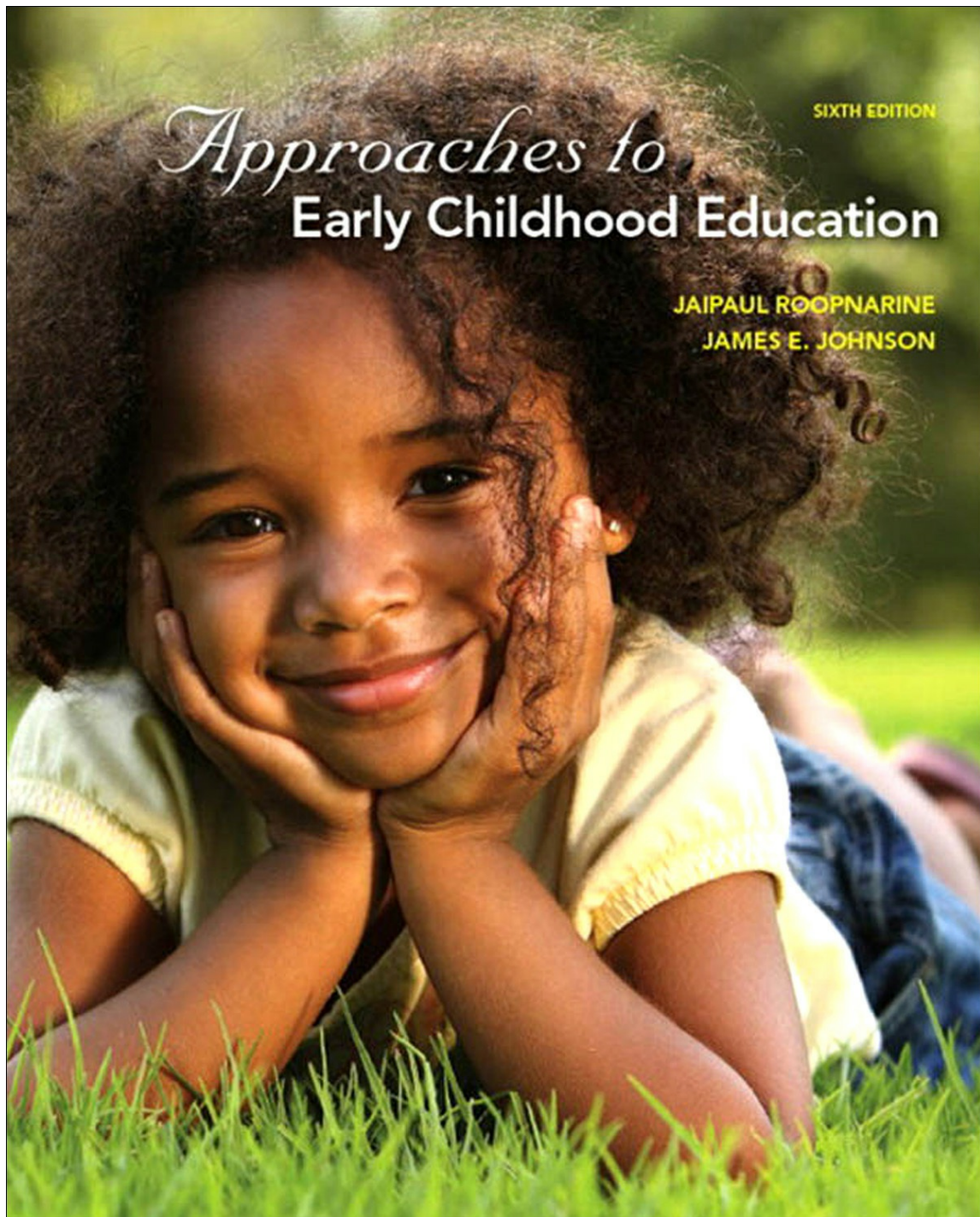


A close-up photograph of a young girl with dark, curly hair, smiling gently at the camera. She is resting her chin on her hands, which are propped up in front of her. She is wearing a light-colored, short-sleeved shirt. The background is a soft-focus green field, suggesting an outdoor setting. The overall mood is warm and positive.

Approaches to
Early Childhood Education

SIXTH EDITION

JAIPAUL ROOPNARINE
JAMES E. JOHNSON



Approaches to Early Childhood Education

Sixth Edition

Jaipaul L. Roopnarine

Syracuse University

James E. Johnson

The Pennsylvania State University

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We dedicate this book to the memory of Jack Reilly

Preface

With pleasure, we introduce our new edition of *Approaches to Early Childhood Education*. This sixth edition is coming out 25 years after the publication of the volume's first edition in 1987. We have now had the privilege of working with leaders and influential writers in the field of early childhood education (ECE) for a quarter of a century, learning quite a bit in the process and being instrumental in bringing this composite knowledge to the book's readership.

Some of you may have read all six editions or a subset of them, but for many this is the first time you will read *Approaches to Early Childhood Education*. We hope you appreciate the unprecedented acceleration of knowledge and expertise in ECE and adjacent disciplines, and will view this edition favorably in its attempt to keep pace with progress to better meet the educational needs of young children. There have been gargantuan leaps in the amount of available information over the years and it has become ever more difficult to discern, distill, and synthesize important knowledge to construct meaningful understanding in any professional field—including our own very complex and dynamic one.

Our field has grown worldwide over the last decades and much real progress is occurring, both quantitatively and qualitatively, in improving the educational lives of young children. Certainly, there are gaps and areas for continued improvement, but few will disagree that at the base of our progress is a fruitful, functional relationship among theory, research, and practice that has led to better practical insights and more formalized approaches to curriculum, teaching, and assessment in ECE. Many of the programs that have been chronicled in this book over successive editions support this conclusion. ECE program models such as Bank Street, Project Approach, and others in this volume have themselves “matured” in significant ways.

At the same time, curricular models and programs have faced increasing challenges to address new needs and aspirations to be inclusive and responsive to diversity, and to be able to have or to strive for excellence in design and implementation. These realities as they have been confronted have helped spur development in ECE programs and approaches. In particular, we find that the ascendancy of more differentiated local theorizing about cultural communities, participation, and educational practices enriches ECE, as does and will the work done or to be done in the inchoate global developmental sciences, neurosciences, and other innovative multi- or hybrid disciplines.

About this Text

As with previous editions, this book has tracked important changes and adaptations of the major approaches to early education such as Montessori, Bank Street, Project Approach, Reggio, and others. Important dimensions and characteristics in the development and implementation of the major curricular models and programs in ECE are examined in detail. Furthermore, the context and history and current issues and trends in the field as it evolves are covered in special chapters.

New to this Edition

Every chapter has been updated, but specific and significant additions to this edition include the following:

- A new chapter on important developments in multicultural competence ([Chapter 6](#))
- A broadened chapter on assessment ([Chapter 8](#))
- A new chapter on The Creative Curriculum® ([Chapter 9](#))

- Learning outcomes listed at the beginning of each chapter
- A new list of questions at the end of each chapter to foster student comprehension and discussion of major themes covered in the book
- Expanded emphasis throughout on inclusion, diversity, and fostering multicultural competence within the profession aims to help prepare a new generation of teachers and child and family specialists to better serve today's children and families across cultural communities and early childhood settings

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Part I Introduction

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Chapter 1 History of Early Childhood Education in Multicultural Perspective

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After reading this chapter, you should be able to:

- Discuss origins and histories of key early education programs
- Explain the education of young English language learners
- Describe current issues in early childhood education
- Define the Child Well-Being Index
- Characterize women's leadership in early education

The multicultural history of early childhood education in the United States begins with the indigenous peoples of North America, followed by the introduction of educational systems brought by the colonists, slaves, and immigrants who arrived on its shores. This history is enhanced by the programs that formed the European roots, based on the theories and practices of such educators as Jean-Jacques Rousseau, Johann Heinrich Pestalozzi, Samuel Wilderspin, Robert Owen, Friedrich Wilhelm Froebel, sisters Rachel and Margaret McMillan, and Maria Montessori. The educational practices of Africans released from slavery and of immigrants from the four corners of the world, melded with “home grown” ideas and methodologies, led to unique variations of traditional programs and new educational institutions designed to foster the social-emotional (affective), cognitive, and physical–motor development of children from birth to age 8 years in the United States.

Origins And Histories of Key Early Education Programs

American Indian Early Childhood Education

Originally in the Americas there were the indigenous peoples—hundreds of tribes who spoke approximately 600 languages.¹ These peoples were erroneously called “Indians” by the explorers and colonists who thought they had reached Asia. The Native Americans had a strong tribal and family system. They codified methods of preparing, educating, and inducting young children into the skills, knowledge, and rituals they needed to become functioning members of society. Many of the original tribes have disappeared as a result of warfare, disease, or assimilation.² The history of early childhood education in the United States usually begins with the European roots; however, it is important to note that American Indians had a viable system of early childhood education, with many aspects similar to that of the ancient Greeks ([Lascarides & Hinitz, 2000](#)).

Before the arrival of European colonists, American Indians were the only indigenous groups living in North America. The heterogeneous tribes included nomadic hunters, farmers living in agricultural communities, and fishermen. The members of existing tribes have maintained their specific group identity and culture to the present day, in spite of all attempts to assimilate them into other religious and secular cultures from the 1600s on.

On June 2, 1924, Congress enacted the Indian Citizenship Act, which granted citizenship to all Native Americans

born in the United States. The right to vote, however, was governed by state law; until 1957, some states barred Native Americans from voting. Approved on February 8, 1887, “An Act to Provide for the Allotment of Lands in Severalty to Indians on the Various Reservations,” known as the Dawes Act, emphasized severalty, the treatment of Native Americans as individuals rather than as members of tribes. The Fourteenth Amendment to the U.S. Constitution, ratified in 1868, provided that all U.S. citizens were also citizens of the state in which they resided.

Adults in tribes gained social standing and became eligible to participate in the functioning of the group by marrying and having children. The French and Spanish missionaries of the 1600s and 1700s attempted to convert children and adults to Christianity, but they made little attempt to educate them. The Puritans, on the other hand, established schools for boys and girls, formed Native American “praying towns,” and printed the Bible and several other books in tribal languages or bilingual versions. An 1819 act of Congress provided for a “civilization fund” to teach adult Indians agriculture and trades, and to teach the children reading, writing, and arithmetic ([Lascarides & Hinirz, 2000](#)). Some tribes, in particular the Cherokee and Choctaw, developed well-defined school systems that existed until the Curtis Act of 1898 ended tribal governments in “Indian territory.” The original schools established in the Southeast were closed by the Removal Act of 1830. They were reopened, after the forced move, on western reservations.

Three types of government-funded schools existed during the 1800s and early 1900s: reservation boarding schools, reservation day schools, and off-reservation boarding schools. Each type of school had its own problems; however, the off-reservation boarding schools had the most difficulties. Although some parents responded to enticements to send their children to off-site boarding schools, the majority went to great lengths to hide their children from the police and government agents. They feared the boarding school personnel’s attempts to assimilate children (some as young as 6 years of age) by extinguishing their name, their language, and their culture, while forcing them to dress as Euro-Americans and to speak only English. Harsh punishments, including beatings, sticking their heads in the toilet bowl, and jailing, were established for children who disobeyed or ran away. The lack of hygiene and nutritious food in most of these schools led to epidemics of illness and even death. In *First Peoples*, [Callaway \(1999/2011\)](#) presents ways in which the students in these schools were able to band together to keep their culture alive. Some of the students who survived the experience returned to the boarding schools as teachers in the hope of providing their students with a better academic and experiential education. Two of the better known boarding schools were the Carlisle Indian School and the Hampton Institute. Hampton was originally founded to educate former slaves and became controversial for mixing African Americans and American Indians. It was one of the few schools that permitted Native American students to speak their tribal languages and engage in traditional religious and cultural practices.



The intermingling of cultures makes our early education programs and our country as a whole more robust, vigorous, and resilient.

In 1894, President Grover Cleveland appointed William Hailmann to be the Superintendent of Indian Schools for the Bureau of Indian Affairs (BIA; [Beatty, 1995](#)). Hailmann was a Froebelian educational leader, who had been a school principal and superintendent, as well as an active participant in and speaker for the National Education Association (NEA) and the International Kindergartens Union (IKU). (See the discussion of Froebel's work later in this chapter.) "Hailmann's involvement with Indian education came at a time when the federal government's attitude and public opinion toward Native Americans was changing from a demand for military enforcement of reservation confinement to an emphasis on education for citizenship and assimilation" ([Hewes, 2001, p. 209](#)). He was expected to administer all the schools, on and off the reservations, select employees, prepare courses of study, select textbooks, and maintain the schools. He was also directed to visit and inspect all the schools, either personally or through his agents, and to report to the Commissioner of Indian Affairs concerning the conditions and requirements of the schools. Hailmann attempted to foster interdependence and to support the web of interpersonal relationships among boarding school students by suggesting communal entertainments and partitioning of the dormitories into small-group living areas. For educational reasons, he favored day schools over boarding schools, and he opened a number of day schools during his tenure in office. Froebelian kindergartens, staffed by trained teachers, were successfully introduced into the reservation schools during his administration. The kindergarten teachers received pay equal to that of the elementary teachers, who introduced elements of Froebel's system into the primary grades. Three normal schools were opened to train Indian students in Froebelian methods, preparing them for professional life off as well as on the reservation. When Hailmann left office in 1898, he was praised by the Indian Rights Association as "a fine example of the merit principle," for his "honest and sensible administration" and his successes "in spite of the fact that partisan politics ... sought to thwart his efforts at every turn" ([Hewes, 2001, p. 232](#)).

The Board of Indian Commissioners contracted a study of Indian life and education that was financed by the Rockefeller Foundation. Entitled *The Problem of Indian Administration*, it was better known as the *Meriam Report*, for its lead investigator Lewis Meriam. The 1928 report criticized the funding of "Indian Affairs" and Indian schools and was particularly critical of conditions in the boarding schools. Its release resulted in major shifts in Indian education. The BIA was instructed to keep children in their home communities, which meant providing day schools as opposed to boarding schools. Progressive pedagogical methods using stories, songs, mathematics, and science from the life of the children and the tribe were to be implemented. Curriculum was to be grounded in local conditions, history, and culture. The Johnson-O'Malley Act of 1934 provided for federal-state contracts issued through the BIA to assist in the implementation of these reforms. The compensatory education programs of the 1960s and 1970s stimulated examination of the educational needs of American Indians. Analysis of methods to cope with these needs has resulted in the use of Froebelian principles. Milton Akers's 1968 National Association for the Education of Young Children (NAEYC) proposal, *Training Program for Kindergarten Teachers of American Indian Children*, is cited as an example of the appropriateness of this approach ([Hewes, 2001, p. 234](#)). The proposal states that special attention would be given to fostering pride and cultural identification, effective use of materials from the natural environment, and designing a working partnership with the family, the tribal community, and the school. The 1972 Indian Education Act provided federal assistance to help close the achievement gap. This act also established the Office of Indian Education (OIE) and the National Advisory Council for Indian Education (NACIE). The Indian Self-Determination and Education Assistance Act of 1975 granted American Indians local school control and self-determination for what happened in the Indian education system, provided for development of human resources and teacher training, and created a youth intern program. Recent developments have had an impact on the educational lives of young American Indian children ([Castile, 1998](#)). The publication *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8*, now in its third edition ([Copple & Bredekamp, 2009](#)), was designed to provide a guidance framework for the early childhood profession. Among the "core considerations in developmentally appropriate practice (DAP)," one of which is "knowledge to consider in making decisions," the current edition discusses "the social and cultural contexts in which children live—referring to the values, expectations, and behavioral and linguistic conventions that shape children's lives at home and in their communities that practitioners must strive to understand in order to ensure that learning experiences in the program or school are meaningful, relevant, and

respectful for each child and family” ([Copple & Bredekamp, 2009, p. 10](#)). This statement begins to address previous concerns regarding a clash between DAP and the cultural dispositions nurtured in many Native American communities. For example, group activity, collaborative effort, and cooperation are valued above individual attainment and praise. Observation of a respected adult model is valued for its assistance in the social rather than individual construction of knowledge. Therefore, in a Native American classroom, a child’s ability to observe carefully and follow directions in carrying out an assignment would be valued rather than deemphasized. Although many Native American communities have an elaborate oral tradition, silence is also greatly valued. The extended family is responsible for overseeing a Native American child’s education. Therefore, exchanges of information about school may take place with individuals who are not the child’s parents. The family may also expect there to be clear standards, leading to interdependent actions. American Indian children and adults may be reluctant to display verbal facility, even though they have the ability to present powerful arguments orally ([Williams, 1994](#)).

The dawn of the 21st century saw the passage of the No Child Left Behind (NCLB) legislation by the U.S. Congress. The legislation promised to “have every child reading by the end of third grade,” but it also prevented Native American students from studying and using their heritage languages. It is difficult to pass on rituals, legends, ancestral ties, and other cultural aspects without the assistance of tribal languages. During the boarding school movement, authorities attempted to stamp out Native American culture and language, but they were unsuccessful. Over a century later, the U.S. government may unintentionally be succeeding with NCLB. In 2004, the National Indian Education Association (NIEA) was successful in petitioning President George W. Bush to sign Executive Order 13336, which gives American Indians self-determination based on “their own needs and precedence.” It assists “American Indian and Alaska Native students in meeting the challenging student academic standards of the No Child Left Behind Act of 2001 (Public Law 107–110) in a manner that is consistent with tribal traditions, languages, and cultures.” The order also mentions preserving the peoples’ culture in the process of so doing. NCLB supports English language use over heritage language use. Therefore, the only schools that have avoided the language-related pitfalls of NCLB are the bilingual American Indian schools.

The NIEA, founded in 1969, is the largest and oldest organization for the improvement of American Indian education in the United States. The organization embraces all native peoples in its paid membership. It has a board of 12 directors who are American Indian, Alaskan Native, or Native Hawaiian. Its goal is American Indian self-determination. Its purpose is to contribute to society in order to protect indigenous values and cultural heritage while improving educational resources. The NIEA has influenced a variety of federal decisions since its creation. Recent research ([Besser, 2006](#)) on the resources and funding of selected American Indian schools for young children demonstrates that progress is being made in Native American early childhood education. However, work still remains to be done.

Our European Roots

Today’s early childhood education in the United States stands on a strong foundation of theoretical and practical European roots. These roots provided the basis for the three current strands of group child care and education. The theories and practices of Jan Amos Komensky (Comenius), John Locke, Jean-Jacques Rousseau, Johann Heinrich Pestalozzi, Robert Owen, Friedrich Wilhelm Froebel, and Maria Montessori, summarized in the sections that follow, constitute the classical underpinnings of the field. Each of these educators, in their own way, looked at the role of parents in educating their own children; the format, the materials, and the pedagogy of schools for young children; the place of play in the life of the child; methods of disciplining children; and child development.

Jan Amos Komensky (Comenius), 1592–1670, Bohemia

Comenius was an education reformer who recognized the importance of early childhood. He believed that

education is a lifelong process and proposed a four-level educational system consisting of infancy (Mother School), childhood (Vernacular School), boyhood (Latin School or Gymnasium), and youth (University). He organized a school in Leszno so that each grade formed the foundation for the next higher one, by initiating specific, developmentally appropriate curricula for each grade. This was a new innovation. In his book *The Great Didactic*, he promulgated a method of teaching all things to all people. He stated that education is necessary for young people of both genders and all societal classes, including those with differing abilities. He believed that all of these children should be educated together in classes so that they could interact with and learn from each other. He said that the Vernacular School should be open to girls as well as boys. Comenius used examples from nature in his work. He recommended that discipline should be free from anger or dislike of personality, and he was opposed to the harsh methods prevalent in his time. *School of Infancy* instructs mothers on their responsibility for educating their children (under the age of 6) in faith, piety, and morals, as well as language and the arts. The importance of play in a safe environment is emphasized. Provision of toys is discussed. Comenius's most well-known book is *Orbis Sensualium Pictus (The World of Senses in Pictures)*. It is widely regarded as the first picture book because the accompaniment to the words in Latin and the vernacular are individual relevant drawings. Comenius believed that "there is nothing in the intellect that has not first existed in the senses" ([Lascarides & Hinitz, 2011, p. 42](#)). His goal for the book was to assist the child in developing reasoning and communication abilities and eye-hand coordination.

John Locke, 1632–1704, England

Locke, a teacher and scholar, wrote about using observations in the planning of educational work and the importance of children's play for learning. He believed that the use of examples and the provision of many opportunities for practice were preferable pedagogical methods. He said the child should have as few rules as possible. He did believe that girls' education should differ from that of boys by restricting their outdoor play, including the services of a "dancing master," and by avoiding harsh discipline.

Jean-Jacques Rousseau, 1712–1778, France

Rousseau had extremely conservative views on the education of girls, believing that their education should be planned as a preparation for marriage. He was more innovative in his discussions of boys' education, particularly in his work *Emile ou de l'éducation (On Education)*. Rousseau believed that children should be permitted to be children before they are required to behave as adults. He said that children actively solve problems through their play. Rousseau's pedagogy "was firmly based upon first-hand experience" ([Siraj-Blatchford, 1997, p. 12](#)). He divided the sources of education into three categories: nature, man, and things. He believed that child development is a process of "unfolding."

Johann Heinrich Pestalozzi, 1746–1827, Switzerland

Pestalozzi organized a school in Burgdorf for 4- to 8-year-olds according to the children's abilities. This permitted each child to be successful in most activities undertaken and led to a favorable inspection report. He wrote *How Gertrude Teaches Her Children: An Attempt to Help Mothers to Teach Their Own Children* in the form of letters expounding on the principle of self-activity. The system described in the book includes intellectual, physical, and moral education designed to precede the formal study of reading, writing, and arithmetic. At Yverdon, where the school included 6- through 12-year-olds, Pestalozzi honed his methodology. The schedule, like those of some of his predecessors' schools, alternated between lessons and games. The program encouraged the development of children's natural gifts and talents. The "Object Lessons" were designed to help children learn from sensory experiences. Guided discovery was used to help children learn to observe. They were encouraged to use language to clearly express what they thought they understood. Pestalozzi's associates and disciples—Joseph Neef, William Maclure, Horace Mann, Henry Barnard, and William Torrey Harris—introduced Pestalozzi's practices to the United States. Maclure opened the first U.S. Pestalozzian school in Pennsylvania in 1809, with Neef at its head.

Mann had children question their parents, observe nature, read books, and report to the class on what they learned. Barnard wanted teachers to avoid the exclusive use of the textbook and to work with subject matter concretely. He was opposed to the codification of Object Lessons, stating that this methodology abrogated Pestalozzi's teaching. Harris introduced the teaching of the natural sciences through observation and description by children into the St. Louis public schools.

Robert Owen, 1771–1858, Scotland

Robert Owen had a vision of a social order based on cooperation rather than competition. He believed that the environment forms the child's character and personality, and the central purpose of education is the formation of good character. He was a follower of Rousseau. Owen favored a strong, although not an overly academic, curriculum. He said, "Children can be trained to acquire, any language, sentiments, belief, or any bodily habits and manners not contrary to human nature" ([Siraj-Blatchford, 1997, p. 7](#)). Owen put his beliefs into practice, first in New Lanark, Scotland, and later in New Harmony, Indiana. Wilderspin credited Owen with establishing the first infant school in Britain. The Institution for the Formation of Character was opened at his New Lanark mills in January 1816. A major tenet of the school was to treat children with kindness and never to beat or threaten them. Unlike the majority of mill owners, Owen wanted children to stay in school, and he convinced parents to permit them to stay out of the factory until they were at least 10 years old. The school used the Monitorial System invented by Bell and disseminated by Lancaster. To accommodate the system, the classrooms for the older children had desks arranged around the room with a free passage down the center, a pulpit for the lecturer, and galleries in which the children sat. The curriculum for all the children included dancing and singing, nature study, and outdoor play. The older children were given instruction using real objects, paintings, maps without labels, and models. The methods of instruction were chosen to hold the children's interest and adapted to their capabilities. The 2- to 5-year-olds had a large, enclosed outdoor play yard and a spacious indoor classroom for their use. In 1824, Owen purchased a tract of land in Indiana and started New Harmony, a cooperative based on a utopian vision of communal living and collaboration. In 1826, the Education Society bought the farm and buildings, placing the school under the direction of Maclure and Neef. Included were the first infant school and the first kindergarten in the United States ([Johnson, 1970](#)). Madame Marie Duclos Fretageot taught the girls and Mr. M. Phiquepal d'Arusmont taught the boys by using Pestalozzian natural methods of education. In his schools in Scotland and the United States, Owen modeled his own educational principles, as well as several innovative educational systems of the time.

Friedrich Wilhelm Froebel, 1782–1852, Germany

Friedrich Froebel was the "Father of the Kindergarten." Like Jean Piaget in later years, Froebel studied the sciences and mathematics. He investigated architecture and mineralogy and attended lectures in Berlin given by the originator of the science of crystallography. An illustration of the wooden teaching models of crystal forms that Froebel may have encountered there appears in Norman Brosterman's 1997 book. Froebel experimented with different teaching methods while working with schoolage children at the Universal German Education Institute in Keilhau for 25 years, prior to creating the kindergarten. In *The Education of Man*, published in 1826, Froebel wrote that "'thinking and doing' through play, learning, and work are 'the proper basis for a fully active, conscious and happy life' for the individual and for society" ([Weston, 1998, p. 13](#)). During the revolution in Germany (1848) he wrote, "I am educating and training people in the exercise of republican virtues." He dreamt of revolutionizing German education along liberal democratic lines ([Weston, 1998, p. 17](#)). However, the exhilaration did not last very long. In 1851, the Prussian government closed all of the kindergartens in the country. Several reasons for this action have been proposed, including confusion as to the authorship of a pamphlet written by his nephew Karl, and association with his nephew Julius, who was condemned to death as a member of the National Assembly. Weston wrote that "a more likely explanation is that educating the people according to principles of freedom is a dangerous thing for oppressive regimes, which can have no control over outcomes and rely on a subservient population for their existence. After all, Froebel himself called the kindergarten 'the free Republic of childhood'" ([Siraj-Blatchford, 1997](#); [Weston, 1998, p. 17](#)). But the kindergarten had already

escaped national boundaries and begun its worldwide dissemination, initially to England, then to the United States (by Caroline Luise Frankenberg in 1836 and Margarethe Schurz in 1856), and to parts of Eastern and Western Europe. It later found its way to Japan, Australia, Korea, Catholic France, Belgium, and Italy, and eventually around the world.

Froebel's kindergarten demonstrated his belief in women as the natural educators of children, and play as the method of developing the child from within outwards. He believed that all teaching was based on self-activity and highlighted the importance of both the natural and human-built environment. He developed the Gifts and the Occupations to enhance children's study of the forms of nature, the forms of beauty, and the forms of knowledge. Gifts one to six included three-dimensional objects, such as small woolen balls and wooden blocks, as well as a set consisting of a wooden ball, cylinder, and cube. Flat tablets, sticks, rings, and "points" (pebbles or shells) constitute the remaining ten Gifts. Froebel believed children could use the Gifts to re-create objects that they saw in their indoor or outdoor environment. Froebel's Occupations included drawing and painting on, folding and pricking paper; sewing; and modeling in clay. Children could use the block sets to create aesthetically pleasing art elements, using pattern and/or symmetry. They could engage in hands-on learning about mathematical and scientific principles by manipulating the Gifts and the Occupations in a variety of ways. It must be remembered that Froebel's original iterations of the methodology of using the Gifts and the Occupations were open-ended. It was after Froebelian pedagogy was disseminated, particularly in the United States, that work with the Gifts became codified and routinized.

In a recent book, [Pollman \(2010\)](#) describes the manner in which the Froebelian curriculum promoted spatial development, and relates it to current social studies, arts, math, literacy, and science curricula. For example, appropriate use of the Gifts can assist teachers in meeting current math and physical science standards. Pollman incorporates the relevant theories of Piaget, Vygotsky, Dewey, and Socrates into her discussion of the manner in which Froebelian materials and pedagogy can enhance the study of art and literature for young children. Pollman presents a detailed narrative, accompanied by clear graphics, in her portrayal of elements of the social studies and movement arts, emphasizing mapping and positional words. She makes the point that even the youngest child goes through "a developmental sequence of spatial stages" ([Pollman, 2010, p. 66](#)) leading to the making and reading of rudimentary maps. The author (of this chapter) has observed 3- and 4-year-olds spontaneously drawing maps of their outdoor play area and following "treasure maps" or oral directions to find objects in the classroom. This discussion can be linked to descriptions of Froebel's *Mutter und Kose-Leider*, or *Mother—Play and Nursery Songs*, published in 1843, in the literature. Many of the "Mother Plays" and today's "Action Rhymes" include directions such as left and right, and positions such as over, under and next to, that are used in topology in later schooling. Some of these songs and games, such as *Blue Bird, Blue Bird, Through My Window*, are still enjoyed by preschool and kindergarten children today.

Maria Montessori, 1870–1952, Italy

Maria Montessori was an Italian educator, physician, feminist, and peace proponent. In 1896 she was appointed to the Italian delegation to the International Congress for Women's Rights, held in Berlin. Montessori asked the Congress to vote to ensure that the wages of women and men laborers be brought to the same level. She thus began her career taking a position on equality, a theme she carried throughout her life's work. As director of the State Orthophrenic School for Deficient Children, she provided the children with 2 years of learning how to care for themselves and their environment and engaging in purposeful activity. Her "deficient" adolescents were then able to pass sixth-grade examinations in reading and writing in the Italian public schools. Montessori began to search for the reasons why "normal children could be equaled in such tests by her unfortunate pupils" ([Lillard, 1972, p. 2](#)). In 1907, she opened the first "Casa dei Bambini," incorporating child-sized furniture and specific didactic materials, to test her theories with "normal" children of poverty. She trained young women with no formal teacher education to be the directresses of her schools. They learned about her philosophy, her educational principles, and her "special method of observation" ([Standing, 1957, p. 29](#); see also [Chapter 16](#), in this volume).

Montessori was the first in a long line of early childhood educators working for peace. In her book *The Montessori*

Method, she described the “silence games” that were originally developed as tests for auditory acuteness. More recent worldwide methodological iterations are highlighted in Wolf’s *Our Peaceful Classroom* (1991). Montessori began her peace education work with a 1926 lecture to the International Bureau of Education of the League of Nations, later published as *Peace and Education* (Montessori, 1932/1943; Wolf, 1989). She stated her belief that the child, unspoiled by societal influences (as conceptualized by Rousseau), could become the basis for rebuilding mankind in a peaceful image. She said that education could serve as a model for a peaceful existence if harmonious practices were adopted. After her death in 1952, Maria Montessori’s work was carried on by her son Mario Montessori.³

European Influences on the United States

The nursery schools established by Margaret Naumburg (1914), Edna Noble White (1922), and Abigail Adams Eliot (1922) brought the pedagogy of European early childhood educators to U.S. shores. During 1921, White and Eliot studied with Margaret McMillan in Deptford, England. Naumburg was influenced by the work of Montessori after becoming a member of the first English-speaking training class at the Casa dei Bambini in 1913. With her diploma in hand, Naumburg returned to New York City to lead a Montessori kindergarten at the Henry Street Settlement. Deciding that the Montessori method alone was too constricting, Naumburg melded aspects of Montessori pedagogy with Jungian psychoanalytic theory in the formation of the philosophy and curriculum for the Children’s School. The name was later changed to Walden School at the request of the students (Hinitz, 2004). Naumburg originally chose the name “The Children’s School” to highlight the curriculum that grew “out of the needs of the children.” As the school expanded from its original nursery school base and incorporated the upper elementary and secondary grades, the older students launched a protest against the name around 1922. The name “Walden School,” was chosen to honor Transcendentalist Henry David Thoreau’s *On Walden Pond*. The new name highlighted “the right of the individual against the pressures for massive conformity, and the rights of minorities against the oppressions of majorities” (Naumburg, “Statement of Philosophy,” n.d., p. 7).

Progressive Schools

Three “founding mothers”—Elisabeth Irwin, Margaret Naumburg, and Caroline Pratt—were leaders of the progressive movement (Sadovnik & Semel, 2002). Beginning in the 1920s, their work in the public and private sectors helped to create a new era of education reform. The parameters of their work should be seen in light of the social milieu and the evolving definitions of progressivism in their lifetimes. Progressive schools were designed to be pluralistic and to provide the environment necessary for the development of a democratic society. A number of them were founded in response to dissatisfaction with the conditions in the public schools. Among the common characteristics of progressive schools were child-centered curricula; teachers viewed as guides in the learning process and creators of environments; long, flexible time periods; fostering of originality in the expressive arts; learning through exploration and experimentation; “projects” and “jobs”; and the importance of a sense of community.

Many of the leaders in the progressive movement were feminists who wanted to overcome the deeply rooted societal views that women were inferior intellectually and physically. They resented that women’s education was channeled into the areas of homemaking and nurturing, which was designed to prepare them for marriage and child rearing rather than the working world (Beatty, 2005). They wanted citizenship, autonomy, sexual liberation, and equal wages for equal work (Hauser, 2006; Lascarides & Hinitz, 2011). Between 1912 and 1940, these women found a home at the Dinner Club at Patchin Place, and later the Heterodoxy Club in New York City’s Greenwich Village. Among the commonalities these women shared were their initial work in settlement houses, their extensive review of existing educational theories and philosophies, and finding fault with aspects of the early childhood teacher education programs of their day. Each of them in her own way was able to foster changes in teacher preparation curriculum and practice, particularly through their participation in the Cooperative School for Student Teachers (which became Bank Street College of Education) and the Bureau of Educational Experiments.

Naumburg, Pratt, and Irwin each had experiences in working with the public school system, and each returned to the private school setting. Naumburg taught a Montessori-based kindergarten class at Public School 4 in the Bronx from April 1915 through February 1916. She faced many obstacles, including lack of heat in the winter and a paucity of appropriate supplies, materials, and furnishings. But it was the lack of support from the Board of Education hierarchy that eventually caused her to resign ([Hinitz, 2002](#)). Pratt worked only as a consultant in the public schools. She was involved in the formation of the All Day Neighborhood Schools, a demonstration program in the New York City schools funded by the Progressive Education Association and other community agencies.

Little Red School House, founded in 1921, was originally a public school experiment in progressive education. Irwin was a central figure in the effort to transform public education. She was one of the first educators to introduce mental hygiene into the New York City public schools. Her activity-based curriculum challenged existing primary school practices. New programs and approaches were viewed by big-city public school educators and administrators as visionary and impractical. They were also viewed as threatening to the politicians of Tammany Hall ([O'Han, 2009](#)). Irwin's resistance to the regimentation and coerciveness of the traditional school, and her disagreements with Board of Education supervisors and administrators, eventually led to the closing of the public school program. Committed parents supported the 1931 reopening of the school as a private enterprise and its metamorphosis into the educational institution (Little Red School House and Elisabeth Irwin High School) that exists today.

Black Early Childhood Education

The story of early childhood education for Black Americans begins in the 1600s, when Black indentured servants, and later slaves, arrived on the shores of North America. Although the three-way shipping trade from New England to Africa to the Caribbean involved slave sales in the northeastern United States, the great majority of "slave states" were found in the southeastern part of the country. In all of those states, with the exception of Kentucky, the law forbade anyone from teaching slaves to read and write. An exception was made for reading the Bible. Therefore, most of the early efforts to educate Black children and adults were initiated by religious authorities, beginning with the Church of England, followed by the Quakers, the Baptists, and the Methodists. What little formal education young slave children were given took place sporadically in ramshackle buildings. Because they wanted to Christianize them, French and Spanish colonists were more active in educating their slaves than were the English.

Black beginnings in North America were marked by cultural discontinuity as Black people lost the political, economic, and social institutions that had organized their lives, attitudes, and values in West Africa. Slavery was a system of forced dependency. Therefore, unlike immigrant parents, slave parents could not prepare their children for greater opportunities in the new culture. The slaves were not a single, cohesive ethnic group, so they did not share a unifying set of customs and traditions. On some of the larger plantations, a respected central figure was able to unify the group.

During the 1700s, separate schools for Blacks were opened in Massachusetts, New York, Pennsylvania, and New Jersey. The Emancipation Proclamation that officially ended slavery also had the effect of ending the legacy of Blacks having their own schools by choice. The Bureau of Refugees, Freedmen, and Abandoned Lands (Freedmen's Bureau) had the responsibility for assembling the framework of an education system for African Americans during the Reconstruction period ([Ashelman, 2003b](#)). The impermanence of the bureau prevented it from equalizing public school systems; however, it did introduce the idea of free elementary education for all children into the South. Blacks had been closed out of mainstream political, economic, and social power. For the most part, they were unable to circumvent the denial of opportunities or the disparity in educational expenditures ([Comer, 1989](#)). Public school systems in many parts of the country, particularly in the South, maintained segregated schools for the next century, until the *Brown v. Board of Education* U.S. Supreme Court decision of 1954 and beyond.

At the end of Reconstruction, Black women organized clubs to meet urgent social needs. They trained in churches and in “secret orders” to take up “club work” ([Cahan, 1989](#)). These local organizations in cities around the country united into the National Association of Colored Women (NACW) in 1896. The National Council of Women (a White women’s group) pledged in 1902 to assist the NACW with its day nursery and kindergarten work. In northern cities, the creation of separate day nurseries for Black children in the early 1900s resulted from prevailing racial prejudice. A committee of Black women founded one of the first, the Hope Day Nursery in New York City.

Through local clubs in most southern states, the NACW provided kindergartens, nursery schools, and day nurseries for working mothers. Mary Church Terrell and Josephine Silone Yates were instrumental in the founding and implementation of these kindergartens. Although most of the kindergartens for Black children were private, educators such as Anna Murray advocated for public kindergartens. Ashelman wrote that it took 70 years and the support of several national organizations, including the NEA and the National Kindergarten Association, to bring this hope to fruition in the State of Virginia ([Ashelman, 2003a](#)).

Patty Smith Hill became director of the Louisville Free Kindergarten Association (LFKA) in 1893, beginning 12 years of supervisory leadership. Her philosophy was one of inclusion. Under the influence of the Northern Presbyterian Church, Hill inaugurated a kindergarten for Black children in which Finnie Burton and other teachers from the demonstration kindergarten were involved. (A demonstration kindergarten was a model kindergarten class taught by an experienced kindergarten teacher. It was used by kindergarten teachers-in-training for observations and some participation experiences.)

As was true of many kindergartens during that time, the LFKA kindergartens served as learning spaces for children, as well as for prospective teachers. The LFKA kindergarten program was aimed at children from different environmental conditions, races, and physical, social, and intellectual statuses, especially those from “wretched and degraded homes on the other side of the tracks” ([Snyder, 1972, p. 242](#)). The Louisville Education Association “invited the Louisville Colored Kindergarten Association (LCKA) to become a branch of the Association” ([Fowlkes, 1987, p. 21](#)), something unheard of up to that time.

The first “public Kindergarten for Colored Children” was opened in 1879 ([Whitney & Ridgeway, 1938, p. 40](#)). The public schools in Louisville began providing classroom space for both Black and White kindergartens in the same building. Mary Hill (Patty’s sister) was a kindergarten teacher in the school; Francis Ingram, a first grade teacher, was trained by Colonel Parker, who had studied new pedagogical methods in Germany in 1872. Parker, a Civil War commander, held several posts as a local superintendent of schools and was the principal of Cook County Normal School in Chicago from 1883 to 1899. Parker was a member of the progressive wing of the kindergarten movement. He put his theories into practice by founding the Chicago Institute, which became a part of the University of Chicago School of Education in 1901, as well as the Francis W. Parker Schools in Illinois and California, which are still in existence today. By 1938, there were 31 Kindergartens for Colored Children, successfully directed by Colored Women, graduates of the St. Louis Kindergarten Normal School ([Fowlkes, 1987](#)).

A number of private Black day nurseries were opened between 1900 and World War II. Oneida Cockrell, holder of degrees from the University of Chicago and Columbia University, founded Chicago’s Rosenwald Child Nursery in 1930. She proposed a redefinition of early childhood education from custodial care to excellent education for young children ([Simpson, 1981](#)). This was in keeping with the trend of the times toward incorporating an educational program based on work in the kindergarten and nursery school into the day nursery. After his wartime Navy service, Ira August Calhoun realized that many of the children cared for by his wife and daughters in family child care came from struggling one-parent homes. He and his family took early childhood development courses to meet the State of California requirements for operation of a nursery school. In 1965, they opened Blue Bird Day Nursery to serve neighborhood children and families ([Simpson, 1981](#)).

The parallel and independent child development movement among Blacks led historically Black colleges and universities (HBCUs) such as Hampton University (1929), Spelman College (1930), and Bennett College (1931) to found laboratory nursery schools. In their roles as university professors and professional organization executives,

two illustrious graduates of Hampton's home economics program, Flemma P. Kittrell and Evangeline Howlette Ward, went on to promote the formation of day nurseries and nursery schools around the country and the world. Dr. Kittrell, the first Black recipient of a doctorate in home economics/early childhood education, carried her work to India. In 1964, she opened "a nursery school program within day care hours for culturally deprived children and parents" at Howard University ([Cahan, 1989](#); [Kittrell, 1966, 1970](#)). This 2-year research project became part of the foundation for Project Head Start. Dr. Ward was the first Black president of NAEYC. Like Montessori, she turned to peace education from midcareer onward. At the time of her death in 1985, Ward was a member of the World Executive of the World Organization for Early Childhood Education (OMEPE).

The term *culturally deprived* was used extensively in the early education research literature of the 1960s. This term referred primarily to poor, urban, mostly Black children and families. In actuality, the children usually were not deprived of their family culture, and often they resided in communities that contained numerous cultural institutions, but not necessarily those of the Euro-American culture. [Comer \(1989\)](#) said that the parents of Black children are members of a social network that may not be part of the social mainstream. He stated that race-related social conditions of the past and present have put a disproportionate number of minority parents under stress. Therefore, many are not able to provide their children with the kind of developmental experiences that will prepare them for school. He advocated more support for the family and better teacher preparation to help ameliorate this condition.

In addition to the information just cited, Comer reminded us that gaining access to higher education was challenging for Black students over the past 2 centuries. HBCUs such as Howard University, Bethune-Cookman College, and Tuskegee University, in addition to those cited earlier, offered early childhood education programs that "became a vehicle for [the] advancement of African Americans" ([Bredenkamp, 2011, p. 62](#)). Many 20th- and 21st-century Black leaders in early childhood education and teacher education overcame the difficulties, received higher degrees from prestigious universities, and made substantial contributions to the field. Amy Wells-Dolan writes stirring about tracing the evolution of Southern traditions and the challenges of writing about the educational history of the South. Quoting John Hope Franklin, she reminds us that "the study of history demand[s] fairness and impartiality and cautious judgment" ([Wells-Dolan, 2010, p. 195](#)). It is left to the educational historians of the future to fill in the missing pieces that will bring to light the struggles and triumphs of unheralded Black early childhood educators and teacher educators in that section of the country.

A recent paper by [James Young and Ernest Washington \(2009\)](#) makes hitherto unpublished information regarding the Black Task Force of the Child Development Associate Consortium (CDAC) available. The CDAC, formed in July 1972, was tasked with developing a "competency based assessment system" and a credentialing system. The Black Task Force grew out of the Black Colloquy, one of several ethnic colloquies that met with CDAC executives to share concerns and ideas. In addition to the authors of the paper, and Asa Hilliard and Evangeline Ward, nine other members provided various Black perspectives, representing a wide range of disciplines and organizations. The position papers written by the Black Colloquy members and the evaluative criteria prepared under Dr. Hilliard's guidance played a major role in the development of the assessment and credentialing system that was put into place in 1974.

The following quote from a magnet school kindergarten teacher in Topeka, Kansas, which was opened as a result of the *Brown III* decision, can serve as a summary of decades of working toward the ideals of equal and integrated education for young children. She said, "You have children from three different backgrounds, like I teach and others in the school teach. [They learn] to love one another, to do the right thing, and to be an asset to their communities, so I think the magnet schools provide an opportunity to mold children to change things ... or if they (the magnet schools) weren't there things would remain the way they used to be in the past" (interview with Mrs. Johnnie Sanders in [McConnell, Hinitz, & Dye, 2005, p. 62](#)).

Let's hope that teachers like Wells-Dolan and Sanders will continue to foster change and divergent thinking in their students, to put an end to the "the peculiar institution" (enslavement) of the mind just as the Emancipation Proclamation ended the physical enslavement of Black people.

Asian and Hispanic Early Childhood Education

Scenario A

You are 5 years old. You are sitting in the classroom at a low table with four other children. Each of you has a worksheet, a box of crayons, and a pencil. The fair-skinned, brown-haired young teacher gives some directions orally in English. The other four children open their crayon boxes and begin to make marks with the pencil and to color in certain pictures on the page. You look with frustration at the paper and wait, eyes downcast, for the teacher to come and help you.

Scenario B

You are 5 years old. You are sitting in the classroom at a low table with an adult and three other children. Each child has a worksheet, a box of crayons, and a pencil. The fair-skinned, brown-haired young teacher gives a few directions in English. The adult at the table repeats them in another language. You and your table-mates open your crayon boxes. You all take your pencils and make a mark on one of the pictures in the first box. You all take out your crayons and color in some of the other pictures according to what the adults tell you to do. You complete your paper and give it to the adult at your table. You take your symbol card and go to the block area. You place your card on one of the four hooks outside the area to designate your activity choice.

Think about these two scenarios for a moment. Both depict the same child from the same immigrant family. However, there is a world of difference between the views of immigrant and bilingual young students revealed in these scenarios. Consider the responsiveness of the adults in each scenario to the cultural and linguistic variations these young students represent. As you read the demographic and programmatic information in this section of the chapter, keep these scenarios in mind.

Immigrant populations and English language learners (ELLs) play a significant role in the early education history of the United States. Waves of immigrants and their children have affected and have been affected by early childhood education programs. The discussion that follows highlights aspects of the private and public response to the needs of young immigrant children and ELLs focusing on the two populations that currently constitute the greatest percentage of young immigrants in the United States, Asians and Hispanics ([Passel, 2011](#)).

A look back in history will reveal that all of the colonial and immigrant populations that came to the land that is now the United States sought institutions that provided education and care in the language of the local population. This was readily available to members of the middle and upper classes because they had the funds to support the institutions to which they wanted to send their children. The German-speaking kindergartens, and later the accompanying training schools founded by Margarethe Schurz, Caroline Luise Frankenberg, Maria Krause Boelte, and Eudora and William Hail-mann, were available to those who could pay the fees. However, as *Past Caring* tells us, a twotiered system of early care and education persists ([Cahan, 1989](#)). The poorer members of numerous waves of immigration to U.S. shores could ill afford the tuition for private schools. One example of the problem is the collapse of the welfare system following the Civil War and the depression of 1873. Increased immigration and high birth rates led charity workers to seek new ways of working with young children and their families. Free kindergartens supported by “patrons” from upper income families and by subscriptions were organized in many urban areas. In a manner similar to the American Indians, these immigrant children were stripped of their language and culture and were forced to use English and study “citizenship” from one “American” point of view. Gradually, the free kindergarten associations expanded their services to the community to include home visits and classes for parents ([Lascarides & Hinitz, 2011](#)). Eventually, some free kindergarten associations redefined their role and merged with other social agencies to form social settlements. Among the most famous of these are Hull House in Chicago and the Henry Street Settlement in New York City. During the late 1800s, as the numbers of people using the free kindergartens expanded exponentially, the kinder-gartners

(kindergarten teachers and their patrons) began to have difficulties supporting and managing the organizations. The campaign for public school kindergartens began with the exposure of corruption and inefficiency in the public school system. The publicity generated often led to the incorporation of philanthropic kindergartens into the public school system. Those kindergartens continued to emphasize “Americanization” of immigrant children and their families ([Lascarides & Hinitz, 2011](#)).

During the 1800s, Asian and Hispanic laborers and immigrants came to the United States. Members of these groups were initially treated similarly. However, while some of the Asians were able to purchase land of their own, the Hispanic immigrants, for the most part, remained members of the poor laboring class. The stories of these groups diverge from each other in several ways, including how they were viewed and treated during the period from the 1930s to the 1950s. We will look first at the history of several Asian American groups that together make up 18% of immigrant children ([Fortuny, Hernandez, & Chaudry, 2010](#)). Then we will examine aspects of the history of Hispanic/Latino/Latina early childhood education.

Asian Early Childhood Education. Three of the major countries from which Asians and Asian Americans have come are China, Japan, and India. Other cultures included Filipinos, Urdu-speaking Mirpuris from Pakistan, and Bengali-speaking Sylhetis from Bangladesh. The majority of these people emigrated to the United States for religious freedom, job opportunities, or education. The largest group of émigrés from Southeast Asia included the Vietnamese, Cambodian, Hmong, Iu Mien, and Laotian refugees, who came in five waves between 1972 and 1989, during the Vietnamese War and after the collapse of South Vietnam. The five waves of immigration included the families of military personnel and those close to the South Vietnamese or American administrations, in 1975; the “boat people” who arrived between 1975 and 1989; the “Amerasians” (children fathered by American servicemen) during the 1980s; and political prisoners who were released from Vietnamese “reeducation” camps. With the exception of the first wave, the majority of these refugees were poorly educated. The provision of specialized Head Start and public school programs and assistance from social service, educational, and religious entities aided in the refugees’ integration into several communities.⁴

Chinese

Among the first Chinese to arrive were merchants and traders, followed by laborers. Because of the strict immigration laws, the men were forced to leave their wives and families behind. When the families were finally permitted to enter the United States, they sought education for their young children. However, beginning in 1879, Exclusion Acts abridged the Chinese workers’ opportunities. They were forbidden to send their children to White schools or to own land. Anti-Chinese bias in San Francisco and other communities was particularly evident in the area of public education. Between 1871 and 1884, the San Francisco Board of School Trustees refused to acknowledge the right of children of Chinese descent to attend public schools. In response to the California Supreme Court ruling that children of all ethnic groups had the right to attend schools in the state, San Francisco initiated a “separate but equal” ordinance that forced children of Chinese ancestry to attend a segregated Chinese School. In 1974, the United States Supreme Court ruled in *Lau v. Nichols* that 1,800 Chinese-speaking children in the San Francisco public schools were entitled to English language instruction or other support to help them understand what was happening in their classrooms. “[S]tudents who do not understand English are effectively foreclosed from any meaningful education,” the Court found ([Lau v. Nichols, 1974, p. 3](#); [Russakoff, 2011, p. 3](#)). This decision made ELLs with limited English proficiency (LEP) a protected class. The court stated that for these LEP students, the same treatment did not constitute equal treatment; therefore, schools bore an affirmative obligation to address both the language and the curricular needs of the students ([Hakuta, 2011](#)).

Japanese

Although the Japanese were products of early childhood and primary education, as their immigration to the United States increased, they were placed in the same inferior position as the Chinese, working as agricultural day laborers. Some Japanese men had money and were able to buy their own land and farms. But that did not prevent

San Francisco from passing school laws that forced Japanese students to attend only the segregated Chinese school. These laws were broadened in 1905 to include “all Orientals.” However, the cultural assimilation of the Japanese into U.S. society, particularly in the western states and Hawaii, made the later anti-Japanese movement and exclusionary legislation especially troubling to the Issei (see [Figure 1–1](#)). The signing of the Oriental Exclusion Act ended Japanese immigration to the United States until after World War II.

The resentment against the Japanese people was magnified with the bombing of Pearl Harbor, and on February 19, 1942, President Franklin Delano Roosevelt signed Executive Order 9066. Although this order also applied to the aliens from Germany, Italy, and other nations, it was primarily used to justify the incarceration of Japanese and Japanese Americans. All persons of Japanese ancestry were included. It was not limited to suspected Japanese informants and collaborators. The presidential order was particularly shocking to the Nisei, who had been educated in American schools and surrounded by American culture. They were just reaching adulthood and becoming parents of the Sansei ([Hewes, 1988](#)). Descriptions of Manzanar, Camp Harmony, Tule Lake, and other relocation centers are available (see Selected Resources). They reveal that schools were omitted from the Wartime Civilian Control Administration (WCCA) plans. The Japanese Americans within the camps soon saw a need for the creation of an educational structure for children and adults. At some camps, the Civilian War Relocation Authority (WRA) funded preschool, kindergarten, and elementary level classes. The instructional staff was composed of internees who had been either employed as teachers or enrolled in higher education before the evacuation, their parent assistants, and a few non-Japanese

Figure 1–1 Definitions of Terms 1

Source: Information from *Nisei Nursery: Preschool at Manzanar Relocation Camp 1942–1945*, by D. W. Hewes, November 18, 1988, Discussion paper presented at the History Seminar of the annual conference of the National Association for the Education of Young Children, Anaheim, CA, pp. 2–3.

- The Issei were the first-generation Japanese immigrants.
- The Nisei were their Japanese American children born in the United States, who held automatic U.S. citizenship.
- The third generation are the Sansei.
- The Yonsei are the fourth generation of children.
- A refugee is any person who is outside his or her country of nationality and is unable or unwilling to return to that country because of persecution or a well-founded fear of persecution.

educators. All of the supervisors came from outside the camps (War Relocation Authority, ca. 1943–1944).

Asian Indians

Asian Indians are the third largest Asian population in the United States. They are unique among Asian immigrants because the majority of the adults have obtained a college degree and approximately 60% of them are employed in a management, educational, or professional occupation. According to a recent census, there are nearly 1.7 million Asian Indians, many of whom speak English, living in the United States. It has been reported that Asian Indian children often grow up hearing three languages—English, Hindi (one parent’s primary language), and a dialect such as Guajarti or Bengali (the other parent’s primary language) spoken in the home (A. Berdecia, personal communication, June 7, 2011). Indian society is diverse in terms of caste, subculture, socioeconomic status, geography, and education. However, the families do share a common culture and set of values with each other and with other South Asian immigrants.

Nearly 1 in 4 children younger than 8 years of age in the United States has immigrant parents. Eighteen percent of these children have parents born in Asia. Forty-three percent of the children have Mexican parents, and 25% have origins in Central or South America or the Caribbean. Persons of Asian origin have the highest levels of education and income among all ethnic and racial groups in the United States ([Haskins & Tienda, 2011](#)). By contrast, immigrants from Latin America have fared poorly, both in education and in earnings.

Hispanic/Latina/Latino Early Childhood Education. Two Spanish-speaking cultural groups make up the greatest percentage of the Hispanic population of the United States: Mexicans or Mexican Americans, and Puerto Ricans. Cubans and others from Central and South America are a third segment of this population. (See [Figure 1–2](#) for explanation of terms in this chapter section.) Mexicans immigrated to the United States in the late 1800s and early 1900s as agricultural laborers. When jobs became scarce, immigration was discouraged; however, Mexicans as nonquota immigrants were excluded from the National Origins Quota Act of 1924, Puerto Ricans became U.S. citizens in 1917 and were then able to take advantage of free public education on the island and the United States mainland.

U.S. census data for 2010 confirm that Hispanics are the largest and fastest growing racial/ethnic “minority” group in the United States. In six states, the Hispanic population accounted for all of the state’s population growth. For all age groups, the number of Hispanic children as a proportion of all children continues to increase more rapidly than the number of non-Hispanic White and Black children ([Fortuny et al., 2010](#); [Passel, Cohn, & Lopez, 2011](#)). They represent 1 out of every 8 persons in the population. While immigrants come from a wide range of economic circumstances, poverty rates among immigrant households have increased dramatically over the past 25 years. Children have higher poverty rates than any other age group—a pattern that developed in the mid-1970s and continues to exist. According to 2010 data, children of immigrants have higher poverty rates than native-born children. Many of the high-poverty children and their families are not eligible for social welfare programs because eligibility is determined by legal status and citizenship. Approximately two-thirds of first-generation poor children are Hispanics ([Fortuny et al., 2010](#); [New & Beneke, 2009](#); [Passel, 2011](#)).

Research studies published over the past 40 years arrived at the same conclusions about the conditions of child care and early education for, and the needs of, young Latina/Latino children and their families. Parents struggle to find child care that is linguistically and culturally responsive. In several studies, Hispanic families

Figure 1–2 Definitions of Terms 2

- According to Tudico, the term Hispanic is “a government-regulated term coined for use in the United States census” ([Tudico, 2010, p. 169](#)). He prefers the term Latino, which is the masculine form of the Spanish word. To ensure gender equity, Latino/Latina will be used each time this terminology appears in the chapter. Both Hispanic and Latino/Latina will be used in this chapter.
- The U.S. Census Bureau defines immigrant children and youth as young people between birth and 17 years of age who have at least one foreign-born parent ([García et al., 2009, pp. 9–10](#)).
- First-generation youth are foreign born.
- Second-generation youth were born in the United States, with at least one immigrant parent.
- Third-generation U.S.-born children are children whose parents were also born in the United States ([Tienda & Haskins, 2011](#)). Puerto Rican-born youth are categorized as a part of the third generation, because they have U.S. citizenship ([Passel, 2011](#)).
- English language learners (ELLs) are children who speak a language other than English in the home and are not fully fluent in English ([Espinosa, 2008](#)). They are students who do not understand enough English to learn without support in mainstream classrooms. They lag far

behind all other students, except those with disabilities, on state reading and math assessments ([Russakoff, 2011](#)).

- Language-minority children is a term commonly used to describe children whose native language is one other than English, regardless of their current level of English proficiency ([García et al., 2009, p. 9](#)).
- In addition, language-minority children refers to children who may already be proficient English speakers but whose parents, on the Home Language Survey, indicated the use of a language other than English in their home ([Calderon, Slavin, & Sanchez, 2011](#)). Another term that refers to both kinds of children is English as a second language students.
- Limited English proficient (LEP) students is a federal designation for children who are learning English ([Calderon, Slavin, & Sanchez, 2011](#), endnotes). Section 9101 of Title IX of the Elementary and Secondary federal statute defines an LEP individual as one who is between the ages of 3 and 21, is enrolled or is preparing to enroll in an elementary or secondary school, was not born in the United States or whose native language is not English, and who may face diminished opportunities within society because of difficulties in speaking, reading, writing, or understanding the English language.
- The terms limited English proficient (LEP) and English language learner (ELL) are often used interchangeably to refer to students whose English proficiency has not yet developed to a point where they can profit fully from English instruction.
- Second language acquisition is the process of learning a second language as a result of a parent speaking a separate language with the child or when a child begins to learn a second language after the first language is at least partly established ([Tabors, 2008](#)).
- Dual-language (DL) programs, also known as two-way immersion (TWI), are curricula that teach English to ELL students and Spanish to native English speakers through dual-language content and instruction in a shared classroom. These Vygotsky-based, “naturalistic learning” programs have reported positive effects on both young Hispanic and language-majority populations and have demonstrated academic benefits over English-only programs for Latino/Latina students ([García & Jensen, 2009](#)).

expressed a strong preference for informal child care arrangements provided by the parent, the spouse, relatives, friends, or neighbors. Some parents who avoid group care have available traditional forms of social support, such as extended family networks, or they perceive considerable cultural dissonance between informal arrangements and formal preschools. Shared language is an important factor that influences Latina mothers’ choice of child care organization. Some mothers want their children to continue developing language skills in both Spanish and English, and they search for child care staff members who can support that desire. Shared values about child rearing, socialization, and education are important. Successful home–school connections are based on principles of *respeto* (respect) and *confianza* (mutual trust within a defined community network that leads to support and understanding beyond expectations). Latino/ Latina parents differentiate between the terms *educar* (to educate) and *enseñar* (to teach); the parents’ role is to educate or instill morals and values in their children and help them become good people. Children are taught to be respectful, obedient, and reserved. Latino parents believe it is the role of the school to teach subjects such as reading, writing, and math, and that it would be disrespectful to interfere with the teacher’s role of educating their children ([Rodriguez-Brown, 2010](#)). Latina/Latino demand for organized center-based care may be constrained by limited purchasing power or weaker community organizations than those found within other ethnic communities. This population is underserved by, and they under-utilize, child care and early education programs. Hispanic families often confront lower quality of available child care, and a lower supply of it, than does the general public ([Collins & Ribeiro, 2004](#); [Crosnoe, 2007](#); [Fuller, Eggers-Pierola, Holloway, & Liang, 1996](#)).

Immigrant and Citizen Children and Youth

Major waves of large-scale migration occurred at the beginning and the end of the 20th century. Immigration coming mainly from Southern and Eastern Europe changed the face of the United States at the beginning of the 1900s, before being brought to an end by World War I and the restrictive legislation enacted shortly thereafter. Passage of the landmark Immigration and Nationality Act of 1965 spurred new immigration flows, mainly from Latin America and Asia, which increased through the end of the century. The legislation abolished the national origins quota system that had governed immigration since the 1920s, and changed the criteria for admission to the United States to give priority to family reunification ([Crosnoe & Turley, 2011](#); [Haskins & Tienda, 2011](#)).

Immigrant progenies currently account for a quarter of the nation's 75 million children. By 2050, these progenies are expected to make up a third of more than 100 million children in the United States ([Passel, 2011](#); [Tienda & Haskins, 2011](#); [Zehr, 2011](#)). They and their families face tremendous challenges ([Crosnoe, 2010](#); [Crosnoe & Cooper, 2010](#); [Crosnoe & Kalil, 2010](#); [Crosnoe, Wirth, Pianta, Leventhal, & Pierce, 2010](#); [García & Miller, 2007](#); [Huntsinger & Jose, 2009](#); [National Task Force on Early Childhood Education for Hispanics, 2007](#)).

Foremost among these challenges are barriers to accessing quality early education programs. Forty-three percent of young immigrant children are in parental care or do not have a regular care arrangement. The same is true of only 29% of children of U.S.-born citizens. Center-based care is the most common arrangement among all children ages 3 to 4 in nonparental care, but it is less common for children of immigrants than for children of U.S.-born citizens ([Matthews & Ewen, 2010](#)). The enrollment gap narrows at age 5, when most children (87% of immigrants vs. 86% of natives) are in kindergarten ([Fortuny et al., 2010](#)).

Fueled both by legal and unauthorized immigration, the foreign-born share of the U.S. population has increased to levels last seen in the 1920s. The racial and ethnic mix of the population, particularly the youth, changed dramatically. Foreign-born and U.S.-born children of unauthorized immigrants represented about 6.9% of all children in 2009. However, they are about 30% of immigrant youth. The different age structures of the first and second generations affect socioeconomic characteristics of the groups. In *Immigrants Raising Citizens: Undocumented Parents and Their Young Children*, Yoshikawa (2011a) presents findings from a longitudinal study of Chinese, Mexican, and Dominican infants in New York City. He describes the stressful work and financial conditions under which immigrant parents without legal status are raising their citizen children and discusses several factors that play a role in family functioning, very early learning, and child health. In a congressional briefing, Yoshikawa (2011b) emphasized the educational, law enforcement, and policy implications of his research. The parents avoid government programs and authorities; they have isolated social networks. They shun public agencies and programs such as child care and food subsidies, for which the children are eligible, because of the constant threat of discovery and possible deportation and family separation. The avoidance of center-based child care (which is directly correlated with early skill development in children) leads to poorly developed cognitive skills, recognizable in children as young as 2 years of age. Yoshikawa suggests that instead of relegating the more than four million citizen children of undocumented parents to "a permanent underclass," their potential to succeed in school should be maximized, with access to quality preschool, health, and child care ([Yoshikawa, 2011b](#)).

Reports in the literature using data from the 2010 U.S. census and the federal government's Early Childhood Longitudinal Study–Kindergarten Cohort (ECLS-K) provide us with important rationales for supporting the educational success of young children in immigrant families. As the predominantly White baby boom generation born between 1946 and 1964 ages, it will increasingly depend for economic support on the productive activities and civic participation of working-age adults who belong to a wide range of racial and ethnic minorities. Many of these working-age adults will have grown up in immigrant families. Their educational



We continue to use the lessons of history to make a difference in the lives of children and families.

success and subsequent economic productivity are important both to the immigrant groups themselves and to the broad American population ([Hernandez, Denton, & Macartney, 2009](#); [Hernandez, Takanishi, & Marotz, 2009](#)). The dual-language (DL) proficiency of young immigrant children can have long-term cognitive, cultural, and economic advantages. [Espinosa \(2008\)](#) reports that “ELL children are quite capable of learning subject matter in two languages” (p. 2). She further states, “Early literacy skills learned in the home language do transfer to English.” Although it is important that children learn English, the primary language used in schools and most other organizations and institutions in the United States, it is equally important for them to maintain the language of their country of origin. This will assist them in preserving elements of their parents’ cultural or religious heritage, as well as communicating with family members whose first language is not English.

The Education Of Young English Language Learners

Bilingualism and many of its related problems have been with us since before our nation’s founding. The physical and mental abuse inflicted on the First Americans has been replicated in various forms with all of the immigrant populations that followed them into the schools and child care centers. For this reason, bilingualism and the education of young ELLs must be a part of the discussion of the experiences of young immigrant children and their families in early education programs. Historically, the United States was intentionally isolationist and monolingual. Remnants of these thought and action patterns are still present today. Several of the states have laws establishing that English is the official language. This places the country at a distinct disadvantage in world society. In a time when more than 50% of U.S. jobs are related to the global economy, it is important for children

(and adults) to have fluency in multiple languages, which benefits the children and the country as a whole.

The *Lau* case (discussed earlier) has implications for the present day. Title VI of the Civil Rights Act has been interpreted through *Lau*. Title VII of the Elementary and Secondary Education Act (ESEA)—the Bilingual Education Act—fostered the development of programs that use the native language, in spite of resistance. In 1981, the *Castañeda v. Pickard* court case interpreted the meaning of “appropriate action” as stated in the Equal Educational Opportunities Act of 1974, which codified LEP students’ rights, consistent with the *Lau* decision. The judge’s opinion in the *Castañeda* case stated that the role of the court in determining appropriateness should be guided by three standards: that the educational approach be based on sound educational theory; that the approach be implemented adequately; and that, after a period of time, the approach be evaluated for its effectiveness in remedying the inequity. An implicit fourth standard was that if an approach is not effective, the implementation or the theory must be revised until the inequity is remedied. The *Castañeda* standards helped organize the field of bilingual education “by linking theory to programs, implementation, and outcomes” ([Hakuta, 2011, p. 165](#)). Before *A Nation at Risk*, the education system identified classes of students and paid for educational services that targeted their needs. Under standards-based reform—with a goal of high standards for all, including ELLs—there is a focus on outcomes accompanied by accountability. Targeted service now needs to be viewed in this emerging context of systemic reform ([Hakuta, 2011](#)). The similarity to the treatment of Native American children and their schools is notable.

One positive initiative was the Institute for Teaching English Language Learners (ITELL), a collaboration involving Arizona State University, the Navajo Nation, and six elementary school districts in rural northern Arizona. It was designed to address the needs of ELL students while meeting mandatory state education policies that prohibit instruction in students’ heritage language. It provided a classroom environment that optimized both language development and the acquisition of content-specific knowledge. It improved parent and family contributions to children’s academic growth by promoting parental engagement ([García, 2010](#)).

Challenges, Solutions, and a Look Toward the Future

Demographic data clearly show the challenges presented by ELLs, who are projected to comprise 40% of the school-age population by the year 2030. The number of ELLs in U.S. public schools has increased 150% since 1990, while the overall student population has grown by only 20%. Currently, 40% of ELLs are between 3 and 8 years of age. Young ELLs speak more than 400 native languages; however, 75% of them speak Spanish ([Russakoff, 2011](#)). Young Hispanic children are not only the largest racial/ ethnic group in the United States, but also the youngest and fastest growing. As a population, young Latinos/Latinas are unique, because most of them live in a home where Spanish is spoken regularly. Statistical data show that young Hispanic children lag behind their White and Asian American peers at all proficiency levels of reading and mathematics at the beginning and throughout prekindergarten (PK) to Grade 12 schooling ([García, Jensen, & Cuellar, 2006](#)). For young Hispanics to succeed in academic contexts, they need strong English skills in addition to maintaining their heritage language.

The publication of the report of the National Task Force on Early Childhood Education for Hispanics generated numerous ancillary reports, journal articles, congressional briefings, and foundation and organizational initiatives between 2006 and 2011. García and his associates proposed a series of research-based recommendations to federal, state, and local governments; educational researchers; and private organizations. These recommendations concerned the design, funding, and evaluation of the preparation of bilingual and culturally knowledgeable teachers ([García, Jensen, & Scribner, 2009](#); [National Task Force on Early Childhood Education for Hispanics, 2007](#)). Their research establishes that “a coherent, sequenced, and integrated set of learning experiences from PreK through Grade 3 provides the foundation for educational and life success” ([Russakoff, 2011, p. 4](#)). High-quality PK programs and elementary schools, strategic inclusion of the student’s native language in classroom instruction, screening for and closely monitoring learning problems, intensive small-group interventions, extensive and varied vocabulary instruction, and regular peer-assisted learning opportunities can foster learning and achievement. Such evidence-based practices as having culturally knowledgeable teachers who are proficient in English and the language learner’s native language, and teachers trained to teach the English language and academic content

simultaneously, are essential to improving students' learning and achievement. Such strategies as increased academic learning time; lower student–teacher ratios; improvement of teachers' domain-specific expertise, pedagogical skills, and abilities to encourage student participation and engage family and community members; and meaningful parent involvement are deserving of consideration ([García & Jensen, 2006–2007](#); [García & Jensen, 2007](#); [García et al., 2006](#); [García et al., 2009](#)).

Parent Involvement

Data on Asian, Black, and Hispanic families from the ECLS-K show that “parental involvement in education partially mediates the association between family poverty and children’s math and reading achievement in kindergarten, but differences exist across race” ([Cooper, Crosnoe, Suizzo, & Pituch, 2010, p. 859](#)). However, these researchers discovered that home-learning activities predict reading achievement only in Hispanic families. This research supports the application of the “family process model” for children transitioning into the elementary school ([Cooper et al., 2010, p. 859](#)).

Another report stated that Hispanic parents felt disrespected and unwelcome in their children’s schools. Some parents said that the teachers made them feel like “little children.” They stated that involvement would be increased if schools offered interpreters who spoke Spanish. Parent responses to a question about what they would want preservice teachers to learn from teacher preparation programs centered on themes of care and respect. They made the following suggestions to teachers: Communicate with parents in their primary language (orally and in writing), always be nonjudgmental, and have clear ideas about how parent involvement at the school will help them in their role as parents and communicate these ideas in an unambiguous manner. Implementing these strategies will help teachers and schools avoid alienating families and, we can hope, increase parent and community involvement in the school and the classroom ([García et al., 2006](#)).

Current Issues In Early Childhood Education

The Home Instruction for Parents of Preschool Youngsters (HIPPY), founded by Dr. Avima Lombard in Israel in 1969, is a parent-involvement, school-readiness program that helps parents prepare their 3-, 4-, and 5-year-old children for success. The parents are provided with a set of curriculum, books, and materials designed to strengthen their children’s cognitive skills, early literacy skills, and social-emotional and physical development. In this family support program, parents are trained by paraprofessionals from their own communities. The model used in the seven countries that make up HIPPY International includes a developmentally appropriate curriculum, with role-play as the method of teaching, staffed by paraprofessional home visitors, supervised by a professional coordinator; and home visits interspersed with group meetings as the delivery method. The coordinators, who have degrees in education or counseling, receive support from national or international networks. HIPPY USA, headquartered in Little Rock, Arkansas, is the U.S. affiliate (HIPPY USA, n.d.; [Westheimer, 2003](#)).

Recent research on the impact of HIPPY on a group of Latino families in Texas showcases both the parents and the program providers working within a framework of cultural competence. The immigrant families are served by native speakers of Spanish from within the same community, all of whom had been HIPPY parents. Spanish-language use and DL learning encouraged both the children’s emergent Spanish literacy and later English reading ability. The study found that the HIPPY home visiting intervention program for Latina mothers of young children had a positive effect on the home environment of the preschool children and on their math achievement in Grade 3 as well. The intervention increased the low-income parents’ involvement in their children’s learning experiences, even years after the conclusion of their participation in the program. The learning materials provided by home visitors remained in the homes and were available for use by other children in the family and community. The researchers concluded that “home visiting, in this case, may fill the gap between the investment of immigrant parents in their children’s education and their ability to prepare their children to navigate the American school system” ([Nievar, Jacobson, Chen, Johnson, & Dier, 2011, p. 276](#)).

The Child Well-Being Index

In observance of its centennial year, the Foundation for Child Development (FCD) created an index to reflect the well-being of America's children from birth to age 18 years. The aim was to create a tool similar to the Consumer Price Index that would help policy makers and the public monitor how well children are doing. The FCD Child Well-Being Index (CWI) is a national, evidence-based composite measure updated annually that describes how young people in the United States have fared since 1975. The CWI is the nation's most comprehensive measure of trends in the quality of life of children and youth. It combines national data from 28 indicators across seven domains into a single number that reflects overall child well-being. The seven quality-of-life domains are Family Economic Well-Being, Health, Safe/Risky Behavior, Educational Attainment, Community Engagement, Social Relationships, and Emotional/Spiritual Well-Being. Included in the Social Relationships domain are the rate of children who have moved within the last year and the rate of families headed by a single parent. The Health domain includes the rate of children with very good health, the rate of children with activity limitations, those who are overweight, and infant and child mortality rates. The children's parents report much of these data. Interestingly, the rate of PK enrollment by children ages 3 and 4 years is included in the Community Engagement domain. The only items included in the Educational Attainment domain are reading and mathematics test scores at ages 9, 13, and 17. Data sources used in the CWI include the Digest of Education Statistics, the U.S. Department of Education, the National Center for Education Statistics, the U.S. Bureau of the Census, the Centers for Disease Control, and the National Center for Health Statistics. The CWI for 2010 was -1.27. The researchers found that the Great Recession will wipe out virtually all the progress for children since 1975 in the Family Economic Well-Being domain, which includes secure parental employment, median annual income, the poverty rate, and the rate of children with health insurance. The rate of children living in poverty is the highest in 20 years. The researchers believe that "the connections that children have to their surrounding communities is likely to be negatively impacted by declines in Prekindergarten enrollments as more parents are unemployed and more children are living in poverty, and as states and local communities reduce the availability of Prekindergarten programs due to budget cuts" ([Land, 2010, p. 15](#)). They further state that "such declining trends could lead to poorer future performance of children in elementary school and beyond, particularly for those children at-risk due to poverty and other social inequalities" ([Land, 2010, p. 15](#)). Other researchers state that, "if we as a country are truly committed to securing our future by protecting and investing in our most precious resource—our children—we must do so by lifting up every single child in America." ([Hernandez & Cervantes, 2011](#)).

Women's Leadership in Early Education

Women's leadership has always driven early childhood education in the United States. Through the decades, in this "proving ground" for female leadership from cooperative nursery schools ([Hewes, 1998](#)) to program management, women have demonstrated that they have the intellectual capacity, skills, and knowledge to be both caring and businesslike. Early childhood education has provided the venue for women to demonstrate their creativity, resourcefulness, and administrative and supervisory skills. A majority of the directors of early education programs are women. They usually are promoted from the "operations" or educational arena, with little or no preparation or training for their new responsibilities. In the early history of programs for young children in the United States, there were no schools of educational administration or textbooks. Prospective managers would therefore apprentice themselves to the directors of existing kindergartens or day nurseries. The knowledge base for contemporary managers has changed from a focus on program information to a broad range of fiscal, regulatory, personnel-related, team-building, assessment, and organizational knowledge. As foreshadowed by Hewes (2000), many states now have criteria, procedures, and standards for directors in their state licensing regulations. The current NAEYC Accreditation Standards do include these criteria.

The most recent book on women and educational leadership reiterates the themes just discussed ([Grogan & Shakeshaft, 2011](#)). The authors state that "historically, women have defined schools as instruments of social change" and that women were more likely to serve "working-class, immigrant, and female students" (p. 89). They acknowledge that women often reluctantly move into administrative roles "as service or as sacrifice to improve the

education of children.” They cite research demonstrating that “because of their higher rates of participation in professional development, women leaders are much more likely than men to keep student learning as a central goal of leadership” (p. 89).

Conclusion

This chapter has explored the multicultural history and the current status of selected early childhood education programs in the United States of America. Although the journey has been long and complex, a few essential points stand out. When the European colonists came to America, they tried to eradicate not only the native culture, but also cultures of those who immigrated after them. In later years the policies of individuals and government entities attempted to homogenize the education system for young children. Fortunately, many of these attempts were unsuccessful. Each culture has retained its individuality and language, often in the face of hostility and great adversity. The intermingling of these cultures makes our early education programs and our country as a whole much more robust, vigorous, and resilient. Innovations in theory and practice from the past such as the development of infant schools and kindergartens, the Montessori method, the progressive movement, methods of educating English language learners, and parental involvement practices have had an impact on the early education programs of today. We have confidence that we will continue to use the lessons of history to make a difference in the lives of children and families.

Reflect on

1. How have African American educators helped to shape early childhood education?
2. What educational and social practices and policies may have undermined the right to optimal early childhood education of native peoples and African Americans?
3. How has the recent proposition of “developmentally appropriate practices” been modified to accommodate the cultural beliefs and practices of non-European heritage groups in the United States?
4. Who would you consider to be the “founding mothers” of progressive early education in the United States?
5. What are your views on how we should design early childhood programs for English language learners (ELLs)?

Endnotes

1. [1](#) In 1990, the U.S. Census Bureau identified 136 different Native American languages, approximately 70 of which are spoken by fewer than 200 persons. These languages are among the 191 U.S. “Languages in Danger” identified by the 2010 *UNESCO Atlas of the World’s Languages in Danger* ([Moseley, 2011](#)).
2. [2](#) See Lascarides and Hinitz (2011, [Chapters 14](#) and [18](#)) and the maps throughout the September 1992 issue of *Young Children*.
3. [3](#) See Lascarides and Hinitz (2011, [Chapter 16](#)) for a further discussion of Maria Montessori and Montessori schools.
4. [4](#) See the discussion of the Refugee Families Program in [Chapter 16](#) of Lascarides and Hinitz (2011), for example.

Selected Resources

Historical Perspectives on Kindergarten

For a further discussion of the dissemination of the kindergarten, see the following articles in a special 2009 issue of *History of Education Quarterly*, 49 (2):

- J. C. Albisetti, “Froebel Crosses the Alps: Introducing the Kindergarten in Italy,” pp. 159–169.
- K. Uno, “Civil Society, State, and Institutions for Young Children in Modern Japan: The Initial Years,” pp. 170–181.

Also see *Blocks and Beyond: Strengthening Early Math and Science Skills Through Spatial Learning* by [M. J. Pollman, 2010](#), Baltimore, MD: Paul H. Brookes; and *Kindergartens & Cultures: The Global Diffusion of an Idea* by R. Wollons (Ed.), 2000, New Haven, CT: Yale University Press.

Early Education and Japanese Internment

For information on the Japanese American internment camps in World War II (and their early childhood programs), see the following:

- [Chapter 16](#) in *History of Early Childhood Education*, by V. C. Lascarides and [B. F. Hinitz, 2000/2011](#), New York, NY: Falmer Press/New York, NY: Routledge.
- The Public Broadcast System (PBS) Children of the Camps Web site: www.pbs.org/childofcamp/index.html
- The Center for Asian American Media (CAAM) Exploring the Japanese American Internment through Film and the Internet Web site: caamedia.org/jainternment/

The full text of Executive Order 9066 may be viewed at www.pbs.org/childofcamp/history/eo9066.html

President Clinton’s October 1993 Letter of Apology may be viewed on the Internet at www.pbs.org/childofcamp/history/clinton.html

Peace Resources

For a further discussion of Montessori’s peace education work, see

- Pages 162–164 in *History of Early Childhood Education*, by V. C. Lascarides and B. F. Hinitz, 2000/2011, New York, NY: Falmer Press/New York, NY: Routledge.
- *Peaceful Children, Peaceful World: The challenge of Maria Montessori* by [D. Wolf, 1989](#), Altoona, PA: Parent Child Press.
- Pages 81–82, 157–158, and 369–370 in *Maria Montessori: Her Life and Work* by [E. M. Standing, 1957](#), New York, NY: New American Library.

See the column contributed by Aline Stomfay-Stitz and Edyth Wheeler to the Association for Childhood Education International journal *Childhood Education* (www.acei.org) and the work of the early childhood educators who are members of the American Educational Research Association’s Peace Education Special Interest Group (www.aera.net/Default.aspx?menu_id=198&id=831).

Hispanic/Latino/Latina and English Language

Learners

For a full definition of *limited English proficient*, see www2.ed.gov/policy/elsec/leg/esea02/pg107.html

Report of the National Task Force on Early Childhood Education for Hispanics, *Para Nuestros Niños: Expanding and Improving Early Education for Hispanics*: Main report: ecehispanic.org/

Home Instruction for Parents of Preschool Youngsters (HIPPY): www.hippyusa.org/

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Chapter 2 The Program for Infant/Toddler Care

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After reading this chapter, you should be able to:

- Describe the background and status of contemporary infant care in the United States
- Outline the PITC-recommended program policies for high-quality infant/toddler care
- Chronicle the history of PITC
- Discuss the theoretical and research foundations of PITC
- Characterize the PITC approach to curriculum
- Illustrate the PITC course of study
- Depict the PITC module training process
- Epitomize the PITC media-based training approach
- Delineate the needs assessment for PITC
- Specify the efficacy of PITC

The Program for Infant/Toddler Care (PITC) seeks to ensure that America's infants get a safe, healthy, emotionally secure, and intellectually rich start in life. Its five-pronged mission is to (1) increase the quality and availability of child care for all children under age 3; (2) increase the number of knowledgeable trainers focused on the 0 to 3 age period by making available high-quality video and print training materials and promoting effective training strategies; (3) disseminate information that increases the practice of responsive, respectful, and relationship-based infant toddler care; (4) promote a curriculum-planning process that honors each infant's unique curriculum; and (5) inform national, regional, and local policies and practices so that curriculum development and program activity are centered around the needs and interests of infants, toddlers, and their families.

Background And Status of Infant/Toddler Care in the United States

PITC took on its mission in 1985 in response to the low quality of infant/toddler child care found in the United States, the increased use of and demand for infant/toddler care, and the paucity of trainers and training materials available for the age period. With regard to quality, what we observed then and what subsequent research confirmed was frightening. Less than 10% of care for children under age 3 was rated as developmentally appropriate and 40% was rated as damaging ([Cost, Quality, and Child Outcomes Study Team, 1995](#)). With regard to demand, requests for infant care slots far outnumbered slots available ([California Child Care Resource and Referral Network, 2009](#)). With regard to available training and training materials, most of the training at the time was conducted by trainers knowledgeable in preschool care but with little experience with infants. In a search

for audio and video training materials targeted to group care for infants, Honig and Wittmer (1989), who were commissioned by PITC to develop an annotated guide on that topic, found little.

As of this writing, little has changed concerning the availability and quality of care. Only the number of trainers and availability of training materials have changed. Sixty-one percent of children younger than 6 years old are being cared for by someone other than their parents and 55.4% of mothers with children under age 3 are employed ([U.S. Department of Labor Bureau of Statistics, 2010](#)). [The California Child Care Resource and Referral Network \(2009\)](#) reports that, although the supply of child care generally falls short of meeting the demand, infant care is particularly scarce. Although 65% of the overall supply of child care is center based, only 6% of licensed slots are for children under the age of 2. As for quality, an important indicator is turnover rate, which ranges from 25% to 40% for the child care workforce annually ([National Association of Child Care Resource and Referral Agencies, 2011](#)). Moreover, the infant/toddler care field has yet to be recognized as a profession worthy of appropriate compensation. The average hourly wage for a child care center worker is \$9.25 ([U.S. Department of Labor Bureau of Statistics, 2009](#)). These factors have seriously dampened the effect of training efforts in the field.

Yet quality clearly matters, as a growing body of research shows. The National Institute of Child Health and Human Development ([NICHD; 1997, 1998, 2002a, 2002b, 2007](#)) study of early child care found that higher quality care was related to better mother–child relationships, lower probability of insecure attachment in infants of mothers with low sensitivity, fewer reports of children’s problem behaviors during the early childhood years, higher cognitive performance of children in child care, higher children’s language ability, and higher levels of school readiness. Conversely, lower quality care predicted less harmonious mother–child relationships, a higher probability of insecure mother–child attachment with mothers who were already low in sensitivity to their children, more problem behaviors, lower cognitive and language ability, and lower school readiness scores.

It was also found that children benefit most from higher quality child care under certain circumstances. Consistently reported was the impact of the family on development. Family characteristics and the quality of the mother’s relationship with the child were found to be stronger predictors of children’s development than child care factors. Yet there appears to be an interactive effect between home conditions and conditions in care: The more children are in need of support at home, the greater the effect on them of high-quality or low-quality care. For example, in the NICHD study, quality child care modestly predicted greater involvement and sensitivity by the mother (at 15 and 36 months) and greater positive engagement of the child with the mother (36 months). But infants who received either poor-quality care for more than 10 hr per week of care, or were in more than one child care setting in the first 15 months of life, were more likely to be insecurely attached only if their mothers were lower in sensitivity.

Overall, however, children in care who received more sensitive and responsive attention had fewer caregiver-reported problems at ages 2 and 3 years. This finding is supported by research showing that quality child care promotes cognitive, language, and social and emotional development. When caregivers provide a supportive environment that encourages verbal stimulation, children are likely to show advanced cognitive and language development ([Partnership for America’s Economic Success, 2008](#)). In addition, higher quality care generally relates to more competent peer relationships during early childhood and into the school years (Scholl, Heidiger, & Belsky, 1996; [Shonkoff & Phillips, 2000](#); Sigman, 1995—all as cited in [Hetherington & Parke, 2003](#)). Such positive effects extend well beyond the early school years. Studies that examine children’s development over time have shown that higher quality child care is a predictor of improvement in children’s receptive language and functional communication skills, verbal IQ skills, cognitive skills, behavioral skills, and attainment of higher math and receptive language scores—all of which impact later school success (Cowen & Ewen, 2008). When child care is very high quality (as it is in model early childhood programs), positive effects endure into the early adult years, particularly for children from the poorest home environments ([Shonkoff & Phillips, 2000](#)). In contrast, children without nurturing relationship experiences—both at home and in child care—find interacting with people and objects in the environment more difficult and have greater challenges in their early learning experiences ([Lurie-Hurvitz, 2009](#)).

Instability of care, as measured by the number of entries into new care arrangements, was found to be associated

with higher probability of insecure attachment in infancy if mothers were not providing sensitive and responsive care. Only 45% of children with both mothers and child care providers in the bottom 25% of the sample on the sensitivity dimension were found to be securely attached, whereas 62% of those with more sensitive mothers and caregivers were securely attached. Conditions of poverty also had an important interactive effect with conditions of care. A difference was found in the quality of care available to infants from families that were consistently poor and received public assistance, as compared with children from families in near poverty who did not receive assistance. Families that met poverty criteria for subsidized care were found to receive a higher level of care than the children from near-poverty situations whose families had to pay for care out of their budget. Families more dependent on the mother's income placed their infants in child care at earlier ages and used more hours of care than did families less dependent on the mother's income. Families who moved in and out of poverty—known as transitory poverty—were most likely to place their infants in child care very early, before 3 months of age. The way that low-income families tend to use infant care places their infants and toddlers at greater risk than middle- to high-income infants and toddlers for a variety of poorer outcomes and vulnerabilities, such as later school failure, learning disabilities, behavior problems, mental retardation, developmental delay, and health impairments ([Shonkoff & Phillips, 2000](#)).

Given these and many other confounding issues related to the impact of quality of care on children's development, PITC developed a set of program policies aimed at creating a climate with a high probability of ensuring quality regardless of family and child circumstances. Although excellent programs may be developed without one or more of the PITC program policies, the entire set of policies was conceived to maximize the chances for the actualization of accessible high-quality infant/toddler care. Together, the six PITC program policies establish stable child care experiences for all infants and toddlers and their families. Emphasis is placed on achieving relationship stability and emotional connection for each child and family. The purpose of these policies is to help each child become emotionally secure in care, which serves as the foundation for enhancing the child's learning, development, and well-being.

Pitc-Recommended Program Policies

- **Primary Care.** The assignment of a primary infant care teacher to each child and family. In a primary care system, each child is assigned to one teacher who is principally responsible for that child's care ([Bernhardt, 2000](#)). When children spend a longer day in care than their primary teacher does, a second teacher is assigned to be the primary relationship. Each child should have a special person assigned to that child at all times during the child care day. Teaming is also important. Primary care works best when teachers team up and support each other, providing a backup base for security for each other's primary care children. Primary care does not mean exclusive care. It means, however, that all parties know who has primary responsibility for each child.
- **Small Groups.** The creation of small groups of children and caregivers. Every major research study on infant and toddler care has shown that small group size and good ratios are key components of quality care. PITC recommends primary care ratios of 1:3 or 1:4 in groups of 6 to 12 children, depending on the children's ages. The guiding principle is this: the younger the child, the smaller the group. Small groups facilitate the provision of personalized care that infants and toddlers need, supporting peaceful exchanges, freedom and safety to move and explore, and development of intimate relationships.
- **Continuity.** Continuity of teacher assignments and groups over time. Continuity of care is the third key to providing the deep connections that infants and toddlers need for quality child care. Programs that incorporate the concept of continuity of care keep primary teachers and children together throughout the 3 years of infancy or the period that covers the child's enrollment in care.
- **Personalized Care.** Responsiveness to individual needs, abilities, and schedules. Following children's unique rhythms and temperaments promotes well-being and a healthy sense of self. It is important to help a child feel good about him- or herself, even if that child's biological rhythms or needs are different from those of

other children. Responding promptly to children's individual needs supports children's growing ability to self-regulate—that is, to modulate their behavior and emotional responses in personal and social contexts. The program adapts to the child, rather than vice versa. The child receives the message that he or she is important, that her or his needs will be met, and that his or her choices, preferences, and impulses are respected.

- **Cultural Continuity.** Cultural continuity between home and program through dialogue and collaboration with families. Children develop a sense of who they are and what is important within the context of culture. Traditionally, it has been the child's family and cultural community that have transmitted values, expectations, and customs, especially during the early years of life. As more children enter child care during the tender years of infancy, questions of their cultural identity and sense of belonging in their own families are raised. Consistency of care between home and child care, always important for the very young, becomes even more so when the infant or toddler is cared for in the context of cultural practices different from those of the child's family. Because of the important role of culture in development, teachers who serve families from diverse backgrounds can support cultural continuity as follows:

1. Heighten their understanding of the importance of culture in the lives of infants
2. Develop cultural competencies
3. Acknowledge and respect cultural differences
4. Learn to be open and responsive to families and willing to negotiate with them about child rearing practices

In this way, families and infant care teachers, working together, can facilitate the optimal development of each child.

- *Inclusion of Children with Special Needs. Appropriate accommodations and support for children with disabilities or other special needs.* Inclusion means making the benefits of high-quality care available to all infants through appropriate accommodations and support so each child may participate fully and actively in a program. Issues already embraced by PITC—a relationship-based approach to the provision of care that is individualized and responsive to the child's cues and impulse to learn—are important for all children, including those with disabilities or other special needs. Infants who have responsive, enduring relationships develop emotional security, which gives them the foundation for becoming socially competent and resilient. Infants who have individualized care are allowed to learn and grow in their own way and at their own pace.

These policies, shown in [Figure 2–1](#), are rooted in work that dates back to the 1960s. By the time PITC's development began in 1985, the need for policies that support the implementation of responsive, relationship-based care for infants and toddlers was abundantly clear.

History of Pitc

The beginnings of PITC originate with work at the Syracuse University Children's Center, the first federally funded infant/toddler center in the United States. In 1964, this program

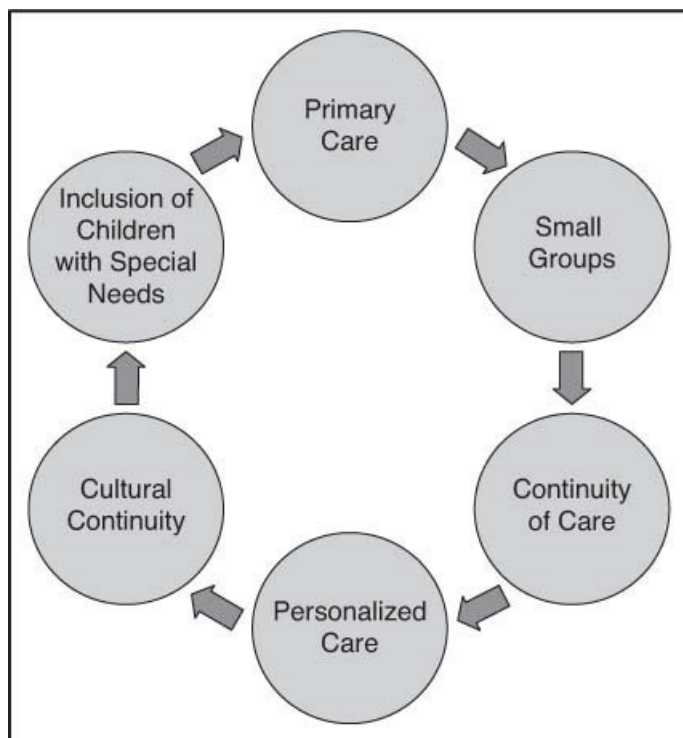


Figure 2–1 PITC-Recommended Policies

opened its doors to study the effect of center-based care on infant development. Created jointly by Bettye Caldwell and Julius Richmond, with the assistance of Alice Honig, it combined strategies from the fields of developmental psychology, child development, early childhood education, and pediatrics to create and provide a child and family enrichment program designed around center-based child care. In 1969, J. Ronald Lally succeeded Bettye Caldwell as director of the center and initiated the Syracuse University Family Development Research Program (FDRP), a longitudinal intervention for 108 children from low-income families beginning in the third trimester of pregnancy and continuing through the fifth birthday of each target child. Throughout the period from 1964 through 1977, continuous improvement efforts were conducted based on classroom and child observations and assessments. One of the results of these efforts was the book *Infant Caregiving: A Design for Training* (Honig & Lally, 1981), which disseminated many of the lessons learned about the provision of infant/toddler care at the Syracuse University Children’s Center and formed the foundation for PITC. As the longitudinal follow-up study reports, the approach toward care used in the center program was designed to achieve the following:

[So] that children could expect to be treated fairly and with loving kindness by adults and other children in a secure and consistent setting, that they would come to expect daily educational experiences, and that they would see the resources of their childcare community as available for their use and to meet their needs. The staff functioned under the agreed upon assumptions that these children were capable of: 1) learning something about anything in which they showed interest; 2) learning to understand that their actions and choices had an impact on others; 3) learning that cooperation and concern for the rights of others would ultimately allow them to express their own creativity, excitement, curiosity, and individuality more fully; 4) learning that wonder and exploration were encouraged by adults; and 5) imitating the actions of staff to other children and other adults. Additional assumptions were that these children were to be treated as special creations, each with particular skills and specialties that would be appreciated by and useful to the larger society; these special powers were protected and allowed to rise to ascendance by the adults who spent their daytime hours with them. In summary, the context that was fostered set a daily tone of freedom of choice and awareness of responsibility, an expectation of success in each child; confidence in the fairness and consistency of the environment; an emphasis on creativity, excitement and exploration in learning;

expectation of internal rather than external motivation; and the safe, cheerful place to spend the day. ([Lally, Mangione, & Honig, 1987, p. 2](#))

This philosophy of care also formed the foundation of the home visit component of the FDRP and eventually became the basis for “Home Visiting the PITC Way,” the home visit training component of PITC.

During the same period, Glen Nimnicht and his team were creating the Responsive Education Program ([Thoms & Lewis, 1975](#)) at Far West Laboratory for Educational Research and Development (now called WestEd). This federally funded and carefully evaluated early childhood education program (prekindergarten to Grade 2) had three goals: (1) to support children’s cognitive development by promoting the development of problem-solving abilities; (2) to support a healthy self-concept by supporting learners in using their own ideas, values, and learning styles productively; and (3) to support cultural pluralism by promoting the development of attitudes and behaviors that enable learners to understand and value ethnic and cultural diversity and to interact equitably in a pluralistic society. Evaluation findings in educationally treated showed significant positive growth movement as compared with controls on all three goals. When Lally moved from Syracuse University to Far West Laboratory and was later joined by Peter Mangione, they worked to blend these two well-thought-out and carefully studied approaches. By 1985, when the opportunity arose to help the California Department of Education (CDE) with concerns about the quality of care infants and toddlers were receiving in subsidized programs, the PITC approach was already well on its way to being formulated. Half the nation’s infants and toddlers were spending long hours in child care programs in which their care and education were often relegated to underappreciated, poorly compensated, and inadequately trained providers. California trends mirrored national trends. CDE, through the leadership of Robert Cervantes and Janet Poole (the latter who had visited the Syracuse Children’s Center in the late 1970s), entered into a historic and long-lasting collaboration with Far West Laboratory for Educational Research and Development to develop and operate PITC.

As work began, PITC’s developers soon found, although both research and experience pointed to the significance of the first 3 years of life and a good deal was known about individual infant development, that little information was available to child care professionals about how to provide optimal care for infants and toddlers in group-care settings. Poole and others—in particular, Mary Smithberger of CDE’s Child Development Division (CDD), and Lally and Mangione of WestEd’s Center for Child and Family Studies—started by gathering a team of child and family researchers, child care experts, and media specialists. Together, they began to develop a comprehensive multimedia training system centered on user-friendly broadcast-quality videos that would bring directly to infant care teachers theoretical and practical knowledge about infant development and care. Partnerships were forged with private foundations, including Carnegie Corporation, The Ford Foundation, Smith Richardson Foundation, and the Harris Foundation, to support video and print material development.

Since PITC’s beginning, it has focused on assisting center and family child care providers to implement high-quality infant/toddler care. It has developed strategies aimed to help caregivers read and respond to the emotional, social, and intellectual messages of infants in their care. Further, these strategies include encouraging policies that enable programs to focus on the importance of the relationships between the caregiver and child, and the caregiver and family, as the foundation of good-quality care. PITC materials and approach have been used to instruct many trainers throughout the country, who in turn have taught thousands of caregivers.

From its inception, PITC has included the perspectives of a wide range of stakeholders. In the project’s first year, 3,000 parents, caregivers, and trainers participated in an assessment of training needs in California. A panel of nationally recognized experts in the field of infant/toddler care and development was enlisted to be the project’s advisors and reviewers. In addition, a state panel of child care experts was formed. Special consultants, noted experts, and theorists on early learning, environment, culture, and language, as well as trainers, caregivers, children, and parents, have made significant contributions to PITC. These contributions include the conceptualization, review and piloting of training materials, writing articles for PITC curriculum guides, and appearing in PITC videos.

A pilot study early in the development of PITC ([Mangione, 1987](#)) suggested that trainers needed more than high-quality videos and guides to be able to use the materials effectively in training. Trainer’s manuals were developed

to offer lesson plans based on PITC materials. In addition, CDE and WestEd took a major step toward far-reaching dissemination of the PITC philosophy and materials with the creation of a series of Trainer Institutes. The first of these Trainer Institutes were presented in 1990, taking the form of training by module in 3½-day segments, with faculty including notable figures in the field of infant care and development, as well as the CDD and WestEd creators of PITC. The Trainer Institutes offer a deep understanding of PITC content and philosophy—as well as guidance in effective adult learning techniques—to college teachers, program managers, resource and referral agency staff, and others responsible for training caregivers in home-based and center settings. Since 1992, CDE/CDD has provided fellowships for eligible California residents, significantly increasing the accessibility of the trainings to diverse communities in all regions of California. The institutes are also open to trainers from out of state, a decision that provided the impetus for national dissemination of PITC.

In 1994, Carnegie Corporation issued the report titled “Starting Points: Meeting the Needs of Our Youngest Children” ([Carnegie Task Force on Meeting the Needs of Young Children, 1994](#)), which resulted in a significant increase in awareness and will on the part of public and private groups to address infant/toddler care needs. Two years later, national welfare reform legislation placed additional demands on child care systems and raised concerns about the quality of care, particularly for children under 3 years of age. It became more imperative than ever to expand and support training efforts; federal and state agencies and private foundations looked to California for guidance and training materials. Representatives of the departments of education, health, and social services in several states contracted with WestEd to present PITC Trainer Institutes and to provide technical assistance in the creation of statewide training networks. To date, PITC has conducted Trainer Institutes, along with graduate conferences and satellite trainings, in 18 states and the District of Columbia. In addition, between 1996 and 2003, PITC played a major role in providing training and technical assistance to the 700 Early Head Start (EHS) and Migrant Head Start programs serving infants and toddlers. In fact, all grantees in the first four waves of EHS participated in PITC training. In 2011, PITC reached 600 EHS center-based staff and 600 EHS home visit staff with 12 weeklong intensive trainings.

In 1998, California’s CDE/CDD expanded the partnership with WestEd in a wide-ranging plan to increase the quality of care for infants and toddlers with disabilities, as well as typically developing children. PITC became the heart of a system of training and technical assistance designed to reach every region of California. New PITC activities included the following:

- Partners for Quality (regional training and coaching network)
- PITC demonstration programs (five California sites)
- PITC Home Visitor Training Institutes
- PITC *Beginning Together* Trainer Institutes, focusing on the inclusion and care of children with disabilities or other special needs
- PITC Infant Toddler Learning & Development Advanced Training Institutes
- Specialized assistance to community colleges and local planning councils

Each year the PITC training system reaches more than 3,000 infant/toddler care teachers and administrators at 150 centers, including groups of family child care providers, who serve approximately 18,000 infants and toddlers in California.

Collaboration with the California Department of Education continues. In 2008, CDE’s comprehensive Infant/Toddler Learning & Development System was made available to state practitioners to link PITC training and technical assistance with newly created program guidelines, child development foundations, a curriculum framework, and an assessment instrument, all based on PITC philosophy ([Figure 2–2](#)).

Theoretical and Research Foundations of Pitc

The PITC approach is constructed to help programs and infant care teachers provide infants and toddlers with close and responsive relationships; safe, interesting, and developmentally appropriate environments; uninterrupted time to explore; and interactions with adults that both emotionally and intellectually support and expand their learning. These emphases reflect the research-based understanding that developing infants and toddlers exhibit both great competency and great vulnerability ([Shonkoff & Phillips, 2000](#)). Both of these attributes need to be addressed by parents and teachers. On one hand, the infant has been found to be vulnerable and in great need of adults. Human infants operate in a state of what David Hamburg, past president of Carnegie Corporation, calls “prolonged helplessness” ([Hamburg & Takanishi, 1997](#)). The infant needs adults for survival, protection, and early nurturance. Without this protection and nurturance, that child will die. The infant also relies on the adult for social, emotional, and intellectual survival. Young children seek out adults not only for protection but also for guidance on successful ways to function in

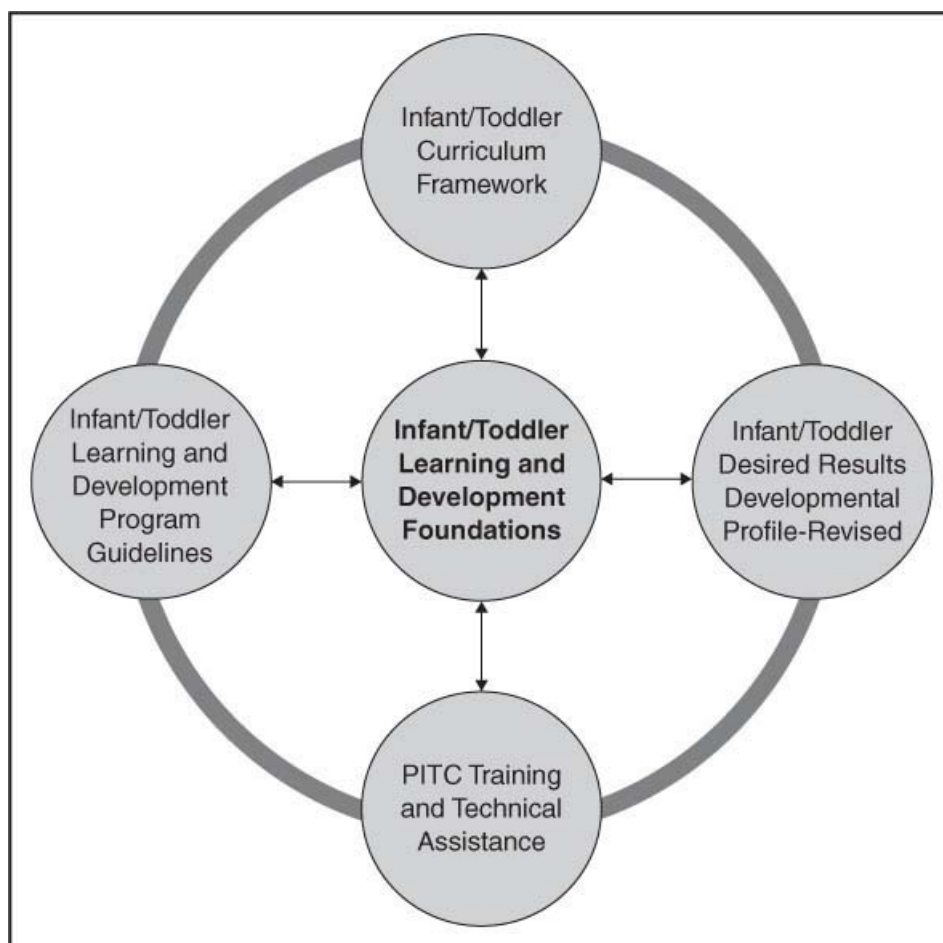


Figure 2–2 CDE Systems Chart

the particular society and culture into which they are born. They depend on adults to share with them society’s “rules of the road.” On the other hand, it has been found that, in addition to their vulnerability, infants are quite competent. Infants have their own agenda, they are born ready to learn, they move toward organizing their experience, and they create order. Their brains are structured to make sense of things, to find meaning, and to explore possibilities. They actively explore and experiment. They are genetically predisposed to learn language. They are inclined to watch and learn from others. Through imitation and incorporation of their perceptual experiences, they develop ways of thinking, feeling, and acting. Skills crucial to success in school, including the ability to regulate one’s urges (inhibition), the ability to hold some information in mind while attending to something else (working memory), and the ability to switch attention or mental focus (cognitive flexibility), are shaped through the give-and-take of relationships in which babies engage during the first two years of life

([Thompson, 2009](#)). PITC has created strategies to assist program leaders and infant care teachers with understanding and simultaneously addressing these two attributes. With regard to attention to the child's vulnerability, the PITC approach emphasizes that, through the infant care teacher's prompt, appropriate, and contingent responses, the child learns that her or his actions are acknowledged and addressed. The child begins to understand that these actions can produce a desirable result. Yet the child's vulnerability is never addressed without simultaneous attention to the child's competence. Therefore, PITC recommends that infant care teachers watch and wait as a child struggles with a problem until the child gives a signal for help, rather than either rushing in to do things for the child or not helping when the signal is given. This simultaneous responsiveness to both the vulnerability and competence of the child is at the heart of the PITC approach. The supportive presence of the infant care teacher allows the child to learn to persist in the face of a challenge and yet to feel that help is available if needed. This type of learning is fundamental in a child's cognitive growth ([Hauser-Cram, Warfield, Shonkoff, & Krauss, 2001](#)). Being attentive to secure base behavior is also emphasized in the PITC approach. As an infant grows, the child becomes a more willing and confident explorer if that child has a secure base in the form of a supportive and trusted caregiver from which to explore ([Bowlby, 1969](#)). Again, the presence of both vulnerability and competence is addressed. As the young child exhibits new and sophisticated exploration skills—such as crawling and hand-to-hand transfer of objects—these competencies are both recognized and supported while the infant care teacher attends to the child's vulnerability by being a secure base for exploration and continuing to strengthen the child's feeling of security and well-being.

With this vision of the infant or toddler as an exhibitor of both vulnerability and competence at the center of PITC philosophy, our approach is further based on 10 additional attributes of infancy that have been identified in the research literature.

Ten Attributes of Infant/Toddler Development on Which the PITC Approach is Based

1. Relationships are essential for development. The infant is dependent on close, caring, ongoing relationships for positive physical, social, emotional, and intellectual growth. Infants develop best when they are sure of having trusted caregivers who can read their cues and respond to



Holding baby on the caregiver's lap, hugging, and stroking the baby help in the development of a trusting parent–child relationship.

their needs. The impact on the infant's development of the quality of the relationship between caregiver and infant, parent and infant, or home visitor and parent cannot be emphasized enough. PITC recommends infant/toddler care policies to increase the probability that these relationships are formed and have a chance to deepen over time.

2. Infants learn holistically. Parents and caregivers need to relate to infant learning by being conscious of the impact of their actions on all developmental domains, not just the one on which they focus at any given time. Infants do not experience social, emotional, intellectual, language, and physical learning separately. Infant learning is best fostered in very young children through attending to the “whole child” rather than through giving focused attention to one developmental domain at a time (Bornstein & Bornstein, 1999; [Shonkoff & Phillips, 2000](#)). For this reason, adults are most helpful to young children when they interact in ways that reflect an understanding that the child is learning from the whole experience, not just the part of the experience to which the adult gives attention. PITC recommends that teachers adopt this “whole child” approach to facilitating young children's development and learning. Within its holistic approach, PITC trains teachers and parents to see the component parts of early learning experiences by focusing on each developmental domain and identifying the various learning interests of infants and toddlers. Teachers and parents using this approach become much more likely to match what they do with children to the children's needs and interests. This approach to early learning can have tremendous impact on a child's development and learning because it focuses on issues of interest and that are meaningful to the child.
3. Infancy consists of three broadly defined stages. Between birth and age 3, a child goes through three distinct developmental stages: young infant, mobile infant, and older infant. At each of these stages, infants organize their thoughts and actions differently. Adults need to be able to adjust the way they attend to an infant depending on what the child presents developmentally. If a teacher, for example, expects the young infant to have the same level of impulse control as an older infant, that teacher might employ discipline techniques that are damaging to the child. PITC recommends that teachers always look at the “developmental

equipment” ([Fraiberg, 1955](#)) a child possesses as a key variable in how the adult should act. In doing so, the adult comes to see that there is no one approach to issues such as biting, fighting, and crying; in each instance, the adult needs to take into account what the child brings to the issue—in particular, the child’s developmental level. PITC advises that the type of care provided and experiences introduced should be in harmony with the child’s developmental stage and should change as the child moves from one stage to another.

4. Infants are active, self-motivated learners. Each infant is born curious and motivated to learn—indeed, the child actively participates in learning each day. Environments and activities that keep motivation, experimentation, and curiosity alive must be constructed to facilitate the infant learning process. Environmental design, toys and equipment, activities, and facilitation of play and exploration must reflect awareness of infants’ self-motivation. If, for example, the caregiver selects all the lessons to be learned or provides an environment neither challenging nor interesting, the child will push to do what he or she is interested in or to create his or her own stimulation. In an adult-directed world, infants and toddlers often will be told “No,” “Stop,” or “Bad” when they are either passionately following their own learning agenda or searching for experiences of interest. In contrast, PITC tries to help teachers see that, when engaged in self-directed learning, children should not be made to feel “This is wrong” or “I am bad” or “I should not take the initiative in learning.” Awareness of a child’s self-motivation actually frees parent and caregivers. Rather than assuming that they have to supply all the learning motivation and create every learning experience, they can look for ways to take advantage of the child’s natural desire to learn and then expand, adapt, and encourage what they observe. This approach not only helps the child learn, but also encourages the child to feel good about him- or herself as a learner.
5. Infants differ from one another. They are individuals with unique temperaments and unique relationship experiences. Each child is born an individual with an individual temperament, a different rate of development, and different ways of relating to others. It is essential for caregivers to acknowledge the effect of temperament on individual children’s development and to respect these temperamental differences. Doing so requires professionals working with young children to know the different temperamental traits and to be knowledgeable of the dynamic quality of development. Awareness and allowance for temperamental differences in children comprise a first step toward individualizing care. Temperament is a window through which adults can view their relationship with each child. Understanding that the active child, slow-to-warm-up child, and child who is not intense or is easily overstimulated all need a slightly different approach is crucial to individualization.
6. Infants develop their first sense of self through contact with others. An infant or toddler learns most of how to think and feel by imitating and incorporating the behaviors of those who care for that child. How infants first see themselves, how they think they should function, and how they expect others to respond to them all come from and through their relationships.
7. Home culture and family are a fundamental part of a child’s developing identity. Because an infant’s sense of self is such a crucial part of a child’s development and learning, early care programs must, in addition to carefully selecting and training caregivers, ensure that links with family, home culture, and home language are a central part of program policy. PITC consciously strives to both respect and incorporate the cultural values of the families served and to seek out from family members information about how they would like their child to be treated. Making connections with young children requires that caregivers and home visitors make connections with families. To serve a child well, program staff need to know that child’s family. Thus, teachers and program administrators need to be skilled observers and respectful interviewers with a commitment to engage families. PITC advises teachers that much of the information needed to better serve children would either be incomplete or not learned at all without family connections.
8. Language skills and habits develop early. The development of language is particularly crucial during the infant/toddler period.



Sensory experiences such as touching are the building blocks of early exploration and peer play.

PITC supports teachers in providing various opportunities for infants to engage in meaningful, experience-based communication with trusted adults who acknowledge and encourage their communications. Creating a verbally rich environment enhances language development, but it also promotes cognitive development. Singing, talking, asking questions, waiting for a response, and verbally labeling objects directly affect the formation of neural pathways ([Shore, 1997](#)). For infants learning more than one language, the same principles apply. In addition, teachers need to focus on enhancing babies' comfort with a second language by creating continuity between the home and the child care setting. When supporting a child learning one or more languages, infant/toddler care should emphasize warm, nurturing conversation that is responsive to the child's attempts to communicate (Pearson, with [Mangione, 2006](#)).

9. Environments are powerful. "What young children learn, how they react to events and people around them, and what they expect from themselves and others are deeply affected by their relationships with parents, the behavior of parents, and the environment of the homes in which they live" ([Shonkoff & Phillips, 2000, p. 226](#)). Infants and toddlers are strongly influenced by the environments they experience each day. This is particularly true for very young infants who cannot move themselves from one environment to another. PITC shares information with infant care teachers about the importance of creating safe, healthy, and interesting environments that are not cluttered, confusing, noisy, or chaotic. Careful attention is paid to the impact on child functioning of materials, equipment, size of groups, and stability of environments.
10. Caregiving routines are prime avenues for infant/toddler learning. Some of infants' most important learning experiences occur during caregiving routines. When carried out in a consistent manner and at a pace the infants can follow, infants can learn to anticipate what will happen next in a routine. This experience allows infants to participate and eventually cooperate in caregiving routines. They learn how their needs are met and how to begin regulating themselves. Routines also offer opportunities for the teacher to talk about the steps in the routine and engage in conversations with infants and toddlers, thereby fostering language development. Through routines, families transmit culturally based practices. Because caregiving practices are culturally meaningful, it is important for teachers to create links between the child's experiences with routines at home and those in the child care program.

The Pitc Approach to Curriculum

Good infant/toddler care is not like babysitting or preschool. It is a special kind of care that looks like no other.

Because infants and toddlers have unique developmental needs and interests, their care must be constructed specifically to meet those needs. For care to be designed well and carried out appropriately, decisions about environments, routines, staffing, group size, relationships with families, supervision, and training must have as their starting point the individual infants in care. The PITC approach to curriculum therefore includes the infant as an active partner in the process of curriculum creation. In a curriculum following the PITC philosophy, a good portion of lesson planning has to do with altering teacher behavior and environments in ways that adapt to the lessons that infants choose to learn. PITC curriculum planning explores ways to help infant care teachers attune themselves to each infant they serve and learn from the infant what that child needs, thinks, and feels. Once in tune with individual children, teachers draw on their knowledge base (child development, environments, developmentally appropriate materials, awareness of their own personal characteristics) to facilitate the next step of the children's development. This two-part process—putting oneself in the child's position and then using one's own knowledge and experience to inform the next interaction with the child—is the essence of the PITC approach to curriculum. In this approach, the most critical curriculum components are often not planned lessons but planned settings. Thus, this approach respects the active role of infants in their learning and development, as well as the manner in which they learn, which often changes from moment to moment in unpredictable ways. In essence, PITC curriculum planning looks to the infant for direction. Understanding who the individual infants and toddlers are, what their needs and interests are, and how they learn drives decisions about what kind of care best supports their development, learning, and well-being. This approach requires ongoing cycles of observation and documentation of children, as well as discussion, contemplation, reflection, planning, and implementation. [Figure 2–3](#) illustrates the curriculum process.

Observe Each Child. To facilitate learning and development effectively, infant care teachers need

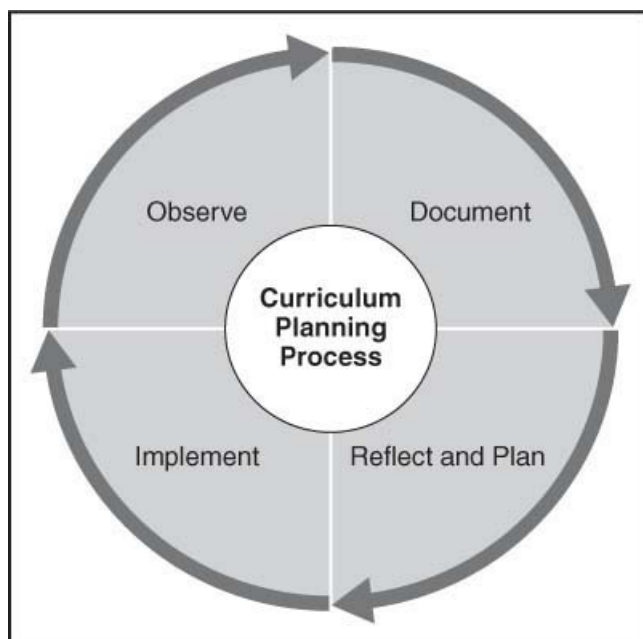


Figure 2–3 PITC Curriculum Process

to observe what children do. In the PITC approach, teachers actively participate with the children while observing, take notes on the fly, and selectively record what they think will be meaningful at a later time to them, to the child, and to the child's family. PITC encourages teachers to use their knowledge to interpret behavior as they focus on dynamics that arise in the child's relationships. These observational strategies place value on teachers' active role in identifying and then recording what they think has meaning.

Document Observations. Infant care teachers record their observations in three different ways: (1) immediately taking notes or photos, or videotaping or audiotaping the children; (2) setting aside time for note taking; or (3)

collecting what older children create. Teachers often work together to document their observations in ways that do not interfere with time spent with the children or with the flow of the day.

Reflect and Plan. PITC encourages infant care teachers to study their observation records and documentation information both by themselves and with colleagues and family members. Taking time to slow down, review, and think about each child's behavior, temperament, learning interests, developmental profile and needs, helps teachers deepen their understanding and appreciation of each child. This contemplation time also helps them uncover ideas on how to continue to support that child's learning and development. This process can be exciting and invigorating for teachers as they come up with ideas and think about how they might adapt the environment or routines, or introduce a new routine or material based on observations, notes, reflection, and discussion. Part of the reflection and planning process includes narrowing down the list of ideas to one or two that relate directly to the interests and abilities of a child or a small group of children. Once teachers have a plan for the next step in supporting a child's learning and development, they then introduce the adaptation or change in a way that allows the child to make choices and to interact with the new material or environmental setup, experiencing freely and creatively.

Implement Plans. Teachers using the PITC curriculum process try out their plans by making changes in the environment, introducing materials, relating and interacting in new ways, and highlighting objects or concepts for selective focus. As teachers test their plans with children, the process begins again with observation. By observation, followed by documentation, assessment, and reflection, teachers learn how each child responds to the changes made. This dynamic process of ongoing study of children's learning and development leads to new curriculum ideas to plan and implement. Through this curriculum process, teachers deepen their understanding of each child. They become more sensitive in adapting the environment and more responsive to each child's evolving interests and abilities.

The Pitc Course of Study

Infant/Toddler Development

PITC focuses on four developmental domains: social-emotional, cognitive, language, and motor and perceptual.¹ As PITC is aligned with the CDE's *Infant/Toddler Learning and Development Foundations*, the specific competencies and learning interests identified in each of these domains correspond to the foundations. As stated previously in this chapter, infant learning and development are understood to be holistic in PITC's perspective. Although the division of competencies and learning interests into domains is artificial, it helps teachers understand and attend to the breadth and depth of early learning and development. In some cases, the division of competencies into domains is arbitrary. For example, only four specific competencies or interests appear under the language development domain, yet interactions, relationships, expression of emotion, and imitation directly relate to children's developing abilities to communicate and use language. PITC training works to help teachers focus on specific competencies within domains, while always maintaining a focus on the interrelated nature of learning and development. Within this approach, the specific competencies and interests of infants and toddlers are as follows:

Social-Emotional Development

- Interactions with adults
- Relationships with adults
- Interactions with peers
- Relationships with peers

- Identity of self in relation to others
- Recognition of ability
- Expression of emotion
- Empathy
- Emotion regulation
- Impulse control
- Social understanding

Cognitive Development

- Cause and effect
- Spatial relationships
- Problem solving
- Imitation
- Memory
- Number sense
- Classification
- Symbolic play
- Attention maintenance
- Understanding of personal care routines

Language Development

- Receptive language
- Expressive language
- Communication skills and knowledge
- Interest in print

Motor and Perceptual Development

- Gross motor
- Fine motor
- Perceptual

The Practice of Group Care

PITC integrates the information about the developmental domains with information on group care practice by organizing both sets of information into five training modules: (1) Social-Emotional Growth and Socialization; (2) Group Care; (3) Learning and Development; (4) Culture, Family, and Providers; and (5) Beginning Together—Caring for Infants and Toddlers with Disabilities or Other Special Needs in Inclusive Settings.

Module I: Social-Emotional Growth and Socialization. This module is based on the belief that all children need physically and emotionally secure care that simultaneously supports their developing self-knowledge, self-control, and self-esteem while encouraging respect for the feelings and rights of others. Healthy social-emotional development in infancy underlies all other learning and is dependent, to a great extent, on the child's close relationships with respectful, caring adults. Infant care teachers can support an infant's growing sense of self by providing security, warm acceptance, and appreciation for the child's growing independence. A teacher's ability to promote social-emotional development in children is influenced by the teacher's own feelings and experiences; thus training also focuses on self-awareness. Training topics include infant temperament, stages of emotional development, responsive caregiving, and guidance and discipline. The following are the specific training sessions:

- Social-Emotional Milestones
- Responsive Caregiving
- Temperament and Individual Differences in Group Care
- Meeting Children's Emotional Needs
- Guidance and Discipline with Infants and Toddlers in Group Care

Module II: Group Care. Module II focuses on the implementation of the PITC philosophy through program policies that support close relationships among children, families, and child care providers. These policies are the creation of small groups, primary caregiver assignments, and continuity of care that keeps children and caregivers together over time. In addition, this module addresses the basics of daily care, the development and maintenance of an environment that supports the child's health and safety, and social-emotional development and learning. Training topics in this module include creating intimacy in infant/toddler groups, caregiving routines, creating safe and interesting environments, and respectful caregiving. The following are the specific training sessions:

- Primary Care and Continuity of Care
- Group Size and Individualization of Care
- Setting Up Environments for Infants and Toddlers
- Daily Routines in Group Care Settings

Module III: Learning and Development. This module emphasizes the approach to infant learning taken by PITC, an approach that focuses on facilitating infants' natural interests and urges to learn rather than teaching them specific lessons. This facilitation is done by providing children with close and responsive relationships with caregivers; designing safe, interesting, and developmentally appropriate environments; giving infants uninterrupted time to explore; and interacting with infants in ways that emotionally and intellectually support their discovery and learning. Such practices are consistent with the attitude of respect toward infants and toddlers that is the hallmark of PITC. Training topics include cognitive development; the development of language and communication skills; the relationship between language, learning, and culture; and the inclusion of children with special needs in infant/toddler care groups. The following are the specific training sessions:

- Cognitive Development and Learning

- Language Development and Communication
- Special Needs
- Culture, Language, and Cognition
- Brain Development in Infancy

Module IV: Culture, Family, and Providers. The family is the single most important influence in a young child's life, and child care providers need to include the family in important decisions about the child's care. Creating a strong partnership between the child care program and families strengthens infants' feelings that who they are and where they come from are valued. Communicating in an infant's home language is also important. Module IV's recommendations include becoming aware of one's own cultural perspective and negotiating differences respectfully with families. The module offers support to caregivers in easing parents' concerns about using infant care, as well as in exploring, accepting, and dealing with their own feelings. Topics include culture and identity formation, dealing with cultural differences, program policies for culturally sensitive care, and creating partnerships with parents. The following are the specific training sessions:

- Self-Awareness and Cultural Perceptions
- Culturally Responsive Care
- Using the Process of Acknowledge, Ask, and Adapt
- Culture and Early Identity Formation
- Creating Partnerships with Parents

Module V: *Beginning Together*—Caring for Infants and Toddlers with Disabilities or Other Special Needs in Inclusive Settings. PITC implements this as a 5-day Trainer Institute open only to certified PITC graduates who have completed the first four modules. The institute's goal is to ensure that the training and technical assistance provided by PITC trainers incorporate issues related to children with special needs and promote appropriate inclusive practices. PITC also uses the *Beginning Together* training materials to provide regional outreach and support in the inclusion of children with disabilities or other special needs directly to child care programs.

The Pitc Module Training Process

PITC training institutes are provided for both professional trainers and infant care teachers. Each training module focuses on both the content and strategies for training adults in that module. The presenters, composed of PITC developers and adjunct faculty experts in specific topic areas, model the PITC training philosophy of responsiveness to different adult learning styles with a variety of strategies: lecture, video, readings, large-group and small-group discussions, experiential learning, reflection, and collaborative problem solving. After attendance at each module institute, participants may become certified PITC trainers in that module through the successful completion of a certification paper describing their training plans for each of the module's topics. An integral part of PITC's training philosophy is the concept of "creating a community of learners," which focuses attention on the variety of learning styles, knowledge, and experiences of adult learners and emphasizes the value of supportive, cooperative learning. At these institutes, the PITC content experts use video and print materials as the core of the curriculum.

Pitc Regional Caregiver Training Systems

PITC has worked with a number of states to develop training and technical assistance for child care providers at their sites. The Partners for Quality (PQ) system in California is the most comprehensive of the systems created

and is used here to illustrate regional training efforts.

PQ brings PITC training to both high-density population centers and underserved rural areas of California. PITC-certified Regional Infant/Toddler Specialists organize capacity-building efforts in their respective regions and coordinate training by PITC-certified PQ trainers. Regional Infant/Toddler Specialists and PQ trainers provide training, coaching, and mentoring to centers, and family child care homes in their region. This mentoring process happens on site. Mentoring usually takes place over a period of 18 months and includes 64 hr of training and up to 80 contact hr of program observation and reflective practice exchanges with providers and program directors. Since the inception of PQ, more than 41,000 California child care providers have received training and technical assistance. An evaluation of PQ has shown a strong positive impact on programs that complete the mentoring activity (see The Efficacy of PITC later in chapter) similar to that found by [Fiene \(2005, 2007\)](#) and by [Korkus-Ruiz, Dettore, Baghato, and Ho \(2007\)](#) in their studies of mentoring. The Regional Infant/ Toddler Specialists also work with various local community-based organizations: child care resource and referral agencies, child care planning councils, county First Five commissions, early intervention programs, and other groups to publicize and disseminate PITC training. In addition, an Infant/Toddler Specialist is assigned to coordinate and support each of four PITC demonstration programs located at community college campuses in various regions of California.

Demonstration Programs

In collaboration with the Community College Chancellor's office, PITC has developed four community college-based PITC demonstration programs in California. These programs, at Cabrillo College near Santa Cruz, Grossmont College near San Diego, Chabot College in Hayward, Santa Rosa Junior College, and Glendale Community College in Los Angeles County, offer observers the opportunity to see PITC policies and practices in action. Trainer Institute and regional training participants, early childhood education students, program managers, policy makers, teachers, and other visitors are invited to observe relationship-based care, responsive teaching and nurturing, and safe and interesting environments using one-way-vision observation rooms or electronic audio and video monitoring. Each demonstration site is unique, offering visitors to more than one site the experience of viewing programs that differ in size, physical environment, location, history, and culture. The programs have been available for observation as PITC demonstration programs since 2002 and can be seen by arrangement with the local Infant Toddler Support (ITS).

Home Visiting the Pitc Way

PITC is also a key element in early intervention efforts with low-income children and families. In 2002, PITC developers embarked on the creation of a curriculum for home visitors, addressing ways that home visitors can be more effective in their work with parents, blending the philosophy of PITC with best practices in home visiting. Home Visiting the PITC Way is a training curriculum that prepares home visitors to support parents in understanding, promoting, and delighting in their children's healthy development. Home visitors learn how to establish trust with parents, how to communicate with parents about child development stages, and how to model positive parenting practices. Participants practice with scenarios of teaching opportunities and problem-solving situations with parents, watch and analyze videotaped examples of young children's developmental needs and capacities, and create personal professional development agendas.

The core institute, facilitated by PITC faculty and a Home Visiting the PITC Way trainer's manual, requires at least 5 days, either in a block or spaced over time. It is customized for trainers or supervisors with the option of additional days, based on the needs of the participants.

Early Head Start PITC Home Visitor Training

In 2011, a variation of Home Visiting the PITC Way was developed for the Early Head Start Community. Grounded in the PITC philosophy, this 7-day intensive training for home visit supervisors and family support specialists provides both content and process information about home visit practice. Training of home visitors, family support supervisors, and family support specialists addresses issues of risk and resilience, helping parents read babies cues, early brain development and parental responsiveness, facilitation of parents understanding of infant development, developmentally appropriate guidance and discipline, the unique role of the EHS home visitor, reflective practice, self-awareness and self care, and cultural competence as it applies to work with families.

Pitc Pq—home Visiting

The PITC PQ home visiting training emphasizes the importance of nurturing responsive relationships in the healthy development of infants. The information presented in the training assists the home visitor in how to best support the relationship between the parent and the child as well as in how to individualize care for each child and parent. This training is provided directly to home visitors on site by PITC-certified Infant/Toddler Specialists in collaboration with social work and mental health consultants.

The Pitc Media-Based Training Approach

The philosophy and content presented in the previous sections are disseminated in various ways, with the centerpiece being a series of 15 training DVDs supplemented by various written materials, most notably guides and manuals on infant and toddler care. Several considerations influenced the decision by PITC's developers to make videotaped materials central in the training system. Above all, becoming a sensitive observer of young children is an essential part of learning about how to care for them appropriately and effectively. Without guidance, an untrained observer can miss many subtle aspects of an infant's behavior. Videotaped materials can be highlighted with both visual effects and narration to draw the attention of viewers to subtleties of infant behavior and to help them become more sensitive observers.

Another consideration underlying the choice of video is that high-quality training materials can be made available to larger numbers of child care providers. Videotaped programs are easily transportable and can be broadcast over public and private networks. In addition, if made well, videos can both inform and inspire the viewer. A video that shows quality care being provided to young children can both engage the interest of caregivers and present positive role models to them.

As stated previously, [Honig and Wittmer \(1989\)](#) compiled information from a review of 91 media training materials for infant/toddler caregivers in an annotated guide. At the time PITC development commenced, most of the materials identified by Honig and Wittmer in their search were either for parents or college-level students of human development. These materials rarely addressed questions related to caring for infants in groups. Thus, such topics as designing environments for groups of infants, group size, age mixture of infants in groups, individual variations within a group, and dealing with parental concerns and needs receive little treatment in currently available media training materials.

Against this background, the number of training videos being made on topics related to group care has recently increased. PITC is part of the growing recognition of the need to support the training of center-based and family child care providers. It represents an attempt to provide a comprehensive series of training videos in English, Spanish, and Chinese, with each video/DVD covering a specific topic grounded in a coherent approach to caring for young children.

The Needs Assessment For Pitc

In the first phase of developing PITC, survey data were gathered from 405 child care providers in the State of

California (278 center-based, 127 family child care providers) to document their perceived needs for training. Over 50% of the questionnaire respondents ranked the topic “Setting up a Safe and Interesting Environment” among their top-five choices of videos they would find useful to view. Other topics that frequently received high rankings were in the domain of social-emotional growth and socialization. These findings were used to establish priorities in the development of the PITC videos and related written guides.

Caregivers were also asked to rank the effectiveness of different means of learning about early development and care. The option that was most often ranked among the top five was “Observing a Master Caregiver in Action.” This result strengthened the view that observation is an important mode of learning for students of early development and care.

Finally, respondents ranked the desirability of various contexts or settings for viewing a training video on infant care. They were found to favor settings in which a trainer and peers are present. Opportunities to ask questions of a specialist, as well as to discuss video content in a group, were identified as vital to their learning. The general interest of caregivers in opportunities for discussion with a trainer or specialist indicated that presenting information via video should be integrated into a comprehensive training system.

Information derived for the review of media materials, the needs assessment, and the articulation of guidelines for quality infant care provided a framework for the development of the training videos. Advice and recommendations to the project team from PITC’s national state advisors, video production experts, caregiver trainers, and practitioners helped shape such characteristics as the length of the videos, the extent to which theory is covered versus practical suggestions, the breadth of material presented, and the type of visual effects used.

For several reasons, a length of 25 to 30 min was considered optimal for the videos. Advisors representing public television systems recommended this length because it would make the videos suitable for programming in half-hour time slots.

Experts in video production advised that each video should be narrow in scope, covering only a limited number of concepts. Because as a series the videos were intended to constitute a comprehensive package, each could focus on a specific topic. However, to be handled adequately, a narrowly defined video topic must be treated in considerable detail.

In light of these competing concerns, the approach adopted was to give ample coverage to a small number of concepts, while trying not to overdo the presentation of any given concept. In effect, the concepts themselves organized the information presented in a video.

Another consideration in making the videos was striking a balance between developmental theory/research and practical guidelines/suggestions. The advisory groups strongly recommended creating videos that are practical in nature. Following this advice, the videos introduce background material on early development and then spell out practical tips and recommendations based on theory and practice. Much of the theory and research on the development of young children and related practical advice refers to caregiving by parents in the child’s home. This material has been adapted to the context of group care and supplemented by knowledge derived from group-care practice.

One of the challenges in making videos on infant care is finding ways to convey the subtle aspects of quality caregiving. Critically analyzing each scene before deciding what to communicate about it has become an essential part of the process of creating each video. The analysis stage often consists of repeated viewing of a sequence and discussion among the project team members on how to interpret the behavior of both the caregiver and the children. A thorough analysis results in the development of simple, direct language to draw attention to the key aspects of the scene and gives insight into the kinds of editing techniques and visual effects that would effectively highlight the points made in the narration. To engage the interest of care-givers, the videos emphasize the rewarding aspects of infant caregiving and acknowledge its challenges and difficulties. The videos visually and verbally communicate young children’s need for warm and trusting relationships with

Figure 2–4 Needs Assessment Videos (Available on DVD)

Note: The videos can be obtained from www.wested.org

Module I: Media Training Materials

- In Our Hands
- The Ages of Infancy: Caring for Young, Mobile and Older Infants
- Getting In Tune: Creating Nurturing Relationships with Infants and Toddlers
- First Moves: Welcoming a Child to a New Caregiving Setting
- Flexible, Fearful, or Feisty: The Different Temperaments of Infants and Toddlers
- Getting In Tune: Creating Nurturing Relationships with Infants and Toddlers

Module II: Media Training Materials

- Respectfully Yours: Magda Gerber's Approach to Professional Infant/Toddler Care
- Space to Grow: Creating a Child Care Environment for Infants and Toddlers (2nd edition)
- It's Not Just Routine: Feeding, Diapering and Napping Infants and Toddlers (2nd edition)
- Together in Care: Meeting the Intimacy Needs of Infants and Toddlers in Groups

Module III: Media Training Materials

- Discoveries of Infancy: Cognitive Development and Learning
- Early Messages: Facilitating Language Development and Communication
- The Next Step: Including the Infant in the Curriculum

Module IV: Media Training Materials

- Protective Urges: Working with the Feelings of Parents and Caregivers
- Essential Connections: Ten Keys to Culturally Sensitive Child Care
- Talking Points for Essential Connections: Video Clips for Group Discussion
- Talking Points for Protective Urges: Video Clips for Group Discussion

Module V: Media Training Materials

DVDs from the other four modules are used in this module's sessions.

their caregivers. Examples of the natural enjoyment of the relationship shared by caregiver and child are shown throughout the series of videos. Humor is used in the videos to convey the light and playful side of infant caregiving. A respectful tone is conveyed, and the importance of responsive caregiving to young children is underscored. In other words, the style of presentation in the videos is intended to recognize and honor the profession of infant/toddler caregiving. In light of increasing numbers of infant/toddler care-givers in the United States who are non-English speakers, it was decided that the materials should be created in Chinese and Spanish, in addition to English. The videos are also available in Phase Alternating Line (PAL) format for international distribution and are closed captioned. (See [Figure 2-4](#).)

The Efficacy of Pitc

Several field-based evaluation studies have demonstrated the efficacy of PITC. In a 1996–1997 study, PITC training was found to have a positive effect on 18 participating family child care providers. After completing training, 89% of the caregivers were rated as providing high-quality care (a mean of 5.93), 2 points higher on the 7-point Family Day Care Rating Scale (FDCRS) than scores for a national sample of caregivers (Carollee Howes, personal communication, 1997).

In 1999, a team at Nova Southeastern University used the PITC materials to prepare infant/toddler care program administrators in Broward County, Florida, to train caregivers in centers. Prior to training, the centers received an overall mean rating of 3.7 (minimal quality) on the Infant/Toddler Environment Rating Scale (ITERS); observed quality increased to a mean of 5.0 (good quality) following training ([Masai, 1999](#)).

The CDD of the CDE has supported statewide training and technical assistance based on the PITC for the past 5 years. Child care programs and groups of at least five family child care providers can apply to receive 60 hr of training and technical assistance from a certified PITC trainer. In 2002, 436 programs received this PITC training and technical assistance. WestEd conducted two evaluations to assess the change in the quality of child care under this initiative. In a statewide study, the difference between overall pretraining ($\bar{X}=4.00$) and overall post-training ($\bar{X}=4.38$) ITERS score for classrooms with children under 24 months was statistically significant. Likewise, the difference between the overall pretraining ($\bar{X}=4.00$) and overall post-training ($\bar{X}=4.48$) ECERS score for classrooms of 2-year-old children was statistically significant ([WestEd, 2003](#)). In a San Diego study, all post-training ITERS subscale scores were significantly higher than the corresponding pretraining ITERS subscale scores. Similarly, all posttraining ECERS subscale scores were significantly higher than the corresponding pretraining ECERS sub-scale scores ([WestEd, 2002](#)). In the evaluation of family child care homes, all FDCRS subscale means increased significantly between the preand post-assessments. Before training, they ranged from 2.34 to 4.38. Most of the subscales showed that programs were providing care in the “minimal” range or worse at preassessment. Postassessment means ranged from 3.76 to 5.50 ([WestEd, 2003](#)).

In summary, studies have demonstrated statistically significant improvements in overall quality of three samples of programs (two center-based and one family child care sample) that completed PITC training and technical assistance. The quality of the caregivers' interaction with infants and toddlers was the area in which the most consistent positive change was found. The mean ratings were clearly in the “minimal” range on the Infant/Toddler Environment Rating/Scale, Early Childhood Environment Rating/Scale, and Family Day Care Rating Scale (ITERS/ECERS/FDCRS) before training began and moved upward within that range or up to the “good” range following the services. These results are promising and warrant further study. A randomized study of PITC was launched in 2008. When completed, this evaluation study will provide additional insights into the impact of PITC training and technical assistance.

Conclusion

As stated in the introduction to this chapter, today there are now over 6 million infants and toddlers in child care

in the United States. Most are experiencing a level of quality care that is either inadequate or harmful. At PITC, we believe that 50 years from now people will look back at the current treatment of infants and toddlers in the United States as we now look back at the child labor conditions of the early 1900s—with horror. Most centers currently do not meet children’s needs for health, safety, warm relationships, and learning. In addition, when infants are in poor-quality settings they are at increased risk for exposure to communicable illnesses and infectious diseases (e.g., gastrointestinal illnesses, upper respiratory tract infections, and ear infections). These findings may be in part from basic sanitary conditions not being met for diapering and feeding ([Lu Samuels, Shi, Baker, Glover, & Sanders, 2004](#)). Injuries related to program safety are also a source of concern. Estimates of serious (that is, medically attended) injury rates in low-quality child care settings can be up to 3.2 injuries per 100,000 child hours of exposure ([Korch, Hussey, & Carter, 2003](#)). In addition, infants in poor-quality settings miss nurturing and developmentally engaging environments, such as warm, supportive relationships with adults, books, and play materials that promote physical and intellectual growth. Inadequate social and physical care environments have been linked to negative social and cognitive outcomes as children enter elementary school ([Cost, Quality, and Child Outcomes Study, 1995](#); [National Institute of Child Health and Human Development Early Care Research Network & Duncan, 2003](#)).

Conditions for infants in family child care settings have been found to be similar to those described in this chapter for centers. For instance, researchers report that most family child care programs in the United States provide mediocre or low-quality care, with only about 8% to 10% of programs considered to be of good or high quality ([Austin, Lindauer, & Rodriguez, 1997](#)). Spending hours in low-quality family-based child care as an infant may adversely affect an infant’s attachment security as well. In a study of family-based care in California, North Carolina, and Texas ([Galinsky, Howes, Kontos, & Shinn, 1994](#)), only half of the children were rated as securely attached to their child care providers. It is noteworthy that 65% of the parents in the study believed they had no alternative to the family child care setting that they were using. Children from low-income homes were more likely found to be in lower quality family child care than those from higher income homes. [Galinsky et al. \(1994\)](#) reported that several factors affected the quality of family child care. Quality appeared to be higher in settings in which the providers were trained. Another factor is that an extremely high percentage of settings (81%) were not regulated and were operating illegally. These researchers also identified intentionality as an important factor, with intentionality referring to the group of family child care providers in the sample “who are committed to caring for children, who seek out opportunities to learn more about child care and education, and who seek out the company of other providers to learn from them” (p. 5).

What Can Be Done About Inadequate, Damaging Care?

Recommendations that stem from the research on infant care quality and PITC’s 25 years of experience include all of the following:

- Training based on child-development knowledge and sound practice must be mandated. Federal, state, and local agencies must work together to create training systems that reach all infant/toddler caregivers, including family child care providers.
- The regulation of infant care is essential. Regulations should ensure that care settings meet infants’ fundamental needs for (1) close, caring relationships, (2) health and safety, (3) connection to family, and (4) knowledgeable, responsive caregivers.
- Attention must be paid to the selection of infant/toddler caregivers. Not just anyone is appropriate to care for infants. Individuals who are committed to providing good care will take advantage of opportunities to learn about child care and early development and are likely to be warm, responsive caregivers.
- Caregiver training must be comprehensive, with a dual focus on content and delivery strategies. For the content of training to be sound, it should be based on current knowledge of child development research and

practice. The training curriculum should help caregivers understand the social-emotional foundation of early development, the infant's inborn motivation to learn and explore, the impact of the child's language and culture, the critical role of the child's family, and the child's individuality and special needs. It should also include information about setting up group-care environments, individualizing child care routines, and structuring care to promote the development of close caregiver–infant relationships.

Babies are born with an amazing capacity to learn and develop. By age 3, roughly 85% of the brain's core structures are formed. It has become clear that the quality of the child's experiences during the early years contributes to cognitive and language development, building relationships with adults, and the ability to engage in positive interactions with adults and peers. Making sure that young children have these positive early experiences starts with attention to the type of care that they receive each day. Both the structure of services and the system of professional development need to drastically improve if infants are to grow and prosper. We at PITC hope that in the near future not only will the infant/toddler period be given the serious attention it deserves, but also that those who care for infants and toddlers will be afforded the training and professional status appropriate to their essential work.

Reflect On

1. How is quality of infant/toddler care linked to the development of early emotional bonds between children and parents?
2. What are the core primary care dimensions of PITC?
3. What developmental concepts form the basis of the PITC approach to curriculum for infants and toddlers?
4. How does PITC train child care personnel for home visiting?
5. Has PITC demonstrated effectiveness in training early childhood professionals?

Endnote

1. [1](#). These areas are described in detail in the CDE's Infant/Toddler Learning and Development Foundations and illustrated in accompanying DVDs developed by PITC in collaboration with CDE.

Selected Resources

The Program for Infant/Toddler Care

www.pitc.org

WestEd

www.wested.org

ZERO TO THREE: National Center for Infants, Toddlers and Families

www.zerotothree.org

For Our Babies

www.forourbabies.org

Educare

www.educareschools.org

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Chapter 3 The Head Start Program

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After reading this chapter, you should be able to:

- Describe the evolution of Head Start
- Characterize program services and effectiveness
- Discuss the future of Head Start

Head Start is the largest federal early childhood program in the United States. By 2009, Head Start had served more than 27 million children since its beginnings in 1965, enrolling more than 900,000 children nationwide in 2009. The program has evolved from its original form as a summer program to a comprehensive set of services for economically disadvantaged young children and their families. Head Start has served as the nation's laboratory for experimenting in the field with quality programs for children from birth through 5 years of age. The program has been a pioneer in methods of working with parents and in the development of innovative demonstration programs focused on families with very young children. It also has been at the forefront of approaches for including children with disabilities as well as responding to culturally and linguistically diverse populations. Remarkably, Head Start has gained widespread support from policy makers of contrasting political orientations. It has been called "the most important social and educational experiment of the second half of the twentieth century" ([Zigler & Muenchow, 1992, p. 2](#)).

This chapter provides an overview of the Head Start program. The intent is to provide readers with a general understanding of the origins and current scope of the largest federal early childhood program in the United States. Program goals, standards, and services are covered as well as current information about Head Start planning, staffing, and partnerships with communities and families. Results of recent evaluations of Head Start also are presented.

Evolution Of Head Start

War on Poverty Origins

Head Start was conceived in 1964 as a key part of the nation's War on Poverty during a highly optimistic time in U.S. history. Its origins are based in the social and political struggles of the civil rights era, renewed scientific interest in environmental influences on the course of human development, and the promising results of educational intervention programs for children from economically disadvantaged backgrounds ([Zigler & Anderson, 1979](#)).

The civil rights movement of the 1960s drew attention to the widespread nature of poverty and its threats to the economic and social well-being of the nation. The movement also highlighted inequitable treatment of racial and ethnic minorities as well as poor people in accessing quality education, jobs, housing, health care, and social services. The War on Poverty programs advanced by presidents John F. Kennedy and Lyndon B. Johnson adhered to a basic belief in education as the solution to poverty. Job training and education were core features of the Economic Opportunity Act of 1964, which led to the creation of programs aimed at eradicating poverty ([Zigler & Valentine, 1979](#)). There also was a belief that individuals in disadvantaged circumstances should help plan and administer programs aimed at compensating for inequalities in social and economic conditions. The concept of maximum feasible participation was incorporated into the Economic Opportunity Act and subsequently into

policies of War on Poverty programs such as Head Start.

During this era, research evidence demonstrating the lasting power of environmental influences on human development shaped social policies affecting young children. This environmental view was in marked contrast with the hereditarian perspective that prevailed in the 1950s and early 1960s. Noted scholar J. McVicker Hunt's 1961 book *Intelligence and Experience* was particularly instrumental in challenging the widespread view of intelligence and abilities as fixed by heredity. Hunt argued that the quality of environmental inputs, particularly from the mother, largely determined intellectual development.

Benjamin Bloom, also an eminent scholar, reached a similar conclusion in an exhaustive review of a large body of research in his 1964 book *Stability and Change in Human Characteristics*. Bloom's work pointed to the first 4 or 5 years of life as the period experiencing the most rapid change in intellectual growth. He concluded that the preschool years were the best time to make a long-lasting impact on cognitive functioning. This conclusion gave rise to the popularity of the "critical period" of development in the early years and to claims about half of learning taking place before the age of 5 years.

Later research clearly pointed to the extreme nature of a view of human development that disregards heredity and the significance of experiences that occur beyond 5 years of age. Eventually there was recognition of the need for elementary school experiences to be designed in a way that sustains the benefits of early childhood education. Nonetheless, the environmental perspective dominated the mid-1960s period in which Head Start was launched. The early years were seen as analogous to the importance of the foundation of a building: "If the foundation is shaky, the structure is doomed.... The public hailed the construction of a solid foundation for learning in preschool children as the solution to poverty and ignorance" ([Zigler & Anderson, 1979, pp. 7–8](#)).

Promising evaluation results from several early intervention programs also contributed to the decision to establish the Head Start program. Although preschool programs focused on the education of children from economically disadvantaged backgrounds were rare in the 1950s and early 1960s, a handful of innovative programs were established in this era to serve children from poor families. The Early Training Program directed by Susan Gray at Peabody College in Nashville, Tennessee, was among these prominent forerunners of Head Start. The project's focus on achievement motivation and aptitudes for learning resonated with the environmental view and had commonsense appeal among the public. Importantly, the positive impact of this early education program on IQ and verbal abilities ([Gray & Klaus, 1965](#)) offered hope of what might be achieved on a broader scale.

Naïve Assumptions and Political Realities

Head Start was offered in the summer of 1965 to far more communities and children than recommended by experts. One point of view was that the program should begin as a small, closely monitored pilot effort. Proponents of this view were concerned about the logistics of successfully launching a major new effort in a short time. They reasoned that there was insufficient information from experience and research for making informed decisions about how best to provide a preschool program for children from poor families. However, a large-scale effort initially involving 500,000 children in some 2,000 centers was envisioned by the time of President Johnson's May 18, 1965, Rose Garden speech announcing plans for Head Start. The goal was to reach as many children as possible, even if the summer program for some children entailed nothing more than modest interventions such as immunizations and badly needed health services ([Richmond, Stripek, & Zigler, 1979](#)). There were high hopes of boosting children's IQ and intellectual competence through preschool education. Sweeping claims were made in the 1960s about the ability of a preschool program for children from disadvantaged backgrounds to eventually reduce the prevalence of poverty in the United States.

The great expectation of achieving significant improvements in children's intellectual functioning through a relatively small dose of environmental enrichment (initially a summer program) proved to be naïve and overly optimistic soon after Head Start was launched. Serious questions were raised about the prevailing view of children as clay that could be molded easily and permanently through appropriately stimulating environments. The lack of attention to biological factors in the environmentalism of the mid-1960s prompted the pendulum to swing toward

a more reasonable middle ground by the late 1960s. Interactions between genetic factors and the environment were increasingly recognized as key developmental processes, a trend that continues today ([Bronfenbrenner & Morris, 2006](#)).

The early years of Head Start were marked, in addition, by simplistic assumptions about the nature of poverty and the characteristics of children and families living in economic disadvantage. A common stereotype was that low-income mothers were generally incompetent and incapable of providing appropriate guidance and affection to their children ([Baratz & Baratz, 1970](#)). Life in poor families was seen as either overstimulating (e.g., too much noise) or understimulating (e.g., too few toys). As noted by Zigler and Anderson (1979), “verbal activity in the poor household was supposed to consist of body language, monosyllables, shouts, and grunts” (p. 2). The anthropologist Oscar Lewis’s studies of poverty were interpreted by many to indicate there was a uniform “culture of poverty” and children growing up in poor families were “culturally deprived.” Deviations from the norms of mainstream middle-class family life often were viewed as forms of pathology or dysfunction.

By the late 1960s, there were clear challenges to stereotypical views of poor families and children. Studies heightened professionals’ sensitivity to the biases of tests developed on middle-class samples of children and of testing situations that were unfamiliar to lower income and minority children. For example, research indicated that the verbal performance of African American children was significantly better when tested by an African American tester in a nonacademic setting ([Labov, 1970](#)). Studies, program experiences, and media reports also demonstrated the diverse manifestations of poverty across regions, communities, and populations, thereby casting doubt on research and programs that assumed all people are alike in needs, characteristics, and aspirations. Further, the influence of community and societal contexts on individual and family functioning was emphasized in policy analyses (e.g., [Keniston & Carnegie Council on Children, 1977](#)); families and individuals were not to be viewed as self-sufficient units to be blamed when things go wrong ([Ryan, 1971](#)). Eventually, a backlash against the concept of “cultural deprivation” led to calls for educational and human service programs to celebrate cultural diversity, respect individual differences, and build on family strengths rather than weaknesses.

Over time, then, there were modifications of simplistic views of the magnitude of environmental influences, the early years as a highly malleable period of development, and poor families as uniformly incompetent. Still, the original expectation that a short-term preschool program could achieve dramatic and lasting improvements in the IQ and general competence of children from economically disadvantaged families has long persisted as a powerful albeit flawed framework for Head Start and other early childhood programs. This expectation supports a view of an early childhood program as an inoculation against future effects of poverty. As demonstrated in this chapter, the inoculation model has shaped what policy makers and the public often expect of Head Start.

Program Goals

Head Start has long embraced a broad set of objectives focused on the development and learning outcomes of children in low-income families. The major domains of child development—social, emotional, cognitive, and physical—are viewed as interrelated. Accordingly, Head Start works with the “whole child.”

Currently, significant attention is being given to Head Start’s role in preparing children for school success. School readiness is a strong theme in the 2007 and 1998 federal reauthorizations of the Head Start program (Public Laws 105-285 and 110-134, respectively). The purpose of Head Start was revised in the 1998 reauthorization with the intention that Head Start promote “school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services that are determined to be necessary, based on family needs assessments” (Public Law 105-285). Performance standards also were added to ensure that children enrolled in Head Start meet the following minimum expectations: develop phonemic, print, and numeracy awareness; understand and use oral language to communicate needs, wants, and thoughts; understand and use increasingly complex and varied vocabulary; develop and demonstrate an appreciation of books; and in the case of children for whom English is a second language, progress toward acquisition of the English language. The 2007 reauthorization of Head Start continued the emphasis on school readiness goals.

In 2000, the federal Office of Head Start issued a Child Outcomes Framework of building blocks deemed important for school success. The framework is intended to guide programs in their ongoing assessment of progress and accomplishments of 3- to 5-year-old children and in program efforts to use child outcomes data for program self-assessment and continuing improvement. A revised framework was issued in December 2010, entitled *The Head Start Child Development and Learning Framework*. It is organized into 11 general domains, 37 domain elements, and more than 100 examples of specific indicators of children's skills, abilities, knowledge, and behaviors. The framework includes the outcomes legislatively mandated in 1998 ([U.S. Department of Health & Human Services, 2010](#)). The 11 domains and their respective elements are as follows:

- Language development: receptive and expressive language skills
- English language development (for dual language learners): receptive and expressive English language skills, engagement in English literacy activities
- Literacy knowledge and skills: book appreciation, phonological awareness, alphabet knowledge, print concepts and conventions, early writing
- Mathematics knowledge and skills: number concepts and quantities, number relationships and operations, geometry and spatial sense, patterns, measurement and comparison
- Science knowledge and skills: scientific skills and methods, conceptual knowledge of the natural and physical world
- Creative arts expression: music, creative movement and dance, art, drama
- Social studies knowledge and skills: family and community, history and events, people and the environment
- Physical development and health: physical health status, healthy knowledge and practice, gross motor and fine motor skills
- Social and emotional development: social relationships, self-concept and self-efficacy, self-regulations, emotional and behavioral health
- Approaches to learning: initiative and curiosity, persistence and attentiveness, cooperation
- Logic and reasoning: reasoning and problem solving, symbolic representation

From the beginning, Head Start has viewed the family in general and parents and primary caregivers in particular as essential partners in achieving improved outcomes for children. It is understood that children develop in the context of their family and culture and that “parents are respected as the primary educators and nurturers of their children” ([Head Start Bureau, 1997, p. 1](#)). The program provides numerous opportunities for parents to be involved in program decisions and activities and to develop their own strengths and interests in a variety of adult roles, including child rearing. A premise of these provisions is the realization that no 1- or 2-year program is likely to make lasting improvements in a child's development unless the program helps parents become the “agents of change, reinforcing positive changes in the child long after the formal program's conclusion” ([Zigler & Muenchow, 1992, p. 101](#)).

Head Start's approach to working with parents has consistently been at the forefront of methods of parent participation. For example, a Head Start requirement is that parents constitute more than one-half of the local policy council for a program. This policy provision for a parent role in local program governance reflects a family empowerment perspective wherein parents are to be viewed as active, respected participants rather than as passive recipients of professionally determined services. The provision stems from Head Start's War on Poverty roots and the “maximum feasible participation” language of the Economic Opportunity Act described earlier. It has “always been designed to be more than preschool education” ([Washington & Oyemade Bailey, 1995, p. 8](#); italics in original).

There has been confusion about Head Start's goals for many years. One area of misunderstanding has been Head Start's role in eradicating poverty. As already indicated, Head Start was established during an era of great optimism about the power of social and educational programs to successfully address numerous societal ills. President Johnson spoke to the goal of combating poverty in his May 18, 1965, speech on Head Start: "Five- and six-year-old children are inheritors of poverty's curse and not its creators. Unless we act these children will pass it on to the next generation, like a family birthmark. This program this year means that 30 million man-years—the combined lifespan of these youngsters—will be spent productively and rewardingly, rather than wasted in tax-supported institutions and in welfare-supported lethargy" (cited in [Zigler & Valentine, 1979, p. 68](#)).

The idea that an early childhood program could reduce welfare costs and crime in adult life was given a major boost in 1984. An influential study of the Perry Preschool Project in Ypsilanti, Michigan, indicated that at age 19 years, participants in the Perry Preschool Project had better high school completion rates and less adolescent pregnancy and juvenile delinquency than youth who had not participated in the preschool program ([Berrueta-Clement, Schweinhart, Barnett, Epstein, & Weikart, 1984; Chapter 10](#)). In 1993, results of follow-up studies of the Perry Preschool Project participants at 27 years of age ([Schweinhart, Barnes, & Weikart, 1993](#)) and again at 40 years of age ([Schweinhart et al., 2005](#)) showed that preschool participants had fewer criminal arrests, higher earnings and property wealth, and higher levels of employment than their counterparts who did not attend preschool.

Many policy makers and children's advocates erroneously assumed the Perry Preschool findings were applicable to Head Start and ambitiously promoted Head Start as a proven strategy for reducing welfare. Some analysts believe this inappropriate generalization of evaluation data from the Perry Preschool Project to Head Start ran into serious trouble when informed citizens realized the Perry Preschool Project is not Head Start. This realization is thought to have contributed to a period of reduced political support for the program and limited progress in allocating funds for Head Start expansion and quality improvements ([Zigler, 1998](#)).

More confusion over Head Start's goals has concerned whether the program is primarily focused on improving children's IQ and intellectual competence. Programmatic attention to all aspects of children's development has been in place from the beginning. The original goals for Head Start set forth by the program's planning committee in 1965 emphasized physical health, social and emotional development, mental processes and skills, and self-confidence in future learning efforts. Children's IQ became an early focus in how policy makers and the general public understood Head Start, however, partly because IQ is a well-known (yet poorly understood) construct in American society. Importantly, IQ tests were readily available for use by program evaluators and, in contrast, reliable, valid, and efficient tests of most other aspects of children's functioning were not available. Thus, early program evaluations held Head Start accountable for achieving gains in IQ and cognitive abilities mostly or exclusively.

Current Scope and Organization

Some key numbers offer an impressive profile of Head Start's current status. In 2009, the program served 904,513 children in all 50 states plus the District of Columbia, Puerto Rico, the Virgin Islands, and other territories. The paid staff numbered 212,000 and there were more than 1.2 million volunteers. There were 49,200 Head Start classrooms in 2009. The 2010 budget was more than \$7.2 billion, and the average cost per child was \$7,600 per year.

The racial background of children enrolled in Head Start in 2009 was as follows: White, 40%; African American, 30%; American Indian/Alaska Native, 4%; Asian, about 2%; Hawaiian/Pacific Islander, less than 1%; biracial/multiracial, about 8%; and unspecified or other, 17%. Thirty-six percent of children were Hispanic/Latino. In 2009, nearly 12% of enrolled children had one or more disabilities, defined to include mental retardation, health impairments, visual handicaps, hearing impairments, emotional disturbance, speech and language impairments, orthopedic handicaps, and learning disabilities. Head Start has long required that children with disabilities represent at least 10% of enrolled children in a local program.

The vast majority of children are 4 years (51%) or 3 years (36%) of age. Most Head Start programs operate a part-day program, although a growing number provide full-day services. A minimum of two home visits annually is expected of all center-based Head Start programs. A relatively small number of programs provide home-based services in a significant way. In 2006, nearly 48,000 children participated in home-based Head Start program services.

Since 1995, the program has been serving infants and toddlers through the Early Head Start program. Early Head Start programs tailor their services to meet the needs of low-income pregnant women and families with children 3 years of age or younger through home-based, center-based, or a combination of home- and center-based options. In 2009, more than 650 programs were given funds to provide Early Head Start child development and family support services to some 66,000 children under the age of 3 years. The federal allocation to Early Head Start in 2009 was \$709 million.

Head Start is administered federally by the Office of Head Start, located in the Administration for Children and Families office of the U.S. Department of Health and Human Services. Local programs are operated through grants to public agencies, private nonprofit organizations, faith-based organizations, and school systems. Grants are awarded by the 12 regional offices, including regions for American Indian and Alaskan Native Programs and Migrant and Seasonal Programs. In 2009, there were 1,519 local grantees. Federal funds are limited to 80% of total program costs; there is a matching requirement of 20% from nonfederal sources. Federal law prohibits Head Start programs from charging fees to parents.

Program Services and Effectiveness

A core tenet of Head Start is that local programs need flexibility to meet the particular needs of their communities. The intent is to provide a range of individualized services that are responsive and appropriate to each child and family within a community context. Flexibility occurs within firm parameters set forth in Program Performance Standards by the federal Office of Head Start (2006). The Program Performance Standards define the services that Head Start programs are to provide children and families and constitute the best statement of Head Start's expectations of high quality.

The standards are organized into three major areas: Early Childhood Development and Health Services, Family and Community Partnerships, and Program Design and Management. Each area contains a set of standards that in essence are mandated regulations for all Head Start programs, plus a rationale for the standards and guidance in the form of examples of how a standard could be implemented. There also is a detailed section on standards for working with children with disabilities and their families. To provide maximum flexibility in implementation, the Program Performance Standards do not prescribe how the services defined in the standards are to be carried out. Head Start seeks to provide a coordinated set of services, not separate components in early childhood, health, and parent involvement. To this end, the standards include a number of cross-references to other standards and examples, in an attempt to support an integrated approach to service delivery.



Early Childhood Development and Health Services

A common misconception of Head Start is that a standard curriculum is implemented in all classrooms. In reality, local programs are given a good deal of flexibility to select or design and implement a curriculum based on developmentally and linguistically appropriate practices with young children. For example, many programs employ High/Scope or the Creative Curriculum and there is growing interest in curricula such as Tools of the Mind (see [Chapters 9 to 11](#)). The Program Performance Standards recognize that children have individual rates of development as well as individual interests, temperaments, languages, cultural backgrounds, and learning styles. Head Start programs are to be inclusive of children with disabilities, as noted earlier, and to foster an environment of acceptance that respects differences in gender, culture, language, ethnicity, and family composition. The need for Head Start to support the home language, culture, and family composition is emphasized repeatedly in descriptions of the Program Performance Standards.

Head Start standards closely follow the developmentally appropriate practices guidelines in early childhood programs recommended by the National Association for the Education of Young Children ([Copple & Bredekamp, 2009](#)). There is to be a balance of child-initiated and adult-directed activities, including individual and small-group activities, in the daily program. Social and emotional development is to be supported by building trust; fostering independence; encouraging self-control by setting clear, consistent limits and having realistic expectations; encouraging respect for the feelings and rights of others; and providing timely, predictable, and unrushed routines and transitions. Each child's learning is to be supported through experimentation, inquiry, observation, play, exploration, and related strategies. Art, music, movement, and dialogue are viewed as key opportunities for creative self-expression, and language use among children and between children and adults is promoted. Developmentally appropriate activities and materials are to be provided for support of children's emerging literacy and numeracy development. Center-based programs are to provide sufficient time, space, equipment, materials, and adult guidance for active play and movement that supports fine and gross motor development. Provisions and encouragement for social and symbolic forms of play help young children's self-regulation and social competence. Home-based programs are to encourage parents to appreciate the value of physical development and to provide opportunities for safe and active play.

Program standards for education and early childhood development include separate sections on infants/toddlers and preschool-age children. Services for infants and toddlers emphasize the development of secure relationships (e.g., limited number of consistent teachers over an extended period), emerging communication skills, fine and gross motor development, and opportunities for each child to explore a variety of sensory and motor experiences. The curriculum for preschool-age children is for cultivating skills that form a foundation for school readiness and later school success, including opportunities for each child to organize experiences, understand concepts, and develop age-appropriate literacy, numeracy, reasoning, problem-solving, and decision-making skills. In addition, the curriculum is for helping children develop emotional security and facility in social relationships; self-awareness; and feelings of competence, self-esteem, and positive attitudes toward learning.

The emphasis on school readiness and especially literacy outcomes in Head Start, noted earlier, has led to new research-based curricula and professional development initiatives aimed at supporting local programs in promoting children's school success. For example, a rigorous study of a program designed to enhance teaching quality and enrich Head Start programs with new curriculum components found positive effects on children's language, literacy, and social-emotional school readiness outcomes at the end of the prekindergarten year ([Bierman et al., 2008](#)). Research on innovative professional development programs that include individualized coaching or mentoring with Head Start teachers has found positive effects on children's literacy ([Powell, Diamond, Burchinal, & Koehler, 2010](#)) and language ([Wasik & Hindman, 2011](#)) outcomes. Also, a nationally disseminated professional development program known as *HeadsUp! Reading* was developed by the National Head Start Association and offered as a 15-week satellite broadcast training series. An outcome study found positive effects of the program on children's literacy skills compared to a control group ([Jackson et al., 2006](#)).

Parents are to be an integral part of the development of the local program's curriculum and approach to child development and education. Further, opportunities are to be provided for parents to strengthen their child observation skills and to share assessments with staff that inform program planning for each child. Parent-staff discussion of each child's development and education is to occur in conferences and home visits. One of the purposes of home visits is to support parents in their role as their child's



Children working cooperatively in Head Start Classroom.

first teacher and to assist families in the development and attainment of family goals. Services to children with disabilities are to be consistent with each child's Individualized Family Service Plan (IFSP) or Individualized Education Program (IEP).

Head Start has had a strong commitment to improving children's health outcomes since its inception. The first director of the national Head Start program was a physician, Dr. Robert Cooke, then chair of the Department of Pediatrics at Johns Hopkins University. Careful attention to children's health care needs was a central part of Head Start's original purpose.

This tradition continues today with detailed attention to child health and safety, child nutrition, and child mental health in the performance standards. Within 90 days of entry into a Head Start program, the staff is to collaborate with parents in determining the health status of each child. This entails an assessment of whether each child has an ongoing source of continuous, accessible health care. If ongoing health care is not accessible to a child, the program must assist parents in accessing a source of care. The child health status review also includes a determination as to whether the child is up-to-date on a schedule of preventive and primary health care, including medical, dental, and mental health. Again, the program is to assist the family in making arrangements to bring the child up to date if necessary. The Head Start program, in addition, is to ensure that children continue with the recommended schedule of well-child care and to track the provision of health care services. When a child has a known or suspected health or developmental problem, the Head Start program is to obtain or arrange for further diagnostic testing, examination, and treatment by a licensed or certified professional.

Within 45 days of each child's entry into Head Start, the program is to perform or obtain developmental, sensory, and behavioral screenings of motor, language, social, cognitive, perceptual, and emotional skills. The screenings must be sensitive to the child's cultural background and home language. Multiple sources of information on all aspects of each child's development and behavior are to be obtained, including input from family members, teachers, and other relevant staff. A follow-up plan is to be established and monitored with parents of children with identified health needs. Dental follow-up and treatment must include fluoride supplements and topical fluoride treatments for every child with moderate to severe tooth decay and in communities where there is a lack of adequate fluoride levels. Further, Head Start programs are to develop and implement procedures that enable staff to identify any new or recurring medical, dental, or developmental concerns so that there can be prompt and appropriate referrals. Parents are to be fully informed and involved in this process.

Program provisions for mental health services include collaborations with families to solicit parents' information and concerns about their child's mental health. These provisions will enable staff to provide information to parents about staff observations of the child and anticipated changes in the child's behavior and development, especially separation and attachment issues. There also is to be parent–staff discussion of how to strengthen nurturing, supportive environments, and relationships at home and in the program. Programs are to help parents better understand mental health issues and to support parents' participation in needed mental health interventions. Staff and/or family concerns about a child's mental health are to be addressed in a timely manner through the services of a mental health professional secured by the program. There should also be a regular schedule of mental health consultation with program staff and parents on how to address individual children's needs and ways to promote mental wellness.

Head Start performance standards call for staff and families to work together to identify each child's nutritional needs, with consideration of a family's eating patterns, including cultural preferences and special dietary requirements. Local programs are to design and implement a nutrition program that meets the nutritional needs and feeding requirements of each child. Children in center-based programs are served a meal on a daily basis. For each child, there is a nutritious snack plus breakfast and/or lunch, depending on morning, afternoon, or full-day enrollment. A variety of foods—responsive to cultural and ethnic preferences as well as for the broadening of a child's food experience—are to be served. Food should not be used as a reward or punishment. Each child is to be encouraged, but not forced, to eat or taste the food. At least one-third of a child's daily nutritional needs are to be met through meals and snacks in a part-day center-based program, and one-half to two-thirds of a child's daily nutritional needs are to be met in a full-day center-based program. Dental hygiene is to be promoted in conjunction with meals at programs. Parents should be involved in planning, implementing, and evaluating a program's nutritional services, and parent education activities must include opportunities for families to learn about food preparation and strengthen nutritional skills.

Last, Head Start standards include health emergency procedures, a description of conditions for short-term exclusion from the program because of a health-related matter, and provisions for medication administration, injury prevention, hygiene, and first-aid kits.

Family and Community Partnerships

Among model early childhood programs in this country, Head Start has perhaps the most comprehensive and detailed set of provisions for working with families ([Powell, 2006](#)). Scholars have long pointed to parent involvement as a cornerstone of Head Start's success.

Head Start seeks to establish a collaborative partnership with parents built on mutual trust and an understanding of family goals, strengths, and necessary services and other supports. To this end, programs are to offer parents an opportunity to develop and implement an individualized Family Partnership Agreement that sets forth family goals, responsibilities, timetables, and strategies for achieving the goals plus monitoring progress. The agreement is to take into account and coordinate with preexisting family plans developed with other programs or agencies. The services here pertain to emergency assistance with basic needs such as housing, food, clothing, and transportation; education and counseling programs focused on such mental health issues as substance abuse, child abuse and neglect, and domestic violence; and continuing education and employment training.

Head Start's concept of parent involvement is broad based and emphasizes two parental roles: parents as active contributors to program policies and practices, and parents as competent supporters of their child's healthy growth and development. Parent participation in any program activity, including home visits, is voluntary and must not be required as a condition of a child's enrollment.

Probably the best known Head Start provision for parent participation is the shared governance requirement that 51% of the members of the local program policy group must be parents of currently enrolled children. Also, parents of formerly enrolled children may serve as community representatives on the policy group. The policy group is charged with working collaboratively with key management staff and the governing body responsible for

legal and fiscal administration of the local program to determine policies and procedures in many areas, which include the following:

- Program philosophy and long- and short-term goals and objectives
- Criteria for determining recruitment, selection, and enrollment priorities
- Decisions to hire or terminate the Head Start director and any person who works primarily for the program

The policy group also advises staff in developing and implementing local program policies, activities, and services.

There are many other provisions for parent participation. One is for parents to serve as employers or volunteers. More than 850,000 parents volunteered in their local Head Start program during the 2008–2009 program year, and 26% of Head Start staff members were parents of current or former Head Start children. As noted previously, local programs are to provide opportunities for parents to help select or develop the program's curriculum. Parents must be welcomed as visitors and encouraged to observe children and participate with children in group activities. Facilities must be open to parents during all program hours. In recent years, Head Start has offered special opportunities to increase fathers' involvement in their children's education. In the 2008–2009 program year, 228,000 Head Start fathers participated in regularly scheduled activities.

Head Start addresses numerous parenting tasks faced by adult participants in the program. Opportunities are provided for parents to enhance their parenting skills, knowledge, and understanding of the educational and developmental needs and activities of their children. Parents also are encouraged to share concerns about their children with program staff, as described in the previous section. In addition to two home visits per year, teachers in center-based programs are to hold at least two staff–parent conferences per program year. The goal of the conferences is to enhance the knowledge and understanding of both staff and parents of each child's educational and developmental progress in the program.

A wide range of content areas is addressed in the parenting education and support services. There are opportunities for parents to be involved in health, nutrition, and mental health education. Another content area is community and child advocacy. The program is to support and encourage parents to influence the nature and goals of community services in a way that makes services more responsive to their needs and interests. Programs also should help parents become advocates for their children as they transition from home to Head Start or another early childhood program and from Head Start to elementary school. Further, support for the child advocate role focuses on parents' continued involvement in their children's education in school. This support includes education and training for parents to exercise their rights and responsibilities regarding the education of their child in the school setting. Moreover, there should be communication with teachers and other school personnel so parents can participate in decisions related to their child's education. In addition to the health and advocacy content areas, the revised program standards call for local Head Start programs to support family literacy development directly or through referrals to other local programs. An aim here is to assist parents as adult learners in recognizing their own literacy goals.

No one program can meet all of the needs of a child and family. An intent of Head Start's community partnerships is to improve the delivery of services to children and families and to ensure that a local Head Start program responds to community needs. Strong communication, cooperation, and sharing of information are to occur between Head Start and the following types of community organizations:

- Health care providers such as clinics, physicians, and dentists
- Mental health providers
- Nutritional service providers
- Individuals and agencies that provide services to children with disabilities and their families

- Family preservation and support services
- Child protective services
- Local elementary schools and other educational and cultural institutions such as libraries and museums
- Providers of child care services
- Other organizations or businesses that may provide support and resources to families

Each Head Start program is to establish and maintain a Health Services Advisory Committee composed of professionals and volunteers from the community.

The program gives considerable attention to children's transitions into Head Start and from Head Start to elementary schools or other child development and care settings. Local Head Start programs are to ensure that children's relevant records are transferred to the school or the child's next setting. Furthermore, each Head Start program is to take an active role in encouraging communication between the program staff and their counterparts in the schools and other child development and care settings, including principals, teachers, social workers, and health care staff. The aim of these communications is to facilitate continuity of programming for each child. Meetings are to be initiated for Head Start staff, parents, and kindergarten or elementary school teachers to discuss developmental progress and abilities of each child. In the Early Head Start programs, transition planning is to begin for each child and family at least 6 months before the child's third birthday.

Program Planning and Staffing

Planning is an integral part of the management of local Head Start programs. Specifically, each program is to develop and implement a systematic, ongoing process of program planning that includes consultation with the program's governing body, policy groups, program staff, and other community organizations that serve Head Start or other low-income families with young children. The program planning should include an assessment of community strengths, needs, and resources; the development of both short-and long-range program goals and objectives; written plans for implementing services; and a review of progress in meeting goals at least annually. A self-assessment of program effectiveness and progress in meeting program goals and objectives is to be conducted at least once each program year. Communication with parents, governing bodies, and policy groups and communication among staff should be carried out on a regular basis. Records are to be maintained on all children, families, and staff, with appropriate provisions for confidentiality.

The staffing structure for a local Head Start program consists of a director, classroom teachers and home visitors, and content experts in each of the following areas: education and child development services, health services, nutrition services, family and community partnership services, parent involvement services, and disabilities services. The content experts are staff or regular consultants, depending on the size of the local program. Staffing patterns and staff organizational structures are determined by local programs.

The 2007 reauthorization of Head Start stipulates that at least 50% of Head Start teachers nationwide in center-based programs should have a bachelor's or advanced degree in early childhood education or related field by the year 2013 (Public Law 110-134). In 2008–2009, 77% of Head Start teachers had an associate's degree or higher in early childhood education. Qualifications of staff or consultants serving as content experts are specific to the content area. For example, the content expert responsible for the education and child development services must have training and experiences in areas that include theories and principles of child growth and development, early childhood education, and family support.

Sensitivity to cultural and linguistic differences is a staff qualification. Staff and program consultants must be familiar with the ethnic background and heritage of families in the local program. To the extent feasible, consultants and staff alike must be able to communicate effectively with children and families with no or limited English proficiency. When a majority of children speak the same language in a Head Start program, at least one

classroom staff member or home visitor interacting regularly with the children must speak their language.

Program Effectiveness

An extensive body of research literature on Head Start has accumulated since the program's inception in 1965. Results indicate the program provides immediate benefits for children. In short, "Head Start participants can begin kindergarten on a stronger footing than they would without the program" ([Love, Tarullo, Raikes, & Chazan-Cohen, 2006, p. 569](#)).

Results of the large-scale Head Start Impact Study, conducted from 2002 to 2006, indicated that Head Start had positive impacts on several aspects of children's school readiness during their time in the program. Children who had access to Head Start when they were 4 years of age experienced gains chiefly in the cognitive domain, particularly in language and literacy skills. Children who had access to Head Start when they were 3 years of age experienced benefits in each of the four domains of development examined in the study: cognitive, social-emotional, health, and parenting practices. Children who had access to Head Start at 4 years of age demonstrated stronger receptive language skills and were more likely to have health insurance coverage than children who did not have access to Head Start. Some scholars argue that the magnitude of these effects is likely larger than indicated in the study because analyses focused on groups randomly assigned to Head Start or to the control group ("intent to treat") rather than on children who actually enrolled in Head Start or remained out of Head Start. That is, some children who were offered the opportunity to participate in Head Start did not actually enroll in Head Start, and some children assigned to the control group eventually became Head Start participants ([Ludwig & Phillips, 2007](#)).

The gains demonstrated during children's Head Start year were mostly not sustained by the end of first grade. There were only a few significant differences in outcomes between children who had access to Head Start and the control group. At the end of first grade, children enrolled in the Head Start Impact Study who had access to Head Start at 3 years of age demonstrated stronger oral comprehension skills as well as closer and more positive relationships with their parents. In addition, parents of children who had access to Head Start demonstrated improved parenting practices compared to parents of children in the control group. Children who had access to Head Start at 4 years of age did significantly better on a measure of receptive language ([Puma et al., 2010](#)).

The Head Start Impact Study described earlier was conducted with a nationally representative sample of nearly 5,000 children who were randomly assigned to a Head Start group that had access to Head Start program services or to a control group that did not have access to Head Start but could enroll in other early childhood programs or non-Head Start services identified by their parents. The sample represented 84 Head Start delegate agencies ([Puma et al., 2010](#)). Key strengths of the study include the random assignment design, the representative sample of children and programs, an examination of a broad set of outcomes, and follow-up with children at the end of first grade. A follow-up with the children in third grade is underway. The experimental study was mandated by Congress as part of the 1998 reauthorization of the Head Start program. Prior to this investigation, rigorous experimental designs were used infrequently to assess Head Start effects. A 1997 U.S. Government Accounting Office (GAO) report on the impact of Head Start ([Government Accounting Office, 1997](#)) highlighted the limitations of much of the research on Head Start and indirectly led to the congressionally mandated Head Start Impact Study.

The first several decades of Head Start research was summarized in a 1985 synthesis of 210 published and unpublished reports on Head Start research ([McKey et al., 1985](#)). The synthesis found immediate gains in children's cognitive abilities, achievement motivation, self-esteem, social behavior, and health indicators. There were, in addition, some indications of improvements in mothers' well-being and in community services, although it is not clear Head Start played a causal role in these changes. The synthesis review also found that cognitive test score gains achieved during Head Start did not persist over the long term (generally 2 years after participation in Head Start). Similarly, the gains in socio-emotional functioning also did not persist over the long term (generally 3 years after participation). Not all of the 210 research reports included in the 1985 synthesis examined each aspect

of Head Start. For example, the report's findings on cognitive gains were based on 72 studies and the findings on socio-emotional development were based on 17 studies ([McKey et al., 1985](#)).

The Early Head Start program also has undergone a major outcome study in recent years. The study involved a sample of 17 programs and some 3,000 children selected to represent diverse program approaches, geographic locations, and participant backgrounds. Results when children were 36 months of age showed program children performed better than did control group children in cognitive and language development, displayed higher emotional engagement of the parent and sustained attention with play objects, and were lower in aggressive behavior. Early Head Start parents were more emotionally supportive, provided more language and learning stimulation, read more often to their children, and spanked less ([Love et al., 2005](#)).

The federal Office of Head Start sponsors the Head Start Family and Child Experiences Survey (FACES), designed to describe characteristics, experiences, and outcomes for children and families in Head Start and beyond. To date, five cohorts of children, families, and programs have been studied since 1997. The first cohort consisted of a nationally representative sample of 3,200 children and their families, assessed in the fall and spring of the children's Head Start year, on entry into kindergarten, and in first grade for some children. Subsequent cohorts have been studied for 2 to 3 years, with data collected in the fall and spring of the children's first year in Head Start and at the end of kindergarten for children who complete 1 or 2 years of the program. Children are administered a one-on-one assessment of their development that includes school readiness skills in language, literacy, and mathematics. Interviews are conducted with parents about a range of child and family topics; Head Start and kindergarten teachers provide information about children's classroom experiences and behaviors. There also is an Early Head Start Family and Child Experiences Survey (Baby FACES), designed as a longitudinal descriptive study of a nationally representative sample of 89 Early Head Start programs and more than 970 parents of children.

Further, the Head Start research literature includes numerous smaller scale and nonexperimental studies of program impact. For example, a study conducted in a Southeastern metropolitan community examined school readiness outcomes for children eligible to enroll in Head Start. The children were randomly assigned to Head Start or to a wait-list control group. The children enrolled in Head Start achieved greater gains from fall to spring in receptive vocabulary and phonemic awareness than did the control group children, but there were no group differences on measures of social skills and approaches to learning ([Abbott-Shim, Lambert, & McCarty, 2003](#)). Moreover, a recent longitudinal study of children in 18 urban areas in the United States found that Head Start attendance was associated with enhanced cognitive abilities and social competence and reduced attention problems, but not reduced internalizing or externalizing behavior problems at 5 years of age. The investigation, involving some 2,800 children, compared children in Head Start to children who received other forms of preschool such as parental care and center-based early childhood programs ([Zhai, Brooks-Gunn, & Waldfogel, 2011](#)).

The Future of Head Start

Currently, the most pressing challenge facing Head Start is to strengthen attention to children's school readiness skills. Throughout its history, questions have been raised about the quality and focus of Head Start's preparation of children for school success. Current interest in Head Start's contributions to the school success of low-income children occurs in the context of widespread concern about lagging school achievement of children living in poverty and results of recent outcome evaluations of Head Start. As summarized in this chapter, the latest findings suggest that Head Start programs make a positive contribution to children's school readiness. The gains are modest, however, and evidence from the rigorous Head Start Impact Study indicates that few immediate outcomes are sustained through first grade.

The federal Office of Head Start released a plan in 2010 designed to improve the school readiness of Head Start children. Called the Head Start Roadmap to Excellence, its provisions include stronger attention to children's learning and family engagement in forthcoming revisions of the Head Start Program Performance Standards,

improvements in professional development and related forms of training and technical assistance, replacing poorer performing programs with new grantees through a grant recompetition process, and strengthening Head Start collaborations with other early childhood programs and with elementary schools at local and state levels. Each of these directions includes specific actions, such as increased emphasis on family literacy in family engagement practices and systematic use of standardized tools for measuring instructional quality.

The growing emphasis on academic skills has generated concern that Head Start's comprehensive focus, including dental care, immunizations, nutrition, and family support services, will erode in favor of attention to children's literacy and school readiness experiences in classrooms. There also is concern that outcome assessments will drive curriculum emphases through "teaching to the test" practices.

Creative responses to the challenge of improving children's school readiness will require Head Start to capitalize on its status as the "birthplace of comprehensive services in a family setting" (Zigler & Muenchow, 1992, p. 243) and its tradition of adaptation and improvement (Bowman, 2004). Head Start needs to retain and strengthen its role as a national laboratory for developing new models of innovative programs for children and their families. Strong partnerships with other institutions and resources in local communities are essential in these efforts. No matter how comprehensive or well administered, Head Start can only do so much to combat the poor prenatal care and nutrition, inadequate housing, crime-ridden neighborhoods, and racial and gender discrimination that affect the lives of many families living in poverty. Head Start is not a "panacea for poverty" (Washington & Oyemade Bailey, 1995, p. 141). It is, however, a demonstrated leader in mobilizing the energies of diverse institutions in communities on behalf of young children. Improvements in children's development and learning outcomes require not only stimulating classrooms and supportive parent-child relationships, but also communities that genuinely care about children, families, and their environments.

Reflect On

1. What assumptions that marked the beginnings of Head Start have subsequently been found wanting?
2. How does Head Start involve parents, and why is this so important?
3. What changes in Head Start have occurred in recent years because of heightened concern over school readiness and success?
4. What is the minimum percentage of children with disabilities that must be enrolled in Head Start programs?
5. Do you think it possible for Head Start to really balance its comprehensive services orientation with a strong emphasis on academics?

Selected Resources

Beacon of Hope: The Promise of Early Head Start for America's Youngest Children by J. Lombardi and M. M. Bogle (Eds.), 2004, Washington, DC: Zero to Three Press.

The Hidden History of Head Start by E. Zigler & S. J. Stryco, 2010, New York: Oxford University Press.

National Head Start Association: www.nhsa.org

Office of Head Start: www.acf.hhs.gov/programs/ohs/

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Chapter 4 Home Visiting Programs

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After reading this chapter, you should be able to:

- Characterize the historical perspective on home visiting in the United States
- Discuss modern-day home visiting and early childhood education
- Examine the quality in home visiting

From its early beginnings in the United States, home visiting has been associated with young children and their families, whether for health, education, or social service purposes. Although it has roots in Europe, where health care in the home was provided for individuals across social classes, home visiting also has a rich heritage in the United States, especially in addressing the educational needs of young children.

Current economic, political, and social events in the United States make a review of home visiting in early childhood education well timed, especially a review that includes the needs of children growing up in poverty, reading levels of children in elementary school, the needs of children from immigrant families, and the continuing needs for maternal and infant health care. Children born into poverty have more negative health outcomes in infancy and early childhood, often leading to an increased likelihood of school failure. These challenges in our society have increased attention on home visiting to ensure positive maternal and infant health outcomes and children's early school success. In addition, these issues have influenced the initiation of the U.S. Patient Protection and Affordable Care Act of 2010, designed to provide \$1.5 billion over 5 years for a state-based early childhood home visiting program serving at-risk families with young children or pregnant mothers. Although our focus is on the benefits of home visiting for children's early education, children's development is a complex and multifaceted phenomenon, necessitating a look at home visiting services designed to address health and social-emotional development as well as children's early language and literacy development. Child abuse and neglect can lead not only to social and emotional disabilities but also to cognitive impairments, difficulties in language development, and poor academic success that can all negatively influence educational outcomes. Because child abuse and neglect influence children's overall development, our review also encompasses services in these areas. To frame our review, we provide a chronology of home visiting dating to the 1900s and then examine developments in each decade beginning with the 1960s. Within each decade, we describe key developments related to home visiting for young children and associated educational outcomes. We conclude with identifying new developments that could positively influence family and child outcomes addressed through home visiting.

Historical Perspective On Home Visiting in the United States

Home visiting gained prominence in the United States during the progressive era, a period of social reform from

1890 to the 1920s, and was used as a strategy to reach out to both those in poverty and immigrant families to address nutrition, illness, and disease. Another factor promoting home visiting services was the recognition of the role of parents in their children's education and the value of reaching out to parents in their own home. Visiting nurses, social workers, and visiting teachers all provided services during this time. The concept of the visiting teacher evolved from the association of kindergartens and elementary schools with settlement homes where many families lived upon arrival in the United States.

Issues of crime, child labor, and urban slums were further motivating factors for home visitors to improve not only the family environment, but also their communities. As educators worked to make schools more positively influential in the lives of children, visiting teachers functioned as mediators between families and educational institutions, familiarizing themselves with the environment of children in settlement houses and sharing this information with teachers. Thus, teachers were enabled to better understand their students and to address their educational needs.

Other social and political events were also influential in services provided to mothers and children. In 1909, President Theodore Roosevelt called the first White House Conference on the Care of Dependent Children, helping to raise awareness of issues that children faced, including the detrimental effects of institutionalization. This conference acknowledged the importance of family and home life for children, leading to the creation of the Children's Bureau and the widow's pension movement. These two efforts emphasized the importance of the welfare of all children, not only those from low-income, mother-led households. Another organization, the Child Welfare League of America (CWLA), was founded in the early 1920s to ensure the well-being of children and their families. The Children's Bureau and the CWLA indirectly contributed to children's early education by improving the lives of mothers and young children.

By the late 1920s, a shift away from home-based services occurred for many professionals: social workers, nurses, teachers, and physicians. Center-based services became the norm as professionals began to believe that such settings could better serve families. Although this approach was prevalent for many years, by the 1960s events resulted in a renewed interest in home visiting.

Modern-Day Home Visiting and Early Childhood Education

1960s

Renewed Interest

Not unlike the confluence of events at the turn of the twentieth century, several converging events in the 1960s heightened interest in children, poverty, and early education. President John F. Kennedy's concern with the poverty conditions he observed in Appalachia and the follow-up initiatives of the Lyndon Johnson administration's "War on Poverty" resulted in funding to address families living in poverty. The country's attention had been drawn to the plight of children being raised in poverty and the subsequent school failure associated with these home conditions. Education came to be viewed as key in ending the nation's continuous cycle of poverty. Project Head Start was designed to provide early educational opportunities to children from low-income families and to make health, nutrition, and family support services available ([Zigler & Valentine, 1979](#)).

Although Head Start was certainly the most visible and well-known early childhood effort in the 1960s, it was not the first. Other initiatives in the early 1960s included the Early Training Project ([Gray, 1971](#)), a university-based program that provided both preschool and home visiting programs for low-income children designed to offset school failure. Three-year-old children attended 10-week preschool programs for two to three summers, and home visits were made both when the program was and was not in session. The home sessions were conducted by

paraprofessionals who brought early childhood materials into the home and helped parents learn how to effectively use these items with their children ([Gray, 1971](#)). I. J. Gordon's work on home visiting with low-income families, the Parent Education Project (PEP), also used paraprofessionals to provide home-based services with a focus on helping mothers provide positive early learning experiences for their children ([Gordon, 1970](#)).

The High/Scope curriculum was yet another 1960s initiation, a center-based early childhood program that incorporated a home visiting component where teachers met their students' families for 1½ hr each week. Outcomes of the study found that the project was effective as an educational intervention and as a delinquency prevention model. As reported by Schweinhart (2003; also [Chapter 10](#)), by age 27 the children who received the intervention services during preschool had completed a higher level of schooling, had higher levels of general literacy, reported greater levels of income, and were linked to economic benefits, such as lower justice system costs, when compared to the control group.

In 1965, the Mother-Child Home Program was developed from Levenstein's Verbal Interaction Project ([Levenstein, Levenstein, Shiminski, & Stolzberg, 1998](#)). Today, this program is known as the Parent-Child Home Program (PCHP) and is implemented across the United States and in Canada, Bermuda, and Ireland. The PCHP emphasizes the importance of parent-child interactions to promote early school success and uses home visits to strengthen children's language skills, social-emotional development, and problem solving. The PCHP provides services to families for a 2-year time span when children are 2 to 3 years old until they enter preschool. Home visits are frequent and short, lasting half an hour twice a week, and are used to model interactions and activities with provided materials. Although research on the PCHP has been mixed, studies have shown that participants in PCHP graduated high school at significantly higher rates than the control students ([Levenstein, Levenstein, Shiminski, & Stolzberg, 1998](#)). In addition, children who participated in PCHP in preschool performed similarly at first-grade entrance on achievement tests in comparison to statewide performance data and outperformed at risk children who did not enroll in PCHP ([Levenstein, Levenstein, & Oliver, 2002](#)).

Having its genesis in Israel in 1969, the Home Instruction for Parents of Preschool Youngsters (HIPPPY) came to the United States in 1984. HIPPPY was designed to provide 2 to 3 years of services for children, focusing on the development of cognitive skills, including language, problem solving, logical thinking, and perceptual skills. Services focus primarily on parent involvement and school readiness for children 3 to 5 years of age, using a curriculum that includes materials and books to foster cognitive skills and socio-emotional and physical development in children. HIPPPY home visits include a variety of activities, from discussing educational objectives and providing educational materials to role-playing and parenting information. Parent involvement within the child's school is also promoted. Home visits are conducted by paraprofessionals who receive intensive training in order to provide weekly visits to families. In addition, parent group meetings are provided to encourage learning among participants through discussion and role-playing.

Research findings suggest positive treatment effects on child expressive language skills and parent involvement in the home, and a correlation between parent participation and child expressive language outcomes for children at risk for school failure. In addition, research shows that teachers identified children involved in HIPPPY as better prepared for kindergarten literacy instruction and above average in school performance. In comparison to their non-HIPPPY kindergarten classmates, HIPPPY children were also identified as better behaved, more engaged, and more familiar with routines in school. One longitudinal study found that HIPPPY children in fifth grade continued to demonstrate above-average scores across academic subjects (e.g., reading, spelling, math, social studies and science; [Bradley & Gilkey, 2002](#)).

The Portage Project ([Shearer & Shearer, 1972](#); [Shearer & Shearer, 2009](#)) started in 1969 in Wisconsin as a demonstration project funded by the U.S. Office of Education (Bureau for the Education of the Handicapped) to develop services for parents and their young children with disabilities. The goal was to test and establish an early education program for children up to age 3 with a range of developmental disabilities; a teacher would provide weekly services in the home. Assessment procedures were used to identify the child's competencies and served as a basis for determining the services for each child. In the 1970s, the program expanded to other states and later made numerous expansions in other countries.

Recognizing a lack of materials available to support parents in the development of young children with disabilities, the *Portage Guide to Early Education* (PGEE) was created as an assessment and curriculum-planning tool. This tool supports individuals working in various settings that offer programming to young children and their families. For example, although the PGEE was designed for home visiting, the guide is also used in center-based settings. Most importantly, this tool is designed to support relationship-based intervention that is family centered, ecological, and strength based, reflecting the core values of the Portage Project. Two additional guides are available for identifying and addressing developmental needs, including the *Portage Classroom Curriculum* and the *Growing Birth to Three* tools. The Portage Project materials can be adapted to the needs of different cultures ([Jesien, 1984](#)), a feature that has facilitated the spread of this project to numerous other countries.

1970s

In the 1970s, many early childhood interventions were influenced by the writings of Urie Bronfenbrenner on the role of the family in children's early development. His conceptualization of an ecological perspective of children as nested within the family and the family as nested within the larger community is arguably the most significant theoretical framework for early childhood interventions. This conceptualization is especially pertinent for home visiting, given the emphasis on the role of the family in children's development, and has helped expand the view of services from those for an individual child to those for the family within the broader community.

The Abecedarian Project, a center-based early childhood program started in 1972, served as the basis for two later efforts that included home visiting, both Project CARE, initiated in 1978, and the Infant Health and Development Program (IHDP), started in 1985. The Abecedarian Project was an experimental study of center-based care for at-risk children from low-income families ([Campbell et al., 2008](#)). Similar to the High/Scope project, the Abecedarian Project has now followed children into their young adult years, demonstrating several lasting effects of early center-based intervention. A related intervention was Project CARE, a comparison of center-based and home-based care beginning in infancy ([Wasik, Ramey, Bryant, & Sparling, 1990](#)). At school entrance, Project CARE children in the day care program demonstrated positive outcomes, but not the children in the home-based-only program. Building on the Abecedarian Project and Project CARE, the Infant Health and Development Program (IHDP, 1993) was a national randomized study of low-birth-weight infants and their families with a home visiting–day care treatment combination. The intervention took place in eight large cities throughout the United States, providing treatment families with home visiting during the child's first year followed by home visiting and full-time day care during the next two years. Results showed that at the end of the intervention at age 3, treatment children outperformed control group children on cognitive measures, with an average of 6.6 points higher for lighter low-birth-weight children and 13.2 points higher for heavier low-birth-weight children on an IQ measure, thus providing a stronger foundation for later school performance (IHDP, 1993). Additional follow-up studies demonstrated similar higher scores on measures in IQ, receptive vocabulary, and mathematics and lower scores on a risky behavior index from ages 5 up to age 18 for the heavier low-birth-weight stratum but not the lighter low-birth-weight stratum.

Child Abuse and Neglect

A significant advancement during the 1970s was the recognition that home visiting could provide an effective means of helping to reduce the occurrence of child abuse and neglect. Among the professional events influencing this attention was the work of Henry Kempe in identifying child abuse as a significant social and health issue. The Kempe Family Stress Inventory (KFSI) was developed to determine if parents are at risk for future parenting difficulties, such as child maltreatment. Enacted in 1974, the Child Abuse Prevention and Treatment Act (CAPTA; P.L. 93-247) and its amendments heightened public awareness of child abuse and neglect. CAPTA prompted many initiatives designed to address these concerns. Influenced by the work of Kempe, Hawaii's large-scale effort to reduce abuse and neglect was established in the 1970s as the Hawaii Healthy Families program. Other programs during this time addressing abuse and neglect were Project SafeCare (formerly Project 12-Ways) and Nurse-Family Partnership (initially called the Nurse Home Visiting Program).

Project 12-Ways, in addressing child abuse and neglect, provides relatively comprehensive services to parents in their own homes ([Lutzker, 2009](#)). In comparison, its more recent model, Project SafeCare, has narrowed its focus to (a) positive parent–child interactions, (b) home safety and accident prevention, and (c) child health care. In-home visitation and training with the parents has yielded significant improvements across all three skill domains ([Gershater-Molko, Lutzker, & Wesch, 2003](#)). In line with its eco-behavioral model, services are provided exclusively in the home environment. Project SafeCare primarily targets parents and caregivers with children in infancy to early childhood, or ages 3 to 5 years ([Lutzker, 2009](#)). The adaptations that Project SafeCare made from Project 12-Ways have resulted in a focus on parents with low intelligence and/or learning disabilities, thus promoting early childhood education in this population by fostering positive parent–child interactions, child health care, and home safety ([Gershater-Molko et al., 2003](#)).

In the 1970s, D. L. Olds began the first of a series of studies to help first-time low-income mothers and children, in which he and his colleagues examined outcomes related to maternal and child health, including instances of abuse and neglect. Randomized controlled trials began in 1977 in Elmira, New York, in 1988 in Memphis, Tennessee, and in 1994 in Denver, Colorado, obtaining positive results for improved pregnancy outcomes and improved development of infants and children. By 2010, what is now known as the Nurse-Family Partnership (NFP) had been launched in 32 states. The NFP partners first-time mothers with a nurse home visitor until the child's second birthday to establish a therapeutic relationship that addresses necessary behavior changes to promote infant and mother health and self-efficacy to develop plans for the future ([Olds et al., 2004](#); [Olds et al., 2007](#)). Although findings are sometimes specific to one of these experimental studies, positive outcomes have been obtained for maternal life course changes and children's health. Related to early childhood education, findings suggest a 50% reduction in language delays and a 67% reduction in intellectual and behavioral problems in children at age 6 who participated compared with children not in the program ([Olds et al., 2004](#))—results relevant for children's school success.

1980s

In 1981, the pilot project of the Parents as Teachers (PAT) program was conducted to help first-time parents prepare their children for school and encourage parent involvement. Today, PAT is established across all 50 states and seven other countries. The PAT program has four main goals: (a) increase parent understanding of child development to improve parenting practices, (b) prevent child neglect and abuse, (c) provide early identification of developmental delays and other health concerns, and (d) increase children's school readiness and success (www.parentsasteachers.org/results). Data reported on PAT have shown that children were more likely to be read to and enrolled in preschool when parents participated in PAT than were children who did not receive services. Based on the School Entry Profile, a teacher report to measure skills and areas of performance in kindergarten, children in the PAT program and preschool were judged more ready to learn than children who did not receive either service. At third grade, children were more likely to reach benchmarks on the Missouri Assessment Program Communication Arts Test ([Parents as Teachers National Center, 2007](#)).

Efficacy of the PAT curriculum was investigated in a study comparing 237 families in the



The home visiting teacher helps the parent and child develop an effective instructional style.

PAT program receiving the Born to Learn curriculum against 237 families that received general child development education. Drotar and colleagues ([Drotar, Robinson, Jeavons, & Kirchner, 2008](#)) used several standardized assessments to measure cognitive development, adaptive behavior, mastery motivation for problem-solving abilities, language development, concept development, prereading skills, and social competence across three time points: 12, 24 and 36 months. The strongest findings of the study included significantly higher scores in mastery motivation at 36 months and significantly higher effects for children with low socioeconomic status (SES) on cognitive development at 24 months (www.parentsasteachers.org/training).

1990s

Two significant home visiting programs were started in the 1990s. Healthy Families America (HFA) began under the auspices of Prevent Child Abuse America. An evidence-based home visiting model, it seeks to help families with histories of trauma, violence, mental health, and/or substance abuse issues to prevent the occurrence of child abuse or neglect by teaching positive parenting and promoting child development. HFA services are intensive, are long-term (3 to 5 years), and are provided on a voluntary basis by local organizations. HFA provides services in 35 states with a focus on helping families with multiple risks of child maltreatment as identified by the KFSI. Although research on HFA has mixed reviews, several studies have demonstrated positive outcomes on child development and school readiness, child health, and positive parenting practices. Caldera and colleagues ([Caldera et al., 2007](#)) evaluated Healthy Families Alaska in six out of seven state program sites to determine the effectiveness of HFA on child development as measured by the Bayley Scales of Infant Development and the Child Behavior Checklist. [Caldera et al. \(2007\)](#) found that participating children had more favorable scores on both measures. The study concluded that by promoting positive parenting, HFA reduced problem behaviors and promoted child development, but did not improve child health. In addition, HFA has been able to influence early childhood education through improving the home learning environment, maternal self-efficacy, and the increased use of center-based parenting services.

Realizing the need to reach younger children in a more systematic manner, the U.S. government funded Early Head Start (EHS) in 1995 to provide comprehensive child and family services for low-income pregnant women,

as well as families with infants and toddlers to age 3. Through year-round services, EHS's overarching goal is to promote children's physical, cognitive, emotional, and social development; encourage parent efforts in promoting early development; and help parents become self-sufficient by providing a range of services in child development, child care, case management, health care referrals, parenting education, and family support. Depending on the needs of the community and family, the EHS program provides home-based services, center-based services, or a combination of services. Recent data suggest that 52% of families with 1-year-olds are enrolled in a home-based service option ([Boller et al., 2012](#)). Home-based services require, at minimum, 48 visits per year. Estimates of home visits within each service option suggest that home-based program recipient families receive an average of 71 visits, mixed-approach recipient families have an average of 65 visits, and center-based families receive 11 visits during the 26-month enrollment in EHS ([U.S. Department of Health and Human Services, 2004](#)).

A large randomized study of EHS (Early Head Start Research and Evaluation Project) examined the program's influence on parents when the children were ages 2 and 3 years, on children's language and cognitive outcomes at these same ages, and on parents' own literacy and self-sufficiency outcomes ([Boller et al., 2012](#)). Results showed parents enrolled in the home visiting program provided more stimulation, were more involved in educational activities, and reported less parenting stress. EHS children at ages 2 and 3 years significantly outperformed control group children on measures of both child language and cognitive skills. Further analyses showed that the language environment contributed to children's later language learning ([Boller et al., 2012](#)). Quality of the home visitor's strategies was also found to be correlated with parent-child interactions and children's vocabulary, suggesting that quality home visits can have a positive impact on early childhood education ([Boller et al., 2012](#)).

Another effort that focused on the role of parents is the Positive Parenting Program, better known as the Triple P. It is an international public health approach molded and supported by over 30 years of research designed to help parents develop strong parenting skills, prevent child maltreatment, and deter socio-emotional and behavioral problems in children. The Triple P framework is centered on self-regulation and empowerment for parents to make their own decisions in terms of goals, skills, and values they desire ([Sanders et al., 2008](#)). Developed in Australia, Triple P began as an individually administered home-based training program for parents with disruptive children in preschool ([Sanders, 2008](#)), evolving into an evidence-based prevention program that can be adopted by organizations and government agencies. Triple P is unique in being a multilevel support system that addresses developmental needs from infancy through adolescence, offering five levels of intervention that increase in intensity. The first level encourages participation in parenting programs. The second and third levels target parents with specific concerns, while level four is for parents seeking intensive training or for parents of children with more significant behavior issues. Level five is for parents facing significant child behavior problems in addition to family dysfunction.

In summarizing research on Triple P, [Prinz, Sanders, Shapiro, Whitaker, and Lutzker \(2009\)](#) noted that positive effects have been obtained for observed and parent-reported child behavior, parenting practices, and parent adjustment across families, cultures, sites, and investigators. Research has also demonstrated the efficacy of Triple P with parents who are linguistically and culturally diverse (e.g., [Turner, Richards, & Sanders, 2007](#)).

A relatively new initiative is the Family Check-Up home visiting program founded by Dishion and Kavanagh (2003), an empirically based family-centered intervention that seeks to improve family management practices or parenting skills, as well as parenting quality, to prevent or reduce early childhood problem behavior ([Dishion et al., 2008](#)). Family Check-Up is grounded on EcoFIT, an ecological approach and public health focus for family intervention and treatment, also created by the Child and Family Center at the University of Oregon. EcoFIT is embedded in a health maintenance model that emphasizes periodic contact with families at key transitions in development ([Shaw, Connell, Dishion, Wilson, & Gardner, 2009](#)).

Family Check-Up begins with an initial interview to learn of needs and concerns in order to best serve the family on an individual level. Intervention options are chosen based on an ecological assessment conducted through a home visit, a series of questionnaires, and a measure of the child's school performance and adjustment. Research supports Family Check-Up as a model for increasing levels of positive parenting during early childhood, thus indirectly influencing early childhood education through school readiness ([Lunkenheimer et al., 2008](#)) as measured by improvements in self-regulation and language development.

National Collaborative Efforts in the 1990s

Advances in home visiting in the 1990s resulted in part from a number of professional publications and activities. The Lucile and David Packard Foundation took a strong interest in home visiting services, producing two major volumes on home visiting during this time. The first provided an introduction to many issues related to home visiting, raising awareness in the field ([Gomby, Larson, Lewit, & Behrman, 1993](#)). The second 1999 volume examined in more depth whether significant parent and child outcomes were occurring ([Gomby, Culross, & Behrman, 1999](#)). Among the conclusions in this latter volume was a serious question on the effectiveness of home visiting for parents and children, leading to recommendations for enhancing program quality. The calls in the second volume influenced the development of the National Forum on Home Visiting, which became a setting for collaboration among major U.S. home visiting programs serving families, infants, and young children. The 1999 volume also helped advance the field on topics including systems management; home visitor training, retention, and supervision; research; and policy. Meeting across several years, this forum forged an advanced level of knowledge about home visiting across major program models (PAT, HFA, HIPPY, PCHP, NFP, and EHS) in addition to highlighting common issues across different service models. This forum's work is available on the Harvard Family Research Project Web site (www.hfrp.org/other-research-areas/home-visit-forum), where the following observation is made about the forum's work: "Despite the unique attributes of each program, the use of home visitation as a delivery model means these organizations shared many common goals. Participants worked to create areas for cross program cooperation and learning that strengthen the home visit field as a whole, as well as enhance individual programs." The collaboration across national programs that came out of this forum was, in no small way, a significant factor leading up to the 2010 funding of the federal Maternal, Infant, and Early Childhood Home Visiting Program, designed to ensure that "children have the opportunity to grow up healthy, safe, ready to learn, and able to become productive members of society" (www.clasp.org/federal_policy/pages?id=0024).

2000

During the past 10 years, from 2000 to 2010, interest in home visiting has continued to grow. The National Forum on Home Visiting carried on its work into the first part of the decade, while other private and government organizations maintained support for home visiting research and services. Renewed interest in teacher home visiting is also occurring. This interest is illustrated by the Teacher Home Visit Program in St. Louis, Missouri, using home visiting to improve communication between schools and homes and to help families understand that the goals they have for their children are shared by teachers and schools. Through a partnership between parents and teachers, this teacher home visit program works toward six overarching goals: (a) improve academic achievement and test scores; (b) decrease discipline referrals; (c) improve attitudes toward school; (d) encourage homework completion; (e) increase student attendance and parent participation; and (f) increase parent involvement. A recent evaluation within the St. Louis metropolitan area during the 2009–2010 academic school year showed grade improvements in math and improvement in school attendance for students who participated, in contrast to those who did not. Parents demonstrated an increase in contact and participation with their children's school; teachers reported they felt the program improved their classroom instruction and relationships with students ([Sale, Weil, & Kyrach, 2011](#)).

All the national models identified as developing between the 1960s and 2000 continued their growth during this decade, while researchers, funders, and policy makers raised the bar on the expectations for evidenced-based practice. At the end of this decade, events at the federal level brought home visiting into the national limelight, again showing its history as a strategy that is often rediscovered by new generations. An extensive review was undertaken of home visiting programs for children from birth to age 5 to assess whether the programs met standards of evidenced-based practice. In [Table 4–1](#) we have listed 10 programs, including 7 identified as having met the standards of evidenced-based practice in a 2011 review of home visiting programs (homvee.acf.hhs.gov/homvee_executive_summary.pdf; NFP, HFA, HIPPY, Family Check-In; PAT; EHS; and Healthy Steps), two that have other research evidence (Project Safe-Care and Triple P), and one that was part of

the National Forum on Home Visiting (PCHP).

By the end of this decade, home visiting had been documented through numerous sources as a prevalent strategy for providing services to families in their own homes. According to the National Inventory conducted by the PEW Center on U.S. states for the FY 2009–2010, 46 states and the District of Columbia are providing home visiting services, 33 of which have more than one established program. Several national models have continued to expand their efforts, and numerous other state and local programs are serving children and their families.

Nevertheless, only 15% of families who could benefit by home visiting services for families and young children are receiving them. Such data lead to renewed interest in reaching more families through home visits. Home visits are especially important for children from Latino families because these children are less likely to attend center-based care and thus are less likely to have early interventions that can facilitate school success. Concerns continue about the early physical, social, and cognitive development of children reared in poverty. These children enter school behind their peers and rarely catch up. Data across the years on the potential for home visiting to improve maternal outcomes related to children's development, improve



Data suggest that home visiting improves childhood development through parental activities.

parenting skills, and enhance children's health and school readiness have led to increased calls for family services for pregnant women and families with a child between the ages of birth and 5 years. Although the research findings remain mixed across the field as a whole, with some outcomes having moderate to strong effects, but others not showing effects (homvee.acf.hhs.gov), sufficient support exists to continue to refine these services for families and children.

Future Directions: 2010–2020

The decade from 2010 to 2020 may see the largest expansion of home visiting interest and programs since the 1960s and 1970s, along with the largest infusion of federal funding. This decade opened with one of the most significant events in the history of home visiting, the signing by President Barack Obama in 2010 of the Patient Protection and Affordable Care Act that included among its provisions \$1.5 billion in funding over 5 years for high-quality, evidence-based, voluntary early childhood home visiting services. Benchmarks of success will include improvement in maternal and child health, childhood injury prevention, school readiness and achievement, reduction in crime or domestic violence, family economic self-sufficiency, and coordination with community resources and support. The rationale for this legislation was developed during the mid-2000s, culminating in this historic funding effort. Fortunately for early childhood education and home visiting, this act has specified many procedures consistent with the best guidelines available for promoting program quality and fidelity and measuring outcomes. For home visiting to advance beyond its current status, the infusion of financial resources should be accompanied by continuing research that advances our knowledge about what child and parent outcomes are most

likely to come about through home visiting, as well as examining in depth the potential processes and procedures that can lead to positive outcomes.

The role of the states will become much more critical to program quality, as the states are given the responsibility to use evidenced-based programs or those that have promise, select organizations that are able to effectively implement programs, and ensure that ongoing program evaluation occurs. In recognition of the important role of state leaders and policy makers in ensuring program quality, a national summit on quality in home visiting programs was held in 2011, the first such national conference on home visiting in the United States. State and national leaders, policy makers, researchers, and practitioners came together to examine in depth the factors that need to be addressed to ensure home visiting services are provided appropriately and with high quality. Issues of staffing, program selection, training and supervision of home visitors, data monitoring, and outcome assessments were among the issues addressed. In the following section, issues essential to a discussion of quality in home visiting are identified.

Initiation	Program Model	Goals	Start and Duration	Population Served
1960s	The Parent-Child Home Program (PCHP) Visitors—Paraprofessionals	Promote positive parenting and quality and quantity of parent-child interaction Enhance children's conceptual and socio-emotional development Develop children's early literacy skills and promote school readiness	Ages 2–3 Biweekly home visits for 2 years	Families with multiple risk factors, such as low income and teen parenthood
	The Home Instruction Program for Preschool Youngsters (HIPPY) Visitors—Paraprofessionals	Encourage parents to support their child's development Promote confidence in parenting and increase parent involvement in education Increase children's school readiness and success	2-year program for ages 4–5, or 3-year program for ages 3–5 Implementation must occur through age 5 Weekly sessions, alternating between home visits and center-based meetings	Parents of children ages 3–5 who doubt their parenting skills and ability to prepare child for school
1970s	The Nurse-Family Partnership (NFP) Visitors—Nurses	Improve pregnancy outcomes Promote mother responsibility and competent care to improve her child's health and development Improve the economic self-sufficiency of the family	Prenatal to age 2 Weekly to monthly home visits by nurse, depending on the age of the child	Low-income, first-time mothers
	Project SafeCare Visitors—Paraprofessionals	Enhance parenting skills in areas of play, responses to behavior, and health and home safety Reduce child abuse in families with history or risk of maltreatment	Parent-infant and parent-child modules: Appropriate for birth to 8–10 months and 8–10 months to 5 years Weekly home visits for 18–20 weeks	Families with history or at risk for child maltreatment
1980s	Parents as Teachers (PAT) Visitors—Paraprofessionals	Empower parents to be their child's first and most influential teacher Prepare children for school and school success Prevent child abuse and neglect Detect developmental delays and health issues	Prenatal until child enters 1st kindergarten Monthly to weekly sessions, depending on the needs of the family	Families with young children
	Healthy Families America (HFA) Visitors—Paraprofessionals	Give pregnant women access to prenatal health care and encourage a healthy lifestyle Provide children with early screenings and interventions for developmental delays Link families to health care providers Promote positive parenting skills	Prenatal or birth to age 3–5 Sessions are initially conducted at least once a week; Frequency may change depending on needs of the family	Single parents and families of low income or history of substance abuse, mental health issues, and/or domestic violence
1980s	Early Head Start (EHS) Visitors—Paraprofessionals	Promote healthy outcomes for pregnant women Encourage healthy family functioning Improve the development of young children	Birth through age 3 Services include center based, homebased, and a combination	Low-income pregnant women and families
	Triple P Visitors—Professionals	Promote nonviolent, protective, and nurturing environments for children Increase knowledge, skills, and confidence in parenting Decrease child abuse, mental illness, behavioral problems, and homelessness	Birth through age 16 Number of sessions dependent on the client's specific needs	All families seeking advice on parenting
	Healthy Steps Visitors—Professionals	Provide professional assistance in monitoring child health and development Promote positive health practices within the family Address parents' concerns regarding their child's physical, emotional, and intellectual development	Birth to age 3 Two to five home visits from birth to between 12 and 30 months, depending on the intensity of the family's needs Health check-ups and parent support groups are offered to 36 months	Families of young children receiving services from pediatric, family medicine, and other health care providers
	Family Check-Up Visitors—Paraprofessionals	Provide brief, comprehensive assessment to improve family management Enhance parenting skills and encourage parent involvement Improve maternal depression Improve child behavior, academic success, and internalizing problems	Children age 2–18 Three home visits or meetings. Additional intervention options are made available	Families at risk for low income, child conduct problems, mental health issues, academic failure, and substance abuse

The Quality in Home Visiting

[Figure 4–1](#) provides a framework for addressing program quality, identifying key components of home visiting programs that must be taken into account when seeking to ensure program quality under the Patient Protection and Affordable Care Act, which calls for states to be essential players ([Wasik, 2011](#)). Considerations for program quality are presented in a nested format to illustrate the components that each state must meet to ensure quality standards for the programs in their state.

For each of the program components identified in [Figure 4–1](#), program quality can be examined under three categories: program characteristics, progress monitoring, and outcomes. [Table 4–2](#) provides details on the program components and the categories of quality. As an example, each local organization must have the

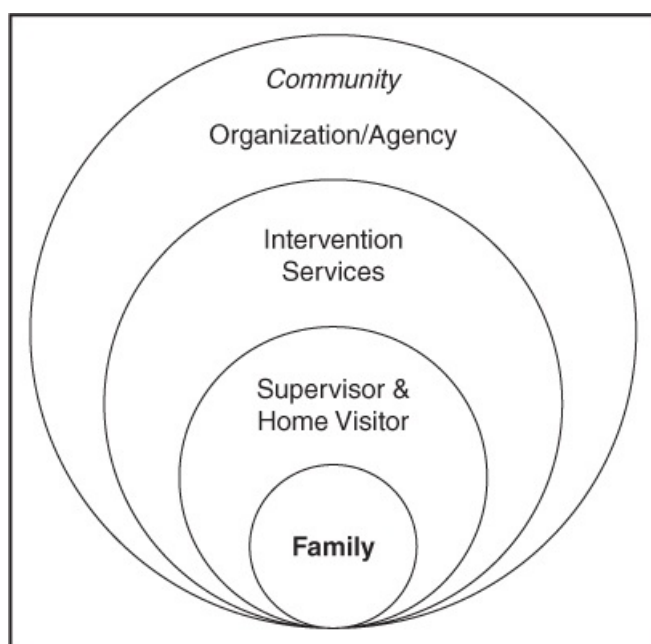


Figure 4–1 Components of Home Visiting Services That States Must Address

capacity to implement the program and have a vision about family services consistent with that of the home visiting model or services being implemented. This organization must be actively involved in ensuring that the intervention is implemented as designed. To do so, the organization must make certain that participants are actively recruited and that the standards for participation are met. The organization must identify the necessary training and supervision required for its staff to implement the program with fidelity.

Another consideration of special importance to program quality is whether the intervention services are provided with fidelity to the intervention structure and processes. First, fidelity to structure is evaluated by assessing whether services are provided at the frequency, duration, and intensity described as essential for significant outcomes. Without monitoring these variables, we cannot know if they are being implemented as designed. Considerable data in the field show that services often are not provided as frequently as intended, making conclusions difficult to draw. Second, process fidelity must be evaluated by including the following: (a) how well the services in the home match the intervention (i.e., materials, strategies,

	Characteristics	Progress Monitoring	Outcomes
Organization/ Agency	Capacities Beliefs	Implements intervention Provides training and supervision Meets recruitment and retention targets	High fidelity to structure and process Fiscal management Family retention
Intervention Services	Evidenced-based intervention	Ongoing evaluation of all components	All families received quality intervention
Home Visitors and Supervisors	Hired with essential skills Committed to program fidelity, training, coaching	Demonstrate skills, knowledge Provide regular training and coaching	Provided intervention as designed
Family	Meets program recruitment expectations	Benchmarks: (e.g., participation, engagement, uses intervention)	Family satisfaction Family outcomes Child outcomes

Table 4–2 Home Visiting Components Relevant for Quality and Fidelity

► Alternate View

focus on goals and objectives), and (b) quality of the helping skills and relationships (visitor–family relationships and interactions). Data on program fidelity related to structure are often provided by the home visitors who report on the frequency of home visits and their duration. Information on process fidelity has not been frequently obtained. In some situations, supervisors have observed visitors while conducting a home visit. Rarely have records of the home visit been made that can be evaluated later, such as audio or visual recordings. Without specific information on what takes place during the home visit, we cannot draw conclusions about whether the services were implemented as designed. Furthermore, we might conclude that services were not effective when, in fact, the designed services might not have been provided. Research findings and discussions held in settings such as the National Forum on Home Visiting revealed that the field has not been highly active in obtaining data that document the procedures and strategies in use during home visits. As the field moves forward with renewed interest and funding, it must also raise the standard for quality, fidelity, and outcomes because the needs of families and children can best be served when the organizations providing services maintain standards of excellence.

Conclusions and Recommendations

Two major strategies are available for reaching children: providing services either directly through programs such as child care or indirectly through their parents. Although parent groups are used as a service delivery option, home visiting is the most prevalent strategy for reaching parents. For more than a century, home visiting and early childhood education have been inextricably related, from their early beginnings to the current unprecedented interest level. The most frequent goals for early home visiting include (a) improving maternal and child health; (b) enhancing children’s early language and literacy; (c) facilitating children’s social and emotional development; and (d) both preventing and reducing the prevalence of abuse and neglect. Each of these focus areas has been demonstrated over time to be related to children’s early educational outcomes, and in that sense almost all the

home visiting efforts in the country can be seen as contributing to children's early education. Most programs are aimed at children at risk for poor developmental outcomes and thus reach out to the most vulnerable children and families in our country, helping to provide these children and their parents with knowledge and skills important for the child's educational success. Although the research outcomes on home visiting have been mixed regarding the influence on children's educational outcomes, the present strong emphasis on evidence-based programs and on stronger child and parent outcomes, combined with the maturity in the field regarding program quality and fidelity, should bode well not only for high-quality programs but also for strong positive outcomes regarding children's early educational outcomes.

To realize the potential of home visiting in educational settings, administrators and teachers can take more active roles in using this strategy to link home and school. One of the most obvious and easiest times to reach out to families is at school entrance, most often for kindergarten. This period has the advantage of coinciding with an important milestone for children and is recognized as such by parents. Helping parents feel appreciated and welcome can help ensure that children feel comfortable and welcomed at school. Home visits by teachers in the summer before school entrance can help bridge the gap between home and school and create a positive beginning for school.

Staff can coordinate activities that can make the transition to school much easier for children ([Pianta, Cox, Taylor, & Early, 1999](#)) and provide parents with information on ways to facilitate the transition. Teachers can arrange to visit parents in the spring and summer before kindergarten entrance to strengthen communication with the family and to encourage parents in ways of promoting language and literacy skills. By visiting the family at home, the staff conveys respect for the family and lets family members know they are valued by the school. These visits can help in breaking down barriers between parents and schools and assist parents in learning about school expectations. The visits also provide the school with information pertinent to fostering children's education.

Schools, however, do not need to wait until kindergarten entrance. Many programs, as seen in this chapter, serve children in the preschool years. As a result, schools can coordinate with programs such as Early Head Start and Head Start as well as other programs noted in this chapter, including PAT or HIPPI, to begin to establish strong relationships with parents. The school might designate a particular staff person who will make home visits and give this person opportunities to gain skills in providing home visiting services (such as learning about family values and traditions, and ways of establishing positive relationships; see [Wasik, Berry, and Villagomez, 2011](#), for guidelines and tools related to school-based home visiting services). Resources are available for helping schools begin to set up home visiting programs. One national resource is the Teacher Home Visiting Program (www.teacherhomevisit.org/index.html), but schools often have their own professionals who can provide guidance in developing a systematic home visiting program for reaching out to families and young children. School personnel, including school social workers, school psychologists, and school counselors, are important sources of knowledge and skills related to working with families and can help guide the development of a systematic home visiting program. For too long schools have not taken the initiative in reaching out to families, but the benefits of reaching out via home visiting are compelling and can create a synergy between the school and home, resulting in positive benefits for children's academic performance.

Reflect On

1. What are the early roots of home visiting programs?
2. How have home visiting programs evolved over the last 50 years in the United States?
3. Is there research evidence to suggest that home visiting programs are effective in advancing the social and cognitive development of young children?
4. What are some new benchmarks to successful home visiting programs?
5. What components are relevant for determining quality and fidelity in home visiting programs?

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Part II Core Themes

1. [CHAPTER 5 Including Everyone: A Model Preschool Program for Children With and Without Disabilities](#)
2. [CHAPTER 6 More Than the Sum of Its Parts: Creating Multicultural and Linguistically Responsive Early Childhood Classrooms](#)
3. [CHAPTER 7 Early Prevention Initiatives](#)
4. [CHAPTER 8 Assessment for Learning in the Early Childhood Classroom](#)

Chapter 5 Including Everyone: A Model Preschool Program for Children With and Without Disabilities

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After reading this chapter, you should be able to:

- Outline Jowonio's history
- Describe the philosophical base of the Jowonio School
- Explain how to respond to challenging behavior
- Discuss the composition of the school and its classes
- Delineate strategies for accomplishing inclusion
- Explore the process of transitioning to the next environment
- Examine implications for teacher training
- Review additional inclusion efforts

This chapter describes Jowonio School in Syracuse, New York, one of the earliest programs for young children to include students with disabilities ([Knoblock & Lehr, 1985](#)). The name *Jowonio* is borrowed from an Onondaga Indian word that means “to set free.” We offer this program description as an excellent example of one strong, inclusive early childhood education setting, but it should not be regarded as the only possible model. Rather, local needs and opportunities should be addressed to design high-quality, inclusive preschool programs that will successfully meet the needs of any given community.

Federal and state regulations and research also support the education of children with disabilities in the least restrictive environment with their nondisabled peers. For over 40 years, Jowonio School in Syracuse, New York, has served as a program for a wide range of children, including those with differing physical, social, communication, and cognitive needs. The curriculum developed as an integration of developmentally appropriate practice for special education and early childhood. Special education as a field developed in public schools in the early part of the 20th century ([Osgood, 2007](#)). In the past half century, as a result of both growing scientific knowledge about children and social changes in American society, there has been increased interest in early education (child care, preschool, and so on) that addresses the needs of diverse learners ([Ramsey, 2006](#); [Ray, Bowman, & Robbins, 2006](#)). Notably, the 1960s saw a rebirth of scientific interest in the rapid cognitive, language, emotional, and physical development that is typical of the early childhood (preschool) years (e.g., [R. Brown, 1973](#); [Hunt, 1961](#); [Piaget, 1963](#)). Women were challenging traditional roles and entering the job market in increasing numbers, government social programs were being developed, and many social issues and customs (civil rights, sexual mores, war) were being debated. Parents of children with disabilities, unable to get services, organized (e.g., Association for Retarded Children, United Cerebral Palsy) and started preschool programs. They also advocated for the development of federal and state funding for these programs. An early intervention focus on children with disabilities was developed at the federal level as well. Head Start emerged from the Equal Opportunity Act of 1964 (Pub. L. 88-452), and amendments in 1972 (Pub. L. 94-424) required the inclusion of

disabled children) in Head Start programs. The Handicapped Children's Early Education Assistance Act of 1968 (Pub. L. 90-538) established the principle that children with disabilities should be provided education from birth. The Americans with Disabilities Act (Pub. L. 101-336), which became effective in 1992, strengthened this principle under its Public Accommodations Section (Title III), which states that day care centers may not discriminate on the basis of disability. Physical barriers to accessibility must be removed if readily achievable and, if not, alternative methods of providing service must be offered. Any new construction should be accessible to persons with disabilities.

The most important education act was the Education for All Handicapped Children Act of 1975 (Pub. L. 94-142), which set the standards for all of America's public schools for the education of children with disabilities from 3 to 21 years of age. This law included foundational ideas regarding the education of students with disabilities. The key ideas embedded in Pub. L. 94-142 were as follows:

1. All children should go to school.
2. Children with disabilities should have an education appropriate to their individualized needs (an Individual Education Plan [IEP]).
3. This education should be based on fair assessment of the child.
4. Children with disabilities should be educated with nondisabled children to the fullest extent possible (the "least restrictive environment").
5. Parents should have an opportunity to be actively involved in meaningful ways in their child's education, including procedural due process appeals (see [Turnbull & Turnbull, 1982](#)).

In 1990, a new bill (Pub. L. 101-476) renamed the law: Individuals with Disabilities Education Act (IDEA). This act extended these key ideas to children from birth to 3 years of age, with special emphasis on the family unit as an important part of any early intervention program (see [Bailey, McWilliams, Buysse, & Wesley, 1998](#); [Gallagher, Trohanis, & Clifford, 1989](#)). IDEA was reauthorized by Congress in 1997 (Pub. L. 105-17) and again in 2004 (Pub. L. 108-446) as the Individuals with Disabilities Education Improvement Act. The IDEA amendments place a strong emphasis on parent involvement in the initial evaluation process, in eligibility and placement decisions, and in the development and revision of the IEP. IDEA has a focus on ensuring that services be offered in natural environments. Part C encourages the provision of early intervention services for children under 3 years of age at risk for substantive developmental delay. In addition, there is incentive to establish collaborative efforts with community agencies in order to identify, evaluate, and serve infants and toddlers and to create a smooth transition to preschool services.

Language related to IDEA's requirement that students be placed in the least restrictive environment has changed over the years. Initially, mainstreaming referred to the placement of students with disabilities into regular classrooms, often without supports and often on a part-time basis. *Integration* has meant that children are temporally, socially, and instructionally integrated for a meaningful amount of time, but the assumption is still made that the mainstreamed environment is designed for typical students and students with disabilities must fit in. An inclusive school is structured to serve a wide range of students; the environment is flexible and organized to meet the unique needs of all the students. In an inclusive school everyone belongs, is accepted, supported, and is supported by all members of the community while having individual educational needs met ([Biklen, 1992](#); [Ferri, 2011](#); [Sapon-Shevin, 2000/2001](#); [Stain-back & Stainback, 1990](#)). The Council for Exceptional Children, Division of Early Childhood Education's ([DEC, 1996](#)) position statement explicitly "supports the rights of all children, regardless of their diverse abilities, to participate actively in natural settings within their communities" and "that young children and their families have full successful access to health, social, educational, and other support services that promote full participation in family and community life." This full inclusion is the vision of the future that is held by the people at the Jowonio School and modeled by their practice. Finally, inclusive education models today frequently use the construct of universal design for learning (UDL). Universal design is a set of architectural principles related to the access of structures to the largest number of people possible. Applying

similar principles to education, many inclusive educators have adopted UDL as a framework for their practice ([Rose & Meyer, 2002](#)).

Although it has been an important step for promoting greater participation by students with disabilities, the notion of the least restrictive environment that is articulated in the IDEA is problematic to the inclusive educator, because the words least restrictive imply a continuum of services that also includes more restrictive options ([Nisbet, 2004](#); [Taylor, 1988](#)). [Table 5–1](#) illustrates a range of program models with regard to contact between children with and without disabilities. Such settings are all commonly employed to serve children with disabilities. However, it should be noted that educators with an inclusive perspective are critical of most of these models and do not assume that a student who needs more extensive support ought to have less contact with nondisabled peers. An inclusive education approach resists the notion that inclusion is just another program option on one end of a continuum of service that is calibrated to serve children with ever-increasing support needs. Indeed, students with significant disabilities very much like those routinely placed in residential schools (the “most restrictive” setting in [Table 5–1](#)) are often placed at Jowonio, where they are included in the same classroom groups as nondisabled children and are viewed as full members of the group with much to contribute.

With the exception of “reverse mainstreaming,” all of the programming options presented in [Table 5–1](#) are also employed once children are of school age. Some students with disabilities are full members of an inclusive education environment. Others may be placed in a general education room with consultant services or may have a special education classroom as their home base, but be “mainstreamed” into general education settings for some part of their school day. Such students may also be placed full time in self-contained special education classrooms (housed either in a public school or special setting), provided with home-bound instruction, or sent to a residential facility. There is considerable variation in how the term inclusion is applied, and it is often used to

Table 5–1 Programs for Children with Disabilities

Setting	Characteristics/Assumptions
Residential school	• No significant contact with nondisabled peers • Complete institutional control of daily life
Home-based	• Teachers and/or therapists visit the child at home and implement interventions there • Parent “training” or support for a common component
Itinerant services outside the home	• Use of the community as a resource • Some contact with nondisabled peers possible in community settings
Early childhood special education	• An early childhood classroom designed to serve children with disabilities exclusively • Needs and services “clustered” for efficient provision of services

“Reverse mainstreaming”	• An early childhood special education program that includes a handful of nondisabled peers • Incentives (e.g., free tuition) may be offered to attract nondisabled students
Mixed day (part time in special education setting and part time in early childhood setting)	• Children with disabilities “visit” an early childhood education setting for a substantial part of the day, but also have a “home” classroom designed solely for children with disabilities
Early childhood setting with consultant services	• Similar to the early childhood setting with consultant services, except that the classroom is designed from the start as an environment that can respond to the needs of all students • Service providers, such as special educators and therapists, are integrated into the team of professionals who plan for all students

describe settings that do not meet our criteria for inclusive education, both at the early childhood and school-age level. Sometimes the term inclusion is distinguished from full inclusion. In our vision of inclusive education, the term least restrictive environment would be replaced by least intrusive supports. We would assume that free public education is provided to all students at their neighborhood schools. Rather than a continuum of environments, from least restrictive to most restrictive, there should be a continuum of the supports, from least to greatest intensity, that are necessary to include the student successfully.

Jowonio’s History

Created in 1969 by a group of parents in Syracuse, New York, as an alternative to the public schools, the Jowonio School reflected the humanistic free-school movement of the 1960s. It was run as a community program in which decisions were made cooperatively and it emphasized an individualized curriculum for the whole child, including emotional and social development as well as academic achievement. Because of these values, focus, and structure, Jowonio always attracted children with diverse needs. In 1975, Jowonio cooperated with community agencies serving individuals with disabilities as well as the local university to develop a proposal to create a planned and well-staffed program that integrated children with various disabilities. That fall at Jowonio School, one third of the students were classified as students with disabilities, including several with the label of autism, a syndrome in which language and social skills are frequently quite delayed or different ([Kluth, 2010](#)). Since that time, the school has functioned as an inclusive program; students ages 2 to 5 are served in classrooms populated with students with and without identified disabilities (see [Knoblock, 1982](#); [Knoblock & Lehr, 1985](#)). A number of powerful yet simple beliefs have guided the Jowonio program since its inception, and these are described next.

Philosophical Base of the Jowonio School

All Children Can Learn

We approach the wide range of students we serve with the expectation that they can grow and change and that the impetus to do so is inherent in human nature. Children whom many might call developmentally delayed have enormous potential if adults can help them find ways to express what they know and participate in their

environment effectively. We are finding, for instance, that a number of preschool children who do not speak can nevertheless demonstrate age-appropriate academic skills with help from adults.

Right to Participate

Just as one civil rights movement gave voice to racially and ethnically diverse Americans who insisted that they have an equal right to access and participation in American life, so there is a similar civil right for persons with disabilities. The segregated system of special education services arose out of a well-intentioned but misguided medical model as well as out of discomfort with and prejudice against people perceived as different. In a democracy, not only should all citizens have access to the mainstream culture, but there is also a dire need to broaden the conversation about how a child's characteristics such as race, class, and differing physical or psychological traits intersect with the characteristics of teachers and other professionals in different environments (see [Kalyanpur & Harry, 1999](#); [Ramsey, 2006](#); [Ray et al., 2006](#); [Chapter 6](#)).

We also do not subscribe to the myth of “readiness,” which holds that children should be included in the mainstream only when they are ready to be like their typical peers (see [Ladd, Herald, & Andrews, 2006](#)). That belief assumes that the children must change to fit the program. Our assumption is the opposite; the program should adapt to meet the needs of the children. Any child can be successfully included when school personnel exhibit a willing attitude and children and adults receive appropriate supports. Including everyone not only benefits students with disabilities; the nondisabled students and teachers grow from their contact and interaction as well ([Odom & Diamond, 1998](#)).

Learning Through Relationships

We become open to learning when we are in trusting situations with others. We are more likely to put ourselves in new situations and respond to requests or demands of others when we feel safe and cared about ([Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000](#); [Denham, 2006](#)). The position statement of the National Association for the Education of Young Children regarding developmentally appropriate practice ([Copple & Bredekamp, 2009](#)) begins with the principle that “all the domains of [children's] development and learning—physical, social and emotional, and cognitive—are important and they are closely interrelated” (p. 11). [Greenspan and Wieder \(1998\)](#) also describe emotions as the basis of learning; this informs their intervention approach aimed at children with developmental disabilities, which they call “floortime.” During a playful period, an adult focuses on four goals: to encourage joint attention and connection; to participate as a partner in a circle of two-way communication; to express feelings and ideas through words and play; and to link ideas together into a logical understanding of the world (e.g., classification, cause and effect). Floortime is based on the assumption that children are first motivated to engage and learn through relationships in which significant adults interact and follow a child's interests.

Children learn as much from other children as they do from teachers ([Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996](#)). They model how their peers move through routines, how they follow directions, and how they interact with one another. Often a child who has receptive language problems and does not understand the teacher's verbal instructions imitates other children to know what to do. Developing language and appropriate social skills requires both models and practice ([Cavallaro & Haney, 1999](#); [Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005](#); [Guralnick, 1980](#); [Jenkins, Odom, & Speltz, 1989](#)). When children with disabilities, particularly children with intense speech and language needs, are in segregated programs, how can they learn to talk and interact if their peers all have similar needs? Learning skills within the typical environment rather than in isolated artificial situations means that children will be more likely to demonstrate these skills in the home, school, or community. That is, they will be more likely to generalize. A developmentally appropriate inclusive early childhood classroom offers many opportunities for play and communication with a wide range of peers ([Copple & Bredekamp, 2009](#)).

At Jowonio, the emphasis is on cooperative rather than competitive activities ([Johnson & Johnson, 1999](#); [Johnson, Johnson, & Holubec, 1990](#); [Sapon-Shevin, 1999, 2007](#)). Nondisabled children need to have their questions about their peers answered and to have caring behavior modeled by adults. Teachers should explore the ways in which bias about disabilities affects their language and behavior and the classroom. Integrating nonstereotyped images of disabled and nondisabled persons in the curriculum and structuring activities for children to explore individual differences will facilitate an inclusive atmosphere ([Barnes, Berrigan, & Biklen, 1978](#); [Froschl, Colon, Rubin, & Sprung, 1984](#); [Lieber et al., 1998](#)).

Age-Appropriate Curriculum

Jowonio staff use the guidelines from the National Association for the Education of Young Children on Developmentally Appropriate Practice ([Copple & Bredekamp, 2009](#)). Classrooms offer many opportunities for children to manipulate a wide variety of materials; to play alone and with others in sensory, constructive, and symbolic activities; to ask questions and develop concepts about themselves and the world; to be physically active; and to express themselves in words, art, and music. A stimulating early childhood environment is designed so that any student can succeed in it. This may require adaptations in terms of the physical environment, expectations of level of participation and amount of teacher support, size and nature of groupings during the day, schedule, and the presentation of the activities and materials used.

Communication-Based Classrooms

Just as social relationships are the basis for learning, communication is central to the establishment and maintenance of those relationships, to children's receptive understanding of the world around them, and to their ability to express that understanding to others and to have their needs and wants met. Speech, language, and behavior are all communicative and our efforts with children must be geared toward enhancing their power to influence their environment through verbal or nonverbal communication. We also believe that for young children, language is learned primarily through play (see [Johnson, Christie, & Wardle, 2005](#); [Musselwhite, 1986](#); [Pellegrini, 2009, 2011](#); [Westby, 1980](#)). Obviously, having peers with strong play and communication skills as stimuli and models is very important, as is the opportunity to learn and practice language in natural contexts.

Communication occurs all day long. Even a person with no reliable speech is constantly communicating if another individual is present. However, what one person intends and another understands may be different. As teachers, we must learn to read a child's behavior for its communicative intent and then learn to help a child develop appropriate ways to express those intents. The same behavior may have different meanings in different contexts, and different behaviors may have the same meaning ([Donnellan, Mirenda, Mesaros, & Fassbender, 1984](#)). Children will communicate more effectively if they are provided opportunities to make real choices in their environment. We have used a number of alternative or augmentative systems for children to express themselves. These may include symbol systems, signing, and typing that occur with adult facilitation.

Parent–Teacher Partnership

Despite an emphasis in IDEA on the importance of parents to the special education process, parents are too often viewed by teachers as irrelevant to the decision-making process of education or, at worst, as adversaries. At Jowonio, we view parents as partners in our efforts to create the best program for children. Teachers and parents share their respective types of expertise and each brings an important perspective to a dialogue about children. As teachers, we have access to information about available services, rights, procedures, and support networks for parents. We offer a view of a particular child from our experiences with a range of children and from seeing that child in the school setting. We are in a position to coordinate programming between home, school, and related service personnel and to communicate to other professionals about a child (e.g., when the child makes the transition to public school from preschool). Parents bring to the parent–teacher dialogue essential information

about a child: historical developmental information; an intimate understanding of a child's daily behaviors, needs, and emerging skills; and, often, a repertoire of successful interventions. Parents will be the child's lifelong advocates, and their understanding of the child is critical in effective long-term programming ([Bailey et al., 1998](#); [Biklen, 1992](#); [Kluth, Biklen, English-Sand, & Smukler, 2007](#)).

Teachers have four major roles in relation to parents:

1. Facilitate a child's growth through parent contact
2. Support and empower parents in their parenting role
3. Provide resources
4. Facilitate the transition of parents and children to their next environment

Facilitating a child's growth through parent contact means listening to parent input and wishes and incorporating these into IEP goals that reflect the child's participation not only in school but also at home and in the community.

Teachers must establish ongoing communication with families so that expectations of the child at home and at school are known and coordinated and so that parents are aware of how their child is doing and progressing at school. At Jowonio, this communication can occur in many ways, depending on individual families' preferences and resources. Parents may observe in the classroom and communicate directly with other team members through conferences, home visits, telephone calls, email, daily or intermittent exchange in a home-school notebook, and classroom social events (e.g., potluck suppers, awards ceremonies, grandparents' teas, birthdays). Teachers can reinforce parents' sense of competence by listening and acknowledging them for their effective strategies, by focusing on the child's progress, and by helping them enjoy their child in the present.

Building positive and trusting relationships with parents begins with respecting their love and hopes for their child, soliciting and listening to their ideas and concerns, and sharing one's own questions. It also requires an understanding of what parents can realistically do, given all the demands on their time and energy. For example, a single parent of several children may not be able to follow through with a toileting program if money, meals, and laundry have top priority.

Providing resources begins with developing an understanding of family strengths and needs and natural ways to help them meet their needs ([Bailey et al., 1998](#); [Dunst, Trivette, & Deal, 1988](#); [Migyanka, 2011](#)). This may include information (e.g., literature or workshops on legal rights, autism, toilet training), problem solving to access their own networks, and, if necessary, referrals to agencies and support groups (e.g., financial aid programs, respite care, counseling, parent or sibling support groups).

The staff members of Jowonio's community-based program (Educational Network and Resources for Inclusion in Community and Home, or ENRICH) provide special education and therapy services to children ages birth to 5 years identified as having disabilities. After a comprehensive evaluation, youngsters receive services provided by itinerant teachers and therapists in their home or in nursery, day care, or home child care settings. The opportunity for intensive contact with a parent as well as a child means that families can receive emotional and instrumental support along with models of effective teaching strategies. In these early months after a child is first identified as needing extra support, the contact between therapists, teachers, and parents allows many opportunities to learn about the nature and implications of the child's developmental and unique needs and to try out strategies to support the child's growth. The transdisciplinary team approach (including the parent) is invaluable in providing a variety of perspectives on the child's needs. Collaborating with community day care and nursery programs not only supports individual students with special needs, but also enhances the clinical programming for all the children in these settings. The special education staff learn to address the functional skills that youngsters need to be successful in natural environments.

The transition to the next environment occurs more easily when a teacher can give parents information and a

perspective on the process (e.g., school options, IEP procedures). Staff can help parents to express what they want and to work with the new school to create it, establish lines of communication between parents and the new school, and relate positive specific information about the child to the new teacher (we send a portfolio on to the new school). Pre-schools are often the first place where parents have trusted others to be so important in their child's life; it can be hard to move on to what seems to be a bigger, more impersonal, and less supportive setting. Teachers can help this transition by fostering positive relationships with the new school.

Teaming Skills

Quality teaching is enhanced by working within a team—we all can benefit from the ideas of others and models of different ways of performing tasks ([Bailey, 1996](#); [Thousand & Villa, 1990](#)). Good teaching is never a script; it takes an experimental attitude and the openness to try new procedures. Our program is set up with teachers working in teams of three or four fulltime staff and involves additional part-time and resource staff, including language, occupational, and physical therapists. We allocate specific time each week for teachers to plan together, to have clinical conferences on children, to participate in staff development activities, and to work on their roles and relationships with one another. Most people working with young children have not been taught teaming skills; this is often the most complex part of the job in our program because of the large number of adults with whom we have contact. As we learn to problem solve about programming for children, we can also do so about one another. We have built in a system of peer and administrative supports for all our teachers.

The conscious emphasis on how we are working together pays off in the quality of the programming for children as well as in the job satisfaction of our staff. In addition, we look at adults developmentally, as we look at children, and we provide incentives for all staff to grow in their professional skill.

How to Respond to Challenging Behavior

Responding to complex behaviors can be one of the most challenging aspects of a teacher's job. In a classroom that includes children with special social, behavioral, and communication needs, a wider variety of behaviors may occur, many of which will require specific planned approaches. What children do is the result of an interaction with or reaction to what is happening around them. We never look at a particular behavior as only coming from within the child. The adults and what they are saying and doing, the space and sensory environment, the peer group, and the nature of the materials and tasks that are presented always have an important impact on the behavior. Once behavior is understood within its context, there are a variety of approaches to supporting the child to get his or her needs met more effectively ([Kaiser & Rasminsky, 2006](#)). Such approaches might include a functional analysis of behavior, preventative environmental planning, and support for particular social skill sets, including sharing, turn taking, and problem solving. Combining approaches avoids a narrow focus that can cause adults to miss the point of children's behavior.

Behavior as Communication

What a child does must be looked at as an effort to communicate. To understand what the child is trying to tell us by a particular action (communicative intent), we must understand the context. The single behavior might mean different things in different situations; a child might scream when hurt, frustrated, excited, angry, or trying to get an adult's attention. Several different behaviors might have the same meaning; grabbing, smiling, yelling, or pinching could all be efforts to avoid a task the child finds difficult (see [Carr & Durand, 1985](#); [Donnellan et al., 1984](#)).

Using a problem-solving process, teachers and others attempt to identify the communication content of the behavior by analyzing the relationship between the environment and the occurrence of the behavior. What happened before or after the behavior? What is the setting? Who is present? When did it occur? This process

attempts to discover functional relationships between the behavior and elements in the environment that we can potentially change (see [Dunlap, Kerr-Dunlap, Clarke, & Robbins, 1991](#); [O'Neill, Horner, Albin, Storey, & Sprague, 1990](#); [Touchette, McDonald, & Langer, 1985](#)).

If such an analysis shows a predictable pattern of behavior, teachers will be better able to intervene effectively. Sometimes patterns are not obvious, but our assumption nevertheless is that all behavior occurs for a reason. Intervening respectfully entails considering the emotional, physical, and sensory context of the behavior. Interventions should be chosen that maintain everyone's well-being, consider the child's point of view, and attempt to increase (rather than limit) the social and behavioral repertoire of the child whose behavior is of concern.

Positive Programming

Planning to teach children appropriate behaviors is the most important approach for responding to challenging behaviors ([Dunlap, Johnson, & Robbins, 1990](#); [Evans & Meyer, 1985](#); [Kaiser & Rasminsky, 2006](#); [Meyer & Evans, 1989](#)). Teaching children what you want them to do is more effective than telling them what not to do. This might mean teaching an alternative way to communicate (e.g., "If you want my attention, tap me on the shoulder and say my name"). Or you can teach an alternative response to a stressful situation (e.g., "If it is too noisy for you to work, put on headphones rather than pushing me and crying"). Many times teaching appropriate social skills or how to control emotions using role-playing can effectively reduce problem behaviors (see [Goldstein & McGinnis, 1990](#)). The use of Social Stories™ ([Gray, 1996](#)) can also help to reduce difficult behavior by generating insights for children with differing understandings about unstated social rules and conventions.

Reinforcing Positive Behaviors

Encouraging or acknowledging someone for doing what is appropriate is always more effective than reacting to inappropriate behavior. This means that teachers need to create opportunities for children to exhibit positive behaviors and then respond in a genuine and very reinforcing way when the positive behavior occurs.

Interventions Within Relationships

Implementing interventions around difficult behaviors is always more effective within the context of a positive relationship with the child. This means teachers need to plan time each day for enjoyable positive activities, supportive attention to the child's emotions, and warm and consistent contact (physical and social) with the child. If a strong relationship exists between the adult and the child, the teacher can respond to conflicts and limits in a way that is meaningful for the child.

McGee and his colleagues ([McGee, Menolascino, Hobbs, & Menousek, 1987](#)) describe an approach to problem behavior called "gentle teaching," which generally reverses many notions about behavior problems. This point of view sees a child who throws a tantrum as a child who has not developed positive relationships ("bonded") with others. Teachers should have unconditional positive regard toward the student. Problem behaviors are prevented or ignored ("not valued") and the child is redirected into other tasks that will develop mutual, positive human relationships ("interdependence"). Because the goal is to develop human relationships, skill training or activities are used to foster these interdependent relationships. Any procedure that might interfere with the development of bonding (e.g., punishment) is excluded. Both the teacher and the learner should enjoy working together; otherwise, the activity is not building positive relationships.

Using Natural Consequences

As much as possible, interventions should be natural so that they will generalize to the environments in which we all function (e.g., home, school, community). If Jim dumps food on the floor, he should clean it up. In the long term, we want the normal environment to provide the control and consequences for the problem behavior. It may be necessary to be in the “real” environment to accomplish this, especially for children with more significant disabilities. Waiting in line at McDonald’s can be simulated in the classroom, but there is no substitute for the real thing.

Aversive Treatment Is Unacceptable

We exclude the use of aversive interventions, including seclusion, physical punishment, and prolonged physical restraint, on both ethical and pragmatic grounds. For example, we may use a version of a “time-out” technique to allow students to leave a group so that they can calm down, but we never use exclusion from the group as a punishment. Teaching appropriate behaviors or positive programming is more effective and generalizable ([Donnellan, LaVigna, Negri-Shoultz, & Fassbender, 1988](#); [Dunlap et al., 1990](#); [Evans & Meyer, 1985](#); [LaVigna & Donnellan, 1986](#); [McGee et al., 1987](#); [Meyer & Evans, 1989](#)). When using aversive methods, teachers often lose perspective; punishment carries a variety of risks. For example, punishment creates a challenge to the trust between teacher and student. Often, teachers unwittingly reinforce difficult behaviors through the use of punishment. Focusing on positive experiences, building positive relationships, and not reinforcing (valuing) problem behaviors is more effective in the long run. Research reviews and studies point out the negative consequences of severe forms of punishment across cultural groups ([Gershoff, 2002](#); [Lynch et al., 2006](#); [McLoyd, Kaplan, Hardaway, & Wood, 2007](#)).

Behavioral Interventions in an Inclusive Setting

In any classroom, teachers must balance the needs of the individuals with the needs of the group. Often people opposed to inclusion talk about “the rights of the other students.” The reality is that in any group setting, teachers make decisions that balance the needs of the individual with the needs of the group. All individuals must be considered in such decisions, not just those with (or without) disability labels. If a child screams to get attention, the appropriate strategy may be to ignore the screaming. However, the screaming may be so disruptive to the rest of the children that the teacher may feel a need to address it directly. Talking with other adults will help a teacher to analyze this and similar dilemmas and develop a richer repertoire of positive responses.

Problem-Solving Approach

Good teachers are those who seek as much help as necessary to respond to a problem. At Jowonio, we hold meetings that may involve speech and language pathologists, occupational and physical therapists, other teachers, aides, parents, psychologists, graduate students, and any other people who know the student and might have good ideas. The diversity of the participants is important. Working with such a diverse set of creative people requires some direction and focus; the teacher needs to have some skills to keep the group on task.

Teachers at Jowonio use a general problem-solving approach that involves as many people and their ideas as possible. The problem to be solved may be educational, social, emotional, or behavioral. The solutions sought may require changing the environment. The child is never the problem. A single teacher never has all the right answers.

Implementing an Individualized Education Program

Because it makes sense and because it is mandated by state and federal regulations, children with disabilities must have a description of their planned individual program, an IEP. This IEP must include a statement of each child’s current level of functioning, annual long-term goals, a breakdown of those goals into short-term behavioral

objectives, and a timeline and description of the means by which these goals will be measured and reached.

A typical early childhood curriculum and its themes and concepts are the framework within which specific goals are addressed for students with disabilities. The scope and sequence of that curriculum must allow for diverse levels of achievement and learning styles (see [Gardner & Hatch, 1989](#); [Goodman, 1992](#)). Lesson plans usually incorporate multiple objectives and modes of instruction, in keeping with a universal design for learning approach ([Rose & Meyer, 2002](#)). Adaptations for children with special needs may occur in a number of ways: targeted skill or skill sequence, use of classroom space, groupings, level of participation expected, kinds of materials used, and nature of cues or support required ([Janney & Snell, 2004](#); [Udvari-Solner, 1996](#)).

Technology, especially the use of computers, allows all children to participate in highly motivating activities that encourage independence, foster positive self-esteem and a sense of mastery, and increase attention span and problem-solving skills. Students prefer open-ended interactive software, which often can be used independently after initial and intermittent adult assistance is provided. Because children can play together at the computer, opportunities abound for turn taking, cooperation, and social interaction. Technology also offers options for students to communicate through keyboards and increasingly sophisticated voice-output equipment. Anyone with reliable movement skills can have access through a great many switches to computerized communication devices and enhanced learning opportunities. Nonverbal students can demonstrate their knowledge and in some cases can serve as models and teachers for their peers ([Johnston, Beard, & Carpenter, 2006](#)). In addition to preparing children for the future, technology can enhance significantly the learning and social possibilities in the classroom.

The Composition of the School and its Classes

The wide range of children served at Jowonio includes nondisabled students 2 to 5 years of age and peers with a variety of disability labels. These include children who have been identified by professionals as having speech or language impairments, orthopedic disabilities, autism, other health impairments, or multiple handicaps (all educational labels recognized by IDEA). Each class has a 1- to 2-year age range and a balance of students with skills and needs. For instance, our toddler class has 10 children, 5 with disabilities and 5 typically developing peers. Our full-day 3-, 4-, and 5-year-old classrooms normally have 16 students, 6 of whom have been identified as having special educational needs. It is important that the tone of the classroom group be age appropriate and that there are good models for social and language skills within each group. A cross-age student population offers a greater range of possibilities for peer interactions and friendships.

Three adults are assigned to the toddler class of 10; in the 3- to 5-year-old rooms of 16 children, four full-time adults are assigned. Related services of speech and language therapy, physical therapy, and occupational therapy are available as needed. In every classroom, we try to have staff trained in both early childhood and special education. Background and experience with typically developing children lend awareness of the usual sequence of skills and developmental tasks to expect at each particular age. Then, for example, we can have a perspective that views certain aspects of a 3-year-old child's behavior as within normal developmental limits rather than as symptomatic of a disability.

Strategies for Accomplishing Inclusion

To support maximum participation of a wide range of students in the classroom, we allow for flexibility in scheduling, in groupings, and in levels of support and expected participation ([Stainback & Stainback, 1992](#)). In addition, materials and activities that have multiple objectives



Inclusive classrooms will also help to sensitize children to the diverse abilities of individuals.

and several modes of instruction allow for the inclusion of students with different levels of skill.

Flexibility in Scheduling

The scheduling of the day serves to provide a predictable routine within which children can gain independence while having opportunities for open-ended exploration, spontaneity, and choice making. Adults make use of teachable moments to extend play and broaden learning. We try to minimize the number of transitions and the amount of waiting between events. Time is allowed to learn skills embedded in natural situations such as cleanup and dressing. A balance must always be achieved between active gross motor activities and sitting activities, and children should have opportunities for movement throughout the building and neighborhood. A typical schedule might be as follows:

8:45–9:45	Open play/learning centers, choose and do
9:45–10:00	Meeting or circle time
10:00–10:15	Snack
10:15–10:30	Books and toileting
10:30–11:30	Special activities (movement, music, skill group, paired play, play choices, play group, acting, story stretchers, cooking)
11:30–12:00	Lunch
12:00–12:30	Rest and reading
12:30–1:00	Gym/outside

1:00–2:00 Special activities (as above) or learning centers
2:00–2:30 Goodbye preparation (music/closing circle)

Classes take frequent field trips. Schedules are often planned around a thematic unit based on children's interests, and efforts are made to design activities, select books, and arrange experiences both inside and outside the classroom to reinforce the concepts of the theme. Therapists frequently work in the classroom and may be responsible for planning group activities designed to meet individual goals for target children. Classroom-based therapy maximizes the opportunities for generalization of skills, the modeling of therapeutic techniques for teachers, and the probability that therapy goals will be useful for the child in the classroom and at home. [Janney and Snell \(2004\)](#) refer to this practice as “pull in” therapy, turning the usual jargon (“push in” vs. “pull out” therapy) on its head.

Flexibility in Grouping

Flexibility in grouping children also facilitates inclusion. At Jowonio, we use a variety of group formats to balance individualization and independence, as well as to allow for effective peer modeling and socialization. Groups vary in the level of support needed, complexity of planning, and degree of true integration. In one-to-one situations with adults, students may be working on their relationship with that adult; a one-to-one time may also be used for assessment, teaching a new skill, or rehearsing classroom content to facilitate group participation. Pairs or small groups offer opportunities for social interaction that can be teacher structured. Children also benefit from learning to respond to large-group settings after their preschool years, so opportunities to experience larger groups are important.

Curriculum Adaptation

Typical curricula may need to be adapted so that students with disabilities can participate successfully. This adaptation may involve changing the nature of the instruction in the classroom to use several modalities and to have multiple objectives. In addition, we allow for the partial participation of students, varying our expectations to meet their current capabilities ([Baumgart et al., 1982](#)). Adaptations occur in materials and cues, sequences and rules, and levels of support ([Janney & Snell, 2004](#); [Udvari-Solner, 1996](#)).

Materials and Cues

Children may need visual and object cues to comprehend language; they also benefit from manipulating objects related to the content being taught. We label everything with the written word or with symbols. Labeling the classroom is an important tool for the development of emergent literacy (reading) in all children ([Anderson, Moffat, & Shapiro, 2006](#); [Hill & Nicholas, 2006](#); [Neuman & Roskos, 1993, 1994](#); [Schickedanz, 1986](#)). This has been a particular emphasis at Jowonio because we realized that a number of our less verbal children can demonstrate relatively strong literacy skills if provided support to do so ([Kliewer & Biklen, 2001](#)). Of course, the use of many cues to communicate the same content is good general early childhood practice. An inventory of favorite topics and materials gained through observations and child and parent interviews suggests materials that will make an activity motivating. For example, if a child is interested in cars, we can easily develop seriation, classification, and counting activities using cars.

Sequences and Rules

For some students, we may change the number of steps in an activity or the rules of a game to allow all children to succeed. The number of choices may be limited, waiting time decreased, or the amount of time required to stay at an activity reduced. For example, a child who has a hard time sitting in the large-group circle may initially be

expected to stay in the meeting for 5 min (even under protest!) and then may be allowed to get up and do something quietly in another part of the room. The goal is that by later in the year, becoming comfortable in the routine will encourage the child to stay longer.

Levels of Support

An important strategy for successful participation is providing support from teachers and peers that eventually can be faded so the child functions as independently as possible. The support may include physical assistance, gestures, individualized verbal cues, teacher proximity, peer partners, and peer modeling. Some students with physical disabilities may need physical assistance from adults but may become independent with technological devices such as computers.

To plan integrated activities, goals are developed around motor, socio-emotional, language, behavioral, and cognitive skill areas. The general goals may be based on theme, content area, and skill level used for typically developing students. Then child-specific goals drawn from the IEPs of children with disabilities are incorporated into particular activities. In structuring each activity, the general sequence of events, range of materials, and group composition should be planned. Necessary adaptations are made for individual children. The role of peers must be an important consideration.

The following individualized lesson plan (see [Figure 5–1](#)) is an example of how a cooking activity is adapted to include two students with disabilities. Brad has severely delayed motor and cognitive skills. James, who is considered autistic, has a good deal of language, but it tends to be rote and scripted.

The Process of Transitioning to the Next Environment

An important aspect of any preschool teacher's work is the preparation of children and families for their transition to their next environment—kindergarten ([Donovan, 1987](#); [Migyanka, 2011](#)). A comparative study of preschool special education classrooms and regular kindergarten classrooms ([Vincent et al., 1980](#)) showed that the expectations in the two settings were very different. For example, kindergarten teachers require children to respond to directions given once to a large group, while preschool special education teachers often give their students repeated individual directions in a small group or one-to-one. Conscious of the need to bridge early education and development, part of the responsibility of preschool teachers is to understand the demands of the next environment and to help children acquire the task and social skills to succeed there.

A second responsibility of an early education teacher is to work with families to have a positive impact on the kindergarten placement of our students. We seek to find or create inclusive education programs that will meet the needs of the individual children. The students with disabilities who attend Jowonio come from several local school districts. Consequently, when Jowonio staff members support the transition to school-age special education services for our “graduates,” they work with all of these districts to support the continuity of an inclusive education approach. This often requires skills as an advocate and consultant, for which teachers are not usually trained. It is important to describe the specific needs of the child in all areas to find an existing inclusive education program or to support the development of a new one. Building positive relationships with the school district staff may begin by observing their classrooms and inviting their teachers and administrators to observe our classroom and the student in question.

Parents and their wishes are critical in this transition process. They need to know their rights under the law, to understand the process by which their child will be evaluated and placed in a classroom, to describe program components important to them, and to develop a working relationship with school district staff to achieve the most appropriate integrated kindergarten placement for their child. As preschool teachers and administrators, we work closely with parents to give them the information and support they need to be an advocate for their child.

This transition can be an extremely stressful time for parents. Teachers can ease this transition by their active planning and reassurance.

Lesson Plan

DATE: 4/24 Theme: Spring Week TEACHER: Rae
 ACTIVITY: Cooking: "Grasshopper Shakes" Towonio Cookbook p.12
 LONG-TERM GOAL: To participate in a verbally directed sharing activity
 MATERIALS NEEDED: blender, measuring spoons + cup, ice cream, scoop, milk, ice cream, vanilla, eggs, food coloring

Short Term Objectives	Method/Procedure	Materials	Evaluation
Group: 1. Passing materials to a peer 2. Counting, measuring concepts: whole vs. half 3. Following sequence of recipe 4. Completing a task 5. Beginning reading	small group * each child does a step in the recipe * label materials with signs		
Individualization: Brad 1. Explore ingredients - some tastes 2. Tool use - spoon for scooping pitcher for pouring 3. Follow simple commands - "put in" "give to" 4. Attend to peer	* hand over hand as needed - then fade support * encourage tasting by placing food in hand + bring to his mouth	* seat near blender * DLM pictures of milk ice cream eggs blender	
Individualization: James 1. Use vocabulary in context 2. Attend to + respond to peer requests 3. Request needed item from peer 4. Comment on activity 5. Begin reading	* review chart before activity * encourage peer to request * model comments		
Individualization: Terry, Alicia + Mary - group activity			
Individualization:			
Individualization:			

Recipe Chart
Grasshopper Shakes

Mix in bowl:

 1/2 cup
 milk
 2 scoops
 ice cream
 1/2 teaspoon
 vanilla
 1 teaspoon
 green food coloring
 1 egg

Pour contents of bowl into the blender

Blend briefly!

Enjoy!



Figure 5–1 Lesson Plan

Many parents are increasingly convinced of the importance of having their child with a disability attend their neighborhood school rather than being bused across town ([Kluth et al., 2007](#)). The local school may not have served a child with similar needs before. A home-school placement maximizes the development of long-term social relationships for a child, allows a child to be with siblings and neighbors, increases the communication between parents and school staff, and supports the generalization of skills to the child's natural environment (see [Brown et al., 1989](#)).

Once a child has been formally assigned a kindergarten placement, the preschool teacher communicates in person and through paperwork about the child. We develop a portfolio for the new teacher that includes samples of the child's work, evaluation reports, and descriptions of favorite activities and effective approaches in behavior management and teaching. All of our efforts are geared toward a positive transition to regular kindergarten with sufficient supports to guarantee success.

Implications for Teacher Training

Teacher preparation is an integral part of the program at Jowonio. Based on the wide variety of activities expected of teachers, new teachers need practical experience in quality, inclusive settings. The effective teacher is flexible and reflective in the planning, programming, and management of the classroom. Although teachers clearly must relate well with children, they must also be able to work and interact with a variety of adults. New teachers are sometimes overwhelmed by interacting with the various adults involved in an inclusive classroom. Teachers must be able to work well with other teachers, therapists, parents, administrators, aides, and student teachers, all of whom may have different perspectives on the classroom, different values, and different skills. Because interactions with other adults can be complex, teacher training must include a focus on working cooperatively with other adults. Developing a problem-solving approach is essential ([Cramer, 2006](#)). The best way to achieve this goal is for teacher training programs to require participation in a variety of cooperative, real-life problem-solving experiences with adult peers.

Additional Inclusion Efforts

A variety of inclusive education models for young children are described by Berres and Knoblock (1987), Biklen (1985), Cavallaro and Haney (1999), and [Grisham-Brown et al. \(2005\)](#). Head Start programs have since their inception often considered it part of their mandate to include students with disabilities, although their ability to do so effectively was sometimes limited by funding constraints ([Schwartz & Brand, 2001](#)). Jowonio is one of the earliest models of its kind; as such, the school represents a mature program that may be of particular interest to the field. However, since 1975, when Jowonio first began its systematic approach to inclusive early childhood education, there has been increasing interest in such models, and many other similar programs have evolved. As a consequence, once students with disabilities leave Jowonio, they will attend a great variety of program models, but at the moment none of these are self-contained special education programs. This is because over its history Jowonio has spawned so many inclusive education options in nearby communities. Parents of former Jowonio students are strong inclusion advocates, and several area programs are staffed in part by teachers who used to work at Jowonio.

Currently there exists an enormous variety of program designs in inclusive education ([Bruder, 2010](#)). For example, in addition to the center-based program described in this chapter, Jowonio has developed collaborative relationships with early education programs in its community, providing special education and therapy staff to support the inclusion of children with disabilities ([Barnes, 2007](#)). No matter what the design, inclusive education requires a great deal of creativity, energy, and dedication. Willing teachers and administrators and a commitment to teaming are central ingredients in the success of these programs. Different programs also stand to benefit greatly

by learning from each other.

Most of the research in this area has focused on the effect of inclusive early childhood education on both nondisabled children and children with disabilities, as well as on parent and teacher attitudes (e.g., [Blacker & Turnbull, 1982](#); see also [Ostrosky, Laumann, & Hsieh, 2006](#)), social interaction patterns (see [Strain, 1984, 1985](#)), developmental and behavioral outcomes ([Guralnick, 1980](#); [Jenkins et al., 1989](#)), and methods of intervention ([Strain & Odom, 1986](#)).

Odom and McEvoy (1988), in their review of the research on integration, conclude that there is “good evidence that children with handicaps can receive an appropriate education in mainstreamed ... preschool programs” (p. 262), but that the quality of instruction, not simply the integration of students of differing abilities, is an important factor in the success of these programs. Social interactions between disabled and nondisabled children that are available in inclusive settings do not necessarily occur spontaneously but rather require direct, planned interventions. Although the effect of integration alone is hard to separate from other variables, the empirical literature seems clear in demonstrating that “normally developing children are not adversely affected by integrated classes, and in fact benefit developmentally from the curriculum and instructional strategies” ([Odom & McEvoy, 1988, p. 259](#)). [Odom and Bailey \(2001\)](#) had similar conclusions. Inclusive preschool programs had generally favorable outcomes for students, but these outcomes depended on a variety of factors that go into the making of excellent early childhood programs more generally, including systematic planning and programming, support for adult collaboration, and type of preservice teacher training and level of educational attainment ([Sandall, Hemmeter, McLean, & Smith, 2005](#)).

Research findings suggest that peer interactions for children with disabilities occur more often in inclusive classrooms than in segregated classrooms ([Guralnick et al., 1996](#); [Odom & Bailey, 2001](#)) and there is less unoccupied play and less inappropriate or self-abusive behavior in inclusive classrooms ([Erwin, 1993](#)). A natural proportion of children with and without disabilities has a positive effect on peer interactions ([Hauser-Cram, Bronson, & Upshur, 1993](#)); parents and teachers report that a majority of children in inclusive classrooms have at least one friend ([Buyse, 1993](#)). Nondisabled students in inclusive classrooms gave higher social acceptance scores in response to scenarios about children with disabilities than did their counterparts in noninclusive early childhood programs ([Diamond & Hestenes, 1996](#)). Mixed-age inclusive programs facilitated social conversations between children and led to more play mastery than same-age groupings ([Blasco, Bailey, & Burchinal, 1993](#); [Roberts, Burchinal, & Bailey, 1994](#)).

Acknowledging the difficulties associated with defining and assessing teachers’ beliefs, the data on teacher beliefs about inclusion are fairly consistent overall. Positive teacher attitudes toward inclusion were related to their competency in working with young children with disabilities ([Gemmell-Crosby & Hanzlik, 1994](#)). However, insufficient time for planning and collaboration (Gallagher, 1997; [Marchant, 1995](#)), lack of knowledge about teaching children with disabilities ([Dinnebeil, McInerney, Roth, & Ramaswamy, 2001](#)), the context within which inclusion takes place ([Stoiber, Gettinger, & Goetz, 1998](#)), and the perceived ability levels of children served ([Eiserman, Shisler, & Healy, 1995](#)) all affected teachers’ attitudes toward working with children in inclusive settings.

At base, committing to an inclusive education approach is a values-based decision. Certainly it is affirming when research validates particular inclusive practices. However, even when research is more ambiguous, the position that all students deserve full membership in a classroom community is an ethical and defensible perspective. What makes Jowonio (or any similar program) a successful inclusive education program is its staff and families’ commitment to these values. As Kluth and her fellow authors conclude (2007), inclusion cannot be characterized as a place: “Rather, it is an attitude or set of practices and policies that translate into an open-arms acceptance of their children as participants in the life of the classroom and school” (p. 54).

Conclusion

Accepted developmentally appropriate practice in early childhood (see [Copple & Bredekamp, 2009](#)) and accepted

practice in special education are consistent. Both emphasize the unique pattern of development of each child. The chosen curriculum is responsive to the child's current level of skill and interests. Effective early childhood curriculum calls on an integration of all areas of development, including physical, socio-emotional, language, and cognitive skills. Within a group of children, differences in ability and style are expected and valued. Each member of the community is enhanced by the diversity of the whole.

An inclusive preschool program that serves all children makes both philosophical and practical sense. In this chapter, we have described one "fully inclusive" early childhood setting in which students with and without disabilities are all considered full members of their classroom communities. The Jowonio program is guided by beliefs that all children are to be valued; all children have a right to and can benefit from high-quality, age-appropriate early education; learning occurs through models and relationships; and problem-solving partnerships between teachers and parents and within the teaching team are central to a good program for children. The core activity in an inclusive program is the adaptation of the typical curriculum to ensure successful participation for all students. The goal is to create an inclusive community in which all children and adults can learn and feel valued.

Reflect on

1. What human, philosophical, and educational principles guide inclusive education?
2. What are the key provisions in the Individuals with Disabilities Education Improvement Act (IDEA)?
3. What is the Council for Exceptional Children, Division of Early Childhood Education's (DEC) position statement regarding children with disabilities?
4. What architectural principles guide inclusive education at the Jowonio School?
5. What benefits do young children with and without disabilities accrue from inclusive early childhood education?

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Chapter 6 More Than the Sum of Its Parts: Creating Multicultural and Linguistically Responsive Early Childhood Classrooms

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After reading this chapter, you should be able to:

- Discuss the beginning of schools failing culturally, linguistically, and racially diverse children and children in poverty
- Characterize culturally and linguistically responsive schooling

In the first half of the 21st century, demographic, cultural, and social changes are occurring that have profound implications for the United States and its institutions, including early child care and schooling. America is ceasing to be a nation dominated by a single racial and cultural group, specifically European Americans. Instead, individuals who themselves or whose ancestors came from Africa, Asia, Latin America and the Caribbean, the Pacific Islands, and the indigenous nations of the Americas are shaping a nation with Whites, in which old patterns of racial, cultural, and linguistic dominance may give way to a new, more multicultural, more multilingual, and perhaps less racially polarized society. The United States is simply becoming younger and more ethnically and racially diverse. Moreover, its youngest members are likely to be children who are bilingual or bidialectic.¹ Families are also a part of this change. Increasingly, families rearing children include those headed by divorced parents who share custody; never-married parents; immigrant parents; lesbian, gay, bisexual, and transgender parents; grandparents parenting grandchildren; foster parents and guardians; and parents who adopt. Families with children also include blended families, stepfamilies, and multigenerational families in which child rearing is shared. In fact, in 2000 less than one quarter of American families were “nuclear,” i.e., composed of a married couple with children. The importance of these trends for American educational institutions cannot be underestimated, and early childhood programs serving children from birth to age 8 must respond effectively to the diversification of families and children. Consider the following:

- Children of color are the majority in 27 of the nation’s largest school districts ([Frankenberg, Lee, & Orfield, 2003](#)).
- One sixth of America’s Black children and one ninth of Latino/a children attend “apartheid schools”—that is, schools that are severely underresourced and where 95% of children live in chronic poverty ([Frankenberg et al., 2003, p. 5](#)).
- Of the 23.4 million children under the age of 6 in the United States, 22% are children of immigrants ([Forum for Youth Investment, 2010](#)).
- About a fourth of all 3- and 4-year-old children in the United States live in a household where two languages are spoken (usually English and a non-English language); about 1 in 10 live in what is known as a linguistically isolated home—that is, a home where no English is spoken ([Hernandez, 2010](#)).
- The majority of children who speak a language other than English at home are 8 years old or younger ([Urban Institute, 2007](#)).

Furthermore, American child poverty continues to disproportionately affect racial and ethnic minority children:

- Sixty-one percent of Black children, 62% of Latino/a children, 51% of Native American children, but only 27% of White children under age 18 live in low-income families ([National Center for Children in Poverty, 2008](#)).
- Forty-six percent of children under 6 years live in low-income families ([Chau, Thampi, & Wright, 2010](#)) and children of immigrants comprise more than 26% of all low-income children in the United States ([Forum for Youth Investment, 2010](#)).

As the United States becomes more diverse and as the consequences of prejudice and discrimination grow more socially disruptive, efforts to ameliorate prejudice and discrimination stemming from difference in all its forms become increasingly important. In two decades, the present population of young children (3 to 8 years of age) will be adults. Will the early education programs they attend today help them to be productive members of a multicultural, multilingual, and multiracial American democracy? Will the teachers they have today help them to become individuals who work cooperatively with others different from themselves, embrace and advocate for equity and fairness for all, and resist race, class, ethnic, and other forms of bias? Will our most economically marginalized children have early childhood experiences today that eliminate the achievement gap and assure their equal chance of educational success? Will the efforts of early childhood teachers today help children develop and maintain positive identities, including cultural and linguistic competencies that assist them in moving easily among cultural, language, and ethnic communities? Will children learn to be advocates for social justice because teachers who built caring and inclusive early childhood communities influenced them? To ensure these outcomes in two decades, the early childhood field has to provide all of today's young children with high-quality, culturally responsive programs with educators who are antibias advocates. By the phrase "all young children" we mean each and every child regardless of race, ethnicity, ability, culture, language, dialect, social class, sexual orientation and expression, nation of origin, family, and immigration status. This phrase includes, but does not privilege, the developmental and educational needs of European American, middle-class, monolingual children. The term implies equity, inclusion, social justice, and investment in all children's developmental and educational needs in teaching and learning in early childhood programs and at all levels of professional development and training ([Ray, Bowman, & Robbins, 2006, p. 1](#)). These are challenging goals, because in the United States all childhoods are not equal and access to high-quality early childhood programs is not guaranteed. Children of color and children from working-poor families in economically impoverished ghettos, barrios, reservations, towns, and suburbs—communities frequently described as dead-end, deprived, and dangerous—are far more likely than their middle-class counterparts to attend poorly resourced schools. Too many early educators may view these children as challenging, "at risk," and in need of control. Their intelligence is suspect, their life experience is devalued, their speech or language is considered ignorant, and their cultures are viewed as impediments to learning and achievement in "mainstream" America. Their families and communities are perceived as not up to the task of providing rich experiences that develop academic skills necessary for school success.

This perspective situates the problem of educational achievement and school failure in children, families, and communities of color and poverty, rather than in American society or the culture of schools. This perspective justifies an "apartheid" system of education in the United States, separate and unequal. The first system, well financed and resourced, is primarily for the education of White,² middle-class, monolingual children; the second, decaying, resource-starved, and underfunded, is for the warehousing of children of color,³ the poor, and children who speak a dialect or language other than English ([Kozol, 1991](#); [Orfield & Lee, 2005](#); [Peske & Haycock, 2006](#)). Early childhood programs reproduce these same class and racial inequalities. For example, in comparison to White children, racial minority children and children in poverty are more likely to attend programs with teachers who lack subject content knowledge, have lower academic achievement, and are inexperienced ([Peske & Haycock, 2006](#)). In addition, inadequate early childhood programs and elementary schools are part of a larger ecology that includes poverty, racism, low-wage jobs, and unsafe housing—all factors that jeopardize children's development and family functioning ([Garcia Coll et al., 1996](#); [McLoyd, 1990, 1998](#)). Fundamental transformation of schools may not be possible without significant systemic change that addresses institutionalized racism and economic injustice ([Kozol, 1991](#); [Murrell, 2002](#); [Nieto, 1999](#)).

The Beginning of Schools Failing Culturally and Linguistically Diverse Children and Children in Poverty

The reality of schools segregated by race and class is contrary to the promise of American education, which guarantees fairness and equity for children regardless of characteristics or circumstances. An “even playing field” is supposed to provide the context in which every child may have a chance to achieve through effort, study, and perseverance; the cultural currency of American education has been individual effort, hard work, and equal opportunity. Despite these powerful cultural messages, American schools have failed to deliver on this promise for all of its children. In the earliest years of schooling, processes are set in motion that lead, by fourth grade, to the disengagement and lower achievement of racial and cultural minority children and children in poverty, especially African American⁴ and Latino males ([Chall & Snow, 1988](#); [Dupree, Spencer, & Bell, 1997](#); [Ferguson, 2001](#); [Garcia Coll & Magnuson, 2000](#); [Murrell, 2002](#)). Racial, language, and cultural minority children and children from low-income families are more likely to enter kindergarten behind their middle-class European American peers, to have lower educational achievement in reading and math ([Riegle-Crumb, 2006](#)), and to be assigned disproportionately to special education classrooms ([Bondy & Ross, 1998](#); [Bowman, Donovan, & Burns, 2001](#); [Garcia, 2005](#); [Knapp, 1995](#)). Even when their incomes are similar, African Americans and Latinos/as on average fare more poorly on standardized tests than do Whites ([National Center for Education Statistics, 2001](#)). Further, in the last decade Latino/a children have not shown the same reduction in dropout rates and educational achievement gains experienced by other racial/cultural minority groups, including African American students ([Liontos, 1992](#)). Moreover, national as well as state data show that children for whom English is not their home language lag behind their middle-class, monolingual counterparts by Grade 3 ([Laosa, 2005](#)).

Race, class, language, and gender are especially pernicious factors for boys in school. Boys of color are more likely to be expelled from preschools than other children ([Gilliam, 2005](#)); Black and Latino boys have higher rates of grade failure than other groups ([Liontos, 1992](#); [The Twenty-First Century Foundation, 2005](#)); Latino boys have one of the highest school dropout rates in the United States ([Liontos, 1992](#); [Valdivieso & Nicolau, 1992](#)); and, although Black boys are less than 9% of children enrolled in elementary and secondary schools, they account for over one fifth of total school expulsions ([The Twenty-First Century Foundation, 2005, p. 6](#)).

Numerous factors may contribute to the disengagement from school of young children



Children from culturally diverse backgrounds need to be exposed to instructional materials that speak to their cultural practices.

of color, dual language (DL) learners, dialect speakers, and children in poverty. These factors may include

teachers' low expectations for African American and Latino/a children, unimaginative curricula, lack of understanding of children's cultures, inability to communicate in the child's home language, and arbitrary punishment. [Steele \(1992, 1999\)](#) argues that disengagement on the part of African American, Latino/a, and other racially, linguistically, and culturally marginalized students is a reasonable outcome of persistent messages that they are inadequate. He asserts, "For too many Black students (*Latinos/as, Native Americans and others* [our emphasis]) school is simply the place where, more concertedly, persistently, and authoritatively than anywhere else in society, they learn how little valued they are" (p. 78).

Early Childhood Classrooms—Culturally and Linguistically Unequal

Early education pedagogies, instructional practices, and administrative policies implicitly or explicitly attempt to marginalize, even eradicate, the ancestral cultures, languages, and experiences of children from non-White and low-income communities ([Baugh, 1999](#); [Murrell, 2002](#)). European American cultural knowledge is institutionalized in most early childhood classrooms through language (e.g., "standard" English, norms of speech and grammar, tone and volume of voice); what is taught (e.g., literature, social studies); social norms (e.g., notions of politeness, physical distance, eye contact); expression of emotion (e.g., anger, aggression); policies (e.g., expectation of a proscriptive parent involvement); and curriculum choices ([Sheets, 2005](#)). During the last two decades the United States has seen an increase in the number of states limiting or eliminating the use of the home language in educating DL learners (Gándara, Losen, August, Uriarte, Gómez, & [Hopkins, 2010](#)). This policy trend can communicate to students and families that speaking a language other than English, rather than being an asset that supports their cultural identity, cognitive development, and emotional connections with family and community, is a disadvantage or a deficiency that needs remediation by rapid English acquisition ([Baker, 2000](#); California Tomorrow, n.d.).

Cultures shape who children are and how they experience the world (Kağıtçıbaşı, 1996; [Rogoff, 2003](#)). Through participation in everyday cultural practices (e.g., feeding, bedtime routines, preschool attendance), children learn meaning systems, identity, language, values, beliefs, behavioral norms, and roles intended to develop the competencies appropriate to their culture ([Rogoff, 2003](#); [Whiting & Edwards, 1988](#)). Cultural patterns of thinking and behaving are internalized, becoming part of individual and group identity. Moreover, language is a universal vehicle for the transmission of culture and is intrinsically associated with social and ethnic identity ([Baker, 2000](#); [Blackledge, 1994](#); [Drury, 2007](#); [Thompson, 1998](#)). Hence, by using the language spoken at home and in their communities, children communicate with important adult figures, such as parents and grandparents. These opportunities to learn about their cultural background and take pride in it play an important role in the healthy development of children's identity ([Baker, 2000](#); [Blackledge, 1994](#); California Tomorrow, n.d.; [Drury, 2007](#); [Goodz, 1994](#); [Nieto, 2010](#); [Thompson, 1998](#)).

The cultural repertoires that racially, culturally, linguistically, and economically marginalized children bring to classrooms may be misunderstood, even punished by teachers. Research ([Baugh, 1999](#); [Boykin & Toms, 1985](#); [Delpit, 1995](#)) suggests that African American expressive styles, behavior, and language may be stigmatized because they do not conform to the cultural model of behaving, learning, and language that schools demand. Teachers may not know children's home languages, or school policies may deliberately discourage their use. For example, research ([Chang et al., 2007](#)) suggests that even when teachers are proficient in the child's home language, they use English 77% of the time. In elementary schools, most DL learners receive the majority of their instruction in English ([Zehler, Fleischman, Hopstock, Stephenson, Pendzick, & Sapru, 2003](#)). The absence of adults who speak the child's language is especially problematic for young children because teachers may not be able to adequately assess the cause of a child's distress, determine if the child has understood content, and communicate effectively with the child's family. The National Association for the Education of Young Children's (NAEYC) position statement on best practices for serving linguistically and culturally diverse children asserts the following:

The loss of children's home language may result in the disruption of family communication patterns, which

may lead to the loss of intergenerational wisdom; damage to individual and community esteem; and children's potential non-mastery of their home language or English.

([National Association for the Education of Young Children, 1995, p. 2](#))

To understand how culture and language may influence children's development, early childhood educators (e.g., teachers, assistant teachers, directors, principals) must understand their own identity formation in terms of culture, race, language, privilege, and power. Hence, early childhood educators must have the kind of self-knowledge that facilitates critical acknowledgment of how personal views and beliefs are constructed. These educators also must know how beliefs and assumptions about children of color, DL learners, and second-dialect speakers may reflect racial bias, cultural misunderstanding, and/or ignorance about cultural practices different from those they have experienced. In addition, early childhood educators' ability to understand children's cultural knowledge, the implications of this knowledge for teaching and learning, and how to teach through it are critical, particularly in light of changing demographics. As early childhood classrooms become increasingly multiracial, multilingual, multicultural, and multiethnic, the majority of teachers remain White, female, monolingual, and middle-class. Only 10% of teachers in U.S. classrooms are Black, Latino/a, Alaskan Native, Native American, Asian American, or Pacific Islander ([Darling-Hammond, Pittman, & Ottinger, 1987](#); [Saluja, Early, & Clifford, 2002](#)).

Nevertheless, diversity is not only a challenge to White teachers. All teachers who encounter children with characteristics different from their own must struggle with their responses to difference and privilege. African Americans teach Mexican American children, teachers with visual challenges teach children with ambulatory challenges, straight teachers educate transgender children, teachers fluent only in English teach children fluent only in Cantonese, and middle-class teachers serve children who are from economically impoverished communities. Even when teachers and young children share a common cultural, linguistic, ethnic, racial, or class background, they may not be able to translate their own experiences into effective practices that benefit children ([Zeichner, 1996, p. 133](#)). All early childhood teachers must develop professional competencies to successfully educate all children and engage all families.

Early childhood educators' knowledge and understanding of children who are culturally and racially different from themselves cannot be reduced to simple formulas and prescriptions for educating particular populations of children. In fact, an unintended consequence of focusing teachers' attention on discrete characteristics of children (e.g., race, social class) may contribute to their inability to view minority children as whole individuals with unique identities, capacities, and interests that may influence developmental and educational outcomes. The complexity of the diversity found in U.S. classrooms challenges early childhood teachers in our schools. Teachers have to be able to successfully educate children who are not just African American English speakers or just Dominican Americans or just boys or just low income, but children who bring to school complex capacities, abilities, needs, and identities. In addition, early childhood educators have to be able to help children whose culture, abilities, and language are typically privileged in U.S. schools to appreciate difference.

The critical early years of schooling should build on the curiosity, wonder, intelligence, and abilities that all young children bring to classrooms and lay a solid foundation for life and school success. For many children, however, these years may not. Instead, early education programs may set children on a trajectory that leads to a history in which schools fail them, and possibly contribute to lives of reduced opportunity and achievement. The diversity present in early childhood and primary classrooms today demands that early childhood educators transcend the ethnocentric attitudes resulting from limited awareness of how their own personal histories define them as cultural beings and of the effect of culture, race, ethnicity, language, and socioeconomic status on their students' identities, resources, and needs.

Culturally and Linguistically Responsive Schooling

Effective early childhood education for culturally, linguistically, racially, and economically marginalized children must be grounded in and responsive to children's cultures and languages ([Irvine, 2003](#); [Ladson-Billings, 1994](#); [Murrell, 2002](#)). The rationale for the role of culture and language in children's development and early education is

related to cognitive theory (e.g., [Piaget, 1969](#); [Vygotsky, 1978](#)), which posits that new knowledge is built on prior knowledge and experience. Before formal schooling, all children have gained an enormous amount of understanding of the world through observation, participation, and explicit instruction from adults and older children. When children are introduced to new information, they use their repertoires of established knowledge, language, and cultural practices to make sense of the new ([Cole, 1996](#); [Rogoff, 2003](#)). To support optimal learning in young children, teachers need to have a deep understanding of the knowledge that children bring to school.

Research shows all child development occurs in the context of culture ([Kağıtçıbaşı, 1996](#); [Nsamenang, 1992](#); [Rogoff, 2003](#)). Furthermore, research on culturally responsive pedagogy (see, for example, [Delpit, 1995](#); [Irvine, 2003](#); [Ladson-Billings, 1994](#); [Native Hawaiian Education Council, 2002](#); [Pewewardy, 1994](#); [Sheets, 2005](#)) has important implications for creating schools in which all culturally, linguistically, and racially diverse children and children in poverty achieve and develop as whole individuals. Early education is not a silver bullet for everything that ails this society and its children, but high-quality early education programs have a record of improving children's educational outcomes, especially for culturally and racially diverse children and for those who are economically disadvantaged ([Heckman, 2007](#); [Reynolds, Magnuson, & Ou, 2006](#)). In this regard, we can ask these questions:

- What principles of culturally responsive practice have emerged from the early childhood field?
- What evidence in the research and practice literature indicates that culturally responsive teaching practices contribute to improvements in educational outcomes for young racially, culturally, and economically marginalized children?
- What evidence in the research and practice literature suggests that teacher preparation that addresses teachers' awareness, attitudes, and beliefs about cultural and racial differences can contribute to teachers' effective practice with young racially, culturally, and economically marginalized children?

Principles of Culturally Competent Practice in Early Childhood

One of the consequences of the demographic changes referred to at the beginning of this chapter has been the generation of principles and guidelines meant to define educational practices that effectively serve children considered "diverse" by virtue of race, language, ethnicity, ability, and class or socioeconomic status. Although these efforts have multiplied in the last decade, two are worthy of scrutiny as they explicitly articulate a particular vision for early childhood educators: Head Start and NAEYC.

Head Start, a federal program administered by the U.S. Department of Health and Human Services, has been serving young children for more than four decades. Of all children served through Head Start and Early Head Start, approximately 29% are African American, 31% are Latino/a, 40% are White, and 1% are from other minority groups; the majority come from low-income families; and 13% have a diagnosed disability ([CLASP, 2008a, 2008b](#)). The diversity of racial, cultural, ethnic, linguistic, and ability backgrounds present among Head Start participants has generated considerable interest in articulating explicit guidelines on how best to serve culturally and linguistically diverse young children. The Office of Head Start has developed *Revisiting and Updating the Multicultural Principles for Head Start Programs Serving Children Ages Birth to Five* (2008), which enumerates 10 principles of culturally and linguistically responsive practice. The 10 principles acknowledge that every individual is rooted in culture. Further, it asserts that cultural groups represented in the communities and families served by each Head Start program should be the primary sources for culturally relevant programming. Culturally relevant programming entails making curriculum choices and adaptations driven by what is relevant and important to the cultural groups present in the programs; this programming also entails actively maintaining children's cultural identity while ensuring that the children acquire the skills required to function in our diverse society. In the case of children whose home language is other than English, the Head Start Multicultural

Principles assign to programs the responsibility for supporting the continuing development of children's home language while facilitating their learning of English. Most important, these principles affirm that culturally relevant practices must examine and challenge institutional and personal biases, enabling children to develop an awareness of, respect for, and appreciation of individual cultural differences. In addition, culturally responsive programs require staff that both reflect and are responsive to the children, families, and communities served. It is important to note that the focus of the Head Start Multicultural Principles is to describe the values that should frame program practices; they do not attempt to describe how individual practitioners working in Head Start and Early Head Start programs should enact these principles. Nevertheless, given that Head Start is the largest national program serving children from birth to 5 years old and their families, its Multicultural Principles are often considered a model for other programs and initiatives.

The NAEYC, the largest organization of early childhood professionals in the United States, has created the Pathways to Cultural Competence Project (PCCP, 2009), which provides guidelines for culturally competent programs that include eight core concepts: (1) "Children are nested in families." (2) "Identify shared goals among families and staff." (3) "Authentically incorporate cultural traditions and history in the classroom." (4) "Acknowledge child development as a culturally driven, ongoing process that should be supported across contexts in a child's life (e.g., school and home)." (5) "Individuals' and institutions' practices are embedded in culture." (6) "Ensure decisions and policies embrace home languages and dialects." (7) "Ensure policies and practices embrace and respect families' cultural values, attitudes, and beliefs toward learning." (8) "Equalize balances of power; counter stereotyping and bias through intentional teaching."

PCCP also includes four principles that apply to early childhood educators (e.g., teachers, directors): (1) reflection; (2) intentional decision making and practice; (3) strength-based perspectives; and (4) open, ongoing communication between all center staff (e.g., teachers, directors) and families ([National Association for the Education of Young Children, 2009](#)). All components of the PCCP underscore the need for program practices that promote shared goals between families and program staff; encourage program policies that embrace and recognize the home language, including nonstandard dialects; incorporate the cultural traditions of families and communities into the classroom; and respect cultural attitudes about learning ([National Association for the Education of Young Children, 2009](#)).

In sum, the Head Start and NAEYC initiatives are arguably the most comprehensive and well-known of several that attempt to address the importance of culture for child development and learning, as well as the need to incorporate into programs the history, experiences, and languages of the families and communities represented in early childhood classrooms across the United States. However commendable and essential as these and other similar efforts are, they may not go far enough. Although acknowledging, valuing, and incorporating children's experiences, language, and cultural background into early childhood curricula and practices is both fundamental and vital, more is needed to foster the deep and lasting changes that can augur a more socially just United States. As suggested in Head Start's Multicultural Principles, early childhood practice that strives for creating a better and more just society for all children must recognize and actively oppose personal, institutional, and societal racism, bias, privilege, and prejudice. Much can be changed through intentional application of principles such as the ones just described to the practice of educating young children, but early childhood educators must personally embrace the responsibility of educating future generations to uphold the values underlying a socially just society.

Research on Culturally Responsive Teaching and Pedagogy

Teaching practices (i.e., activities, strategies) and curricula responsive to young racially, culturally, linguistically, and economically marginalized children have been recommended for bridging between the knowledge that children bring with them to school and what schools want them to learn. The relevant literature identifies five characteristics of culturally responsive pedagogy: (1) all students are involved in the construction of knowledge; (2) students' prior knowledge, interests, and personal and cultural strengths form the foundation for learning; (3)

students examine the curriculum from a variety of perspectives; (4) teachers use multiple assessment practices; and (5) classroom culture is inclusive of all children ([Villegas & Lucas, 2002, pp. 91–123](#)).

Culturally responsive teachers, according to research ([Foster & Peele, 1999](#); [Irvine, 2003](#); [Villegas & Lucas, 2002](#)), have the following abilities: (1) They can recognize that social-ecological factors such as race, social class, and culture locate people within a social order, which may influence how they understand the world. (2) They advocate for children and engage in systemic reform within schools. (3) They are antiracist, antibias, and social justice advocates. (4) They are responsive to the context in which they teach and to individual and group needs. (5) They possess an array of strategies and techniques for engaging students effectively, creating instruction that integrates the knowledge and experience that children have with the knowledge children are learning in school. (6) They develop knowledge and understanding of the necessity to learn about their students and have strategies to do so. (7) They design instruction to draw on students' strengths and address their needs ([Villegas & Lucas, 2002, p. 121](#)).

Three factors are thought to be related to the educational achievement of young racially, culturally, linguistically, and economically marginalized children: (1) practices that connect children's culture, language, and experience to the classroom, specifically cooperative learning, culturally responsive curriculum, and use and/or acknowledgment of children's discourse patterns and home language; (2) teachers' personal capacities and attitudes necessary for children's school success; and (3) teachers' use of culturally responsive behavior management styles. Because the majority of research on culturally responsive teaching practice has focused on kindergarten through Grade 12 schools, each of these factors will be discussed in relation to research evidence and feasibility for use with 3-to 8-year-old children.



Family members are integral to multicultural education during the early years.

1. Teaching Practices That Connect Children's Experience to the Classroom

Research on teaching practices distinguishes between transformative approaches that dismantle institutionalized Eurocentric pedagogy (see, for example, [McCarty, 2002](#); [Murrell, 2002](#); [Native Hawaiian Education Council, 2002](#)) and additive approaches in which culturally responsive practice is infused in classroom curriculum, but may not alter a fundamentally Eurocentric pedagogy. The former, which [Murrell \(2002\)](#) refers to as “culturally explicit pedagogy,” requires transformation of schools at all levels—classroom practice, policies, philosophy, and so forth. A partnership of educators, community leaders, and families usually creates the transformative approach. The development of culturally explicit pedagogy for Native Hawaiian ([Native Hawaiian Education Council, 2002](#)), Navajo ([McCarty, 2002](#)), and Alaskan Native children ([Alaskan Native Knowledge Network, 1998](#)) indicates that these programs have contributed to greater educational success for children, family and community engagement, and teacher efficacy. These efforts differentiate between teaching and learning about the child's culture, and teaching and learning through the child's culture ([Native Hawaiian Education Council, 2002, p. 12](#)).

[Scheurich's \(1998\)](#) research on highly successful elementary schools serving economically disadvantaged racial minority students, largely Latino/a, is instructive. Children in these public schools perform at or above their more economically advantaged peers on standard achievement measures. These schools are generally not developed by university experts in partnership with school personnel, but appear to have evolved from dedicated parents/guardians/families, teachers, and principals who craft over time a shared vision for the education of children in a particular school. Scheurich's data suggest that all partners share the four following beliefs: (1) All children can succeed at high academic levels; (2) relationships with children must be based on love, appreciation, and respect; (3) the child's culture and first language are highly valued; and (4) the school exists for and serves families and the community.

Research on additive approaches suggests that particular practices do improve outcomes for children of color and children in poverty. Specifically, early elementary children who have teachers who help them build connections between school and home culture show significant improvement in literacy and mathematics achievement. [Knapp \(1995\)](#) studied 140 high-poverty early elementary school classrooms in 15 schools and identified two dimensions of teachers' instructional responses to the diversity of children in their classrooms. The first dimension involves constructive and nonconstructive teacher responses. Essentially, constructive teachers believe that regardless of home culture characteristics (e.g., parents' marital status, poverty, language background), children can learn, while nonconstructive teachers assume that students' backgrounds determine educational outcomes. The second dimension involves the degree of responsiveness (active vs. passive) that teachers exhibit in responding to student differences. Active teachers believe that they understand the cultural backgrounds of the children they teach and use teaching strategies and curricula that support their beliefs. Passive teachers do not respond to differences, either because they do not perceive differences or do not recognize them as significant in the child's educational performance. The researchers caution that active responses should not be automatically perceived as positive. Active teachers can incorrectly assume that they understand children's home culture; as a result, they may develop teaching strategies based on erroneous assumptions.

Cooperative Learning

Cooperative learning takes many forms, but generally involves three elements: student interdependence, achievement, and interaction. Most of the research on cooperative learning is directed at middle school and high school education. The goal is to increase understanding and class cohesion through students working together on school-related assignments that cannot be completed without the help of all. Students learn to listen to others, to build consensus, to cooperate, and other social skills that are presumably transferable throughout other classroom activities. Cooperative learning not only improves academic achievement, but also teaches social skills and improves classroom climate ([Johnson & Johnson, 1991](#)), in part because it gives individual students immediate cognitive and social support ([Brown & Palincsar, 1989](#)). In middle and high school classrooms, cooperative learning is used to develop analytical skills regarding literature, history, math, and science with children from minority communities ([Rosebery, Warren, & Conant, 1992](#)). This teaching strategy requires significant preplanning on the part of teachers, monitoring of group progress, and teachers' individual assessment of each student. How cooperative learning is implemented is critical to its success; according to Slavin (1990), this learning must include individual accountability and positive interdependence. It also requires that teachers scaffold student learning regarding management of emotion, staying on task, and effective communication.

Small-scale studies, ethnographies, and case studies of teachers who employ cooperative learning with African American children suggest that teachers use this teaching approach in part because they believe it reflects home cultural practices. [Foster and Peele \(1999\)](#) report that effective teachers of African American boys use practices that support collectivity, mutual support, and collaborative study. In addition, effective teachers use cooperative practice to develop a sense of familylike relationships within the classroom. In a qualitative study of effective African American teachers of African American children, [Ladson-Billings \(1994\)](#) found that teachers reported using cooperative work with elementary and high school students. But she concedes, "What teachers deem cooperative behavior more accurately falls under the category of compliance and conformity" (p. 70).

Cooperative learning has also been used successfully with DL learners. For example, [Almaguer \(2005\)](#) paired proficient and struggling third-grade readers for whom English was not their home language. This researcher found that struggling readers' fluency and reading performance on a series of reading tasks significantly improved. Similarly, [Gersten, Baker, Marks, and Smith \(1999\)](#) examined the empirical and professional literature describing classroom techniques that enhanced the school success of children speaking a language other than English and identified cooperative learning as one of the most supported.

Nevertheless, there are conceptual and methodological problems with interpreting the value of this practice for children in poverty and children of color. [Knapp \(1995\)](#) questions whether cooperative learning can be applied in a variety of school settings and populations and whether it has lasting effects on children's development. There is a dearth of research indicating that it does. [Ladson-Billings \(1994\)](#) suggests that teachers may falsely assume that children's cultures support cooperative learning when they may not. Application of the construct depends on individual interpretations—and children's confidence in their individual abilities may be jeopardized (p. 66). [Nieto \(1999\)](#) asserts that cooperative learning may be beneficial in improving classroom climate, but there is little evidence that it improves educational outcomes over time.

In early childhood classrooms from preschool through early elementary grades, group learning activities are a staple of instruction. Through projects and interest groups on specific curriculum content (e.g., plant growth) to art projects that require group work (e.g., quilt making), children ages 3 to 8 frequently work in groups. The use of groups as centers for learning may be based on teachers' beliefs about child development and/or about cultural practices familiar to children. There may be a difference, however, in group work activities and cooperative learning activities, particularly in the degree to which teachers plan for individual learning, support the group, and assess and monitor each child's progress. Furthermore, children's age may be a factor in their ability to work together to complete a task and in their need for greater participation and scaffolding by teachers.

Mixed-age grouping and cross-age tutoring may be strategies that contribute to greater school success for racially, culturally, linguistically, and economically marginalized children. Mixed-age grouping (e.g., children 6 and 7 years of age or first and second graders taught in the same classroom) and cross-age tutoring (e.g., an older child tutors a younger child) are based on the following notions: that individual patterns of development in early childhood vary greatly, that chronological age is not always a sufficient indicator of a child's abilities, and that cognitive and social gains can be achieved through collaboration between younger children and older children who model behaviors and knowledge more advanced than the younger children can exhibit alone. Mixed-age classrooms, in contrast to single-age classrooms, presumably provide young children with a greater range of ability, maturity, and competency models from which to learn. Research ([Evangelou, 1989](#)) suggests that mixed-age grouping may foster prosocial behaviors, reduce age-mate aggression, and encourage instruction by older children of younger peers in classrooms.

Cross-age tutoring (e.g., an older child tutors a younger child) appears to benefit culturally, racially, and economically marginalized children's development of social skills, mathematics and literacy skills, and peer relations, as well as improving classroom climate ([Kalkowski, 1995](#)). Teachers of 3- to 8-year-old children can use both mixed-age grouping and cross-age tutoring, but like all teaching strategies they require planning and skill in execution. Teachers must be adept at classroom management and individual child assessment, recognize the value of these strategies for child outcomes, and have sufficient knowledge of child development. The successful adoption of mixed-age grouping in schools, however, must be done within a school or school system; teachers generally do not have sufficient authority to use this approach without administrative support.

Culturally Responsive Curricula

Curriculum change to improve educational outcomes for culturally and racially diverse children has been a significant target of school reform proposals ([Dyson, 2003](#); [Nieto, 1999](#)). [Irvine \(2003\)](#) cautions that curriculum changes that attempt to merely infuse diversity content across the curriculum will "not lead to sustaining outcomes or significant changes in teachers' attitudes and instructional behaviors" (p. 16). Curriculum change

without attention to other factors, especially school and classroom climate and teacher–child relationships, may not have lasting effects. Unfortunately, teachers may have limited control over determining school curricula, pedagogical strategies, and policies. In large urban systems, district administrators and principals may determine curriculum choices or limit schools to a few preselected choices. In addition, federal mandates (e.g., No Child Left Behind) may place enormous pressure on school systems to further regulate classroom curriculum, practices, and pedagogy.

Individual teachers may have more control over some aspects of their own classroom’s curriculum, including the use of formally published multicultural children’s literature, antibias curriculum, and popular literacies.⁵ Within their classrooms, teachers can apply the following essential ideas of culturally responsive curriculum reform: (1) build on what children know, think, and value to enrich the classroom curriculum; (2) build on children’s strengths; (3) build bridges between what children know and school educational goals; (4) create a caring community grounded in children’s cultures as well as antibias/antiracist values and practices; (5) engage parents/guardians/families in meaningful, respectful, ethical partnerships that support home and school cultures; and (6) respect and use children’s languages/dialects.

Discourse Patterns

Children enter school with differences in oral and nonverbal communication because of culture, language, gender, social class, and age. They have learned an established communication system complete with grammatical rules, vocabulary, and communication norms, but not all languages and skills are equal in school-based learning. Many children in poverty and culturally diverse children may not have a clear understanding about behaviors expected in schools and norms for classroom participation. Teachers may have little understanding of the nonverbal communication norms (e.g., body language, interpersonal space, frequency of touching, tone of voice) children bring to class or the logic, grammar, and lexicon of children’s home languages and dialects. Classrooms require unique communication knowledge, including particular discourse patterns. Typical discourse patterns in school are teacher led—for example, the teacher initiates–child responds–teacher evaluates (IRE) sequence, which accounts for a significant portion of classroom discourse. The IRE discourse pattern may contribute to passivity and conformity in learning exchanges ([Silliman & Wilkinson, 1994](#)). Using cross-age tutoring may support children’s greater engagement in classroom activities, provide opportunities for alternative discourse patterns (e.g., child to child), and help young children gain a sense of discourse competence with more accepting school peers. Read-aloud time, show-and-tell, and other teacher-driven activities convey to children expected patterns of communication. Familiarity with school-required communication patterns and norms facilitates student learning; conversely, unfamiliarity may inhibit learning, limit participation in classroom activities, influence teachers’ assessment of children’s knowledge and abilities, and ultimately affect school achievement negatively. Assessment of children’s abilities may be hampered because assessment strategies often require school-required communication skills that children do not possess.

Research suggests that African American children come to school with rich linguistic knowledge and abilities that schools generally problematize and stigmatize ([Baugh, 1999](#); Perry & [Delpit, 1998](#); [Smitherman, 2000](#); [Woodson, 1933/1969](#)). African American English, a language spoken by an estimated 70% to 80% of Black Americans, is little understood by teachers and rarely used as a platform for learning ([Smith-erman, 2000](#)). Black, Latino/a, Asian American, and Native American children may also have substantial popular literacies and languages ([Compton-Lilly, 2003](#); [Dyson, 2003](#); [Zentrella, 1997](#)) not valued in classrooms, and insufficient access to literacies necessary for school success. [Dyson’s \(2003\)](#) rich ethnography documents African American, Latino/a, and Asian American first-grade students’ extensive use of popular literacies (e.g., hip-hop songs, church sermons and music, radio disc jockeys, movies, jump-rope rhymes, television, sports). The children and their teacher use these literacies in writing, art projects, problem solving, relationship building, and classroom activities. Further, the teacher uses children’s language and knowledge to build bridges to school content that both she and parents want children to master. Together, children’s literacy and writing capacities were strengthened throughout the school year. This use of the cultural knowledge that children bring to school is a fine example of how teachers of young children can develop rich discourse, writing, and early literacy skills, connecting home and school. Applying

cultural knowledge requires that teachers recognize children's communicative abilities, embrace their linguistic traditions, build on their strengths, and understand parental goals regarding maintenance of home culture and the development of school competence.

Learning in Two Languages

The literature identifies a series of “best practices” that support DL development in the context of early childhood classrooms. Educational settings that approach language diversity as a resource and not a deficit offer better educational opportunities for DL learners. As [Wright \(2010\)](#) suggests, effective schools adopt a language-as-resource approach; they do not problematize the child's first language but see it as a rich resource that supports content and academic knowledge development of DL learners (p. 13).

Bilingual teachers and other bilingual educational staff play a central role in fostering continuities between the home culture and language and those of the school ([Drury, 2007](#); Garcia, 2005; [Pease-Alvarez, Garcia, & Espinosa, 1991](#)), as they provide young bilinguals considerable emotional support and serve as valuable mirrors for children's language and culture. Furthermore, studies indicate that young bilinguals who receive instruction and support in their home language during the early years of schooling have better long-term outcomes than DL learners who are taught only in English ([Baker, 2000](#); [Rolstad, Mahoney, & Glass, 2005](#)). The use of the home language in early schooling does not endanger the growth of English language proficiency ([Barnet, Yarosz, Thomas, Jung, & Blanco, 2007](#)) and can effectively promote early literacy ([August, Calderón, Carlo, & Nuttall, 2006](#); [National Reading Panel, 2006](#)).

It must be noted, however, that the success of teaching young children in their home language in regard to both subsequent success in English reading and continued home language development depends greatly on teachers' knowledge about the relationship between first-and second-language literacies ([Escamilla, 2000](#)). Further, the effectiveness with which teachers can promote and support emergent literacy in young DL learners is predicated on how well teachers understand the home literacy practices of their students' families; how proficient they are in using classroom strategies that build on those family literacy practices; and how well they can capitalize on home language literacy skills to further literacy development in English.

Unfortunately, very little is known about the specific language and instructional practices that are used with very young children in early care and education settings. However, several program models used in kindergarten and early elementary schools have a well-researched tradition. These models are often categorized depending on whether the ultimate program model is English proficiency, home language maintenance, or balanced bilingualism and biliteracy ([Baker, 2006](#)). For example, bilingual programs vary in the degree to which they promote home language maintenance and development. Some bilingual programs, known as “transitional bilingual,” use the home language to teach content, but their end objective is English proficiency. Other bilingual programs, such as those known as “maintenance/heritage language” and “two-way immersion,” have as an end goal balanced bilingualism and biliteracy ([Baker, 2000](#)).

There is evidence that DL or two-way DL enrichment models have the potential for enhancing the school achievement of DL learners and closing the achievement gap ([Thomas & Collier, 2002](#)). In addition, programs that promote the continued development of the home language, and acknowledge and integrate genuine aspects of the home culture in the classroom, have proven to enhance both academic success and strong socio-emotional competencies (Garcia, 2005; [Garcia & Nañez, 2011](#)).

Studies on effective instructional practices for DL learners have identified several principles whose application leads to better school outcomes for these students (Garcia, 2005). These principles include fostering the preservation of the home language while promoting successful English language acquisition, including knowledge of the academic English needed for school success, and incorporating into the curriculum materials content relevant to students' ethnic, racial, and linguistic identities. Quality early childhood programs serving DL learners should also include instructional techniques that include them in classroom social interactions and recognize the value of their home language; acknowledge the fact that DL learning is a long-term process that necessitates

balanced support for both languages; and understand that literacy skills from the first language transfer to the second ([Ballantyne, Sanderman, & McLaughlin, 2008](#)).

2. Teachers' Attitudes, Beliefs, and Expectations Regarding Young Racially, Culturally, Linguistically, and Economically Marginalized Children

Teachers may perceive African Americans, Latinos/as, and other children of color as “walking sets of deficiencies” ([Nieto, 1999, p. 85](#)), have low expectations for them as learners, and, most importantly, teach to those expectations. Research has reported that teachers may have little knowledge of the families and communities that nurture the children in their classrooms ([Pang & Sablan, 1998](#); [Valdes, 1996](#)); express ideologies that support the social, political, and racial status quo ([Ferguson, 2001](#); [Sleeter, 1993](#)); doubt their ability to effectively teach African American and Latino/a children ([Pang & Sablan, 1998](#); [Valdes, 1996](#)); and feel unprepared to teach in multicultural and multilingual classrooms ([Ray & Bowman, 2003](#); [Valli & Rennert-Ariev, 2000](#)). In contrast, studies ([Casey, 1990](#); [Foster, 1997](#); [Haberman, 1995](#); [Ladson-Billings, 1994, 1999](#); [Skinner, Bryant, Coffman, & Campbell, 1998](#)) of effective teachers of economically disadvantaged and racial minority children, including African American and Latino boys, identify teachers' attitudes, personal capacities, and behaviors as critical factors in children's learning. [Foster and Peele \(1999\)](#) found that successful teachers have “emotional stamina, persistence, and resilience that enable them to negotiate the school bureaucracy, solve difficult problems, and help their students cope with day-to-day setbacks and misfortunes as well as more serious hardships” (p. 10). An ethnography ([Skinner et al., 1998](#)) of 21 Head Start children's transition to kindergarten reported that teachers' high expectations for every child appeared to be associated with children's social and academic adjustment. Children who expressed their love of school were more likely to have teachers who praised and redirected them with kindness than teachers who punished them.

Changing teachers' biases, stereotypes, and low expectations of young racially, culturally, and economically marginalized children cannot be achieved by a single strategy such as professional development or course work. [Irvine \(2003\)](#) recommends that teachers engage in critical reflection. But in order to scrutinize his or her own practice regarding bias, prejudice, and racism, a teacher has to be willing to confront her or his privilege, power, beliefs, and behavior. This type of inquiry is best done with others willing to be or already engaged in similar introspection. Essential is ongoing professional development (PD) tailored to teachers in a particular school that supports reflection, examines research on teacher biases, includes observation in teachers' classrooms by the PD leader, and challenges teachers to examine their practices, expectations, and attitudes.

3. Teachers' Use of Culturally Responsive Behavior Management Styles

Every teacher must choose how to design limits within the classroom and determine consequences and rewards for behavior. Behavior management systems, when well designed and implemented, support the development of positive teacher–child relationships ([Pianta, 1999](#)). Children are more likely to experience teachers as predictable, responsive, and available if teachers are able to maintain effective behavior management systems within their classrooms, which in turn contributes to teachers' sense of effectiveness and influence. Behavior management systems that are inconsistent or developmentally inappropriate can erode teacher–child relationships ([Pianta, 1999](#)).

Teachers' use of culturally grounded behavior management styles with children of color and poor children may be more successful in building trusting relationships and learning ([Ballenger, 1999](#); [Delpit, 1995](#); [Irvine & Fraser, 1998](#)). In the case of African American children, [Irvine and Fraser \(1998\)](#) describe successful teachers as “warm demanders”—that is, individuals who replicate the parental style of effective African American parents. They

caution that this is not a harsh, punitive, or arbitrary parenting style, but rather one that combines affection and warmth with high standards and clear expectations. [Delpit's \(1995\)](#) work identified a nonauthoritarian classroom management style as ineffective with many African American students. [Sunia and Smolkin's \(1994\)](#) research on Pueblo Indian schooling indicates that teachers with a deep knowledge of Pueblo culture are more likely to use classroom management styles that reflect consensus, collective decision making, Pueblo language, and Pueblo ways of knowing in order to reduce discontinuities among school, home, and community. Similarly, Ballenger (1999), a European American teacher of Haitian immigrant early elementary children, describes learning from Haitian American teachers and parents the culturally grounded repertoire of behavior management practices used by Haitian families. Ballenger learned to use these strategies successfully with children to support teaching and learning in her classroom. Haitian American parents and teachers stress group responsibility, clear expectations, and moral persuasion. Ballenger's work suggests that culturally responsive behavior management styles can be learned and taught interculturally, teacher to teacher and parent to teacher.

Teacher Preparation for Effective Practice with Culturally, Linguistically, and Racially Diverse Children

Despite research and the applied literature suggesting strategies and practices that may support the educational achievement of diverse children, it is unclear whether these and other approaches are part of preservice teacher preparation. In relation to preparing teachers who are successful educators of young racially, culturally, and economically marginalized children, there is little agreement on the depth and breadth of knowledge teachers need to work effectively with specific groups of children (e.g., economically marginalized Black, Puerto Rican, Navajo children), how that knowledge should be mastered, how it should be integrated into teaching, and whether it actually makes a lasting difference in child outcomes ([Nieto, 1999](#); [Ray et al., 2006](#); [Zeichner, 1996](#)).

Data ([Ray et al., 2006](#)) indicate that early childhood teacher preparation programs may not sufficiently address the complex educational and developmental needs of young, diverse learners. In a national study of diversity content in course requirements in 226 undergraduate teacher education programs representing one third of all U.S. bachelor's degree programs, Ray and colleagues found that on average only 25% of required semester hours of professional course work focuses on children who are low income, racial or cultural minorities, second-language/dialect speakers, and/or children with diverse abilities. This suggests that perhaps 75% of the professional curricula in bachelor's degree teacher education programs in the United States are primarily concerned with the development and education of White, middle-class, monolingual children without identified disabilities. [Ray and colleagues \(2006\)](#) argue that early childhood teacher education programs convey an unambiguous message to future teachers: Professional competence requires weak and uneven knowledge and practice skills in educating racial/cultural/ethnic minority children, children with diverse abilities, children in poverty, immigrant children, and second-language/dialect speakers.

In-service teachers report that their preservice and in-service preparation for the children in their classrooms, specifically children in poverty and culturally, racially, and ethnically diverse children, had been inadequate; in addition, the knowledge and skills they have had been acquired primarily through listening to colleagues, parents/guardians/families, and the children in their classrooms ([Ray & Bowman, 2003](#)). All this notwithstanding, a number of studies have shown that White teachers who become more aware of their own cultural and racial identity and the role it plays in their teaching tend to be better equipped to work with diverse students ([McAllister & Irvine, 2000](#); [Nieto, 1999](#); [Raible & Irizarry, 2007](#)). For example, a study of teachers of young DL learners, which included in-depth interviews and classroom observations, found that teachers with a greater understanding of their own culture were more likely to integrate cultural and linguistic considerations into their teaching and pedagogy when working with students from different linguistic and cultural backgrounds than their own ([Kimble, 2009](#)).

Perhaps the most salient issue in research on teacher preparation for young racially, culturally, and economically

marginalized children is whether course work or any other strategy has made preservice and in-service teachers effective educators and improved educational outcomes for children. Unfortunately, few studies have systematically followed graduates or in-service teachers into classrooms and evaluated the relationship between their undergraduate training on multicultural and multiracial issues and improved child outcomes.

Clearly, early childhood teacher education programs have attempted to improve teacher education, but much work remains. Additional research on the effects of strategies intended to improve preservice teacher knowledge about and attitudes toward culturally, linguistically, and racially diverse children is needed.

Conclusion

In this chapter, we argue that culturally responsive teachers and classroom practice may contribute to significantly better educational outcomes for young racially, culturally, linguistically, and economically marginalized children. The research reviewed indicates that culturally responsive pedagogy and teaching practices may benefit children, especially in terms of math achievement, literacy achievement, and social adjustment. Results are uneven and the research methodology is typically qualitative (e.g., ethnographies, case studies, and small select samples). Whether results can be generalized to most classrooms and children is unclear. Many questions remain unanswered.

America's stated commitment to its young children remains unmet. It is time to create early education programs, services, and professionals who can meet the developmental and educational needs of every child—especially our most vulnerable children. The contribution that early childhood educators can make to achieve this goal is to provide rich, high-quality, culturally and linguistically relevant educational experiences to the children in their care. They can join with families and communities to create early childhood programs that support strong cultural and language capacities in children, equity, and excellence. By placing social justice at the center of good early childhood practice, teachers commit to intentional actions that reject a deficit approach toward children who differ from the mainstream in race, language, culture, ethnicity, or socioeconomic status. Furthermore, they actively integrate family and group identities and values into the classroom; implement a curriculum that fosters critical thinking and action and is responsive to children's development and prior experience; and acknowledge how personal background and experience shape one's teaching and views of others ([Fennimore, 2008](#)). Accordingly, early childhood education that aspires to be pluralistic and multicultural and is serious about contributing to equity and social justice demands that teachers have a strong knowledge of self, of children's development, and of teaching techniques that support a variety of approaches to learning. If this is done well, our young children will grow up to be productive, successful adults who appreciate and support a multicultural, multilingual society in which bias is lessened. If we fail them, however, then we continue to place our nation and too many of our children in jeopardy. It is our choice.

Reflect On

1. What sociodemographic information would suggest that early childhood education needs to be more culturally and linguistically responsive to the needs of all children?
2. How are early childhood professionals working to make early childhood education more culturally and linguistically responsive?
3. How does culture provide a blueprint for understanding childhood development—or does it?
4. What are the core concepts of the National Association for Early Childhood Education's pathways to cultural competence?
5. Broadly speaking, in what ways do you think you can contribute to the development of your cultural competence?

Endnotes

1. [1](#). Bidialect refers to children who speak two dialects of a language, such as “school English” and African American English or Appalachian English. Because of the lack of knowledge most early educators have of the significance of dialects in early learning, it is important to indicate that the “distinction between ‘languages’ and ‘dialects’ is usually on more social and political grounds than on purely linguistic ones” ([Linguistic Society of America, 1997](#)). From a linguistic and educational point of view, African American English and Appalachian English are recognized by linguists and researchers as rule-governed, viable languages, not as a series of grammatical errors of those who speak these languages.
2. [2](#). European American and White are used interchangeably to refer to people who are primarily descendants of European immigrants to the United States.
3. [3](#). *Children of color* refers to children who are African American, Asian American, Alaskan Native, Latino/a, Native American, and Pacific Islander. We recognize that these terms suggest similarity where there is great variation. For example, there are over 300 distinct tribes that fall under the term *Native American*; similarly, *Asian Americans* represents many different cultural and language traditions.
4. [4](#). *African American* and Black are used interchangeably to refer to people who are primarily descendants of Africans enslaved in the United States.
5. [5](#). The term popular literacies refers to children’s appropriation, from media-saturated environments in which they grow up, of symbols (e.g., brand names), texts (e.g., plots from cartoons), and other cultural resources (e.g., sermons, jingles, popular music) that they use to understand and interpret the world.

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Chapter 7 Early Prevention Initiatives

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After reading this chapter, you should be able to:

- Provide a definition of school readiness
- Describe the preventive intervention approach

For some time, educators have known that children who grow up in poverty often experience delays in cognitive and social-emotional development ([Lengua, 2002](#)). Many start school unprepared for the academic and behavioral demands of the elementary classroom, causing an achievement gap that widens over time ([Zill et al., 2003](#)). Compared with national norms, rates of serious learning problems, underachievement, and school dropout are much higher among socioeconomically disadvantaged and ethnic minority students than among their more advantaged peers ([Ryan, Fauth, & Brooks-Gunn, 2006](#)). The Children's Defense Fund reported in 2005 that the number of United States children living in poverty had grown by 11.3% to approximately 13 million, or 1 in 5 children. By the beginning of 2011, the number of poor children in the United States was over 14.6 million ([Children's Defense Fund, 2011](#)). The promotion of school readiness continues to be a national priority.

Head Start has been referred to as the nation's "premier" federally sponsored early childhood education program, developed to reduce socioeconomic disparities in educational attainment (U.S. Department of Health and Human Services [USDHHS], 2001). The national investment in Head Start programs was based on research showing that high-quality preschool programs can substantially improve the school adaptation and life course of disadvantaged children, enhancing their academic achievement, high school graduation rates, and long-term employment opportunities ([Barnett, 1995](#); [Weikart & Schweinhart, 1997](#)). Yet, significant delays in school readiness remain evident, even for children who participate in Head Start. The recent Head Start Impact Study, which compared children randomly assigned to receive Head Start with a similar group allowed to enroll in community non-Head Start services, demonstrated significant benefits, particularly on cognitive skills ([U.S. Department of Health and Human Services, 2005](#)). However, no effects were found on several important aspects of school readiness, including oral comprehension skills, phonological awareness, aggressive behaviors, or social skills.

In an effort to reduce the achievement gap associated with socioeconomic disadvantage, preventive interventions are being developed to strengthen the impact of Head Start and other prekindergarten programs on the school readiness of at-risk children.

A Definition of School Readiness

Preventive interventions are most effective when they are based on developmental research ([Coie et al., 1993](#)). We define school readiness as the prekindergarten child characteristics and skills that have predicted positive academic and behavioral adjustment to school in longitudinal studies. These skills represent "protective factors" to be targeted in preventive intervention because they promote child resiliency in the face of disadvantageous life circumstances. A central focus of this chapter is on the social-emotional and self-regulatory skills that set the stage for learning at school, including the abilities to establish positive relationships with teachers and peers, focus and

sustain attention in learning



Interpersonal skills are needed for cooperative play.

tasks, cooperate and participate effectively in the classroom, and inhibit aggressive reactions.

Social-Emotional and Self-Regulatory Skills

As preschool children transition into kindergarten, they face heightened demands for self-regulation and social integration. They are expected to initiate and sustain positive relationships with teachers and peers, listen and learn on demand, follow classroom rules and routines, and in general, show appropriate self-regulation, independence, and initiative in the classroom ([Rimm-Kaufman, Pianta, & Cox, 2000](#)). School readiness is enhanced by four interrelated social-emotional skills: (1) prosocial-cooperative skills, (2) emotional understanding and emotion regulation, (3) self-control and attentional focus, and (4) social problem-solving skills.

Prosocial-cooperative skills include the social skills that support friendships (e.g., being friendly and agreeable, sharing, helping) and the collaborative skills that support positive engagement in learning activities at school (e.g., following teacher directions, respecting classroom rules and routines, and working well in a group). Children who enter elementary school with higher levels of prosocial-cooperative skills learn more quickly at school and attain higher rates of achievement over the course of kindergarten than do students with lower levels of prosocial skill readiness ([Ladd, Buhs, & Seid, 2000](#)). Prosocial students also establish better relationships with both teachers and peers and enjoy rich, collaborative, peer play experiences ([Denham & Burton, 2004](#); [Fantuzzo et al., 2007](#)). Conversely, low rates of prosocial skill at school entry predict social isolation, behavior problems, and peer difficulties in later school years ([Bierman, 2004](#)).

Emotional understanding includes knowledge about emotions and the abilities to accurately identify emotional expressions in someone else, to identify one's own emotional states, and to recognize events that are likely to elicit particular emotional reactions. Children with higher levels of emotional understanding show more empathy for others and are more likely to behave altruistically ([Denham & Burton, 2004](#)). Emotional understanding develops rapidly during the preschool years and fosters social and behavioral adjustment. In one study, emotional understanding measured during prekindergarten predicted social competence measured in third grade, suggesting that emotion recognition skills foster transition adjustment at school ([Izard, Fine, Schultz, Mostow, Ackerman, & Young-strom, 2001](#)). Emotional understanding also provides an important foundation for the effective regulation of emotion because it allows children to use their language and thinking skills to analyze and cope with emotional highs and lows. Preschool play often involves mild frustrations (e.g., waiting in line, sharing a prized toy). Kindergarten is even more demanding, as children are expected to delay gratification and organize their behavior according to the schedule of the class and the directions of the teacher. Children who are able to weather the emotional ups and downs of these school and peer demands, and who can recover easily from mild setbacks and disappointments, are more well liked by peers and teachers and are more well adjusted behaviorally at school than are children who find emotion regulation more challenging ([Fantuzzo et al., 2007](#)).

Self-control skills and the capacity to focus attention additionally show significant maturation during the prekindergarten year. Good preschool education is often described as “experiential,” reflecting the drive that most young children show to actively explore, manipulate, and act on their environments. As children move through preschool, developmental changes occur in the way they approach learning. Being able to inhibit activity, control impulses and attention, resist distractions, and learn on demand through listening and watching foster kindergarten adjustment and achievement ([Hughes & Kwok, 2006](#); [McClelland, Acock, & Morrison, 2006](#)).

Learning how to control aggressive impulses is particularly important. In general, aggressive behavior is not uncommon when children first enter preschool and attempt to play with others (ages 2–3). Normatively, however, rates of aggression decrease sharply during the preschool years, as children develop the verbal, emotional, and social skills that allow them to inhibit their first impulses, comply with social rules, and use words (rather than aggressive actions) to voice dissatisfaction and resolve disagreements ([Denham & Burton, 2004](#)). Children who continue to show high rates of aggression in prekindergarten and who carry aggressive behaviors over into elementary school are at high risk for stable and escalating conflicts with teachers and peers that undermine their school learning and adjustment ([Bierman & Erath, 2006](#)).

During preschool, social problem-solving skills emerge, which enable children to use their verbal skills to identify problems, generate alternative solutions, and negotiate with their peers, fostering nonaggressive conflict management ([Dodge, Bates, & Pettit, 1990](#)). Strong social problem-solving skills in preschool predict positive social adjustment later in elementary school. For example, in one study, [Dodge et al. \(1990\)](#) asked prekindergarten children to explain how they would respond to a set of typical conflicts (e.g., a child who wanted to swing when someone was already on the only available swing). Children who could generate several ideas about how to get a turn appropriately (e.g., without using aggression) were more likely to gain peer acceptance when they entered grade school. Children who generated few ideas and relied on aggressive solutions tended to show higher levels of aggressive behavior and develop peer problems in grade school.

Language Skills and a Foundation for Literacy

The term oral language skills refers to the child’s ability to understand and produce single words, grammatically varied utterances, and oral narratives. In the long term, oral language skills provide critical support for school adjustment. They provide a foundation for interpersonal understanding, and they enhance reading comprehension. Effective communication skills also foster the child’s ability to comply with classroom rules, follow teacher directions, and establish positive peer relations at school entry ([Bierman & Erath, 2006](#); [Dickinson & Brady, 2006](#)). The development of social-emotional skills and language skills influence each other; together, they affect school readiness in critical ways. Learning is sometimes conceptualized as the acquisition of domain-specific content, along with the development or construction of new ways of thinking about that acquired knowledge ([Edwards, 1999](#)). The development of school readiness skills is different and cannot accurately be characterized in terms of the isolated acquisition of discrete skill sets ([Blair, 2002](#)). Rather, the social-emotional and language skills just described are intertwined developmentally. Language skills enhance the child’s capacity to regulate emotions and promote effective social interaction ([Greenberg & Kusche, 1998](#)). Conversely, social-emotional competencies foster positive adult and peer relationships, motivating and providing important opportunities for language learning and cognitive development ([Bierman, Greenberg, & Conduct Problems Prevention Group, 1996](#)). Together, language and social-emotional competencies support engagement in school, promoting the child’s ability to follow classroom rules, cope actively with learning challenges, and relate effectively to teachers and peers ([McClelland et al., 2006](#)).

Preventive interventions designed to foster school readiness typically target one or more of the four social-emotional skill sets just described, attempting to strengthen the “protective factors” of prosocial-cooperative skills, emotional understanding, self-control and attentional focus, and social problem-solving skills. Increasingly, a focus on promoting language and preliteracy skills is also being integrated into social-emotional learning interventions.

The Preventive Intervention Approach

A number of prekindergarten interventions have been developed to foster social-emotional development and enhance child self-regulation skills. Many have demonstrated success in promoting school readiness skills, both by using new curricula and by training teachers in specific teaching strategies. The “first-generation” social-emotional learning programs were designed as stand-alone programs. More recently, however, comprehensive prevention programs are emerging, designed to integrate social-emotional learning components with intervention strategies targeting children’s oral language and emergent literacy skills. In the following sections, we briefly review an array of preventive interventions targeting the promotion of social-emotional development and behavioral school readiness during the prekindergarten year (see also [Denham & Weissberg, 2004](#)). Then, we illustrate a prevention program that integrates social-emotional learning with prevention components targeting language and emergent literacy skill development.

Universal Classroom Interventions

A rapidly growing research base suggests that the skills that make up social competence during the preschool years (e.g., cooperative play skills, emotional understanding, self-control, and social problem-solving skills) can be promoted with instructional approaches applied in school settings ([Denham & Weissberg, 2004](#); [Elias et al., 1997](#)). The instructional process consists of three central components ([Mize & Ladd, 1990](#)). First, lessons use modeling stories, puppets, and pictures to illustrate skill concepts and to explain, demonstrate, and discuss the skill. Second, children are provided with multiple opportunities to practice skills with guidance and support, such as in the use of role-plays, games, and cooperative activities. Third, teachers provide reinforcement for the use of the skills, praising skill use, redirecting problem behavior by suggesting skill use, and commenting on the positive consequences of skill use. They also look for opportunities to cue and support the use of skillful strategies in “real-life” situations that occur in the classroom throughout the day.

Teacher-led curriculum-based programs are termed universal when they are used by a classroom teacher to enhance the language skills and social-emotional competencies of all children in the classroom ([Weissberg & Greenberg, 1998](#)). During the preschool years, teacher-led classroom prevention programs may be particularly effective. Teacher–child relationships and interactions provide a primary context for social-emotional development and learning. Teachers are critical sources of support and socialization for young children and influence social-emotional learning in both formal and informal ways ([Pianta, 1999](#)). Teachers who are sensitive, warm, and responsive foster children’s feelings of emotional security in the classroom. This security promotes children’s comfort in exploring their physical and social worlds; it enhances their ability to interact comfortably with other children and concentrate on learning tasks ([Rimm-Kaufman et al., 2002](#)). Teachers who set up clear routines, establish appropriate classroom rules, and help children manage conflicts with discussion and problem solving foster the development of child self-regulation skills and their ability to inhibit aggressive reactions ([Denham & Burton, 2004](#); [Webster-Stratton, Mihalic et al., 2001](#)). Training teachers to provide warm support and effective (nonpunitive) classroom management has positive effects on children’s prosocial behavior and reduced aggression ([Webster-Stratton, Reid, & Hammond, 2001](#)).

In addition, teachers can foster social-emotional learning through the use of explicit curricula and teaching strategies. A rapidly growing research base suggests that social-emotional skill development can also be enhanced via the use of systematic instructional approaches in the classroom ([Consortium on the School-Based Promotion of Social Competence, 1994](#); [Elias et al., 1997](#)).

I Can Problem Solve (ICPS) Program

One of the first universal social-emotional learning programs designed specifically for preschool children was the I Can Problem Solve, or ICPS, program ([Shure, 1992](#); [Shure & Spivack, 1982](#)). This preschool curriculum includes

skill presentation lessons and guided practice activities, which use pictures, role-playing, puppets, and group interaction to teach social skills associated with understanding emotion and social problem solving. During the first 10 to 12 lessons, children learn word concepts to help them describe social sequences (e.g., some vs. all, if / then, same / different). The second unit (composed of 20 lessons) focuses on identifying one's own feelings and recognizing the feelings of others. Students practice identifying people's feelings in problem situations and are shown how behaviors can affect others' feelings and responses. In the third set of 15 lessons, teachers use role-playing games and dialogue to promote social problem-solving skills. Teachers introduce hypothetical problem situations that commonly occur in preschool settings and ask children to generate and act out possible solutions as ways to encourage generative thinking and help children understand the consequences linked with various choices. A randomized, controlled trial showed that the ICPS program promoted gains in children's social problem-solving abilities and led to teacher-rated improvements in frustration tolerance, impulsivity, and task engagement ([Shure, 1992](#); [Shure & Spivack, 1982](#)).

Al's Pals: Kids Making Healthy Choices

Another example of a universal social-emotional learning program designed for preschool children and carefully evaluated is Al's Pals: Kids Making Healthy Choices. Al's Pals includes 46 lessons designed for preschool, kindergarten, and firstgrade children. A hand puppet named Al is a positive role model who, along with his puppet friends Keisha and Ty, demonstrates a set of social-emotional skills in role-plays, discussions, original songs, and books. Skill concepts are introduced during 20-min lessons. Teachers are trained to prompt and reinforce the skills throughout the day, as the opportunity arises.

In one study of Al's Pals, participating children who ranged in age from preschool to Grade 2 showed improved social skills and problem-solving abilities, as assessed by teacher ratings, compared to children in randomly assigned control classrooms who did not receive the program ([Dubas, Lynch, Gallano, Geller, & Hunt, 1998](#)). Similarly, another randomized trial of this curriculum conducted in Head Start classrooms produced significant effects on teacher-rated behavior problems and independent functioning ([Lynch, Geller, & Schmidt, 2004](#)).

Preschool Promoting Alternative Thinking Strategies (PATHS) Curriculum

The Preschool PATHS Curriculum ([Domitrovich, Greenberg, Cortes, & Kusche, 1999](#)) is a third example of a preschool social-emotional learning program, and it is one of the more comprehensive, evidence-based programs available. The PATHS Curriculum ([Conduct Problems Prevention Research Group, 1999](#); [Greenberg & Kusche, 1998](#)) was developed originally for elementary school students. In 1990, the developers began working with Head Start programs to develop a preschool version that represented a developmentally appropriate "downward extension" of the elementary program ([Domitrovich et al., 1999](#); [Domitrovich, Cortes, & Greenberg, 2007](#)). Preschool PATHS targets skills in five specific domains: (1) cooperative friendship skills (helping, sharing, taking turns, being a fun and friendly play partner); (2) emotional awareness and communication (being able to identify and label one's own and others' feelings, understanding the impact of common events and behaviors on feelings and listening skills); (3) self-control/emotion regulation (inhibition of impulsive reactivity when angry or upset, calming down); (4) self-esteem (complimenting oneself and others), and (5) social problem solving (being able to follow the sequence of calming down, identifying the problem, generating alternative solutions, and selecting a positive solution). The units are divided into 33 lessons that are delivered by teachers during circle time. In these lessons, teachers use modeling stories, illustrated with pictures, puppet demonstrations, and role plays to illustrate skill concepts. A set of puppet characters, including Twiggie the Turtle and Henrietta the Hedgehog, are central to the program and model the use of skills in everyday problem situations. For example, in an initial modeling story, Twiggie the Turtle gets very upset, and a wise old turtle teaches him to stop himself from acting out when he feels that way. The wise turtle shows Twiggie how to pull into his shell and calm down first, so he is able to describe the problem, explain his feelings, listen to his friends, and find a way to solve the problem. Following Twiggie's

example, children are taught to tell themselves to stop when they are very upset and to do “turtle” by placing their arms across their chest and taking a few moments to calm down. Once calm, they are encouraged to explain how they felt and what was bothering them, as the first step in effective self-regulation and social problem solving. Twiggle has several puppet friends who are similarly involved in role-plays and stories and serve to illustrate important friendship and social problem-solving skills. For example, Henrietta the Hedgehog is a friend of Twiggle. In one story that teaches friendship skills, Henrietta learns that she feels good when she is able to share things with her friend Twiggle; it makes her happy when she sees her friend smile. During a PATHS lesson, Henrietta tells the children what she learned about “sharing” and how much fun it was for her and her friend when she shared with Twiggle: “Every time you share with someone, you are showing that you care about him or her. That will make the other person feel happy and it will make you feel happy, too.” Henrietta invites the children to think about their sharing experiences and ideas. In a follow-up practice activity on sharing, each child is given a small bag of stickers and asked to notice how he or she and classmates feel when they share the stickers with each other. In this way, the PATHS puppets become models and coaches in the preschool classroom, encouraging self-regulation and prosocial skills to build a supportive peer community.

Each lesson includes ideas for formal and informal extension activities that teaching staff can use throughout the day to generalize key concepts. Teachers are encouraged to provide emotion coaching throughout the day, modeling feeling statements themselves when appropriate, helping children notice the feelings of peers, and prompting children to describe their own feelings. Teachers are also encouraged to watch for naturally occurring “teachable moments,” such as peer disagreements or conflicts. At these times, teachers are taught to help children stop and calm down (using “turtle”) and then talk through the problem-solving steps of defining the problem and their feelings, listening to their friend’s feelings, and generating ideas for how to solve the problem. Such teaching goes far beyond “Use your words, please!”—an instruction often heard in early childhood classrooms, as it provides children with an explicit set of steps and guidelines to support emotion regulation, self-control, and effective conflict management. A randomized trial compared the development of children in 10 Head Start classrooms using Preschool PATHS with children in 10 “usual practice” Head Start classrooms; 287 children were followed for 1 year. Children who received PATHS showed higher levels of emotional understanding; they were rated as more socially competent by both teachers and parents when compared to children in the control-comparison classrooms ([Domitrovich et al., 2007](#)).

The Important Role of Professional Development and Support for Teachers

The universal interventions to support children’s social-emotional school readiness just described all provide teachers with a curriculum guide and materials to enhance social-emotional instruction. In addition, the extent to which children develop social-emotional skills depends heavily on the quality with which the teacher manages problem behavior and responds to children’s emotions and conflicts during the day. Increasingly, prevention programs are investing in more extensive professional development to support teachers in developing the skills they need to establish and maintain high-quality teacher–student relationships, to manage children’s behavior with positive support strategies, and to use emotion coaching and social problem-solving dialogue effectively in the classroom setting. Two recent studies illustrate the positive impact of programs that support teacher professional development on children’s school readiness.

The Chicago School Readiness Project (CSRP)

This project ([Raver, Jones, Li-Grining, Zhai, Metzger, & Solomon, 2009](#)) provided Head Start teachers with training in positive classroom management strategies using an adapted form of the Incredible Years Teacher Training Program ([Webster-Stratton, Reid, & Hammond, 2001](#)). This intervention covered important classroom management topics, including the effective use of rules and routines to clarify classroom expectations, praise and positive incentives to encourage and reward child efforts and behavior, and effective (nonpunitive) limit setting to

manage problem behaviors. In addition, CSRP provided teachers with a mental health consultant, who met weekly with teachers to provide coaching in the area of effective classroom management and to provide emotional support for stress reduction. Mental health coaches also implemented individualized management plans for children displaying high levels of disruptive behavior in the classroom. Results from a randomized, controlled trial demonstrated that, compared with “usual practice” Head Start classrooms, the CSRP intervention classrooms had reduced levels of child aggressive and disruptive behavior ([Raver et al., 2009](#)). Furthermore, significant benefits for children emerged on enhanced preacademic skills (e.g., vocabulary, letter naming, math skills) and attention control ([Raver, Jones, LiGrining, Zhai, Bub, & Pressler, 2011](#)). The intervention directors postulate that improvements in teachers’ classroom management skills and feelings of teaching efficacy led to increases in instructional time and child attention skills, thereby promoting gains in academic as well as social-emotional skills.

My Teaching Partner (MTP)

In a second recent study documenting the benefits of investing in teacher professional development, Pianta and his colleagues ([Pianta, Mashburn, Downer, Hamre, & Justice, 2008](#)) used an innovative Web-based platform to deliver teacher support. The MTP program includes an array of Web-based professional development resources, including video exemplars and lesson plans on literacy and social-emotional topics (adapting Preschool PATHS content). In the Web-mediated consultation condition, teachers met regularly with an “online” coach. Teachers shared videotaped excerpts of their classroom lessons and received positive support, feedback, and suggestions from their online MTP coach. Teachers who received the full MTP program, with full access to Web-based resources along with online coaching, showed the greatest improvement in teaching quality (relative to those who had access to the Web resources but no coaching), and these effects were most pronounced in classrooms serving a high proportion of socioeconomically disadvantaged children ([Pianta et al., 2008](#)). The findings from these two studies document the importance of investing in teacher professional development, as well as evidence-based social-emotional curricula to improve preschool outcomes for at-risk children.

Integrating Social-Emotional Interventions with Classroom Language Enrichment

ICPS, AI’s Pals, PATHS, and CSRP were all developed as “stand-alone” universal social-emotional learning programs, designed for implementation in the context of any preschool setting. In every case, the developers felt these programs would be particularly helpful to children who were experiencing delays in social-emotional development because of socioeconomic disadvantage. Meanwhile, parallel to the development of these preventive interventions, other developers were focusing on preventive interventions that targeted the delays in language and preliteracy skills that also frequently accompany socioeconomic disadvantage.

In particular, language development is heavily affected by interactions with adults during early childhood, and it is frequently delayed among children growing up in poverty ([Dickinson & Smith, 1994](#)). For example, parents and teachers stimulate child language development when they use a rich and varied vocabulary in their talk with children and when they encourage and extend conversational exchanges between teacher and students. Speaking about occurrences and issues that are not represented concretely in the environment (e.g., “decontextualized” talk), such as talking about events that happened at another time, making future plans, or engaging in make-believe together all stretch and expand children’s ability to use language more flexibly and extensively. Furthermore, child vocabulary and syntax skill development benefits from adult responses that expand on the child’s utterances and model new grammatical forms. For instance, a child might say “Dog eat,” and an adult might expand that to “Yes, the dog ate the biscuit,” providing a model that builds on the child’s statement and fosters new receptive and expressive skills. To enhance language development among children from low-socioeconomic backgrounds, preventive interventions were developed to increase the use of these types of language in the classroom ([Dickinson & Brady, 2006](#); [Dickinson & Smith, 1994](#)). These interventions use professional development activities to foster high-quality language and language expansions in the classroom; several also focus explicitly on teacher language

use during book-reading activities.

In interactive book reading (sometimes called dialogic reading), teachers actively engage children in discussions about the book as they read. These discussions go far beyond simple “yes or no” questions posed by the teacher and answered by the children. Teachers ask probing questions to help the children to reflect on the emotions felt by story characters, consider the story sequence and cause–effect links in the story, and identify key vocabulary. This book-reading method is designed to foster vocabulary growth, narrative understanding, and reading comprehension. The combination of curriculum-based interactive book-reading lessons and more general professional development activities



Interactive conversations foster language learning.

have helped teachers use enriched language in the classroom in ways that promote substantial gains in children’s oral language skills (e.g., [Dickinson & Sprague, 2001](#); [Landry, Swank, Smith, Assel, & Guennewig, 2006](#); [Wasik & Bond, 2001](#); [Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994](#); [Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994](#)).

A good example is the recent study conducted by [Wasik et al. \(2006\)](#). In this preventive intervention, an interactive reading program was implemented in 10 Head Start classrooms. During reading sessions, teachers were encouraged to ask questions, make connections, and build vocabulary by explicitly teaching target vocabulary words with props and extension activities. Teachers were also taught general strategies for expanding on children’s utterances, for extending conversations, and for modeling rich language. The intervention was conducted over a 1-year period and included monthly workshops for teachers, combined with in-class coaching sessions in which a mentor modeled the strategy, observed the teacher using the strategy, and provided the teacher with written and oral feedback. The intervention succeeded in increasing the quality of classroom language use, and children in intervention classrooms showed significant gains in vocabulary that exceeded those in the comparison classrooms ([Wasik et al., 2006](#)).

Given the developmental interplay between language skills and social-emotional skill development, it is likely that integrating preventive interventions that target these two domains will have mutually facilitative effects. Both language skills and social-emotional skills represent areas of development that are often delayed by socioeconomic disadvantage. Recognizing the importance of both types of skill, social-emotional learning programs are now evolving to integrate components that concurrently promote language and related preliteracy skills. In the next section, we provide an in-depth description of one of these integrated programs.

Comprehensive Approaches to Preventive Intervention: Head Start Research-Based, Developmentally Informed (REDI) Program

The Head Start REDI program was designed to provide an enrichment intervention that could be integrated into

the existing framework of Head Start programs using HighScope or Creative Curriculum ([Bierman, Domitrovich et al., 2008](#)). The goal was to demonstrate that preventive interventions could successfully integrate social-emotional learning with other curricular components designed to promote language development and preliteracy skills. Specifically, REDI was organized to promote teachers' capacities to use research-based practices in supporting both social-emotional learning and language/preliteracy skill development. The intervention includes curriculum-based lessons, center-based extension activities, and training in "coaching strategies" for teachers to use throughout the day to support generalized skill development.

Social-Emotional Learning in REDI

In the REDI program, Preschool PATHS serves as the universal social-emotional learning program delivered by teachers in Head Start classrooms ([Domitrovich et al., 2007](#)). Each week, teachers implement one PATHS lesson and one PATHS extension activity. In addition, the PATHS themes are linked systematically with an interactive reading program. One of the interactive reading books used each week discusses the PATHS theme of the week, thereby serving as a second PATHS extension activity and tying together the reading and social-emotional learning programs. Teachers are also encouraged to use PATHS compliments daily and to support generalized skill development with ongoing emotion coaching and support for student use of the self-control ("turtle") technique and social problem solving.

Language and Preliteracy Skill Focus in REDI

REDI uses an interactive reading program, a "sound games" program, and print center activities to support concurrent language development and preliteracy skills.

The interactive reading program is based on the shared reading program developed by Wasik and Bond (2001; [Wasik et al., 2006](#)), which was, in turn, an adaptation of the dialogic reading program ([Whitehurst et al., 1994](#)). The REDI version includes two books per week (one focused on the PATHS theme of the week), each prepared with scripted interactive questions to guide teacher–student discussion. Teachers also present props to demonstrate target vocabulary words and encourage children to comment on and discuss the story. In subsequent sessions, teachers "walk through" each book a second time, using scripted questions to encourage child recall and comprehension of the narrative. Moreover, teachers receive mentoring in the use of "language coaching" strategies, such as expanding on children's statements and exposing children to more complex grammar, to provide a general scaffold for language development in the classroom during the normal daily routines, such as mealtimes, and during lesson presentation or small-group times (Dickinson & Smith, 1994).

The REDI program also includes "Sound Games" to promote the preliteracy skills associated with phonological sensitivity that support the initial decoding skills related to learning to read ([Adams, 1990](#)). *Phonological sensitivity* refers to a child's ability to recognize and manipulate the smaller units of sound within spoken words, such as syllables and phonemes ([Lonigan, Burgess, & Anthony, 2000](#)). Children who are able to rhyme, blend sounds to form new words, and otherwise recognize and produce segmented words and syllables, not through print but through hearing and speaking, acquire initial reading skills more quickly than children without these phonological skills (Lonigan et al., 2000). A number of studies have demonstrated that phonological sensitivity can be taught by providing children with carefully sequenced learning activities that target discrete skills ([Ball & Blachman, 1991](#); [Hatcher, Hulme, & Ellis, 1994](#)).

REDI provides teachers with a set of "Sound Games" to use with their students to promote phonological sensitivity skills. Building on other programs ([Adams, Foorman, Lundberg, & Beeler, 1998](#)), these games progress through six units, moving from easier to more difficult skills during the course of the year (e.g., listening, rhyming, alliteration, words and sentences, syllables, and phonemes). Teachers use a 10- to 15-min small-group Sound Game activity at least three times per week.

Finally, REDI also includes print center activities specifically designed to enhance children's letter recognition

skills. Learning to recognize and identify letters of the alphabet is an important predictor of children's early success in decoding printed text and learning to read ([Scarborough, 2001](#)). Research demonstrates that most children do not learn about letters in Head Start programs unless those programs are using an explicit curriculum and a teaching strategy to provide intensive exposure to letters and letter names ([Ball & Blachman, 1991](#)).

In REDI, teachers are provided with a developmentally sequenced set of activities to be used in their alphabet centers with individual children. They are asked to make sure that each prekindergarten child visits the alphabet center several times per week and are given materials to track the children's acquisition of letter names. Materials provided to support student learning include letter stickers, a letter bucket, materials to create a "Letter Wall," and craft materials for various letter-learning activities, such as letter collages, letter towers, and letter murals.

The preventive intervention components of the REDI program are designed for integration with a well-balanced and comprehensive preschool curriculum. For example, [Table 7-1](#) illustrates how REDI is integrated with the Creative Curriculum ([Dodge, Colker, & Heroman, 2002](#)), which is frequently used in Head Start.

The REDI Professional Development Model

The REDI professional development model for teachers includes initial training in the curriculum and ongoing consultation and support provided by REDI consultants, designed to enhance integration of REDI concepts and techniques throughout the day. REDI consultants provide teachers with suggestions in the area of effective classroom management (e.g., establishing clear and appropriate rules and directions; providing positive and corrective feedback for appropriate behavior; applying natural response cost procedures to reduce problem behaviors; and strengthening positive relations with children and parents). REDI consultants coach teachers in the use of interactive reading and provide encouragement and ideas for the development of conversations that extend children's language.

In an evaluation of the Head Start REDI program, the progress of 356 four-year-old children was tracked over the course of the pre-kindergarten year. Classrooms were randomly assigned to use the REDI prevention curriculum or to continue with "usual practice." The REDI prevention program promoted significant gains in teachers' high-quality language use and social-emotional support for children ([Domitrovich, Gest, Gill, Bierman, Welsh, & Jones, 2009](#)). Children experienced important gains in multiple domains of school readiness—vocabulary, emergent literacy, emotional understanding, social problem solving, social behavior, and learning engagement (Bierman, Domitrovich et al., 2008)—and in some executive function skills and attention control ([Bierman, Nix, Greenberg, Blair, & Domitrovich, 2008](#)).

	Tue	Wed	Thu	Fri
9:05–9:10	Arrival			
9:10–9:30	Whole-group “meet and greet” circle (calendar, weather, or other usual circle routines, PATHS “Star of the day” and Compliments; Alphabet letter of the week introduced)			
9:30–10:00	Breakfast			
10:00–10:15	Alphabet activities			
10:15–10:45	<i>PATHS Lesson</i>	<i>Sound Games</i>	<i>Sound Games</i>	<i>Sound Games</i>
Small groups swap activities after 15 min	Math	Journal	<i>PATHS Extension</i>	Journal
10:45–11:15	Physical development (outside)			
11:15–11:25	Wash hands/free book time			
11:25–12:00	Lunch			
12:00–12:30	Music and movement			
12:30–12:50	<i>Interactive Reading</i>	<i>Interactive Reading</i>	<i>Interactive Reading</i>	<i>Interactive Reading</i>
Small groups swap activities after 10 min	Science	<i>Reading Extension</i>	Math	<i>Reading Extension</i>
12:50–1:50	Center Time (Each child does 15-min REDI Alphabet Activity with progress monitoring once during week)			
1:50–2:05	Dismissal			

Note: Italicized entries indicate specific REDI curriculum components; REDI teaching strategies are encouraged throughout the day.

Table 7–1 Typical Classroom Schedule: Head Start REDI with Creative Curriculum

► Alternate View

Strengthening Prevention Services for High-Risk Children: Indicated Prevention

Classroom curricula promote the school readiness skills of all children in the classroom and hence are called “universal” approaches. As illustrated by the Head Start REDI program, classroom programs that integrate research-based strategies in a comprehensive fashion to enhance oral language, emergent literacy, and social-emotional skills may be particularly valuable to children coming from low-socioeconomic backgrounds. Several additional prevention strategies are often used to strengthen the impact of classroom-based “universal” prevention programs.

Some children enter preschool with particularly large delays or special needs (such as developmental delays, language delays, or attention deficits) that put them at particular risk for school adjustment difficulties. These

children often need services that are in addition to classroom-based programs and that provide more intensive instructional support, guided practice, and feedback ([Odom & Brown, 1993](#)). Prevention programs for children with delays or special needs are called “indicated.”

Incredible Years Dinosaur Social Skills and Problem-Solving Curriculum

This program was developed specifically for preschool and early elementary children (ages 4 to 8) who show high levels of aggressive–disruptive conduct problems ([Webster-Stratton & Hammond, 1997](#); [Webster-Stratton, Mihalic et al., 2001](#)). It targets skills for positive peer interaction and friendship development, emotional understanding and expression, anger management, interpersonal problem solving, and appropriate classroom behavior. The program is delivered in weekly 2-hr sessions with small groups of five to six children for approximately 21 weeks.

Peer Coaching Programs

Social skill coaching programs have also been developed for withdrawn and disliked preschool children ([Guglielmo & Tyron, 2001](#); [Mize & Ladd, 1990](#); [Odom et al., 1999](#)). In these programs, adult “coaches” work with children in small groups, focusing on participation and play skills, communication skills, and conflict management skills. Modeling stories and short puppet plays are used to model skill concepts and children then have opportunities to practice the skills in play, guided and supported by the adult coach. Such materials and skill modeling may also be used in therapeutic interventions.

The randomized trial conducted by Odom and his colleagues (1999) provides good evidence of the value of social skills coaching for preschool children with special needs. In that study, an indicated intervention was provided to preschool children with mild to moderate developmental delays (e.g., mental retardation, behavior disorders, communication disorders) who were at risk for social and behavioral adjustment problems. In the child-focused coaching sessions, small groups of three to four developmentally delayed children met with teachers for 10 to 15 min per day for 25 days. These sessions targeted the play skills of initiating play, sharing, agreeing, leading a game, and trying a new way. In these groups, teachers introduced, demonstrated, and discussed the social skills concepts; they then had children role-play the social skills. The program also included peer partners who were “typically developing.” Teachers provided prompts and praise to encourage positive play between the typically developing peer partners and the special needs preschoolers. Teachers specifically coached the typically developing peers to initiate social encounters. They also provided structured activities and supports in the classroom setting to enhance opportunities for peer play between the developmentally delayed students and their typically developing peer partners. [Odom et al. \(1999\)](#) found that social skills coaching had a significant impact, increasing the quality of child social interactions (assessed with observer ratings) and social competence (assessed with teacher ratings).

Resilient Peer Treatment (RPT)

The RPT ([Fantuzzo, Manx, Atkins, & Meyers, 2005](#)) is another example of a program that operates at the indicated level, as it is designed to foster the social skills and social adjustment of socially withdrawn preschoolers who have a history of maltreatment. Classmates who show high levels of social competence are selected to be “Play Buddies” for the socially withdrawn children; family volunteers provide the adult support needed for therapeutic play opportunities for the withdrawn children and their Play Buddies in the classroom. In a randomized trial of the RPT program delivered in Head Start classrooms, observers recorded significant increases in positive play interactions and decreases in solitary play behavior for the socially withdrawn children. Teachers also reported higher levels of collaborative peer-play interactions in the treatment setting; teacher ratings showed sustained gains in self-control and prosocial behavior and decreased levels of problem behaviors two months after the intervention.

Coordinated Parent-Focused Prevention Components

The impact of classroom-based prevention programs can also be strengthened by including coordinated parent-training programs ([Sheridan, Knoche, Edwards, Bovaire, & Kupzyk, 2011](#)). Notably, in one trial of the Incredible Years program, families of 97 children with early-onset conduct problems were randomly assigned to receive the Dinosaur Curriculum, a parent-training program, the combination of the Dinosaur Curriculum and parent training, or a wait-list control group ([Webster-Stratton & Hammond, 1997](#)). The Dinosaur Curriculum, used alone or in combination with parent training, produced significant improvements in social problem-solving skills (as measured in child interviews) and conflict-management skills (as measured by observations of play interactions with best friends). Parent training (used alone or in combination with Dinosaur Curriculum) produced greater effects on problem behaviors at home. The positive effects of the Dinosaur Curriculum and parent training were maintained at a 1-year follow-up ([Webster-Stratton & Hammond, 1997](#)). This study suggests that comprehensive coaching programs for young children with aggressive behavior problems and concurrent social-emotional skill deficits can enhance their social competencies, especially when combined with training that helps parents understand and support the child's social-emotional growth.

Conclusion

In summary, prevention initiatives use developmental research to identify risk and protective factors associated with positive child outcomes. Preventive interventions are designed to foster the promotion of protective factors, and in that way to foster child resilience and positive outcomes. Although Head Start and other high-quality preschool programs have shown effectiveness in promoting school readiness ([Barnett, 1995](#)), research-based prevention initiatives can strengthen their effects, contributing to the school readiness of children at risk because of socioeconomic disadvantage. Critical skill domains associated empirically with school readiness and future school adjustment include social-emotional competencies (cooperative play skills, emotional understanding and regulation, self-control, and social problem-solving skills), and language skills. Comprehensive classroom-based prevention initiatives integrate a focus on skills in these two domains, fostering both the acquisition of specific knowledge and mature approaches to learning. Universal interventions are delivered by teachers and serve to promote the competencies and enhance resilience among all children in the classroom. They can be combined with indicated interventions, which provide more intensive therapeutic support to children with specific needs or developmental delays.

Implications for Education

The available empirical research provides a solid basis for guiding educational policy and practice. First, teachers should receive training in the developmental research that identifies risk and protective factors associated with school adjustment among children growing up in poverty; teachers should also be instructed in the prevention approaches that promote those competencies. Second, along with training, empirically supported emergent literacy and social-emotional curricula should be available to preschool teachers, enabling them to integrate these research-based educational strategies into their general preschool or prekindergarten curricula. Teachers should also have access to professional development and mentoring opportunities. Teaching practices, including language use, emotion coaching, behavioral management strategies, and generalized support for student self-control and social problem-solving skills play an essential role in promoting gains in children's social-emotional and language skills. Third, therapeutic support programs designed for children with special needs (e.g., developmental delays, learning difficulties, social withdrawal) should incorporate empirically supported social skill coaching procedures into intervention plans and coordinated support should be provided to parents, particularly to remediate early problems with aggression.

Estimates suggest that, on average, 16% of children in the United States enter school with significant deficits in social-emotional readiness, with prevalence rates particularly high among socioeconomically disadvantaged

children (Rimm-Kaufman et al., 2000). Research-based universal and indicated preventive interventions have been developed and proven effective in fostering school readiness and in partially reducing the readiness “gap” associated with socioeconomic disadvantage. Ongoing efforts to further develop, evaluate, and widely disseminate effective preventive interventions should be a high priority in the education of preschool and prekindergarten teachers.

Reflect On

1. What are four social-emotional skills needed for school readiness and what does each mean?
2. Why is it important now to integrate language and preliteracy or emergent literacy skills into social-emotional interventions?
3. What special features characterize REDI and how are they integrated with the Creative Curriculum?
4. Identify and describe three socio-emotional learning programs and state why they are called “universal” versus “indicated.”
5. How can one strengthen the impact of classroom-based prevention programs?

Selected Resources

Centre of Excellence for Early Childhood Development

www.excellence-earlychildhood.ca/home.asp?lang=EN

Center on the Social and Emotional Foundations for Early Learning

www.vanderbilt.edu/csefel

Center for Evidence-Based Practice: Young Children with Challenging Behavior

challengingbehavior.fmhi.usf.edu/about.html

Collaborative for Academic, Social, and Emotional Learning

www.casel.org

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8 Chapter Assessment for Learning in the Early Childhood Classroom

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After reading this chapter, you should be able to:

- Provide a brief history of child assessment practices
- Characterize the emerging issues in child assessment practices
- Discuss the theory and practice of assessment for learning
- Outline the distinctive features of Bridging
- Explain the use of Bridging in teacher development

Russian psychologist Lev. S. Vygotsky once compared the work of educators to that of farmers. Good farmers do not tend the plants under their care only at the time of harvest. They observe all stages in the growth of the fruit, monitor crops for signs of development throughout the growing season, and make adjustments in their work of watering, weeding, and fertilizing to sustain growth. Similarly, effective teachers gauge children's learning and development from the day their students enter the classroom. Teachers observe and document continuously what students are learning and how engaged they are in different activities across curricular areas. The teachers create optimal environments and daily routines to further children's learning and build on each child's strengths to extend his or her knowledge, skills, and achievement. In short, effective teachers are astute observers and dynamic synthesizers. They understand why knowing children well is a critical first step in good teaching and they are capable of using that knowledge to improve student learning.

This chapter addresses how ongoing assessment can be used as a tool for teaching and learning in the early childhood classroom. We focus on the concept and practice of assessment for children's learning in contrast to the assessment of learning. The former refers to using assessment to help further student learning whereas the latter is used to determine how much students have learned by a particular point in time.

A Brief History of Child Assessment Practices

Child assessment practices have changed dramatically over the last century. The sheer number of new terms that the field of child assessment has created over the past 30 years could easily bewilder newcomers to teaching. The most commonly used new terms include formative assessment, summative assessment, portfolio assessment, dynamic assessment, performance-based assessment, authentic assessment, instructional assessment, interdisciplinary play-based assessment, high-stakes test, and criterion-referenced test. The proliferation of terms is a clear indicator of the rapid growth in the field. It also reflects diverging conceptions of child development and the functions of assessment in this process. A brief history of child assessment practices helps reveal the complexity of issues related to the purpose and process of assessment in addressing questions about learning and development.

Early Testing Tradition

The practice of assessing children's learning and development began with French psychologist Alfred Binet in 1904. Assessment was initially referred to as testing. Testing required the specialized training of psychologists who used standardized procedures and interpreted scores based on normative data. These tests were often used for diagnostic purposes. One of the most widely recognized was the IQ test, which measured decontextualized knowledge and skills that drew heavily on verbal and mathematical abilities. Test scores could be used to rank order children from superior to below average in intelligence ([Chen & Gardner, 2005](#); [Wasserman & Tulskey, 2005](#)). If a child's IQ was tested at the request of his or her parents, a teacher was not necessarily informed of the score. If results were given to the teacher, they had little relevance to classroom teaching ([Kohn, 2000](#)).

During the 1950s and 1960s, classroom teachers and psychologists involved with testing were trained differently, operated independently, and understood children from different perspectives ([The Staff of Education Week, 2000](#)). A teacher's job was to provide instruction that imparted knowledge and skills to students. Teaching was marked primarily by large-group instruction and desk work. Teachers did not collect or request assessment information. Although ability grouping was used in reading instruction, personalized teaching in response to individual students' developmental levels and prior knowledge was rare. Homework and paper-and-pencil tests were the primary means that teachers used to judge students' progress in school learning. Schools were not designed to be responsive to children's needs. Teachers knew what to teach; it was up to children to meet the school's curriculum demands ([The Staff of Education Week, 2000](#)).

Outside of schools, in offices or testing clinics, the primary responsibilities of psychologists were to administer different kinds of standardized tests, examine children's learning potential or problems, and score their performance based on normative data. It was not the concern of psychologists that these tests yielded little information relevant to classroom instruction. Not surprisingly, there was little dialogue or information exchange between teachers and psychologists. This lack of communication reinforced the separation of testing from classroom teaching and learning ([Wortham, 1996](#)).

Alternative Assessment Era

The most significant shift away from the testing tradition occurred in the 1980s. Educators, politicians, parents, and concerned citizens began to speak of our country as a "nation at risk" ([National Commission on Excellence in Education, 1983](#)). One factor identified as contributing to this state of affairs was testing. More specifically, the lack of assessment information useful to teachers in planning daily learning experiences was seen as diminishing the power of education. These concerns spawned what has become known as the "alternative assessment movement" ([Baker, O'Neil, & Linn, 1993](#); [Hargreaves & Earl, 2002](#)). Moving away from standardized testing, alternative assessment is typically performance based and engages children in meaningful activities with the goals and purposes to which children subscribe. Classroom observations, rubrics, and student portfolios are among the most widely promoted alternative assessment tools. A rubric is a set of criteria typically linked to learning objectives. A portfolio is a collection of a child's sample work for the purpose of documenting learning and development. Many early childhood teachers have been trained in the use of one or more of these techniques.

The alternative assessment movement was welcomed by educators. It put assessment tools in the hands of classroom teachers. Further, use of the tools produced relevant and useful information about each child. The purposes of assessment were no longer labeling or rank ordering children. Alternative assessments produced information about children that teachers could reflect on and use in the classroom. These tools held the promise that teachers could translate assessment results into effective curriculum and instruction for children as individuals and in groups. This movement made progress in closing the gap between assessment and teaching ([Bowman, Donovan, & Burns, 2001](#); [Chen, 2004](#)).

As teachers used these tools in the classroom, new challenges in integrating assessment with teaching became apparent ([Baker et al., 1993](#); [Supovitz & Brennan, 1997](#)). For example, classroom observation generates large

amounts of rich descriptive information; some of it may not be systematic and some may not be comprehensive. Teachers may not know what to look for or may not understand how an observation relates to performance in other curricular areas. For similar reasons, it can be difficult to know what kinds of materials to collect for children's portfolios and what criteria to use to evaluate them ([Chen & McNamee, 2006](#)). Although advancing classroom practice, the alternative assessments had not fully reached their potential to integrate learning and teaching processes in early childhood classrooms.

The Emerging Issues in Child Assessment Practices

By the early 1990s, distinctive trends in the field of early childhood education had emerged. These trends continue to set new educational priorities that require the development of different approaches to child assessment ([Bowman et al., 2001](#); [Bredekamp & Rosegrant, 1995](#)). Three trends particularly relevant to child assessment practices are the development of early learning standards, an increased emphasis on subject matter knowledge, and a focus on accountability.

Development of Early Learning Standards

Early learning standards describe skills and knowledge that young children are expected to acquire during the initial years of formal schooling ([Scott-Little, Kagan, & Frelow, 2005](#)). Learning priorities established by the standards influence what is taught and assessed in all early childhood classrooms. A major purpose of the standards is to provide a basis for teacher accountability. That is, teachers are held accountable for children's progress toward meeting learning objectives specified in the standards. Early learning standards help to ensure that children have equal opportunities to acquire the knowledge and skills needed for school success. To be useful to teachers, assessment must now be aligned with early learning standards ([National Association for the Education of Young Children & National Association of Early Childhood Specialists in State Departments of Education, 2003](#)).

Greater Emphasis on Subject Matter

The implementation of early learning standards has also led to greater emphasis on subject knowledge in early education. Increasingly, early childhood curricula are organized around content areas ([Bowman et al., 2001](#)). Corresponding to this shift, early childhood teachers are required to become more deliberate and intentional about addressing content knowledge and skills in their interactions with young children. With greater emphasis on subject matter, teachers need assessment tools organized in terms of the content areas found in most early education classrooms. In response to this need, a large number of content-specific child assessments, particularly in the areas of language and literacy, have been developed for teacher use in the last two decades ([Dickinson, McCabe, & Anastasopoulos, 2003](#); [Farr, 1992](#); [Fountas & Pinnell, 1996](#); [Rathvon, 2005](#); [Smith & Dickinson, 2003](#)). These newly developed instruments encompass a range of assessment formats, including the observational checklist, portfolio, task performance, and interview. The primary focus of these content-specific assessments is to estimate a child's level of understanding and command of a set of concepts and skills critical to the mastery of a particular subject area. In contrast to the proliferation of content-specific assessments in the areas of language and literacy, relatively little effort has been devoted to other areas of early learning such as mathematics, sciences, and arts ([Chen & McNamee, 2007](#); [Meisels, 1997](#)). It is only recently that tools designed to assess early math concepts and skills in classroom settings began to emerge ([Clements, 2011](#); [Ginsberg, 2011](#); [Starkey & Klein, 2000](#)).

Focus on Accountability

The No Child Left Behind Act of 2001 has had a dramatic impact on child assessment practices at almost every level of education ([Meisels & Atkins-Burnett, 2004](#)). With a primary focus on accountability for all students' school success and increased assessment requirements, states, local schools, and teachers have all been affected by

the law and its implementation. The National Reporting System (NRS), for example, a high-stakes achievement test initiated in the fall of 2003, was being administered to all 4- and 5-year-olds in Head Start. Focusing on a narrow range of skills in literacy, language, and math, the purpose of the NRS was to enhance local assessments of program effectiveness, create greater accountability for students' academic preparation, and improve training and technical assistance. Unfortunately, because of flaws in the assessment design and implementation, the system did not meet any of these goals ([Meisels & Atkins-Burnett, 2004](#)). In response to strong criticisms by leaders in the field of early education, use of the NRS was stopped in less than 4 years. However, the demands of accountability-driven educational practice have persisted. More than ever before, teachers of young children need to administer all sorts of tests to their students, such as screening, school readiness, achievement, or program evaluation measures. Teachers are bombarded with tests that have no direct relationship to classroom teaching and student learning.

Early childhood teachers have loudly voiced the problems of such child-testing practices. Among their major concerns are the following: (1) the tests take time away from teaching and children's play; (2) numbers do not tell the whole story of a child's development; (3) young children do not reliably perform well under the constraints of standardized testing; (4) one-time testing cannot accurately measure young children's learning because their development is sporadic; and most of all (5) many tests do not produce information that is useful for curricular development and classroom teaching. Large-scale, standardized tests that separate assessment information from day-to-day classroom instruction do not improve either how teachers teach or how children learn.

More than a century has passed since the inception of IQ testing. Nowadays, few educators would argue against the use of assessment to inform teaching and learning processes. Yet the field is still debating over where to concentrate its effort and resources. Some assert that if we aspire to join the "race to the top," we cannot fall behind at the starting line. Assessment of learning ensures that teachers are accountable for expected child outcomes and this accountability-based educational practice must begin in the early childhood years. For us, assessment of learning is not without its place in early education if it is used appropriately. However, assessment in education must first and foremost serve the purpose of supporting ongoing learning. It is for this reason that assessment for learning, not the assessment of learning, should be the top priority in educational practice.

The Theory and Practice of Assessment for Learning

The term of assessment for learning came into use by educators in the late 1980s and early 1990s. The concept was developed to contrast with assessment of learning. The two terms—"assessment for learning" and "assessment of learning" are often used interchangeably with the terms "formative assessment" and "summative assessment" coined by [Sciven \(1967\)](#) and elaborated by Bloom (1969). With its positive impact on teaching and learning documented extensively ([Black & William, 1998, 2003](#); [Meisels, Atkins-Burnett, Xue, Bickel, & Son, 2003](#); [Meisels, Bickel, Nicholson, Xue, Atkins-Burnett, 2001](#); [Ruiz-Primo & Furtak, 2006](#); [Wininger, 2005](#)), the concept of assessment for learning is nonetheless not well defined ([Engelman, Noakes, & Rogers, 2011](#)). When describing assessment for learning, a set of principles or features is typically provided—for instance, the teacher contributes to effective planning, uses a sensitive and constructive approach, focuses on how students learn, promotes understanding of goals and criteria, and helps learners know how to improve ([Earl, 2003](#); [Gardner, 2006](#)). There is no agreed-upon lexicon with regard to the concept, nor a clear theoretical underpinning specified to guide practice ([Dunn & Mulvenon, 2009](#)).

The theory of assessment for learning presented in this chapter is grounded in the sociocultural perspective on child development. This perspective asserts that much of child learning and development is mediated through social interactions. Specifically, Vygotsky argues that every function in the development of a child appears first on the social plane as an inter-psychological activity and then appears on the psychological plane of the child as an intra-psychological activity ([Vygotsky, 1978](#)). Development is the transformation of socially shared activities into internalized thought processes ([Wertsch, 1991](#)). To assess a child's learning and development is to understand a child's current competencies as well as what she can do with the assistance of adults and through interaction with peers ([Vygotsky, 1999](#)). In the process of learning about a child, the sociocultural perspective stresses the critical

importance of examining the child in a variety of classroom contexts. The child is not separated and observed in isolation. Understanding what the child can do with the support of adults or peers is as important as knowing what the child can do independently. Guided by sociocultural theory, assessment for learning is distinct from assessment of learning in relation to the goal, approach, procedure, content, and context of assessment (see [Table 8–1](#)). We describe each briefly in the following sections.

Goal—Establishing the Zone of Proximal Development

In contrast to the assessment of learning, which focuses primarily on what children already know and what they can do on their own, the goal of assessment for learning is to look at children’s potential for learning and development. This potential is defined by a child’s zone of proximal development (ZPD), which represents “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable

Table 8–1 Assessment for and of Learning Comparison

Features	Assessment for Learning	Assessment of Learning
Goal	Builds a bridge from the past to the future in a child’s zone of proximal development	Checks achievement status, focusing primarily on what children already know
Approach	Assesses assisted performance to study how a child moves from “other regulation” to “self-regulation” by taking advantage of help, support, and cultural tools	Looks at what children can do on their own, dealing primarily with products of learning
Procedure	Is flexible, clinical, responsive, and constructive. Values teachers’ experience and expertise	Relies largely on structured, controlled, standardized assessment procedures
Content	Emphasizes learning standards and key concepts, using rubrics to chart the developmental trajectories of children’s understanding and performance	Focuses on measurable skills and produces quantitative scores to rank order children’s performance
Context	Engages in an ongoing process situated in an environment that is natural and familiar to children, resembling regular classroom learning situation	Takes place after learning, often with a one-shot experience and social interaction prohibited during the assessment process

peers” ([Vygotsky, 1978, p. 86](#)). The most effective instruction takes place in activities that are situated in a child’s ZPD. Instruction that is too far in advance of the zone is not as effective because it provides no foothold for the child’s understanding. Instruction below the zone is no longer necessary because the child has already mastered those concepts and skills. In classrooms where teachers effectively engage children in their ZPDs, teachers and children interact and communicate in ways that promote questions, new considerations, and problem solving. Children are interested, challenged, and engaged. Because of the critical role of the ZPD in learning, knowing about it and its dynamics is crucial for understanding and facilitating children’s learning and development.

Specifically, in assessment for learning, a child is given a task to engage in first without adult guidance or peer support and then with it. The differences in the child’s task performance without and with support are observed,

documented, and analyzed. For example, what kind of help, adjustment in the task materials, or change in procedures made a difference in a child's success on the task? Through close monitoring, educators learn not only about what skills children have mastered, but also what types of instruction and peer support enable the child to perform at higher levels. The assessment process makes it possible for teachers to take into account individual differences. Teachers vary the support they provide based on the child's emerging skills as evidenced in the assessment process. Focusing on a child's ZPD, assessment for learning seeks ongoing, updated information on factors that contribute to a child's success or failure on task performance and about what can be done to facilitate the child's further learning and problem solving. If an assessment does not explore the ZPD, it is incomplete and gives only a partial picture of a child's abilities. It takes into account only those functions that a child has developed, and not those that the child is in the process of developing. As [Vygotsky \(1978\)](#) explains, "the actual developmental level characterizes mental development retrospectively, while the zone of proximal development characterizes mental development prospectively" (p. 87). By focusing on the child's ZPD, assessment for learning helps a teacher to build bridges from the present to the future.

Approach—Focusing on Assisted Performance

By definition, assessment of a child's ZPD involves social interaction or mediated learning. "Mediated learning" refers to the social transmission of psychological and cultural tools such as language to the developing child ([Vygotsky, 1986](#)). Socially constructed through human history, these important cognitive and cultural tools include various symbol systems, content knowledge, and learning materials. Through a process of guided participation, in which adults provide necessary structure through scaffolding, children make these tools their own, thereby transforming their own understanding and knowledge. The learning process portrayed here is viewed as movement across various forms of regulation: from "other regulation" to "self-regulation," and shifting relationships of interdependence among members of a community, be it in a classroom, a school, or a society ([Rogoff, 1993](#)).

Mediated learning in classroom assessment processes is termed "assisted performance." Such assistance takes many forms, including a teacher providing materials, asking questions, giving feedback, modeling strategies, and offering suggestions. Performance assisted by peers may involve two children helping each other or serving as a reference in task performance. Assisted performance gives children hope and motivates them to do better because the assessment process is regarded as a learning experience that is guided and supported. Errors that children make in the assessment process are documented and used to help them improve and develop. Assisted performance is based on the conviction that "what the child can do in cooperation today, he can do alone tomorrow" ([Vygotsky, 1986, p. 188](#)).

Assisted performance is not found in assessment of learning, which deals primarily with products of learning, such as how many words a child can recognize, how well the child can read, or what kind of math computation skill the child has mastered. It shows great interest in what concepts and skills children know but pays scarce attention to how children learn these concepts and skills. The design of assessment for learning, in contrast, demonstrates the critical importance of looking at the learning process through observing the differences between a child's unassisted and assisted performance. Assessment practices that focus entirely on the child's unaided performance fail to tap the mental functioning and learning potential revealed in the child's response to assistance from an adult or more capable peers. Because the child's emergent abilities are manifest largely through mediated activity, assessment for learning provides and then explores this kind of interaction. Through assisted performance, educators examine the dynamics of the ZPD as they learn about how a child is developing by engaging the child in mediated learning experiences. Only by carefully examining the child's participation in activities with peers and teachers can we understand her full capacity for learning and build on this capacity through further opportunities for mediated learning.

Procedure—Being Responsive to the Child's Behavior

To assess assisted performance, the assessment process has to be flexible, clinical, responsive, and constructive. These characteristics contrast sharply with assessment of learning, which relies on structured, controlled, and standardized procedures.



To fully understand childhood development, we need to focus on the child's activities with teachers and peers rather than on individual development only.

In the assessment of learning, assisted performance is prohibited and social interaction is prescribed. The tester controls stimuli and the child responds to it, often bound by a time constraint. This type of assessment process offers little information about a child's learning strategies or about how the child responds to the social features of the learning situation. Results of the assessment do not help teachers answer how-and-why questions in the analysis of children's success or failure in learning concepts and skills.

In assessment for learning, children's development is understood as an individualized as well as a social process. Assessment mirrors these characteristics. One task does not illuminate all children's learning. Similarly, one procedure does not define all assessments that aim to improving learning. Learning potential from the perspective of assessment for learning is subject to continuous changes in expression and strength. The teacher using assessment for learning practices is sensitive to and guided by the child and the child's responses. She probes the child's emerging skills, explores her learning strategies, and investigates her strengths as well as areas that require more attention or intervention. Applying a responsive procedure, assessment for learning does not typically take the form of a norm-referenced instrument. In fact, it questions the utility of using norms to improve teaching and learning. A norm is established for the purpose of comparison, ranking, or tracking. It does not take into consideration factors such as an individual's ZPD, what a child can do with assistance, or the limiting effects of standardized procedures. A norm has minimum relevance to gaining knowledge about factors that affect learning. Assessment for learning, in the form of tasks, observation, and flexible interviews, invites the clinical analysis and findings of teachers. In so doing, assessment for learning places greater value on the experience and expertise of teachers who are knowledgeable about the children being assessed and directly responsible for using the assessment results ([Darling-Hammond & Ancess, 1996](#); [Linn, 2000](#); [Moss, 1994](#)).

Content—Attending to Learning Standards and Key Concepts

Switching from procedure to content in classroom assessment, we now look at the role of learning standards and key concepts in the practice of assessment for learning. Nonstandardized procedures in the assessment for learning do not negate or ignore standards. On the contrary, standards and learning goals help set the level of potential development in the child's ZPD. Assessment for learning involves performance standards and criterion references that educators can use to guide and evaluate their observations and task analysis. Performance standards are not a list of either factual knowledge or isolated skills; rather, they are key concepts and skills that are essential to a child's mastery of content areas. For example, in number sense, a core content strand in mathematics, key concepts and skills for young children include understanding cardinality (how many there are), knowing the

number word list (one, two, three, four, and so on), establishing one-to-one correspondence when counting, and recognizing written number symbols (1, 2, 3, and so forth; [National Association for the Education of Young Children & National Council of Teachers of Mathematics, 2010](#)). Although it is generally agreed in the field of education that teaching to the test limits students' opportunity to learn, this is not the case when assessment focuses on key concepts and skills. Key concepts and skills are, in fact, central to content learning, consistent with children's thinking, and generative of future learning ([Clements & Sarama, 2009](#)). Teachers can use the key concepts and skills included in assessment for learning as a guide to engage in curriculum analysis, plan teaching activities, and understand children's work. Teachers will then be equipped with tools proven effective for student learning ([Black & William, 2003](#); [Stiggins, 2004, 2005](#)).

For key concepts and skills directly connected to regular classroom teaching, developmental trajectories that correspond to children's thinking and learning must be specified ([National Research Council, 2009](#)). Trajectories are typically described in the form of rubrics in assessment for learning practices. A rubric is a scoring tool that establishes criteria for evaluating a child's task performance ([Goodrich, 2005](#)). It delineates levels of performance that are defined in a rating scale (e.g., excellent, good, needs improvement) or through numerical scores (e.g., 4, 3, 2, 1). Some rubrics also specify the level of assistance in the child's performance, such as independent, with minimal adult help, or with extensive adult help for each quality rating. Unlike the quantitative score in assessment of learning that offers little information about the meaning of the number a child receives, each rubric level is described and includes behavioral indicators that describe the child's task performance. The developmental trajectories of the behavioral indicators provide a road map of possible ZPDs that the child has traveled or will travel. The assessment results are transparent to a skilled teacher who understands how to use findings in curriculum planning and instruction.

Context—Emphasizing Ecological Validity

Ecological validity is the standard for all contexts in assessment for learning. That is, assessment of what children learn is indistinguishable from the context in which actual learning takes place; therefore, the assessment environment must be natural and familiar to children, resembling regular classroom learning situations in which a child interacts with materials and others. Again, this differs from the "ideal" situation for assessment of learning, in which a tester works with one child at a time, preferably in a relatively quiet room away from any distractions, including regular classroom activities. Social interaction in assessment for learning is not noise that should be avoided as it is in the assessment of learning. Rather, social interaction is deemed an integral part of the learning and development process and therefore critical in helping to reveal how a child uses the tools of the culture, including help from others, to develop powers of the mind ([Bruner & Haste, 1987](#)).

Attending to ecological validity, assessment for learning engages children in daily learning activities in the classroom on an ongoing basis. When a child's learning is measured through a one-shot test using add-on, decontextualized tasks, the child's performance may not be representative of his or her capacity. In contrast, when assessment is naturally embedded in the learning environment, it allows educators to observe children's abilities in various situations over time. Such observations generate multiple samples of a child's ability that can be used to document variations in the child's performances within and across domains, and thus more accurately portray the child's learning profile. It also informs teaching that builds on children's strengths and emphasizes multiple ways of learning, doing, and succeeding ([Chen & Gardner, 2005](#)).

The Distinctive Features of Bridging

A number of assessment instruments in the field of early education are designed for teachers' use to promote classroom teaching and learning. Among the most widely used tools are *Work Sampling System*, *Teaching Strategies GOLD™*, *Child Observation Record*, and *Bridging: Assessment for Teaching and Learning in Early Childhood Classrooms*. These instruments share several common features: involvement of teachers in information collection and analysis; use in the course of regular teaching and learning activities; collection of information that describes

multiple aspects of a child's development and learning; effort in identifying the ZPD in relation to learning goals; and connection to instructional practice for the purpose of improving student learning.

In this chapter, we focus on tools for teachers' use in assessing children's learning. It is important to note that several other widely used instruments, although not directly assessing children, provide valuable information to inform classroom practice by identifying qualities of the larger learning environment. These instruments include *Classroom Assessment Scoring System*[™], *Early Language and Literacy Classroom Observation Tool*, and *Early Childhood Environment Rating Scale*. Typically, researchers, coaches, curriculum coordinators, or professional development facilitators conduct the assessment and provide teachers with feedback about their classroom environment and practices based on specific measurement of their areas of strength and weakness. If the assessment is conducted regularly, three times a year for example, teachers can track their improvement based on changes in their scores. By reviewing the results, teachers gain an understanding of the components of teaching and the classroom environment that make a difference in students' learning (Pianta, La Paro, & Hamre, 2008). Results of classroom assessments can provide a springboard for discussion and a means for systematic documentation of progress toward more effective teaching (Smith, Brady, & Clark-Chiarelli, 2008).

To exemplify the theory and practice of assessment for learning, we introduce *Bridging: Assessment for Teaching and Learning in Early Childhood Classrooms* ("Bridging" hereafter). Bridging, developed by the authors of this chapter and the staff of the Bridging Project, is a classroom-based assessment for use by teachers of children 3 to 8 years of age (Chen & McNamee, 2007). Using familiar curricular activities, Bridging provides teachers with a systematic approach to understanding individual children's learning within the classroom context. It guides teachers in locating each child's ZPD in relation to developmental changes in a range of curricular areas. It encourages teachers to respond to children's varied developmental performance levels by providing assistance and guidance relevant to each child. It supports teacher adaptation of ongoing curriculum planning to further children's learning in areas of strengths as well as areas where they will benefit from experience, intervention, and practice. The distinctive features of Bridging include using familiar activities and accessible materials, attending to key concepts and skills in curricular areas, considering activity as a unit of analysis in child assessment, and linking assessment results to teaching and learning processes (see Table 8–2). These four features are interrelated, strengthening *Bridging*'s effectiveness in improving teaching and learning over time. We describe each of these assessment characteristics briefly in the sections that follow.

Using Familiar Activities and Accessible Materials

Bridging includes 15 activities, three in each of five curricular areas: language arts and literacy,

Table 8–2 Distinctive Features of Bridging Assessment

- Using familiar activities and accessible materials: Ensures that teachers can assess children in the context of classroom learning and examine the social interactions that elicit, encourage, and mediate children's learning and performance
- Attending to the development of key concepts and skills in curricular areas: Helps pinpoint the foundational knowledge a child is currently confident in using as well as the knowledge she is in the process of developing
- Considering activity as the unit of analysis in child assessment: Examines variables that might contribute to the child's varied levels of performance and offer specific suggestions for intervention strategies

- Linking assessment results with teaching and learning process: Engages teachers in reflective practice analyzing classroom teaching and learning interactions; offers specific curriculum suggestions based on the level of a child's performance

mathematics, sciences, performing arts, and visual arts (see [Table 8–3](#)). Bridging activities are based on curriculum activities familiar to most early childhood teachers, including children reading books, dictating stories, using crayons to make a design, and using pattern blocks to solve mathematical problems. Some of the bridging activities, such as drawing a self-portrait or counting objects, are common tasks in screening tests and diagnostic assessments. The purposes and procedures when implementing these tasks, however, diverge in striking ways. For example, when the self-portrait task is used for screening or diagnostic purposes, the focus is typically on what body parts a child draws or does not draw and whether the total score the child earns indicates any learning or developmental problems. In Bridging, in addition to paying attention to the

Table 8–3 Bridging Assessment Areas and Activities

Areas	Activities
Language arts and literacy	1. Reading books (child's choice and teacher's choice)
	2. Dictating a story
	3. Acting out stories
	4. Experimenting with crayon techniques
Visual arts	5. Drawing a self-portrait
	6. Making pattern block pictures
	7. Creating pattern block pinwheels
Mathematics	8. Solving pattern block puzzles
	9. Understanding number concepts
	10. Exploring shadows and light
Sciences	11. Assembling a nature display
	12. Building a model car
Performing arts	13. Moving to music
	14. Playing an instrument
	15. Singing a song

sophistication of the self-portrait, the teacher also looks at the approaches that the child uses to perform the task. For instance, how does the child initially respond to the activity? Does the child understand the goal of the activity? Is the child attentive throughout the task? Is she talking while drawing? If so, talking to whom: self or peers? How does she describe the picture she completes? These questions guide the teacher's observation and mental note taking, yielding important information about the child's drawing, as well as her approaches to learning and her thinking process.

The use of common classroom activities for the purposes of assessment in Bridging is not a matter of coincidence or convenience. Use of these activities reflects the belief that assessment and curriculum are two sides of the same coin and that each is more effective when integrated to form a continuous teaching–learning process. Moreover, materials used in the Bridging assessment process are commonly available in classrooms, such as picture books, pattern blocks, crayons, math manipulatives, paper and pencil, and rhythm instruments. This feature of Bridging contributes to the integration of assessment with teaching–learning, because both processes use the same materials. Following assessment, teachers can integrate materials with classroom teaching in multiple ways.

Attending to Key Concepts and Skills in Curricular Areas

Within each of the five curricular areas, Bridging assessment activities examine key concepts and skills identified in national standards set for early childhood education. Based on a developmental analysis of key concepts and skills, a ten-level, criterion-referenced rubric has been developed for each activity. The rubrics specify behavioral indicators of children's learning and mastery in each content area in relation to a developmental continuum in that area. As an example, the rubric used to measure performance on the Reading Books activity is based on the stages of pretend reading developed by [Sulzby \(1985\)](#) and work in guided reading done by Fountas and Pinnell (1996; see [Table 8–4](#)). The rubric progresses from a child attending to pictures without forming stories at Level 1 to a child independently reading for meaning at Level 10 ([Chen & McNamee, 2007](#)). The continua span the full range of early childhood development from ages 3 to 8.

Using the performance rubrics, teachers can pinpoint the skills a child is currently confident in using as well as those she is in the process of developing in each curriculum area. The child's ZPD, consisting of those skills and knowledge currently undergoing change and growth in specific content areas, is revealed in the assessment process (Vygotsky, 1978). By emphasizing key concepts and skills, Bridging calls teachers' attention to the progression in children's development of knowledge and skills in each subject area. With in-depth understanding of key concepts and skills, teachers become more confident using them to plan learning experiences.

Considering Activity as the Unit of Analysis in Child Assessment

A third distinguishing feature of Bridging is the unit of analysis used in the assessment process. Rather than focusing on the individual child in isolation, which is the primary focus of most assessment of learning instruments, Bridging views the "child engaged in activity" as the unit of analysis for learning and development. This shift is based on the conviction that learning and development are not located exclusively within the mind of an individual. Rather, intellectual achievements are expressions of individual effort in relation to tools, resources, and support in culturally determined settings ([Leont'ev, 1978, 1981](#)).

To understand children's development in the context of activities, Bridging examines how different activity parameters influence children's performance. These parameters include materials used in the assessment, the social dynamics of activity administration (e.g., individual, small-group, or large-group setting), whether the child understands the goal of the activity, and the structure of the activity (e.g., open-ended vs. structured). Attending to activity parameters in the assessment process enables teachers to examine children's performance in greater

detail. Beyond simply seeing a child's strengths and weaknesses, teachers can trace factors that might contribute to the child's varied levels of performance. The relative familiarity or novelty of task materials, for example, is likely to influence a child's performance. Looking at social dimensions of activity, some children prefer to work independently whereas others are more comfortable in small groups.

When the child is the unit of analysis, assessment results describe only that child. In contrast, using activity as the unit of analysis, results describe both the child's performance and the context in which it took place. Rather than attributing learning difficulties to an isolated

Table 8–4 Rubric for Early Book Reading

Name	Performance Indicators
Level 1: Attending to pictures, not forming stories	• Child looks at pictures but does not say anything. • Child is “reading” by looking at the storybook pictures; conversation is about the pictures in view. Comments about what is in the pictures are not necessarily related to each other. • “Reading” consists of labeling and commenting on individual story pictures (e.g., pointing out a ball, naming animals).
Level 2: Attending to pictures, forming oral stories	• Child is “reading” by looking at the storybook pictures; the child’s speech weaves a story across the pages, but the wording and intonation are like those of someone telling a story, either like a conversation about the pictures or like a story relayed in a conversation. • Listener often must see the pictures to understand the child’s story.
Level 3: Attending to pictures, forming written languagelike stories	• Child is “reading” by looking at the storybook pictures, and the child’s speech sounds as if the child is reading, both in wording and intonation. • Listener does not need to look at the pictures at all, or only rarely, in order to understand the story.
Level 4: Reading verbatim-like story	• Child is “reading” the text with fluency from memory; reading is a memorized rendition of the text. • Child is not able to decode the print and must look at the pictures (and sometimes the print) in order to “read.”
Level 5: Initial attending to print	• Child may refuse to read for print-related reasons. Also, the child may show some awareness of letters in words, or awareness of certain words. The child is aware that reading means decoding the print, which she recognizes she cannot do yet. • The child may refuse to read, but may pretend read with prompting.
Level 6: Attending to print: strategies imbalanced	• Child can figure out some of the words using one strategy or other—for example, using picture information or certain print features to recognize some letters or words.
Level 7: Attending to print	• Child reads by trying to decipher the print but does not have decoding and meaning-making coordinated.

- Child uses one strategy (phonics, picture cues) with a certain amount of consistency.
- Level 8:
Attending to
print: strategies
balanced
- The strategies are imbalanced—the child is reading but with inaccuracies and not always using strategies flexibly or effectively. Child may sound out some words, leave “nonsense” words uncorrected, omit unknown words, and/or depend on predictable or remembered text rather than the written text.
 - Reading is choppy, but child can decode most words on a page.
- Level 9:
Attending to
print:
beginning
fluency
- Reading is accurate; several strategies are used, but reading is not always fluent.
 - Child reads for meaning, solving problems in an independent way.
- Level 10:
Independent
reader
- Child is able to read book fluently, with appropriate intonation and with little or no help on difficult words.

Sources: Based on *Guided Reading: Good First Teaching for all Children*, by [I. C. Fountas and G. S. Pinnell, 1996](#), Portsmouth, NH: Heinemann; and “Children’s Emergent Reading of Favorite Storybook: A Developmental Study,” by E. Sulzby, Summer 1985, *Reading Research Quarterly*, 20 (4), 458–481.

child, Bridging yields information that teachers use to alter activity parameters in ways that create optimal learning environments for children. As such, the assessment process naturally leads to intervention through carefully planned and positioned teaching activities.

Linking Assessment Results With Teaching and Learning Processes

As the name indicates, Bridging begins with the assessment of children and leads to learning and teaching based on knowledge gained from the assessment process. Teacher reflection and planning guide the transition from assessment to teaching. The reflection process asks teachers to look carefully at the assessment results as well as activity parameters that might affect children’s performance. The planning process encourages teachers to review curricular connections described in Bridging and to consider the implementation of varied curricular ideas based on their assessment results. These ideas help teachers build on children’s skills to further their explorations and understanding of subject area concepts and skills. The ideas do not prescribe a particular way to teach. Rather, they are suggestive, serving as guidelines for teacher discovery and as a springboard for teacher innovation. The goal of planning is clear: Bridging assessment does not end with knowing a child’s developmental status. It uses that knowledge to plan curriculum and instruction that will help a child move forward based on what she knows and what she is ready to learn.

Use of Bridging in Teacher Development

In the process of assisting teachers to conduct assessment for learning, Bridging also promotes teacher development. It does so by helping teachers base their classroom practices on a deep understanding of content knowledge along with knowing each individual child. Specifically, in conducting Bridging assessment, teachers gain deeper content knowledge by studying key concept-based rubrics and applying them to a child’s task

performance. Developing the skills of translating assessment results into curriculum planning, teachers increasingly base instructional practice on what a child is learning and needs to learn to reach the next level of development. In the Bridging assessment process, teachers also learn about the ZPD of individual students with regard to their understanding of key concepts and skills in different content areas. Knowing each individual child's current and potential levels of learning and development, teachers advance in their ability to provide personalized and developmentally appropriate educational experiences (Copple & Bredekamp, 2009). With its support of teacher learning and development, Bridging is also an assessment for teaching in addition to the assessment for learning. Unlike the current practice that quantifies and rank orders teacher performance based on student performance on standardized tests, Bridging supports teacher development and student learning simultaneously. It is our strong belief that for an assessment to support student learning and development, it first has to support teacher learning and development.

Over the last 10 years, we have worked with several hundred preservice and in-service teachers, using Bridging as a tool for professional development. In our experience, Bridging has great potential to influence classroom teaching and learning processes. We describe in the following sections how we use Bridging to engage Erikson Institute's preservice teacher candidates in reflective practice on effective teaching during their student teaching internship. We also report on our experience working with in-service teachers using Bridging as a tool to improve classroom teaching of young children.

Working With Preservice Teacher Candidates

Erikson's Teacher Education Program offers a state teaching certificate to students who work with children in early childhood programs through Grade 3. All teacher candidates at Erikson are required to complete a yearlong student teaching internship. The internship consists of three phases: 9 hr per week in the fall semester, 10 weeks of fulltime teaching through the winter, and 12 hr per week through the remainder of the school year. Teacher candidates are in the same classroom for all three phases. They also participate in a yearlong student teaching seminar that meets weekly for 2 hr.

At the start of the internship period, we introduce Bridging to student teachers by presenting and discussing it in methods courses. We also discuss it in the student teaching seminar. By early November, when student teachers have spent sufficient time in the classroom to know the children, they consult with the supervising teacher to select two target children to engage in Bridging activities. While assessing the two children using all 15 Bridging activities, student teachers keep detailed notes describing each child's performance.

Student teachers use the assessment results to generate a learning profile for each target child. Following the assessment of target children in the fall, student teachers use selected Bridging activities with groups of children in their classroom throughout the remainder of the year. Such activities include children reading books aloud, dictating and acting out stories, moving to music, singing songs daily, and carrying out the number concept activities.

With regard to the effects of Bridging on preservice teacher development, we studied a total of 75 teacher candidates at Erikson Institute who implemented the Bridging assessment process during their yearlong student teaching experience (see Chen and McNamee, 2006, for a detailed description of the study). Three research questions guided our investigation: (1) How does the use of Bridging facilitate student teachers' acquisition of new knowledge about individual children as diverse learners? (2) How does Bridging help student teachers gain a deeper understanding of content knowledge in a range of subject areas? (3) How does the use of Bridging strengthen student teachers' ability to use assessment results to inform curriculum planning and teaching?

The primary sources of data for the study were classroom observations and the reflection papers that student teachers prepared at the end of the student teaching period. Positive results were found with regard to all three research questions. First, student teachers indicated that they gained a new understanding of individual children as a result of using Bridging. This new knowledge included understanding the variability within each child's range of academic performance levels and being able to identify contextual factors that affect children's performance. The

teacher candidates also showed increased content knowledge in a range of curricular areas at the end of their internship. Many of them credited such gains to the careful examination and study of performance rubrics for the Bridging activities. The process of applying these rubrics enabled them to develop a deeper understanding of the key concepts and skills in a range of curriculum areas. In terms of linking assessment to curriculum and instruction, student teachers reported that Bridging results helped them think about curriculum through observation, documentation, and analysis of individual children's activity in specific content areas. Rubrics enabled them to understand the essentials of each curriculum area as well as organize and sequence learning experiences. As they gained mastery over these fundamentals, the student teachers began to create learning experiences appropriate for their particular group of children.

Working With In-Service Teachers

One effective approach to working with in-service teachers is to provide a yearlong professional development experience. Typically, we contract with a school district or child care center to train a group of approximately 25 teachers for each cohort. The number of training sessions varies depending on the availability of teachers in the school district or child care center, arranging from five full-day intensive summer institutes to eight half-day sessions throughout the year. Similar to the preservice teacher education program, the purpose of the in-service training is to promote teacher development in content knowledge, understanding children, and effective teaching methods ([McNamee & Chen, 2005](#)).

There are three important features of our yearlong professional development (PD) program ([Chen & McNamee, 2007](#)). First, in each PD session, we focus on concepts central to the mastery of a particular content area. These concepts are always introduced through activities using materials commonly found in preschool classrooms. Teachers learn about key concepts through our presentations, discussions, practicing teaching methods, and developing simple classroom activities into creative and playful opportunities for young children's learning. These strategies engage teachers with content knowledge and help them to understand it in concrete and meaningful ways. Teachers' learning experiences parallel young children's efforts to learn key concepts.

The second feature of our PD program is teachers' implementation of Bridging in their classrooms. The implementation consists of two simultaneous processes: using Bridging to engage in child assessment and for classroom teaching. In terms of assessment, each teacher chooses four target children in her classroom and assesses them using the entire Bridging process. Teachers share the results of their assessment in the PD sessions. Because Bridging activities foster the development of key concepts and skills in different curricular areas, teachers also use them as regular classroom activities. They implement activities for all children in their area of need, such as in the areas of visual arts and sciences.

The integration of on-site consultation with the training is the third feature designed to stimulate change in teacher practice. Coaches provide on-site classroom support between the training sessions while teachers conduct assessment with the target children or implement certain activities for the whole class. Each on-site coaching session includes three components: the teacher and coach identifying issues for the coach's focused observation, the coach videotaping the observation, and the teacher and coach reflecting on the observation. In PD sessions, the coaches also present examples from classrooms to draw teachers' attention to particular implementation opportunities and issues. The connection between PD sessions and the coaching support helps to reinforce the integration of content knowledge and assessment results with classroom practice.

To evaluate the efficacy of our in-service PD programs, we interviewed 53 teachers working in preschool and kindergarten classrooms in the Chicago Public Schools (see [Melendez, 2007](#) for a detailed description of the study). Of the 53 teachers, 29 participated in a yearlong PD seminar designed to help teachers learn to use the Bridging assessment system in their classrooms; these teachers are therefore denoted as the intervention group. The remaining 24 were early childhood teachers on a waiting list for the Bridging professional development seminar; they make up the comparison group. The two groups of teachers were similar in terms of years of teaching experience and level of education.

Trained researchers interviewed both groups of teachers twice: at the beginning and at the end of the school year. The analysis of the interviews was guided by research questions similar to those used in our study with preservice teacher candidates. That is, to what extent teachers, after participating in the yearlong Bridging professional development sessions (1) gained better understanding of individual children, (2) increased content knowledge, and (3) became capable of using child assessment results to inform curriculum planning and teaching. The results indicated that, at the beginning of the school year, the two groups of teachers were not significantly different in their mean scores on each of the three variables measured, nor were they different in terms of the pattern of scores across the three variables. Specifically, teachers in both intervention and comparison groups showed moderate levels of knowledge in content areas, in their understanding of individual children, and in considering useful teaching strategies to meet the needs of their students.

At the end of the school year, mean scores across the three variables increased for both groups. Although teachers in the intervention group earned higher mean scores than teachers in the comparison group in all three variables, differences between the groups were not statistically significant. However, we did note a finding of particular interest for intervention group teachers: The relationship among the scores of the three variables changed. Intervention group teachers' scores for the three variables were significantly correlated. Similar correlations were not found in the comparison group. This finding points to an often ignored fact that teacher development entails more than quantitative increases in knowledge. It also involves the dynamic interaction of elements essential to effective teaching. These results suggest the possibility that the more closely associated the three effective teaching components are, the more likely they will work together to support the integration of assessment with curriculum and instruction. Further empirical work is needed to test this hypothesis.

As revealed in our work with both preservice and in-service teachers, Bridging's integration of assessment and curriculum development is bidirectional. Assessment guides curriculum development; curriculum implementation is supported by assessment information to help teachers become more effective in their work. It is our conviction that assessment without direct connections to curriculum does not help teachers teach. Curriculum implementation without accurate assessment information may or may not be appropriate for a particular group of children. In the integration process we have developed for Bridging, the pattern is no longer limited to a linear sequence with assessment necessarily preceding curriculum development. Instead, the pattern is a spiral with each interacting to inform the other in a continuous process ([McNamee & Chen, 2005](#)).

Conclusion

The field of child assessment has changed a great deal since the inception of IQ tests more than a century ago. Today, accountability is a most pressing issue at all levels of the education system. The challenges are even greater for early childhood education, with the complex and varied developmental needs of young children. Accurately assessing individual children's knowledge and skills remains one of the most difficult yet most important tasks in teaching. To do so, teachers need reliable assessment systems to help identify students' strengths and areas in need of additional practice and guidance, to monitor their progress, and to decide on appropriate next steps in instructional practice ([Popham, 2008](#)). Understanding assessment and knowing how to use it appropriately is crucial to effective teaching ([Black & William, 2003](#); [Darling-Hammond & Bransford, 2005](#); [Shepard et al., 2005](#)).

[Stiggins \(2002\)](#) stated that "if we are finally to connect assessment to school improvement in meaningful ways, we must come to see assessment through new eyes" (p. 758). We close the chapter with a suggestion for seeing child assessment from a fresh perspective. We call for a new view of the relationship between assessment for and of learning. Specifically, we advocate seeing the two approaches to assessment as complementary rather than contradictory or mutually exclusive. Assessments of learning and for learning are designed for different purposes and use different approaches to child assessment. In this chapter, we have contrasted the two types to heighten understanding of assessment for learning. We have given full attention and our endorsement to assessment for learning because we believe that the pendulum of assessment has swung too far toward the assessment of learning in today's educational practices. However, in the larger context of child assessment, we hold that both types of

assessments have their place in the classroom and can make a critical contribution to a child's education. As such, both types deserve the serious consideration of early childhood educators. Often based on inappropriate forms of testing, the potential value of assessment of learning has been obscured. With closer examination, relationships between the two types of assessment can be discerned.

First, the contrast between the two types of assessments is not necessarily black and white. In a number of cases, determining the type of assessment an instrument is depends on how the teacher uses it, rather than on characteristics of the instrument itself. For example, the Work Sampling System is an assessment tool designed to assist teachers in better understanding individual children and to link the assessment results to curriculum planning and teaching. But it has also been misused as a high-stakes test for tracking students' performance (Samuel Meisels, personal communication). We certainly do not advocate the use of inappropriate testing, including testing for the purpose of rank ordering children. It can be useful for teachers to know each child's status relative to early learning standards, and/or developmental milestones through the assessment of learning. This information can help teachers establish a starting point in the assessment for learning. Used appropriately, the results of assessment of learning can also help evaluate children's progress through a teacher's use of assessment for learning.

Second, in assessments of learning, learning standards focus on the products of learning. In assessments for learning, the focus is on the process of learning. Using both types, teachers can locate what and how children learn in relation to standards. Assessment for learning intends to help teachers support child learning, whereas assessment of learning sets standards to attest whether children achieve the learning goals claimed by the assessment for learning. Assessment of learning is not inherently bad. Assessing a child's learning through both lenses can help the teacher get a better sense of how a child performs independently and in relation to support from others. Complementing one approach with the other offers more information than either assessment alone can offer.

One of the most difficult characteristics of assessment of learning for early childhood educators to accept is the exclusion of conversation and social interaction during the assessment process. From the perspective of assessment for learning, "human mental activity is neither solo nor conducted unassisted, even when it goes on 'inside the head.' Mental life is lived with others, is shaped to be communicated, and unfolds with the aid of cultural codes, traditions, and the like" ([Bruner, 1996, p. xi](#)). It may be that, when assessment of learning is used in the early childhood years, this procedure needs to be changed or made more flexible. As long as the two types of assessments are in competition, there will be no reason to consider how each type may be modified and how both may be combined. The point of view we suggest is fresh, not because it presents a new approach, but because it suggests a new relationship between two familiar approaches. Currently, assessment of learning does not have a good reputation in early education. Careful consideration of what each has to offer brings us to more productive conversations about how we can use both types to best serve the needs of children.

Reflect On

1. What are the differences between assessment of learning and assessment for learning with respect to goal, approach, procedure, content, and context of assessment?
2. How does the Bridging system support teachers in assessing, teaching, and understanding children's learning needs?
3. What does it mean when educators examine activity as the unit of analysis in child assessment as opposed to assessing the child alone as the unit?
4. In what ways are curriculum and assessment two sides of the same coin?

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Part III Specific Approaches—United States

1. [CHAPTER 9 The Creative Curriculum®](#)
2. [CHAPTER 10 The HighScope Model of Early Childhood Education](#)
3. [CHAPTER 11 Tools of the Mind: The Vygotskian Approach to Early Childhood Education](#)
4. [CHAPTER 12 The Developmental–Interaction Approach at Bank Street College of Education](#)
5. [CHAPTER 13 The Project Approach: An Overview](#)

Chapter 9 The Creative Curriculum[®]

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Cate Heroman

and

Kai-leé

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After reading this chapter, you should be able to:

- Describe the philosophy and research foundation of The Creative Curriculum
- Outline the consistent framework of The Creative Curriculum
- List objectives for development and learning
- Discuss The Creative Curriculum for Preschool as a system
- Explain the authentic, ongoing assessment in The Creative Curriculum
- Delineate how teachers use the assessment cycle
- Characterize how The Creative Curriculum includes all children
- Discuss The Creative Curriculum and professional development
- Describe the research on and use of The Creative Curriculum and Teaching Strategies GOLD

The *Creative Curriculum* has a long history with roots in the early years of Head Start, when the field had not yet formally defined developmentally appropriate practice or, arguably, even identified preschool teachers' need for a written curriculum. The curriculum grew out of a series of workshops and handouts developed in 1966 to support Head Start and child care teachers who did not have teaching backgrounds—and some without high school diplomas. The teachers were expected to organize classrooms and teach groups of young children, so they needed on-the-job support. As Head Start and child care programs expanded, the need for practical professional development resources grew. Published in 1978, the first edition of *The Creative Curriculum* included a filmstrip about setting up an effective classroom environment and a series of four books that focused on four interest areas of a preschool classroom: blocks, the house corner, table toys, and art. The intent was to help teachers appreciate how much children can learn in well-organized interest areas. The books explained how to use the materials in each area to help preschool children acquire important skills and understandings.

Evolving from those first four books, the new edition of the preschool curriculum ([Dodge, Heroman, Colker, Bickart, Jones et al., 2010](#)) is a complete system of resources that supports teachers at all levels of experience: the beginning teacher who wants very specific guidance on what, how, when, and why to teach; teachers who are progressing in their understanding of appropriate practice but still need practical support; and teachers who are refining their practices and want to be inspired with new ideas they can adapt and make their own. *The Creative Curriculum System for Preschool* includes a set of five books that help teachers build knowledge and skills for establishing developmentally appropriate programs. It also includes a set of daily practice resources that enable teachers to teach children intentionally each day. Teaching Strategies also developed and published two other versions of the curriculum: *The Creative Curriculum for Infants, Toddlers & Twos* (now in the second edition, revised) and *The Creative Curriculum for Family Child Care* (also in its second edition).

Philosophy And Research Foundation Of The Creative Curriculum

A major influence in the field of early childhood education has been the work of the National Association for the Education of Young Children in defining high-quality teaching practices ([Copple & Bredekamp, 2009](#)). The term developmentally appropriate practice means teaching in ways that are consistent with how children learn at each stage of development. Teachers are encouraged to base decisions on three types of information:

- What they know about child development and how children learn
- What they learn about each child as an individual
- What they know about each child's family and culture

Major child development theories and research are the foundation for all versions of *The Creative Curriculum*. Theory and research inform five guiding principles.

Positive Interactions and Relationships Are Fundamental to Children's Success in School and in Life

This principle follows from the work of John Dewey, who recognized that children learn best when they interact with people in a rich environment ([Dewey, 1897](#)). He urged teachers to create classroom communities where children learn to work with each other and with their teachers, constructing knowledge about their world through firsthand experiences. During the 1920s and early 1930s, Lev Vygotsky (1934/1978) studied children's social interactions and saw how important it is for them to talk about problems and concepts in order to understand them.

Teacher-child interactions that foster positive relationships are a primary focus of *The Creative Curriculum*. Attachment research showed the critical need for infants and toddlers to develop secure attachments with primary caregivers ([Ainsworth, Blehar, Waters, & Wall, 1978](#); [Bowlby, 1969](#)). Research has confirmed that the quality of children's attachment relationships predict children's social-emotional competence, persistence, enthusiasm for learning, and academic success ([Easterbrooks & Goldberg, 1990](#); [Hamre & Pianta, 2001](#); [van IJzendoorn & Sagi, 1999](#)). Moreover, children who develop positive relationships with their teachers are more likely to develop social skills and get along with their peers ([Palermo, Handish, Martin, Fabes, & Reiser, 2007](#)).

Social-Emotional Competence Is a Significant Factor in School Success

Fostering social-emotional development has always been an underlying goal of early childhood education and is central to *The Creative Curriculum* approach. Socially and emotionally competent children understand their own and other's feelings, regulate their own behavior, build positive relationships with others, and interact positively with their peers ([Sroufe, 2005](#)); and there is a connection between social competence and children's readiness for school ([Raver, 2002](#)). *The Creative Curriculum* gives teachers practical guidance based upon [Erik Erikson's \(1950\)](#) ideas about early stages of social-emotional development: trust versus mistrust, autonomy versus shame and doubt, and initiative versus guilt.

Constructive, Purposeful Play Supports Essential Learning

Young children learn best through purposeful play, but play must be meaningful to the child if it is to lead to new and deeper understandings (see [Pellegrini, 2009, 2011](#)). Teachers using *The Creative Curriculum* learn to appreciate the various types of play and their role in the development of logical thinking ([Piaget, 1945/1972](#)). The stages and benefits of sociodramatic play are an important focus of the curriculum because research shows associations between high-level play skills and children's academic learning ([Bodrova & Leong, 2003](#); [Fagen, 2011](#)). Children who do not have high-level pretend-play skills must be specifically taught these skills in order to benefit from their play ([Smilansky & Shefatya, 1990](#)).

The Physical Environment Affects Children's Behavior and the Type and Quality of Learning Interactions

Dewey and Piaget both describe how the physical environment and materials affect children's behavior and learning. The way the physical environment is organized and the selection and display of materials have a profound impact on children as well as on their teachers. Well-organized environments, carefully selected materials, and attractive displays help children develop self-regulation skills and support their ability to attend to and complete tasks ([Mooney, 2000](#)). Consistency and clarity are important to all children, but high-quality materials and organized environments are especially important for children at risk of future school failure.

Teacher–Family Partnerships Promote Development and Learning

Research on the benefits of strong partnerships with families is substantial and conclusive: When families are involved, children feel more secure and do better academically, teachers gain valuable support and insights, and families are better able to guide their children's development and learning. This is true for all children regardless of the educational and income levels of their parents ([Henderson & Berla, 1994](#)). With *The Creative Curriculum*, teachers learn to forge positive relationships based on mutual respect and ongoing communication with families.

In short, the five guiding principles of *The Creative Curriculum* are grounded in the well-established theories of social and cognitive development (e.g., Piaget, Erikson), developmentally and culturally sensitive practices ([Copple & Bredekamp, 2009](#)), and current research on childhood development and learning. Summaries of research findings related to each objective for development and learning are presented in *Objectives for Development & Learning: Birth Through Kindergarten* ([Heroman, Burts, Berke, & Bickart, 2010a, 2010b, 2010c](#)). That information helps teachers understand why particular practices are developmentally appropriate for young children. The studies that are a focus in each of *The Creative Curriculum Teaching Guides* evolved from the thoughtful work of Lilian Katz and Sylvia Chard (2000).

The Consistent Framework Of The Creative Curriculum

The three versions of *The Creative Curriculum* are organized by a consistent framework. Graphic representation of that organizational structure gives teachers a visual picture of the five components, or categories of knowledge, that

are essential for them to acquire, whether they work with children birth to age 3, preschool children, or children of mixed ages in a family child care home. In the preschool curriculum, these five categories of knowledge are applied to 10 interest areas and the outdoors. In the infant/toddler/twos and family child care curricula, they are applied to daily routines and experiences. Why are the curricula different in that regard? The preschool curriculum focuses on interest areas as the most appropriate settings for children ages 3 to 5 years. Interest areas offer children opportunities for making choices, interacting with materials and peers as well as the teacher, and sharing responsibility for maintaining the environment. For children under 3 years of age, the day is organized around routines and play experiences. Routines provide consistency in a child's life and afford teachers daily opportunities to build a relationship with each child and to support children's growing competence. Emphasizing experiences rather than activities or areas of the room, *The Creative Curriculum* guides teachers in selecting appropriate materials for children, observing what children do, and responding to what each child seems to be experiencing.

As shown in the [Figures 9-1a](#) through [9-1c](#), each framework rests on a solid foundation of theory and research (previously discussed) that is updated with each new edition. After a brief overview of the theorists and their research, the main ideas are summarized in a table along with examples of practices in *The Creative Curriculum* that grow out of this knowledge. In this way, teachers are helped to see the connection between theory and practice, learning not only what to do but why particular practices are important.

Knowing How Children Develop and Learn

Knowledge of child development—what to expect of children at each stage of development—is the essential knowledge base for developmentally appropriate teaching ([Copple & Bredekamp, 2009](#); see also [Chapter 6](#)). The first component of each framework therefore focuses on the children: knowing their typical skills, behaviors, and understandings at various levels of development and knowing how each child is unique. This component provides an overview of child development for the curriculum's age-group, discussing four basic developmental domains: social-emotional, physical, language, and cognitive. To help teachers link knowledge of child development with curriculum implementation, the objectives for these domains are introduced early in the discussion.

General child development knowledge is essential but not sufficient for building relationships with individual children and planning appropriate experiences. No matter how much children may be alike in their patterns of development, each child is unique. Teachers must therefore appreciate and pay attention to differences related to rates of development, gender, temperament, interests, learning styles, life experiences, and culture that influence how children respond and learn. Because teachers are increasingly likely to have children in their classrooms whose home language is not English, they need to appreciate the benefits of being bilingual, know the stages of dual-language (DL) learning, and understand how to foster English acquisition in a way that respects the children's heritage and expression of their home languages. It is equally important for teachers to have guidance on including all children in the program: children who progress typically, children with disabilities, and children with advanced knowledge and skills in some domains.

The Learning Environment

The learning environment is the starting point for implementing *The Creative Curriculum*. It includes the physical setting (the organization of space and the selection and display of materials), the daily routines and schedule that provide a

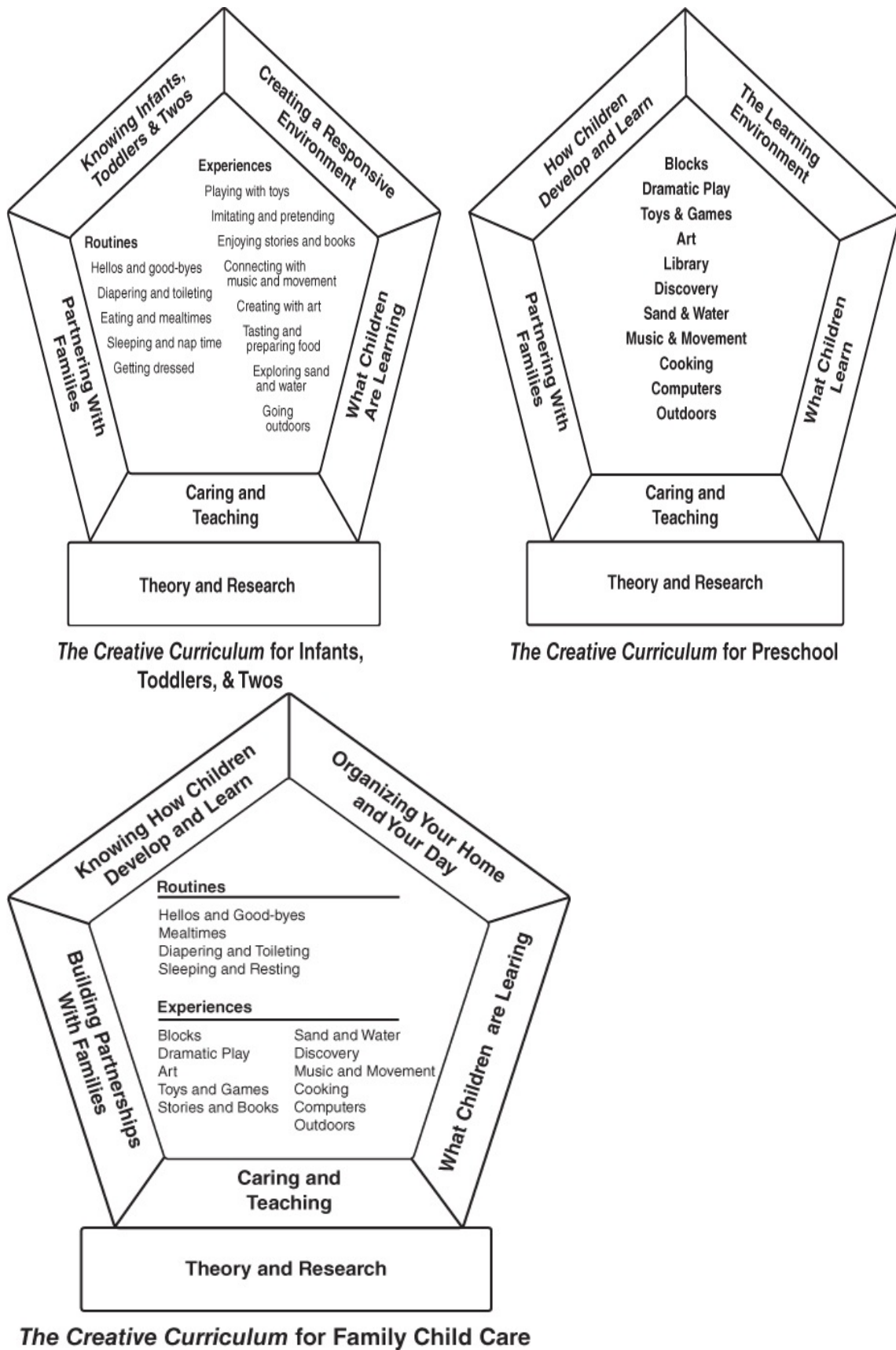


Figure 9–1 Frameworks of The Creative

Curriculum

Sources: From *The Creative Curriculum for Infants, Toddlers & Twos, Volume 1: The Foundation* (2nd ed., rev., p. xiii), by [D. T. Dodge, S. Rudick, and K. Berke, 2011](#), Washington, DC: Teaching Strategies, LLC. Copyright 2010 by Teaching Strategies, LLC. Reprinted with permission. *The Creative Curriculum for Preschool, Volume 1: The Foundation* (5th ed., p. xvii), by [D. T. Dodge, C. Heroman, L. J. Colker, and T. S. Bickart, 2010](#), Washington, DC: Teaching Strategies, LLC. Copyright 2010 by Teaching Strategies, LLC. Reprinted with permission. *The Creative Curriculum for Family Child Care, Volume 1: The Foundation* (2nd ed., p. xiii), by [D. T. Dodge, 2009](#), Washington, DC: Teaching Strategies, LLC. Copyright 2009 by Teaching Strategies, LLC. Reprinted with permission.

predictable structure for each day, and weekly planning based on what teachers learn about individual children and the group.

The Physical Setting

The physical environment has a profound effect on children's behavior. Arranging the environment in particular ways is a powerful strategy for supporting children's ability to function positively in a group setting and to develop self-regulation skills. In all versions of *The Creative Curriculum*, specific suggestions are offered for conveying positive messages through the environment: "This is a good place." "You belong here." "This is a place you can trust." "There are places where you can be by yourself." "You can do many things on your own." "This is a safe place to explore and try out your ideas."

The preschool curriculum provides detailed guidance on setting up and maintaining 10 engaging and well-organized indoor interest areas and an outdoor area in which teachers offer a variety of activities each day. Materials in each interest area are labeled with a picture and word so children can find and return the materials they want to use. If the children speak several languages, each language is color coded. Space must be allocated for large-group times, and suggestions are offered for accommodating children with disabilities. Children's work is protected and displayed in the classroom, and classroom maintenance is a shared responsibility. In addition to participating in cleanup, individual children rotate assigned jobs, such as setting the tables for meals, feeding classroom pets, washing paintbrushes, watering plants, and so on.

In *The Creative Curriculum for Infants, Toddlers & Twos*, ensuring a safe and healthy environment is of primary importance. The environment for young and mobile infants must include adequate spaces for daily routines and open spaces where children can always be supervised as they explore safely and play with materials. Because teachers are often on the floor with children, their comfort must be considered. In the family child care curriculum, guidance is offered for two types of arrangements: (1) shared space where multiple rooms in the home are used in caring for children and (2) homes where providers use a separate program space that looks much like a preschool classroom.

A Structure for Each Day

The daily schedule blocks out time for all events of the day and establishes the sequence of routines and events. For infants and toddlers, the schedule is flexible and individualized. Children ages 2 years and older have a more consistent schedule every day.

The sample schedule in *The Creative Curriculum* shows a balance of active and quiet times; large-group times; small-group activities; outdoor times; read-alouds; and routines such as mealtimes, rest, and cleanup. We recommend posting a schedule with pictures and words where children can see it easily. That way, even young children can identify the periods of the day and the order in which they occur. This is not only a literacy

experience; it gives children a sense of security about their lives at school because they can predict the sequence of events and know what to expect.

Weekly Planning

Teachers using *The Creative Curriculum* are encouraged to review what they learn about individual children and the group as they develop plans for the following week. They identify changes to the environment, large- and small-group experiences, stories they plan to read aloud, and ways to involve and inform families.

What Children Are Learning

The third component of *The Creative Curriculum* concerns what children learn in the areas of literacy, mathematics, science, social studies, the arts, and technology. The relationships that teachers and providers build with each child, the interactions they have throughout the day, and the materials and experiences they provide are avenues through which children learn important concepts and skills. Teachers must be intentional in offering opportunities throughout the day for children to acquire the important skills and understandings that are widely expected by researchers and valued in state early learning standards.

The Creative Curriculum describes major skills and concepts for each content area and gives examples of how children of different ages demonstrate their understanding. *The Creative Curriculum* objectives for children's development and learning are based on content standards and early learning standards. Teachers learn about seven components of literacy: literacy as a source of enjoyment, vocabulary and language, phonological awareness, knowledge of print, knowledge of letters and words, comprehension, and understanding books and other texts ([National Early Literacy Panel, 2008](#)).

For mathematics, the curriculum explains what children are learning about number and operations, geometry and spatial sense, measurement, patterns (algebra), and data analysis ([National Council of Teachers of Mathematics, 2000](#)). Science content falls into three categories: physical science, life science, and earth and the environment ([National Research Council, 1996](#)). In social studies, the major topics are people and how they live, people and the environment, people and the past, and geography ([National Council for the Social Studies, 2010](#)). Four categories of the arts are addressed: dance, music, theater or performing arts, and the visual arts ([Consortium of National Arts Education, 1994](#)). In technology, four components apply to the preschool level: awareness of technology, basic operations and concepts, tools and equipment, and people and technology ([International Society for Technology in Education, 1998](#)).

In *The Creative Curriculum*, a chart for each of the content areas summarizes the main concepts to be taught, gives examples of what teachers can do to support learning, and shows examples of what children might do to demonstrate their skills and understandings.

Caring and Teaching

Care and education cannot be separated when describing the role of an early childhood teacher ([National Research Council, 2001](#)). Positive relationships are the foundation for all learning. They have a profound impact on how children feel in the program and their success as learners. For this reason, building positive relationships and creating a classroom community are the first aspects of the teacher's role addressed in *The Creative Curriculum*. Caring for infants, toddlers, and 2-year-olds centers on positive relationships and helping children get along with other children as well as with adults. The preschool classroom functions as a community, a place where people feel safe, experience a sense of belonging, develop positive relationships with others, share responsibilities, and learn how to resolve conflicts peacefully. Teachers are given strategies and plans for promoting self-regulation, establishing classroom rules with children, setting consistent limits, and coaching children to develop prosocial

skills. Teachers are also shown how to respond to challenging behaviors that are entrenched and require targeted interventions. Recognizing that friendships are very important, we identify the skills children need to make and keep a friend; the curriculum presents classroom strategies that support friendships. These include having discussions about making friends, coaching children to enter a group successfully, assigning tasks and jobs to two children who usually do not play together, and establishing rules that minimize rejection and bullying.

Teachers who use *The Creative Curriculum* are helped to teach intentionally and responsively. Teachers must know how, when, and where to teach, and they must respond appropriately to what each child brings to a learning experience. The how of teaching includes the range of approaches and instructional strategies that the curriculum offers teachers. Different approaches are needed for supporting different skills and the understanding of concepts. Teachers learn to use five basic teaching strategies as they respond to children engaged in firsthand experiences. Teachers guide children in making discoveries, challenge children's thinking, and help them gain deeper understandings. Teachers acknowledge and describe what children are doing and saying; coach children's efforts and make suggestions; extend children's thinking with open-ended questions, prompts, and conversations; and give information to expand children's knowledge base and let them know what is expected of them. *The Creative Curriculum* gives extensive examples of how to apply these teaching strategies in each of the interest areas, routines, and experiences provided for children every day.

In the preschool curriculum, teachers intentionally plan daily small- and large-group activities that address specific learning objectives. These are short (10–15 min), engaging, interactive experiences. With the help of *Intentional Teaching Cards*, teachers are able to easily adapt each activity to include all children—those ready for more challenge and children who can be successful with a simpler task. (These cards, which are a component of the preschool system, are discussed later in this chapter.) Large-group times involve gathering all of the children in the class for meetings. The first meeting of the day is a time to welcome everyone, discuss the day's events, and have a short activity. The end of the day is a time to review the highlights of the day and prepare children for the next day's events. Children are also gathered together for read-alouds, music and movement activities, and discussions of a topic they are studying.

Partnering With Families

The fifth framework component describes ways of building partnerships with families. The two most important worlds for young children are their homes and schools. When adults at home and school communicate positively and respectfully, children feel more secure, teachers gain valuable support from families, and families come to understand the important role they play in their children's development and learning.

The Creative Curriculum helps teachers appreciate the fact that every family, like every child, is unique. Partnerships with families therefore begin by getting to know families—their composition, life experiences, cultures, and their hopes and dreams for their children. The curriculum offers practical strategies for making families feel welcome, communicating through daily and more formal exchanges, and offering families a variety of meaningful ways to be involved in the program. A wide range of resources supports the building of partnerships. These include letters to families that can be adapted by teachers; booklets describing the program and ways families can help at home; and a variety of easy-to-read resources on supporting language and literacy learning, mathematics, physical development, and DL acquisition.

The Creative Curriculum's *Learning-Games* is another resource for involving families with children from birth through age 5. These are simple, everyday activities that families can enjoy with their children to support positive interactions, language development, and relationships. They have been validated by over 30 years of research as a component of the Abecedarian project, which showed positive gains for children throughout the years of school and early adulthood ([Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002](#)).

In the real world, building positive relationships with some families is challenging. Teachers sometimes encounter conflicts because of misunderstandings about or different approaches to the care and education of young children. *The Creative Curriculum* approach to resolving differences constructively proposes four steps: (1) Seek first to

understand the family's position. (2) Validate the family's concerns and wishes. (3) Explain how the program addresses the family's concerns. (4) Continue to communicate with one another to assess progress ([Dodge, Heroman, Colker, & Bickart, 2010](#)).

Objectives For Development And Learning

Lewis Carroll wrote in *Alice and Wonderland* (1865), "If you don't know where you're going, any road will take you there." Planning curriculum begins with a clear vision or road map of what is important and developmentally appropriate for young children. Clearly defined and articulated objectives for development and learning provide teachers with the necessary focus to implement curriculum effectively.

Objectives for Development & Learning: *Birth Through Kindergarten* ([Heroman, Burts, Berke, & Bickart, 2010a, 2010b, 2010c](#)), included in both *The Creative Curriculum* and *Teaching Strategies GOLD*, gives teachers a clear picture of what children at each stage of development should know and be able to do in major areas of development (social-emotional, physical, cognitive, and language) and in general content areas (literacy, mathematics, science and technology, social studies, and the arts). It includes research-based objectives that are predictors of future school success and highly valued in state early learning standards.

Note that many of the objectives listed in [Figure 9–2](#) include dimensions, which are more

Figure 9–2 Objectives for Development and Learning

Source: From *Teaching Strategies GOLD® Objectives for Development and Learning: Birth Through Kindergarten* (pp. xxx–xxxi), by [C. Heroman, D. C. Burts, K. Berke, and T. S. Bickart, 2010](#), Washington, DC: Teaching Strategies, LLC. Copyright 2010 by Teaching Strategies, LLC. Reprinted with permission.

Social-Emotional

1. Regulates own emotions and behaviors
2. Establishes and sustains positive relationships
3. Participates cooperatively and constructively in group situations

Physical

4. Demonstrates traveling skills
5. Demonstrates balancing skills
6. Demonstrates gross-motor manipulative skills
7. Demonstrates fine-motor strength and coordination

Language

8. Listens to and understands increasing complex language

- 9. Uses language to express thoughts and needs
- 10. Uses appropriate conversational and other communication skills

Cognitive

- 11. Demonstrates positive approaches to learning
- 12. Remembers and connects experiences
- 13. Uses classification skills
- 14. Uses symbols and images to represent something not present

Literacy

- 15. Demonstrates phonological awareness
- 16. Demonstrates knowledge of the alphabet
- 17. Demonstrates knowledge of print and its uses
- 18. Comprehends and responds to books and other texts
- 19. Demonstrates emergent writing skills

Mathematics

- 20. Uses number concepts and operations
- 21. Explores and describes spatial relationships and shapes
- 22. Compares and measures
- 23. Demonstrates knowledge of patterns

Science and Technology

- 24. Uses scientific inquiry skills
- 25. Demonstrates knowledge of the characteristics of living things
- 26. Demonstrates knowledge of the physical properties of objects and materials
- 27. Demonstrates knowledge of Earth's environment
- 28. Uses tools and other technology to perform tasks

Social Studies

- 29. Demonstrates knowledge about self

- 30. Shows basic understanding of people and how they live
- 31. Explores change related to familiar people or places
- 32. Demonstrates simple geographic knowledge

The Arts

- 33. Explores the visual arts
- 34. Explores musical concepts and expression
- 35. Explores dance and movement concepts
- 36. Explores drama through actions and language

English Language Acquisition

- 37. Demonstrates progress in listening to and understanding English
- 38. Demonstrates progress in speaking English

specific aspects of the objective (subskills and behaviors). For example, in the area of social-emotional development, the dimensions help give teachers a clear picture of self-regulation:

Objective 1. Regulates own emotions and behaviors

- a. Manages feelings
- b. Follows limits and expectations
- c. Takes care of own needs appropriately

In the area of literacy, a complex construct such as phonological awareness is more easily understood by looking at the outcomes specified in the dimensions:

Objective 15. Demonstrates phonological awareness

- a. Notices and discriminates rhyme
- b. Notices and discriminates alliteration
- c. Notices and discriminates smaller and smaller units of sound

As shown in [Figure 9–3](#), four indicators that children are expected to achieve over time outline how children’s development and learning progress in relation to an objective or dimension. Colored bands indicate widely held expectations for children of different age-groups or classes/grades. Red, orange, and yellow code age-groups for the first 3 years (birth to 1 year, 1 to 2 years, and 2 to 3 years, respectively). Green, blue, and purple code classes/grades for the next 3 years (preschool 3, prekindergarten 4, and kindergarten, respectively). These overlapping bands show that children’s development is uneven, overlapping, and while predictable, not rigid.

Objectives 1 Regulates own emotions and behaviors

The objectives, dimensions, indicators, and examples help teachers understand child development so that their practices can be more age appropriate, individually appropriate, and culturally and linguistically appropriate. The

widely held expectations denoted by the colored bands help teachers and families know what is appropriate for most children in particular age-groups or in particular classes/grades. The progressions enable teachers to see each child's levels—at a particular point in time and over time—along the entire path of development and learning from birth through kindergarten. They are particularly valuable for observing children with special needs and children who have advanced knowledge and skills. Furthermore, the objectives and supporting text are culturally and linguistically

a. Manages feelings

Not Yet	1	2	3	4	5	6	7	8	9
		Uses adult support to calm self - Calms self when touched gently, patted, massaged, rocked, or hears a soothing voice - Turns away from source of overstimulation and cries, but is soothed by being picked up		Comforts self by seeking out special object or person - Gets teddy bear from cubby when upset - Sits next to favorite adult when sad		Is able to look at a situation differently or delay gratification - When the block area is full, looks to see what other areas are available - Scowls, "I didn't get to paint this morning." Pauses and adds, "I have an idea. I can paint after snack."		Controls strong emotions in an appropriate manner most of the time - Asserts, "I'm mad. You're not sharing the blocks! I'm going to play with the ramps." - Says, "I'm so excited! We're going to the zoo today!" while jumping up and down	
	Red	Orange	Yellow						
			Green		Blue	Purple			

Figure 9–3 Progression of Development and Learning for Objective 1, Dimension a

Source: From *The Creative Curriculum for Preschool, Volume 5: Objectives for Development and Learning* (5th ed., p. 7), by [C. Heroman, D. C. Burts, K. Berke, and T. S. Bickart, 2010](#), Washington, DC: Teaching Strategies, LLC. Copyright 2010 by Teaching Strategies, LLC. Reprinted with permission.

respectful. Two objectives enable teachers to document children's progress in acquiring English as an additional language:

- Objective 37: Demonstrates progress in listening to and understanding English
- Objective 38: Demonstrates progress in speaking English

For each objective, *The Creative Curriculum* includes a thorough summary of the research literature. Teachers learn what development and learning looks like over time, why each objective is important, what to consider when observing children with special needs, and what to consider when observing children who are DL learners.

The Creative Curriculum For Preschool As A System

In 2010, Teaching Strategies published the fifth edition of the preschool curriculum, offering greatly expanded resources and professional development support for teachers. It has three distinguishing features: It is comprehensive; it focuses on studies as a way to make learning meaningful and engaging for children; and it is a fully bilingual system (English/Spanish) that includes strategies and materials for supporting children who are DL learners.

This system's approach grew out of our recognition that, while many programs are able to implement *The Creative Curriculum* for Preschool very successfully and achieve positive outcomes for children, administrators and teachers too often face multiple challenges in their efforts to implement any curriculum fully. These challenges include the following:

- High staff turnover that leaves many new teachers responsible for implementing the curriculum and assessment systems without adequate training and support
- Lack of time to reflect on what teachers are learning about individual children and to plan accordingly for each day
- Lack of support for meeting the strengths and needs of children in diverse classrooms, including children with a range of abilities
- Lack of support for meeting the strengths and needs of children who are DL learners
- The challenge of introducing meaningful content in coherent ways that help children build on their understandings and skills and thereby meet early learning standards
- Limited resources to provide the ongoing and individualized support that helps teachers understand and use the curriculum as it is intended

These real-world challenges work against teachers' efforts to implement *The Creative Curriculum* with fidelity and to achieve high-quality programs. If teachers are not supported adequately, programs fail too many children who desperately need and deserve a rich and engaging program that prepares them for success in school and life. *The Creative Curriculum* System for Preschool was designed to support administrators and teachers so they can overcome these challenges.

Knowledge-Building Resources

The Creative Curriculum for Preschool, Fifth Edition, is composed of five volumes that provide educators with a strong knowledge base and a fundamental understanding of best practices in the field.

Volume 1: The Foundation presents the research behind the curriculum and all of the information teachers need to set up their programs. It covers the five components of the framework outlined earlier in this chapter.

Volume 2: Interest Areas applies the five components of *The Creative Curriculum* framework to the 10 interest areas (Blocks, Dramatic Play, Toys and Games, Art, Library, Discovery, Sand and Water, Music and Movement, Cooking, Computers) and the outdoors.

In *Volume 3: Literacy*, teachers are shown how to organize the environment and integrate literacy experiences throughout the day and throughout the classroom. Six basic teaching strategies for supporting literacy learning are described in detail: talking, singing, and playing with language; reading aloud; storytelling; story retelling; writing; and meaningful play.

Volume 4: Mathematics helps teachers understand how to create a mathematics-rich environment and offer small- and large-group experiences that enable children to explore number and operations, patterns, geometry, measurement, and data analysis. The teachers find out how children learn mathematics through the use of process skills.

Volume 5: Objectives for Development & Learning, Birth Through Kindergarten was described earlier.

Daily Practice Resources

This set of resources includes a year's worth of support for implementing an effective and content-rich program.

Teaching Guides

Guidance for the year is organized by *Teaching Guides*. Detailed daily plans show teachers how to introduce content in a cohesive, sequential manner. The first *Teaching Guide*, *Beginning the Year*, addresses the first 6 weeks of school, which are devoted to building a strong classroom community, developing meaningful relationships with children and their families, helping children learn how to contribute as a member of a group, and introducing children to the skills for conducting investigations.

The other *Teaching Guides* feature studies that are in-depth investigations conducted over time. These studies are designed to engage children in interesting topics that are relevant to their daily lives. Each study has a series of questions for investigation, such as these from the *Teaching Guide Featuring the Buildings Study*: “What do the buildings in our neighborhood and other places look like? Who builds buildings? What tools do they use? What are buildings made of? What makes them strong? What is special about our building? What happens inside buildings?”

Studies are an effective way to make learning meaningful for children as they

- Actively explore to find answers to questions about the topic
- Investigate topics firsthand and manipulate real, study-related materials
- Have opportunities to develop skills and approaches to learning, including those involving curiosity, motivation, problem solving, attention, representation, engagement, persistence, flexible and inventive thinking, and communication
- Apply skills in literacy, mathematics, the arts, and technology as they explore concepts in science and social studies

Each *Teaching Guide* study is divided into three main parts: beginning the study, investigating the topic, and celebrating learning. These are similar to the stages of the “Project Approach” ([Helm & Katz, 2001, 2011](#); see also [Chapter 13](#)). “Beginning the Study” takes teachers through the process of introducing the study topic and giving children time to explore. Children are not ready formally to investigate the topic until they have become familiar with materials related to the study. As children explore, teachers ask questions and draw children’s attention to the characteristics of the objects or materials children are handling. During this exploratory time, children talk about what they already know about the topic and generate questions to investigate. Teachers record children’s ideas, as shown in [Figure 9–4](#).

“Investigating the Topic” presents the questions for exploration that teachers will pursue with children during the study. Each investigation is devoted to finding the answer to a question or two closely related questions.

Shoe Size and Clothing Fasteners; They Create Charts and Graphs to Represent Their Findings

Although a study is a large part of what happens in *The Creative Curriculum* classroom, many other high-quality learning experiences also take place. *Teaching Guides* provide teachers with detailed plans for what else to do during each time of day as well as specific strategies for involving families in the program in meaningful ways.

Intentional Teaching Cards™

Intentional Teaching Cards are referenced throughout the *Teaching Guides*. The cards explain playful, engaging activities that can be offered throughout the day, typically during small-group time but also as large-group, outdoor, and one-with-one experiences. To support language, literacy, mathematics, physical, and social-emotional development, each card shows the steps of guiding an activity, the objectives addressed by the activity, a list of materials, strategies for including all children in the experience, and questions to guide teachers' observations.

The most important feature of the *Intentional Teaching Cards* is the color-coded teaching sequence that gives teachers an easy system for individualizing instruction. As shown in the [Figure 9–6](#), a teacher would start the activity at the level of most of the children in the group and then make the activity more or less challenging for individual children.

Resources for Effective Read-Alouds

Reading aloud to children is one of the most powerful ways a teacher can support children's overall literacy development. During interactive read-alouds, or shared readings, teachers engage children in discussions about books and provide definitions of unfamiliar words. Children gain understandings about story structure, build receptive and expressive vocabularies, build their knowledge of syntax, and develop other print-related skills ([McGee & Schickedanz, 2007](#)). *Book Discussion Cards*™ support this interactive approach to repeated read-alouds, enabling teachers to scaffold children's understanding of the book being read. Teachers encourage children's critical thinking by involving children in asking and answering questions, making predictions, engaging in analytic talk, and learning and using new vocabulary ([McGee & Schickedanz, 2007](#)). *Book Discussion Cards* are based on selected books in the *Teaching Strategies Children's Book Collection*.

Resources for Making Every Minute Count

In an 11-state study of practices in prekindergarten programs, researchers found that children were not involved in meaningful, engaged learning 42% of the time ([Early et al., 2005](#)). *Mighty Minutes* is a resource for addressing this problem. It is a set of 100 small cards that offer songs, chants, rhymes, games, and other short activities to help teachers use classroom time effectively. *Mighty Minutes* can be used intentionally to teach language, literacy, math, science, social studies, and physical skills during “in-between” times of day, such as waiting for lunch to arrive, getting ready to go outside, or gathering for a group meeting. Like all of the other *The Creative Curriculum System for Preschool* materials, *Mighty Minutes*™ is rooted in the curricular objectives. Even the shortest activities support children's learning and development in important areas.

How the System Connects to Families

The Creative Curriculum for Preschool System helps teachers build essential bridges between school and home.

Through letters to families, opportunities for family participation, and a lending library of eBooks (in English and Spanish), teachers are enabled to forge authentic partnerships with families to promote children’s learning. Teachers also share *The Creative Curriculum LearningGames* with families for easy-to-use, engaging activities that foster children’s development and connect classroom learning to home.

Figure 9–6 Teaching Sequence From The Creative Curriculum for Preschool Intentional Teaching Cards™, LL01, “Shared Writing”

Teaching Sequence

- As you write, repeat the words back to the child. Point out the letters in the child’s name
- YELLOW as you write it. “Marcus asked an interesting question. Let’s add that to our list. I’m writing your name, Marcus. *M . . . a . . . r . . . c . . . u . . . s*.”
- GREEN Invite the child to notice his name on the chart next to the child’s answer. “James said he liked the octopus best at the aquarium. James, can you find your name on the chart?”
- GREEN When reviewing the chart, talk about individual words and letters. Ask the child where to begin reading.
- BLUE “I see we used the question words why and what on our chart. Why and what both start with the letter W.” “We just wrote about our trip to the zoo. Let’s read it together. Where should I start reading?”
- BLUE Point out and discuss the spaces between words on the chart.
- PURPLE “Look at the question. ‘What do you notice about the weather today?’ Notice the space between what and do. That tells us where one word stops and another starts. Can you show me another space between two words on the chart?”
- PURPLE Ask the child to review the chart with you slowly, matching each spoken word to the written word as you say them together. Have the child point to each word as it is spoken. “Let’s read the chart together. Can you follow along with your finger? Show me where we should start.”

Questions to Guide Your Observations

- Did the child engage in the group discussion by offering questions and answers?
- Did the child relate her own experience and share them when appropriate?
- Was the child able to identify information, any letters and/or their corresponding sounds? If so, which ones?
- How long was the child able to attend to the activity?

Related LearningGames®

- “My Family”

Source: From *The Creative Curriculum for Preschool Intentional Teaching Cards*, LL01, “Shared Writing,” by Teaching Strategies, LLC, 2010, Washington, DC: Teaching Strategies, LLC. Copyright 2010 by Teaching Strategies, LLC. Reprinted with permission.

Authentic, Ongoing Assessment In The Creative Curriculum

In *The Creative Curriculum*, assessment is the process of gathering information about children in order to make decisions. It serves four purposes ([Bowman, Donovan, & Burns, 2001](#)):

- To support learning
- To identify special needs
- To evaluate programs and monitor trends
- To respond to program and school accountability requirements

The Creative Curriculum is linked integrally to an authentic, observation-based assessment system, *Teaching Strategies GOLD* ([Heroman, Burts, Berke, & Bickart, 2010c](#)), to document and support children's learning. It is a research-based, valid, and reliable assessment system for children from birth through kindergarten that can be used with any developmentally appropriate curriculum. Teaching Strategies GOLD® is based on the 38 objectives for development and learning described earlier. Teachers observe and document children's behaviors in everyday classroom situations. Then they analyze the collected information to see how it relates to the objectives and what it tells them about how to scaffold children's learning. Three or four times a year, teachers evaluate each child's progress and compare it to widely held expectations for most children of similar ages or classes/grades. Finally, teachers summarize the assessment information and create reports to inform instructional practices, guide learning, and share information with families and administrators.

How Teachers Use The Assessment Cycle

Here is a summary of the assessment process for teachers who are implementing *The Creative Curriculum*:

Observe and Collect Facts

- Observe children in the context of everyday classroom activities.
- Document learning by taking observation notes, photos, and video or audio clips and by collecting samples of children's writing, drawing, and other work.
- Use teacher-made checklists to quickly and efficiently capture skills and behaviors. *Teaching Strategies GOLD* includes an On-the-Spot Observation Recording Tool that is a checklist linked to the progressions for physical development, literacy, and mathematics.
- Plan experiences with objectives in mind. Some important objectives—particularly in literacy and numeracy—are difficult to capture even with ongoing, observational assessment. For example, separating words into smaller units of sound is an important predictor for reading, but that skill is hard to observe as children engage in everyday experiences. To overcome this difficulty, *Assessment Opportunity Card™* experiences enable teachers to focus their observations on children's knowledge, skills, and behaviors related to literacy and numeracy.
- Use *Teaching Strategies GOLD* online to enter observation notes, photos, video clips, audio clips, and scanned images of children's writing or artwork to create digital portfolios.

Analyze and Respond

- Reflect on each piece of documentation and consider how it relates to the 38 objectives.
- Make preliminary ratings based on the observations.
- Consider the development and learning progressions and how to scaffold children's learning, gently nudging them along each pathway.
- Adjust the environment by offering more challenging, yet not frustrating, materials for individual children.
- Use your observations to individualize instruction for children and to record strategies on the "Weekly Planning Form."

Evaluate

- Three times a year (or four times in a full-year program), pause and take stock of a child's progress. How is this child progressing? How does this child's progress compare to most children of the same age or class/grade?
- Use the progressions of development and learning and rating scales to evaluate each child's accomplishments. In making these determinations, refer to the collected documentation and evidence.

Summarize, Plan, and Communicate

- Summarize the information. Share the summary with families, emphasizing the

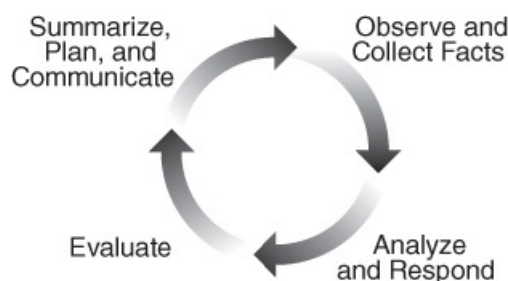


Figure 9–7 Steps of the Assessment Cycle

child's strengths. Together, plan the next steps for learning at school and at home.

- Create reports that summarize the information and inform planning for individuals and for groups of children.
- Analyze assessment data and look for trends so that adjustments can be made to learning experiences, interactions, and the classroom environment.

[Figure 9–7](#) illustrates this ongoing assessment cycle.

The Creative Curriculum Includes All Children

Early childhood teachers increasingly have in their classrooms children who are acquiring English as a second language, have identified disabilities, or have advanced knowledge and skills. *The Creative Curriculum* helps teachers to include all children as fully as possible in program experiences by providing information about ways to support these children. Discussions can help dispel myths about second-language acquisition, explain the benefits of including children with disabilities, and share very specific teaching strategies. Furthermore, the curriculum is closely linked to an assessment system that enables teachers to identify and track each child's abilities, yielding information that is critical to supporting his or her development and learning.

English and DL Learners

DL learners face the challenge of acquiring English at school while simultaneously developing skills in their home languages. Extensive research indicates that supporting children's continued home-language development is very important ([August & Shanahan, 2006](#); [Tabors, 2008](#)). Both teachers and families should appreciate the following findings:

- Children who develop a sound foundation in their first language can more easily learn a second language.
- The concepts and skills children acquire in their first language are transferred to the second language.

In addition to these benefits, a child's ability to retain his or her home language is critical to retaining a sense of cultural identity and enabling the child to remain attached to family traditions, customs, and elders ([Espinosa, 2009](#)). Both the *Teaching Strategies GOLD* assessment system and *The Creative Curriculum* include the same English language acquisition objectives (see [Figure 9–2](#)). *The Creative Curriculum* explains the developmental sequence of second-language acquisition, so teachers know what to look for at each stage. Detailed strategies for promoting children's skills in English are offered, including cultural supports (e.g., integrating children's home cultures and family practices into everyday routines and experiences); social-emotional supports (e.g., establishing and following regular routines and developing positive and warm relationships with children and families); environmental supports (e.g., labeling materials and charts in English and the child's language, and including literacy materials relevant to the child's cultural and linguistic background); language supports (e.g., combining nonverbal communication with speech, learning a few words in the child's home language[s], and reading books with simple illustrations that provide visual clues about content; [Heroman & Jones, 2010](#)).

Families too often abandon speaking and otherwise promoting their primary languages at home, either because they are eager for their children to learn English or because they think that learning two languages is confusing. A resource for families, *Helping Your Child Learn Two Languages*, is filled with information on the benefits of retaining home languages and practical advice on how families can support their children's acquisition of two languages ([Tabors & Terrill, 2011](#)).

Children With Disabilities

Including children with disabilities in the classroom with their typically developing peers is good practice and accords with the Individuals with Disabilities Education Improvement Act of 2004. Teachers cannot be expected to know about every type of disability or what kinds of support an individual child needs to participate as fully as possible in the program. The child's family and a team of specialists (e.g., occupational therapists, physical therapists, and speech-language pathologists) are valuable resources and should be able to provide insights and guidance to classroom teachers.

The Creative Curriculum gives teachers some background information about children with disabilities, offers strategies, and suggests practical adaptations that can be made in the classroom. The curriculum's focus on a well-organized and clutter-free environment is especially important for children who need structure and predictability. Specific strategies to help children with disabilities benefit fully from participation in daily routines and activities include providing visual and tactile cues, using picture sequences to illustrate the events and routines of the day,

preparing children for transitions, using peer buddies, helping children communicate with gestures and pictures, selecting toys that are easy to use and have a range of sensory features, and simplifying activities ([Dodge et al., 2010](#)).

Children With Advanced Knowledge and Skills

Children who are advanced in one developmental domain or more need to be challenged so they are truly engaged and can continue to develop their skills and knowledge. The young children who get the most attention for their abilities are often those whose intellectual skills are impressive. Such children are often very articulate, are able to read and write at an early age, and have extensive vocabularies. Teachers need to be aware that other children may have advanced skills in other domains. For example, a child may be unusually well-coordinated and athletic, have advanced musical abilities, have well-developed social skills, or be able to create detailed drawings.

The Teaching Strategies curriculum and assessment systems enable teachers to identify all children's strengths and to adapt activities and experiences for children with different abilities and interests. The curriculum's emphasis on responsive relationships and its focus on in-depth studies that engage children in firsthand investigations are keys to including all children in the program.

The Creative Curriculum And Professional Development

At all points in their careers, teachers can benefit from ongoing support to deepen their knowledge about children and better implement a curriculum and assessment system as intended. Ongoing support should be respectful and practical and offer a variety of ways for teachers to learn and enhance skills.

Embedded Professional Development Support

Comprehensive and appropriate curriculum and assessment systems offer essential resources for professional development, providing the content and practical tools and strategies for teaching young children. *The Creative Curriculum* and the *Teaching Strategies GOLD* assessment system include detailed resources that promote teachers' understanding of how children develop and learn and how to provide high-quality early childhood programs. As teachers use the curriculum and assessment materials, they enhance their skills in building relationships, observing and reflecting on children's development and learning, using information from ongoing assessment to plan instruction, and offering rich and engaging learning experiences.

Professional development support is embedded throughout *The Creative Curriculum* system. The knowledge-building volumes are designed for teachers at all levels of professional experience to use as a reference for understanding how to apply the latest theory and research in program settings. The *Teaching Guides* provide detailed guidance about what to do and why. For example, an explanation of how to lead a small-group experience with alphabet books includes a call-out that defines the alphabetic principle for the teacher and explains that children's grasping the principle is critical to future reading success. The *Teaching Guides* also highlight strategies for supporting DL learners. For instance, on a page with guidance for facilitating a large-group discussion with children, a call-out explains the importance of using nonverbal communication strategies, such as pointing to pictures, to support children's understanding of the discussion. Another call-out related to a small-group activity suggests pairing each DL learner with an English-speaking child for the activity.

Furthermore, each *Intentional Teaching Card*[™] suggests ideas for including all children in the experience described on the card. Some of the strategies are particularly supportive of DL learners, such as asking questions that can be answered with a gesture or just a few words modeled in the question itself. Other strategies support children with disabilities so that they can participate as fully as possible in the experience. For instance, teachers can offer large

textured letters for children to feel and place on high-contrast paper.

The professional development support embedded in the *Teaching Strategies GOLD* assessment system promotes teachers' knowledge of how children develop and learn from birth through kindergarten. The research behind each objective is explained in detail, so teachers understand why each objective is critical. Strategies for supporting children's development and learning in relation to each objective are also provided so teachers grasp the critical link between curriculum and assessment. Teachers who use *Teaching Strategies GOLD* online can watch short video clips that show examples of what a child might do to demonstrate knowledge and skills related to particular objectives and dimensions. Audio clips by the authors explain each objective and provide assessment tips.

Building Capacity

Research confirms that, in order for best practices learned in a training session to be transferred to the school, follow-up at the classroom level is critical ([Joyce & Showers, 1995](#)). For teachers to make meaningful and lasting changes in their content knowledge and instructional strategies, they need continuous learning opportunities that are specifically related to their day-to-day classroom experiences. They benefit from opportunities to discuss and learn from their colleagues as well as from regular feedback about their practices.

Support for Coaches

Many early childhood programs employ a coaching model in which knowledgeable, experienced staff members work closely with teachers to guide them toward using high-quality practices. *The Coach's Guide to The Creative Curriculum*® for Preschool: A Step-by-Step Resource for Individualizing Professional Development ([Heroman, Jablon, Stetson, & Aghayan, 2009](#)) is a comprehensive resource for anyone who coaches teachers on implementing our systems. It offers specific guidance for determining a teacher's level of implementation: beginning, progressing, or refining (Glickman, Gordon, & Ross-Gordon, 2007; [Tanner & Tanner, 1980](#)). It also explains what specific support to provide for teachers at each of these levels. *The Coach's Guide* examines *The Creative Curriculum* in sections and directs coaches to the information they need to extend the teacher's understanding of each topic. The guide also provides suggestions for a range of ways for coaches to respond to teachers at varying levels of implementation. To enable teachers and administrators to identify which aspects of *The Creative Curriculum* are being implemented well and where a teacher needs additional support, we have developed fidelity tools. Information collected with these tools is often used in conjunction with information gathered from *A Coach's Guide* to create professional development plans for teachers and programs.

Learning Teams

Along with providing individualized support for teachers, Teaching Strategies professional development resources support collegial learning—professional development that occurs through collaborative teamwork when teachers meet together over a period of time to learn about a topic in a focused way. In our training for program administrators, we explain how to use the information gathered through coaching or an implementation checklist to create learning teams or study groups that support their teachers' implementation of the curriculum and assessment systems. Learning teams are a support system as teachers implement new ideas and strategies. Team members may all be at the same level of curriculum implementation, or the group may be mixed. Teams meet during the school day for short periods, such as during children's nap time or a planning period. The group sets common goals for their professional development and learning and works cooperatively to achieve them. Individual teams might review sections from the curriculum and discuss them, view video clips of classrooms in action, visit each other's classrooms, or read and analyze observation notes about children.

Research On And Use Of The Creative Curriculum

And Teaching Strategies Gold

As noted earlier in this chapter, *The Creative Curriculum* has a strong research foundation. The curriculum equips teachers to make choices and informed decisions in order to shape their programs to meet the strengths, needs, and interests of individual children, and they do so with the assurance that implementing the curriculum as it is intended will enable children to meet program and state standards.

Research grounds and confirms the effectiveness of *The Creative Curriculum* in the following ways:

- All of the objectives for development and learning and all of the instructional strategies are evidence based.
- An independent evaluation of all curriculum resources provides evidence of their effectiveness.
- All content is reviewed by experts in the field.

Research on the Curriculum

Until 2010, research on *The Creative Curriculum for Preschool* focused on the fourth edition. A study conducted for the Hartford Foundation for Public Giving ([Philliber Research Associates, 2004](#)) evaluated the impact of *The Creative Curriculum* and training on the quality of child care programs. Researchers found that increased training for teachers, in combination with *The Creative Curriculum*, can improve the school readiness of low-income children. Children made statistically significant gains in the cognitive/language profile and the self-help profile over what children of the same age could be expected to achieve during the same amount of time.

Teaching Strategies is committed to continued research and is conducting several studies on *The Creative Curriculum System for Preschool*. The studies are examining fidelity of use, impact of the classroom environment, and school readiness. The fifth edition of the preschool curriculum is currently being piloted in a variety of programs across the United States and internationally. In addition, Teaching Strategies assessment and curriculum systems are being studied at several universities across the United States, including the University of Tennessee and the Frank Porter Graham Child Development Institute at The University of North Carolina. The collaboration of researchers, developers, and content experts infuse the curriculum with the content necessary to meeting the rising expectations of the early childhood field.

Research on the Assessment System

An essential component of high-quality early education is accurately assessing child development and learning to follow progress, plan learning experiences, and communicate and collaborate with families. As described earlier, assessment is the process of gathering information to make decisions. When decisions about children, teachers, and programs are based on child assessment data, the assessment instruments must be both reliable and valid. Developing accurate and precise assessment tools requires experimental design and testing. The field of early childhood education is advanced by rigorous research on the validity and reliability of instruments for assessing child outcomes.

Field testing of *Teaching Strategies GOLD* began during the summer of 2009. It was conducted by independent researchers Richard G. Lambert and Do-Hong Kim of the Center for Educational Measurement and Evaluation, The University of North Carolina at Charlotte ([Lambert, Kim, Taylor, & McGee, 2010](#)). The field test measured the reliability and validity of *Teaching Strategies GOLD* and examined its usability in classroom settings. Participating sites were carefully selected on the basis of demographics and geographical location. The study sample was selected to be representative of the national population, but intentionally oversampled English-language learners. As part of the validity evaluation, the researchers also examined the skills of infants, toddlers, and 2-year-olds. Children in the sample ranged in age from 2 to 72 months.

The researchers took a three-part approach to their evaluation of *Teaching Strategies GOLD*: psychometric analysis of the data, focus groups with field test participants, and revision of the tool by the developers (based on data analysis and the findings about focus groups' experience with the tool). The designations of widely held expectations and the indicators that are essential parts of the *Teaching Strategies GOLD* assessment tool are criterion referenced and incorporate the latest research in the field of early childhood education.

Norm-referenced data are important because they provide valuable information about a child's performance in comparison to a norm, or average performance by similar children. The norm sample for this study, closely representative of the 2009 U.S. Census Bureau estimates of race and ethnicity, was composed of 10,963 children. These children received services in 618 different programs at 2,525 different centers and schools located across 48 states and the District of Columbia. Some of the findings from the study follow:

- The assessment instrument items clearly explain the different domains of development.
- Teachers are able to rate children's skills regardless of children's special needs status, showing a lack of item bias.
- The reliability statistics are good, which indicates that the ratings can be considered consistent and stable.
- Teachers can use the tool accurately to assess children's skills from birth through kindergarten.
- The assessment tool items measure what they are meant to measure.

Research for *Teaching Strategies GOLD* is ongoing.

Scope of Use

The Creative Curriculum is used extensively in a wide range of programs throughout the United States and increasingly abroad. According to data collected by the Office of Head Start ([Husley, Aikens, Xue, Tarullo, & West, 2010](#)), 63.92% of teachers surveyed reported that *The Creative Curriculum* was their primary curriculum. All military child development programs and the Department of Defense Dependents Schools (DoDDS) are using *The Creative Curriculum*. As of April 2011, 19 states have a list of curricula approved for use in their child care and prekindergarten programs; all of them have determined that *The Creative Curriculum* meets their criteria. *The Creative Curriculum* is also studied in many college and university undergraduate and graduate courses.

The *Teaching Strategies GOLD* assessment system, which became available in the summer of 2010, has also been adopted by the same types of programs for ongoing assessment and to meet reporting requirements. In addition to its adoption by all branches of the military and DoDDS programs, an increasing number of states have adopted the assessment system statewide.

The Creative Curriculum System for Preschool and *Teaching Strategies GOLD* are being translated into Arabic for dissemination in Arabic-speaking countries. During the 2010–2011 school year, the assessment system was piloted with programs in Bahrain, Jordan, and Saudi Arabia. Future pilots are planned for the curriculum.

Conclusion

The Creative Curriculum is a comprehensive, fully integrated system with strong roots in the early childhood field. It has evolved over four decades in response to new research, increasing expectations for teachers to be accountable for achieving positive outcomes, and what teachers have taught us about how best to support their work. The three versions of *The Creative Curriculum*—for children birth to age 3, preschool children, and children in family child care—are organized by a consistent framework. All focus on 38 objectives for development and learning, birth through kindergarten, that include predictors of school success and align closely with state early learning standards. The *Teaching Strategies GOLD* assessment system is based on the same 38 objectives, including two for

English language acquisition.

Recognizing the real-world challenges of teachers today, the fifth edition of the preschool curriculum is a complete system that supports teachers at all levels of experience, offering specific, step-by-step support for those who want it as well as opportunities to innovate. The system includes books that help teachers build essential knowledge and skills for establishing developmentally appropriate programs and a set of daily practice resources that help teachers plan project-based investigations. These resources explain how to teach intentionally and responsively throughout every day.

Reflect On

1. Where in this model curriculum are there opportunities for teachers to build positive relationships with children? Why is this important?
2. What are three major avenues for teachers to help children learn concepts and skills in *The Creative Curriculum*?
3. Does this curriculum do a better job than most early childhood education curricula in connecting activity goals to content and early learning standards? How?
4. How does this curriculum show a balanced appreciation for all aspects of child development?
5. What is the aim and methods of assessment in this model and how does it compare to developmentally appropriate practice guidelines?

Selected Resources

Teaching Strategies, LLC
www.TeachingStrategies.com

The Creative Curriculum® System for Preschool
www.TeachingStrategies.com/system

The Creative Curriculum® for Infants, Toddlers & Twos (2nd ed., rev.), by [D. T. Dodge, S. Rudick, K. Berke, C. Heroman, D. C. Burts, and T. S. Bickart, 2011](#), Washington, DC: Teaching Strategies, LLC.

The Creative Curriculum® for Family Child Care (2nd ed.), [D. T. Dodge, S. Rudick, and L. Colker, 2009](#), Washington, DC: Teaching Strategies, LLC.

Teaching Strategies GOLD® Assessment Toolkit and Online System, by [C. Heroman, D. C. Burts, K. Berke, and T. S. Bickart, 2010](#), Washington, DC: Teaching Strategies, LLC.

The Coach's Guide to The Creative Curriculum® for Preschool, by [C. Heroman, J. Jablon, C. Stetson, and C. Aghayan, 2009](#), Washington, DC: Teaching Strategies, LLC.

The Creative Curriculum® LearningGames®, by J. Sparling, and I. Lewis, 2008, Washington, DC: Teaching Strategies, LLC.

The Creative Curriculum® System for Preschool, by Teaching Strategies, LLC, 2010, Washington, DC: Author.
The system includes these resources:

The Creative Curriculum® for Preschool (5th ed.)

The Creative Curriculum® for Preschool Book Discussion Cards™

The Creative Curriculum® for Preschool Intentional Teaching Cards™

The Creative Curriculum® for Preschool Teaching Guides

Teaching Strategies® Children's Book Collection

Teaching Strategies® Children's eBook Collection

Teaching Strategies Mighty Minutes™ for Preschool

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Chapter 10 The HighScope Model of Early Childhood Education

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and

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After reading this chapter, you should be able to:

- Outline the history of the HighScope model
- Describe active learning by the child
- Characterize the role of the teacher in creating active learning
- Summarize the daily routine that supports active learning
- Detail the key developmental indicators
- Discuss the Preschool Child Observation Record
- Elucidate the role of parents and community
- Illustrate training in the HighScope model
- Delineate research support for the HighScope model
- Explain the relationship of research to the HighScope model

The HighScope model of early childhood education provides teachers with a framework of educational ideas and practices based on the development of young children. David P. Weikart and his colleagues developed the model in the 1960s for use in the HighScope Perry Preschool program ([Weikart, Rogers, Adcock, & McClelland, 1971](#)). The HighScope Educational Research Foundation continues to develop and apply the model today, incorporating new research findings regarding literacy, mathematics, science, social development, health and physical development, the arts and computer use and helping people apply the model to new circumstances and new populations of children around the world ([Epstein, 2007](#); [Hohmann, 2002](#); [Hohmann, Weikart, & Epstein, 2008](#)). Thousands of early childhood programs throughout the United States and in other countries now use the HighScope model ([Epstein, 1993](#)).

Based on the child development theories of Jean Piaget ([Piaget & Inhelder, 1969](#)) and Lev Vygotsky (1934/1962), the progressive educational philosophy of John Dewey (1938/1973), and the more recent work of cognitive-developmental psychology (e.g., [Clements, 2004](#); [Gelman & Brenneman, 2004](#); National Research [Council, 2005](#)) and brain research ([Bruer, 2004](#); [Shore, 1997](#); [Thompson & Nelson, 2001](#)), the HighScope model recognizes children as active learners, who learn best from activities that they themselves plan, carry out, and reflect on. Adults use complex language as they observe, support, and extend the work of the child as appropriate. Adults arrange interest areas in the learning environment; maintain a daily routine that permits children to plan, carry out, and reflect on their own activities; and join in children's activities, engaging in conversations that scaffold and extend children's plans and help them think things through. The adults encourage children to make choices, solve problems, and otherwise engage in curriculum activities that contribute to their learning on key

developmental indicators that encompass all areas of intellectual, social, and physical development.

The HighScope model does not require the purchase and use of special materials, such as the materials required for a Montessori classroom or the teacher and student workbooks required for an academic instructional classroom; the only cost involved is that of equipping the learning environment as would be typical of any good nursery school program. In less developed countries or other settings with limited resources, material from nature, household discards, and other found materials are employed. Although often challenging for adults to learn initially, the methods implementing the model, once mastered, free staff for comfortable work with children, other classroom adults, parents, and supervisors. Rooted firmly in developmental theory and historical early childhood practice, the HighScope model is an organized and transferable expression of what has worked well with children in many programs over the years. The model is an example of culturally and developmentally appropriate practice as commonly defined today by the early childhood field (e.g., [Copple & Bredekamp, 2009](#)); it has been validated by longitudinal studies over 40 years ([Oden, Schweinhart, & Weikart, 2000](#); [Schweinhart, Montie, Xiang, Barnett, Belfield, & Nores, 2005](#); [Schweinhart & Weikart, 1997](#)). In addition, it lends itself to training, supervision, implementation, and assessment so that parents and administrators can rest assured that their children are receiving a high-quality, validated program. Delivery of high-quality programs is the most important task the early childhood field faces, as program ideas move into large-scale service to children, their families, and society at large.

The History Of The Highscope Model

The HighScope model's development began in 1962 with the HighScope Perry Preschool program, a program for 3- and 4-year-olds operated at the Perry Elementary School in Ypsilanti, Michigan. The principal, Eugene Beatty, had established a strong tradition of community engagement at this school and was active in recruiting study participants and their families into the study. This program was one of the first in the 1960s designed to help children overcome the negative effects of poverty on schooling, an idea later embodied in Head Start programs. It was one of the first to achieve an exacting experimental design—children were nearly randomly assigned to attend or not—permitting researchers to trace the program's effects throughout the subsequent lives of participants. This study showed that the preschool program provided participants with a striking variety of short- and long-term benefits: better preparation for school, greater success throughout schooling and in adulthood, a lower arrest rate, higher employment rate, and lower welfare rate. The program was found to pay for itself many times over in economic returns to taxpayers and program participants—\$16.14 returned for every dollar spent ([Schweinhart et al., 2005](#)).

In the late 1950s, Ypsilanti Public Schools Special Education Director David Weikart was concerned that easily identifiable children were failing in school—repeating grade levels, being placed in special education, and dropping out of school. Seeking changes in the schools to address these problems, he was frustrated that school administrators had few realistic alternatives. He turned to the preschool years as a way of reaching children before they fell into the traditional school patterns that spawned their failure.

Staffed by research psychologists and teachers, the preschool program established a creative tension between the psychologist's demand for explicit rationale and the trained preschool teacher's intuitive approach to working with children. The HighScope model evolved from give-and-take among a team of people who had definite ideas about how to do things, but were open to new ideas and could integrate them into their thinking and practice.

As the HighScope Perry Preschool program entered its second year, the staff encountered and embraced the child development ideas of Jean Piaget (summarized by [Piaget & Inhelder, 1969](#)). Piaget offered a conceptual structure around which an early childhood education model could be built, an explicit rationale for the preschool activities. Piaget offered the idea of the child as an active learner, an idea not only with intuitive appeal but also with strong roots in early childhood tradition dating back at least to [Friedrich Froebel \(1887\)](#) in the 19th century. Later, the work of psychologist and educator Lev Vygotsky (1934/1962) became the foundation for the HighScope teaching model, particularly the notion that development occurs within sociocultural settings in which adults scaffold

children's learning.

As the HighScope model developed, the national enthusiasm for early childhood education models also emerged. The federal government nurtured this enthusiasm by taking an active interest in early childhood education as a means of helping poor children avoid school failure and its tragic consequences. President Lyndon Johnson's War on Poverty and the Economic Opportunity Act of 1964 initiated the federal role in early childhood education through the national Head Start project, which has grown steadily over the 45 years since then.

Several projects permitted the HighScope Foundation to develop the HighScope model further and to extend it into the elementary school years. In 1968, the federal government initiated the Follow Through project to provide enrichment to children in the primary grades who had attended Head Start ([Weikart, Hohmann, & Rhine, 1981](#)). The Follow Through project was perhaps the largest funded effort ever offered for the development of early childhood educational models.

In the late 1970s, federal assistance permitted the HighScope Foundation to develop and adapt its educational model to children with special needs and children in Spanish-speaking families ([Hanes, Flores, Rosario, Weikart, & Sanchez, 1979](#)). HighScope actively applies its model in other countries throughout the world. As of 2012, licensed national HighScope training centers and institutes have been in operation in Canada, Chile, Great Britain, Indonesia, Ireland, Korea, Mexico, The Netherlands, Portugal, and South Africa. The basic textbooks and assessment instruments have been translated into Arabic, Chinese, Dutch, Finnish, French, Korean, Norwegian, Portuguese, Spanish, and Turkish. This work helps spread an educational model that is essentially democratic in operation, adaptable to local culture and language, and open to use by thoughtful adults everywhere.

Active Learning By The Child

Adults who use the HighScope model must be fully committed to providing settings in which children learn actively and construct their own knowledge. Much of the child's knowledge comes from personal interaction with ideas, direct experience with physical objects and events, and application of logical thinking to



Planned activities foster learning with peers.

these experiences. The adult's role is largely to supply the context for these experiences, to help the child think about them logically, and through observation, to understand the progress the child is making and to scaffold further learning based on the child's developmental level and interests. From an adult view, children are expected to learn basic tools of language and mathematics; apply the scientific method of hypothesis generation, experimentation, and inference; and demonstrate initiative and problem-solving skills in engaging with the world.

The Role Of The Teacher In Creating Active Learning

Even as children are active learners in the High-Scope model, so, too, are the teachers. By daily evaluation and planning using the HighScope key developmental indicators as a framework, teachers assess children's experience and classroom activities and strive to achieve new insights into each child's unique tapestry of skills and interests. Teaching teams challenge themselves by observing one another's performance and interacting with one another in mutually supportive ways.

An important aspect of the HighScope model is the role of the teacher in interacting with the child. Although broad developmental milestones are employed to monitor the youngster's progress, teachers do not have a precise script for teaching children. Instead, they listen closely to what children plan and actively work with them to extend their activities to more challenging levels as appropriate. Adult questioning style is important. The adult emphasizes questions that seek information from the youngster that will help the adult participate. Testing questions such as those about color, number, or size are rarely used. Instead, the adult asks, "What happened?" "How did you make that?" "Can you show me?" "Can you help Talia?" and so on. Conversation is essential. The teacher is a participant rather than an imparter of knowledge. "Did you see that butterfly?" "May I touch the pizza, or is it too hot?" This questioning and conversation style permits free interaction between adults and children and models language for child-to-child interaction. This approach permits the teachers and the children to interact as thinkers and doers rather than in the traditional school roles of active teacher and passive pupil. All are sharing and learning as they work.

The Daily Routine That Supports Active Learning

To create a setting in which children learn actively, a consistent daily classroom routine is maintained that varies only when children have fair warning that the classroom routine will be different the next day. Field trips are not surprises, and special visits or events are not introduced to the classroom on the spur of the moment. This adherence to routine gives children the security and control necessary to develop a sense of responsibility and to enjoy the opportunity to be independent.

The HighScope model's daily routine is made up of a plan-do-review sequence, group times, and several additional elements. The plan-do-review sequence is the central device in the model that permits children opportunities to express intentions about their activities while keeping the teacher intimately involved in the whole process. The following paragraphs describe the elements in the daily routine.

Planning Time: Stating an Intention

Children make choices and decisions all the time, but most programs seldom have them think about these decisions in a systematic way or help them realize the possibilities and consequences of their choices. Planning time gives children a consistent, predictable opportunity to express their ideas and intentions to adults and to see themselves as individuals who act on decisions. They experience the power of independence and the joy of working with an attentive adult as well as with peers. They can carry out their intentions.

The teacher talks over the plans with the children before they carry them out. This helps children form mental pictures of their ideas and get a notion of how to proceed. For adults, developing a plan with the children provides

an opportunity to encourage and respond to the children's ideas, to suggest practical ways to strengthen the plans so they will be successful, and to understand and gauge the children's levels of development and thinking styles. But the teacher accepts the plans and their limits as determined by the children. Both children and adults receive benefits: children feel reinforced and ready to start their plans, while adults have ideas about what to look for, what difficulties children might have, where help may be needed, and what levels of development children have achieved. In such a classroom, all are playing appropriate roles of equal importance. In this model, adult-child relationships involve shared control.

Work Time: Executing the Intention

The "do" part of the plan-do-review cycle is work time, the period after children have finished planning. The longest time period in the daily routine, it is an active period of work and play for both children and adults. Although adults do not lead work-time activities—children execute their own plans of work—neither do they just sit back and passively watch. The adult's role during work time is first to observe children to see how they gather information, interact with peers, and solve problems, and then to enter into the children's activities and scaffold learning by encouraging, extending, setting up problem-solving situations, and engaging in conversation. Because the layout of the learning environment permits adults to see all the learning areas in the classroom, they can monitor, circulate, and support individuals and groups of children in a variety of activities.

Cleanup Time

Cleanup time is integrated into the plan-do-review cycle work time. During this time, children return materials and equipment to their labeled places and store the incomplete projects, affixing a "work-in-progress" sign if they choose. This process restores order to the classroom and provides opportunities for the children to learn and use many basic cognitive skills such as classifying and ordering objects. Of special importance is how the learning environment is organized to facilitate children's use of materials. All materials in the classroom available for children's use are on open shelves within reach. Clear labeling is essential, with a representation of the learning areas and objects on the shelves (such as actual items, drawings, photographs) and a simple written word. With this organizational plan, children can realistically return all work materials to their appropriate places. It also gives them a sense of confidence in their initiative by knowing where everything they need is located. Further, seeing labels in print helps to promote early literacy development.

Recall Time: Reflecting on Accomplishments

Recall time is the final phase of the plan-do-review sequence. It is the time when the children reflect on what they have accomplished or experienced. The children represent their work-time experience in a variety of developmentally appropriate ways. They might recall the names of the children they involved in carrying out their plan, dictate to the teacher a story of their activity, or recount the problems they encountered. Other recall strategies include drawing pictures of what they did, making models, reviewing their plans, and verbally recalling the past events. Recall time brings closure to their planning and work-time activities; it provides them opportunities to express insights on what they have experienced and thought about; and it often leads to followup ideas and plans for the next day. It provides opportunities to use language and illustrations to inform others. The teacher supports the linkage of the actual work to the original plan, including changes the child made in the course of solving problems. The use of complex language to discuss, describe, and predict outcomes is essential to this support process by the teacher.

Small-Group Time

The formal setting of small-group time is familiar to all preschool teachers: The teacher creates an activity in

which children participate for a set period. These activities are drawn from the children's interests, their cultural backgrounds, field trips the group has taken, new materials available in the classroom, the seasons of the year, and age-appropriate group activities such as cooking and group art projects. Although teachers offer materials and structure for the activities, children are encouraged to contribute ideas and solve problems presented by the activities in their own ways. Activities have a beginning, middle, and end, but are flexible in responding to children's needs, abilities, interests, and cognitive levels. Once each child has had the opportunity for individual choice and problem solving, the teacher extends the child's ideas and actions by engaging in conversation, asking open-ended questions, and supporting additional problem-solving situations. In planning and implementing small-group time, active involvement by all children is important. Children move physically, use objects and materials, make choices, and solve problems. An active small-group time gives children the chance to explore materials and objects, use their bodies and their senses, and work with adults and other children.

Large-Group Time

At large-group time, the whole group meets together with the adults to play games, sing songs, do finger plays, perform basic movement activities, play musical instruments, act out a story they have read or imagined, or reenact a special event. This time provides an opportunity for each child to participate in a large group, share and demonstrate ideas, and imitate the ideas of others. Although the adult may initiate the activity, children provide some leadership and make as many individual choices as the activity allows. Large-group time is a good time for teachers to support the development of a steady beat through patting the floor or their bodies, marching, rocking, and moving to high-quality instrumental music ([Weikart, 2003](#)).

The Key Developmental Indicators

Child progress in the HighScope model is organized around a set of key developmental indicators developed from research findings and child development theory, and designed to align with national, state, and local standards for early learning. As the plan-do-review sequence conducted within a consistent daily routine is the hallmark of the HighScope model for the child, these key developmental indicators are the central feature for the teacher to implement the curriculum content. They are a way of helping the teacher understand, support, and extend the child's self-designed activity so that developmentally appropriate experiences and growth are constantly available to the child. These indicators guide the teacher in planning small- and large-group activities. They provide a way of thinking about curriculum that frees the teacher from total reliance on workbooks of activities and scope-and-sequence charts. They form the basis of the framework that an adult uses to plan for and observe each child.

The key developmental indicators are important to the growth of rational thought in children the world over, regardless of nation or culture. They are very simple and pragmatic. Preschool key developmental indicators have



During small-group activities, children explore materials and objects, make choices, and solve problems.

been identified in the following domains, which parallel the dimensions of school readiness identified by the National Education Goals Panel ([Kagan, Moore, & Bredekamp, 1995](#)):

- Approaches to learning
- Language, literacy, and communication
- Social and emotional development
- Physical development, health, and well-being
- Mathematics
- Science and technology
- Social studies
- The arts

Each of these categories is divided into specific types of experiences. For example, the key developmental indicators in language, literacy, and communication are as follows:

- Talk with others about personally meaningful experiences
- Describe objects, events, and relations
- Have fun with language: listen to stories and poems, make up stories and rhymes
- Write in various ways: draw, scribble, and use letter-like forms, invented spelling, and conventional forms

- Read in various ways: read storybooks, signs and symbols, one's own writing
- Dictate stories

The key developmental indicators in social and emotional development are as follows:

- Take care of one's own needs
- Express feelings in words
- Build relationships with children and adults
- Create and experience collaborative play
- Respond to social conflict

Classroom learning experiences are not mutually exclusive and any given activity will involve several types of key developmental indicators. This approach gives the teacher a clear perspective from which to think about the program and observe the youngsters. In addition, the key developmental indicators give the model structure while maintaining its openness to child-generated experiences. Thus, HighScope staff developing new curriculum domains have a vehicle for expanding the curriculum to include additional experiences. The key developmental indicators enable the HighScope model to continue to evolve as an effective means of promoting children's healthy growth and development.

The Preschool Child Observation Record

The Preschool Child Observation Record (COR; [HighScope Educational Research Foundation, 2003](#)) measures the developmental status of young children 3 to 5 years old. The Infant-Toddler Child Observation Record ([HighScope Educational Research Foundation, 2000](#)) measures the developmental status of young children up to 3 years old. Originally developed to assess the outcomes of the High-Scope model, the COR was later expanded for use in all early childhood programs that engage in developmentally appropriate practice, whether they use the HighScope model or not.

To use the Preschool COR, the teacher writes brief notes over several months describing episodes of young children's behavior in six domains of development: (1) initiative, (2) social relations, (3) creative representation, (4) music and movement, (5) language and literacy, and (6) logic and mathematics. The teacher then uses these notes to classify the child's behavior on 32 five-level COR items in these domains. For example, the item of Making Choices and Plans has the following five levels, from lowest to highest:

1. Child indicates a choice by pointing or some other action.
2. Child expresses a choice in one or two words.
3. Child expresses a choice with a short sentence.
4. Child makes a plan with one or two details.
5. Child makes a plan with three or more details.

The statistical characteristics of the second edition of the Preschool COR ([HighScope Educational Research Foundation, 2003](#)) were assessed with data collected by Head Start teaching staff in one grantee from 160 children in spring 2002 and 233 children in fall 2002. Children ranged in age from 3 years to 5 years 5 months. The average COR total scores were 2.49 in the fall study and 3.47 in the spring study. The alpha coefficients of internal consistency for all 32 COR items were .94 in the fall study and .91 in the spring study, with alpha coefficients for COR categories ranging from .75 to .88. The COR scores of 10 pairs of teachers and assistant

teachers were correlated at .73 for the COR total scores and .69 to .79 for the category scores. A confirmatory factor analysis on data from the spring study affirmed the COR's internal validity and identified four factors that fit the COR categories rather well. The COR's external validity was supported by expected correlations of the COR total scores with the Cognitive Skills Assessment Battery (.46 to .62; [Boehm & Slater, 1981](#)) and with children's ages (.31), with no significant association with gender.

Role Of Parents And Community

Parent participation has been a hallmark from the beginning of the HighScope model. In the initial period during the 1960s, teachers held group meetings regularly and made home visits weekly to each participating child and mother or other family member. Reflecting the movement of women into the workforce, parent participation now focuses on group meetings and other means of contact. One component of High-Scope staff training is providing teachers with strategies to involve parents in supporting their child's early learning in ways that are meaningful, developmentally appropriate, and feasible for the family.

Essential to effective parent involvement is the primary focus on the child and the dual nature of information flow. Although the school and its staff have knowledge and training to provide to the family, the staff must also learn from the parents about the child, the family's culture, and their language and goals. For the program to be successful in various settings, teaching staff must respect the parents as the experts in their own domain.

Training In The Highscope Model

Effective training in the HighScope model has several key elements. It is on site and model focused, with a growing number of online courses to supplement face-to-face contact with HighScope's trainers. It adapts to the actual work setting of the teacher physically and socially, adapts to the group of children involved (e.g., children with disabilities or learning English as a second language), relates to the culture of the children, and enables systematic parent involvement. Training sessions are scheduled about once a month because teachers need time to study training materials, think about the training experience, put new ideas into practice, see the gaps in their own thinking and in the program being presented, and make adaptations to their own setting. Consistent delivery to the individual teacher is maintained by observations and feedback.

The HighScope model is flexible in various ways. It is open to all who understand its developmental principles. It is not so much a set of prescriptions as a methodological framework for education. The teachers and parents employing the framework arrange the context of the program and the general content; children further specify the content to some extent. In these ways, the program grows from the users rather than from the developers. This fact gives it extraordinary flexibility and usefulness as an effective framework for teachers working with children.

The HighScope Educational Research Foundation has trained early childhood teachers and teacher trainers throughout the United States and around the world. The HighScope Foundation has teacher training institutes and centers in Canada, Chile, Great Britain, Indonesia, Ireland, Korea, Mexico, the Netherlands, Portugal, and South Africa. Fledgling efforts in HighScope training and use are taking place in many other countries as well. For example, HighScope Foundation has recently worked with several organizations in the Caribbean to help shift their adult instruction from highly directive to more interactional—not a full adoption of the HighScope model by any means, but an effort to introduce its key principle of balanced interaction between adults and children. Although the initial communication of High-Scope ideas inevitably comes from its U.S. source, it is interpreted and adapted by indigenous peoples throughout the world.

Research Support For The Highscope Model

The HighScope model of preschool education has accumulated a set of research studies that establish its value in a

variety of ways. The HighScope Perry Preschool Study found that it has truly extraordinary long-term benefits when provided to young children living in poverty. The HighScope Preschool Curriculum Comparison Study shows that the model stands out from teacher-directed instruction in its contribution to young children's social development. The Training for Quality study shows that systematic training in the High-Scope model of preschool education helps teachers make greater contributions to children's development. The International Association for the Evaluation of Educational Achievement (IEA) Preprimary Study shows that early childhood settings around the world contribute more to children's cognitive and language development if they let them choose their own activities than if they emphasize whole-group instruction.

HighScope Perry Preschool Study

Weikart and the staff of the HighScope Perry Preschool program in the Ypsilanti Public Schools first developed and used the HighScope model to assist economically disadvantaged children. By virtue of its experimental design (nearly random assignment) and long-term duration (since 1962), the evaluation of the HighScope Perry Preschool program is one of the most thorough examinations of program effects ever undertaken. The basic evaluation question is whether the HighScope Perry Preschool program affected the lives of participating children. The study focused on 123 African American children born in poverty and at high risk of failing in school. In the early 1960s, at ages 3 and 4, these children were nearly randomly divided into a program group who received a high-quality preschool program and a no-program group who received no preschool program. The two groups have been carefully studied over the years with only 6% of the data missing on average across all measures. At age 40, 91% of the original study participants were interviewed (7 of those not interviewed were deceased), with additional data gathered from their school, social services, and arrest records ([Schweinhart et al., 2005](#)). Post-preschool-program differences between the groups represent preschool program effects. Findings presented here are statistically significant (with a two-tailed probability of less than .05). Heckman, Moon, Pinto, Savelyev, and Yavitz (2010a) reanalyzed the data of this study using innovative techniques to address the study's methodological problems. They used permutation-based inference to

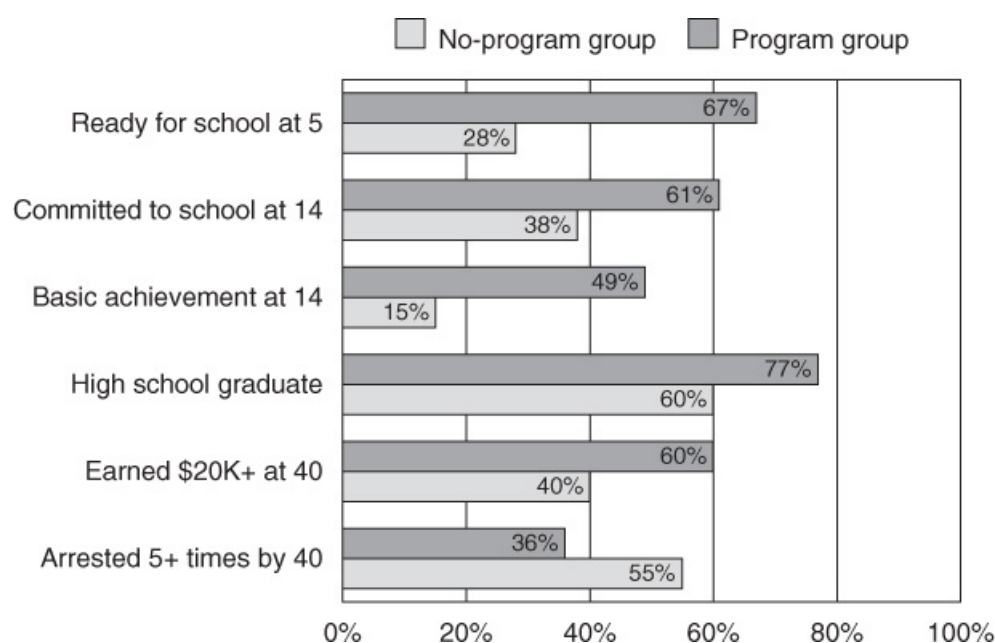


Figure 10–1 HighScope Perry Preschool Study
Major Findings Through Age 40

Source: From *Lifetime Effects: The HighScope Perry Preschool Study Through Age 40* (p. xv) by L. J.

Schweinhardt, J. Montie, Z. Xiang, W. S. Barnett, C. R. Belfield, and M. Nores, 2005, Ypsilanti, MI: HighScope Press. Copyright 2005 by HighScope Educational Research Foundation. Adapted with permission.

correct for the study's departures from random assignment. They used a family-based step-down procedure to correct for multiple hypothesis testing. Although individual results changed, the overall effect was to strengthen the study's already strong internal validity, providing even greater scientific confidence in its results.

As shown in [Figure 10–1](#), more of the program group than the no-program group graduated from high school or received a general educational development (GED) diploma (77% vs. 60%). This difference was from a difference of 42 percentage points between program and no-program females in high school graduation rate (88% vs. 46%). Earlier, program and no-program females had different rates of treatment for mental impairment (8% vs. 36%) and retention in grade (21% vs. 41%). However, the entire program group outperformed the no-program group on various intellectual and language tests from their preschool years up to age 7, school achievement tests at 7 to 14, and literacy tests at 19 and 27. The program group had better attitudes towards school than the no-program group as teens, and program-group parents had better attitudes towards their teen children's schooling than did no-program-group parents. The preschool program affected children's performance and attitudes, regardless of their gender, but this common effect seems to have led school staff to track girls but not boys.

More of the program group than the no-program group were employed at 27 (69% vs. 56%) and 40 (76% vs. 62%). The program group had higher median earnings than the no-program group, annually at ages 27 (\$12,000 vs. \$10,000) and at 40 (\$20,800 vs. \$15,300), as well as monthly at both ages. More of the program group than the no-program group owned their own homes at ages 27 (27% vs. 5%) and 40 (37% vs. 28%). More of the program group than the no-program group had a car at ages 27 (73% vs. 59%) and 40 (82% vs. 60%). More program than no-program males raised their own children (57% vs. 30%).

Over their lifetimes, fewer in the program group than the no-program group were arrested five or more times (36% vs. 55%) or were arrested for violent, property, or drug crimes, particularly dangerous drugs, assault and/or battery, and larceny under \$100. Fewer in the program group were sentenced to time in prison or jail by age 40 (28% vs. 52%).

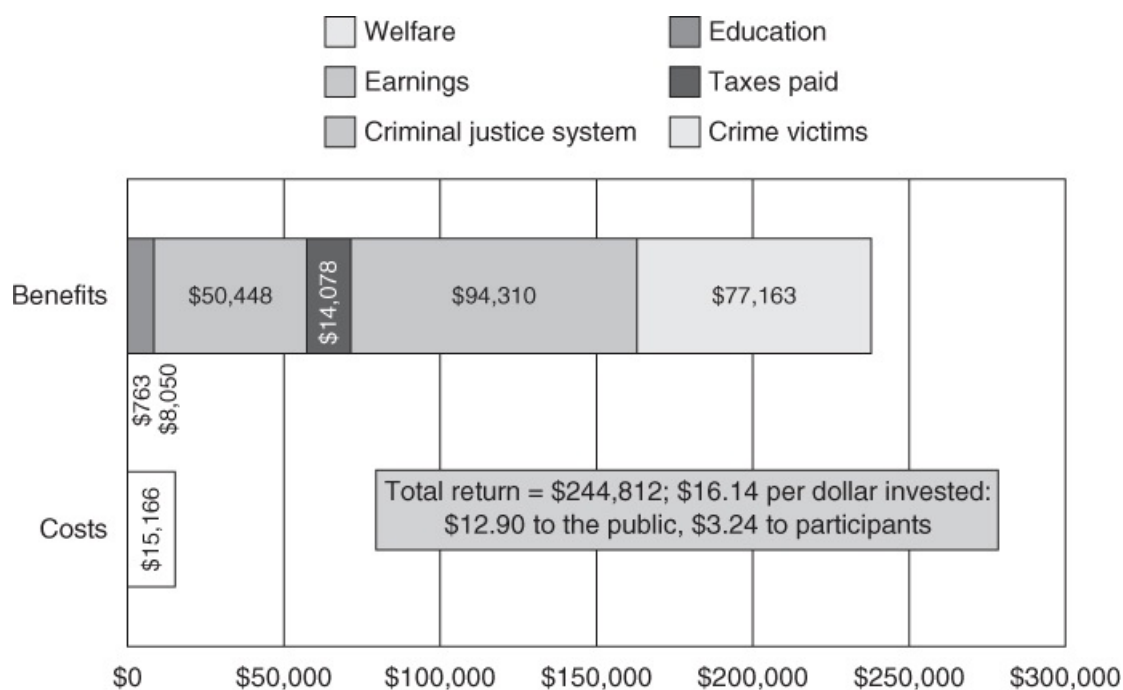


Figure 10–2 Large Return on Investment (per

participant in 2000 constant dollars discounted 3% annually)

Source: From *Lifetime Effects: The HighScope Perry Preschool Study Through Age 40* (p. xvii) by L. J. Schweinhart, J. Montie, Z. Xiang, W. S. Barnett, C. R. Belfield, and M. Nores, 2005, Ypsilanti, MI: HighScope Press. Copyright 2005 by HighScope Educational Research Foundation. Adapted with permission.

As shown in [Figure 10–2](#), in constant 2000 dollars discounted at 3%, the economic return to society for the program was \$244,812 per participant on an investment of \$15,166 per participant (\$8,540 per participant per year)—\$16.14 per dollar invested. Of that return, 80% went to the public—\$12.90 per dollar invested—and 20% went to each participant. Of the public return, 88% came from crime savings, and the rest came from education and welfare savings and increased taxes resulting from higher earnings. Males accounted for a full 93% of the public return, because of the large program effect of reducing male crime. This finding for males stands in stark contrast to the large program effect on the high school graduation rates of females.

Heckman, Moon, Pinto, Savelyev, and Yavitz (2010b) conducted a thorough economic analysis of the data of this study and similarly concluded that the program produced a very large economic return on investment in it.

HighScope Preschool Curriculum Comparison Study

In 1967, a second longitudinal study, the High-Scope Preschool Curriculum Comparison Study ([Schweinhart & Weikart, 1997](#)), was undertaken to explore possible effects of early education programs based on several major theoretical approaches. The question was whether the success of the HighScope Perry Preschool program was to be expected only of preschool programs that used the HighScope model or could be expected of other preschool programs with high standards as well. This study has followed the lives of 68 young people born in poverty who were nearly randomly assigned at ages 3 and 4 to one of three groups, each experiencing a different model:

- In the Direct Instruction model that was current at the time, teachers initiated drill-and-practice activities, following a script with academic objectives, and rewarded

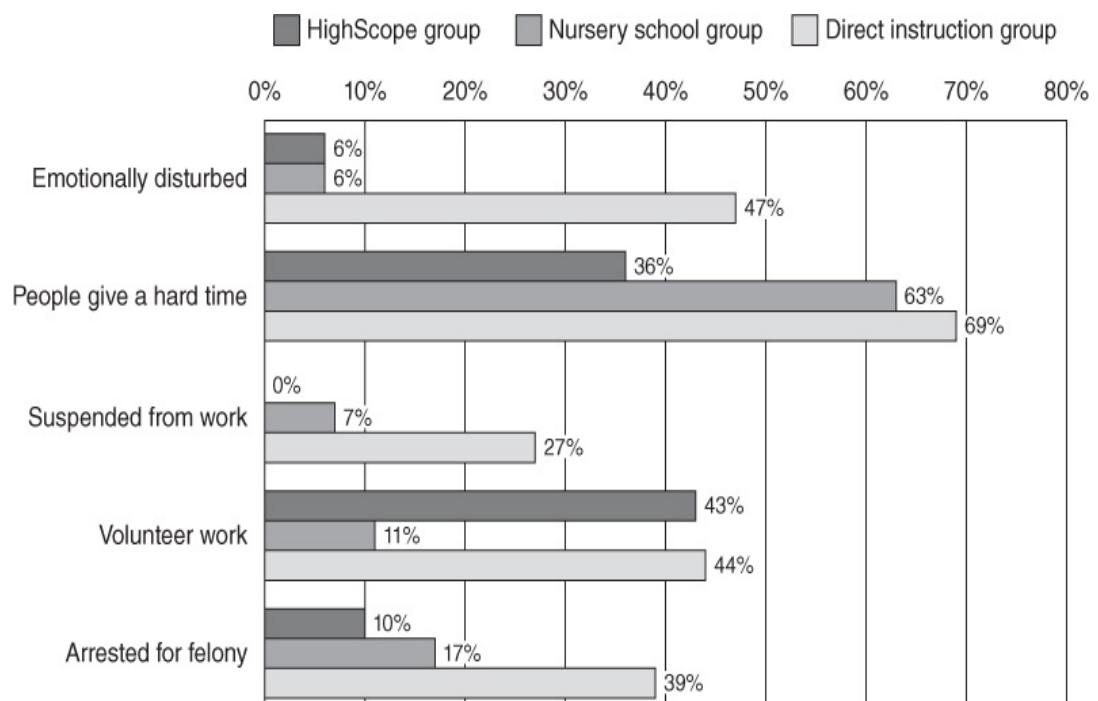


Figure 10–3 HighScope Preschool Curriculum Comparison Study Major Findings at Age 23

Source: From *Lasting Differences* (pp. 40, 48, and 51), by [L. J. Schweinhart and D. P. Weikart, 1997](#), Ypsilanti, MI: High-Scope Press. Copyright 1997 by HighScope Educational Research Foundation. Adapted with permission.

children for responding correctly and following the teacher direction.

- In the HighScope model, teachers and children both initiated actions. Teachers arranged the classroom and the daily routine so children could plan, do, and review their own activities and engage in the key developmental indicators described in this chapter.
- In the traditional Nursery School model, teachers responded to children's self-initiated play and introduced projects in a loosely structured, socially supportive setting.

Program staff implemented the model programs independently and to high standards, in 2½-hr classes held 5 days a week and in 1½-hr visits to children's homes every 2 weeks, when children were 3 and 4 years old.

Except for the educational model, all aspects of the programs were essentially identical. The three groups did not differ significantly on most background characteristics. The findings presented here are corrected for differences in gender makeup of the groups. [Figure 10–3](#) portrays key findings.

By age 23, the HighScope group had eight significant advantages over the Direct Instruction group:

- Fewer felony arrests
- Fewer arrests for property crimes
- Fewer years requiring treatment for emotional impairment or disturbance
- Fewer reporting that other people gave them a hard time
- Less teen misconduct
- A higher percentage living with a spouse
- More who did volunteer work
- More who planned to graduate from college

By age 23, the Nursery School group had four significant advantages over the Direction Instruction group:

- Fewer felony arrests at age 22 and over
- Fewer years requiring treatment for emotional impairment or disturbance
- More who did volunteer work
- Fewer suspensions from work (the only one not in common with the HighScope curriculum group)

By age 23, the Direct Instruction group had no significant advantage on any outcome variable. By age 23, the HighScope group and the Nursery School group did not differ significantly on any outcome variable.

Through age 10, the main finding of this study was that the overall average IQ of the three groups rose 27 points, from a borderline impairment level of 78 to a normal level of 105 after 1 year of their preschool program and subsequently settled in at an average of 95, still at the normal level. The conclusion at that juncture was that well-implemented preschool education, regardless of theoretical orientation, had similar effects on children's intellectual and academic performance. Time has proved otherwise.

The research supports the conclusion that, by age 23, scripted, teacher-directed instruction, touted by some as the surest path to school success, seems to purchase a modest extra improvement in academic performance at the cost of a missed opportunity for long-term improvement in important social behavior. Child-initiated learning activities, on the other hand, seem to help children develop their social responsibility and skills so that they less often need treatment for emotional impairment or disturbance and are less often arrested for felonies as young adults.

Although the HighScope and Nursery School groups did not differ significantly on any outcome variable at age 23, the HighScope model is more readily replicated than the Nursery School approach because of its extensive documentation of practice, validated teacher training program, and well-developed program and child assessment systems. The Nursery School approach used in this study was the unique product of certain teachers trained in a general child development approach. It is unclear whether the results of this study apply to children who experience other versions of the Nursery School approach or an eclectic approach developed by their own teachers.

These findings constitute evidence that early childhood education works better to prevent problems when it focuses on child-initiated learning activities rather than scripted, teacher-directed academic instruction. Because biweekly visits to children's homes were part of each program, home visits by themselves do not account for these differences. These findings suggest that the goals of early childhood education should not be limited to academic preparation for school, but should also include helping children learn to make decisions, solve problems, and get along with others—the goals of the HighScope model of early childhood education.

The HighScope Perry Preschool Study ([Schweinhart et al., 2005](#)) and the HighScope Preschool Curriculum Comparison Study ([Schweinhart & Weikart, 1997](#)) suggest that the HighScope early childhood model has significant, lasting benefits because it empowers participants as follows:

- It empowers children by enabling them to initiate and carry out their own learning activities and make independent decisions.
- It empowers parents by involving them in ongoing relationships as full partners with teachers in supporting their children's development.
- It empowers teachers by providing them with an effective model supported by systematic, model-focused in-service training and supervision and observational tools to assess children's development.

Some might object that these programs are dated, passed over by time—never mind that it is only such programs that are in a position to demonstrate such long-term effects. But the programs are well documented, not only with descriptive narrative, but also with both expert observations and systematic observation by trained observers ([Weikart, Epstein, Schweinhart, & Bond, 1978](#)), so that they can be fully replicated today. Further, there is no reason to think that the relationships between the educational model and child outcomes found beginning in the 1960s are any different today. The experience of poverty in America is still the experience of poverty in America.

Combined with similar findings from other independent investigators ([Marcon, 1992](#); [Nabuco & Sylva, 1997](#); [Zill et al., 2003](#)), these data have wide-ranging implications. They indicate that high-quality preschool programs for children living in poverty can have a positive long-term effect on their lives. Their early educational success leads to later school success, higher employment rates, and fewer social problems such as crime and welfare dependence. Early childhood education can help individuals realize their potential. But the findings show more than good outcomes for individuals. They also indicate that citizens can expect substantial improvement in the quality of community life. An effective program can help reduce crime and improve participants' employment prospects. Further, an important improvement can be made in the available workforce because of better

educational attainment and improved job-holding ability. However, such outcomes are not the results of all preschool programs, but rather those programs that achieve a high standard of quality that includes a balance between an emphasis on later academic success and an emphasis on social development and personal initiative.

The Training for Quality Study

The HighScope Training for Quality Study ([Epstein, 1993](#)) offers evidence of the effectiveness of the HighScope preschool education model as practiced throughout the United States today. In this multistudy evaluation, we analyzed participant reports of 40 training projects; surveyed 203 certified HighScope teacher trainers; surveyed and systematically observed the classrooms of 244 HighScope and 122 comparison teachers; and systematically observed and tested 97 HighScope and 103 comparison children in these classrooms.

HighScope trainers identified 244 High-Scope teachers in Michigan, New York, and California who had been employed at their agencies for at least 6 months, had attended at least four HighScope workshops, and had received three classroom visits. We selected 122 comparison teachers from lists of licensed child care centers and from agencies nominated by staff or trainers, with efforts to maintain proportions of agency types similar to those of the HighScope teachers.

The 200 children in the child outcomes study attended preschool programs in 15 agencies in urban, suburban, and rural settings in southeastern Michigan and northwestern Ohio; 46% were in Head Start, 19% in public schools, and 35% in nonprofit centers. Children ranged in age from 2 to 6 years, average age 4.3 years; 47% were male, 53% female; 43% were white, 32% were African American, 5% were Hispanic American, and 20% were of other ethnic groups. Their fathers and mothers averaged 13.7 years of schooling, identifying these parents as relatively well educated on average. In both groups, according to Bureau of Labor Statistics codes, fathers' median occupational level was that of laborer and mothers' median occupational level was that of service worker. Treatment groups did not differ significantly on any of these characteristics.

The Registry trainer survey found that half of HighScope-certified trainers were in Head Start, 27% were in public schools, and 20% were in private child care agencies. Eighty-eight percent had completed college, including 37% with advanced degrees; 70% majored in early childhood. They had a median of 15 years of experience in early childhood. Seventy-eight percent of them were still in the same agency they were in when they received HighScope certification; 85% had teacher-training responsibility, although they only spent an average of 8 hr a week training teachers. On the average, they made a large-group presentation for 36 staff annually, a hands-on workshop for 15 staff monthly, an observation-and-feedback classroom visit monthly, and an informal classroom visit weekly. The average teacher had attended one presentation and nine workshops and received an observation-and-feedback visit and three informal visits per month.

All the teachers trained had tried out the HighScope model's room arrangement and daily routine; 91% had tried out the key experiences; 63% had tried out the child observation techniques. Eighty-nine percent of them were comfortable and effective with room arrangement; 80%, with the daily routine; 56%, with the key experiences; and 37%, with the child observation techniques. Trainers said they would show visitors 45% of the classrooms of trained teachers as examples of the HighScope preschool model, an average of four classrooms per trainer.

The HighScope Registry listed 1,075 early childhood leaders in 34 states and 10 other countries who successfully completed High-Scope's 7-week Trainer Certification Program in the past decade. The average trainer had trained 15 teaching teams, so an estimated 16,125 early childhood teaching teams, including 29% of all Head Start staff, had received HighScope model training from these trainers. Because trainers regarded 45% of these classrooms as examples of the HighScope model, they would nominate an estimated 7,256 early childhood classrooms throughout the United States and around the world as examples of the HighScope model.

The teacher survey indicated that both High-Scope and comparison classrooms were of high quality. Both groups had at least 10 years of teaching experience. Most in both groups had college degrees and early childhood degrees. Both groups had over 40 hr of in-service training annually. In both groups, teachers' annual salaries averaged

about \$20,000 a year, considerably higher than the \$9,400 national average for child care teaching staff (Whitebook, Howes, & Phillips, 1989). The few group background differences seemed to compensate for each other: The HighScope teachers had significantly more teaching experience than comparison teachers (12 years vs. 10 years), but significantly fewer HighScope teachers had college degrees (63% vs. 79%).

Although HighScope and comparison teachers did not differ significantly in their hours of in-service training per year, more HighScope teachers received significantly more in-service training involving curriculum and teaching practices (91% vs. 71%), child assessment and evaluation (75% vs. 48%), and professional issues (48% vs. 34%). HighScope teachers placed significantly more importance on the following topics than did comparison teachers: room arrangement, children choosing their own activities, teachers participating in children's activities, ongoing training for adults, supervision and evaluation, multicultural awareness, and parent involvement.

HighScope and comparison classrooms differed significantly in classroom environment, daily routine, adult-child interaction, and overall implementation, as assessed by the High-Scope Program Implementation Profile ([HighScope Educational Research Foundation, 1989](#)) adapted for generic use. HighScope advantages in classroom environment involved dividing the classroom into activity areas, providing adequate work space in each area, arranging and labeling materials, providing enough materials in each area, providing real household and work objects, making materials accessible to children, and providing materials to promote awareness of cultural differences. HighScope advantages in daily routine involved implementing a consistent daily routine, encouraging children to plan and review activities, and providing opportunities for planning, doing, and reviewing. HighScope advantages in adult-child interaction differences involved observing and asking questions, participating in children's play, and balancing child and adult talk. Comparison classrooms had no significant advantages over HighScope classrooms on this instrument. These findings indicate that the HighScope classrooms were implementing the HighScope Preschool Curriculum to a significantly greater extent than were the comparison classrooms.

As shown in [Figure 10-4](#), the children in HighScope programs significantly outperformed the children in comparison programs in initiative, social relations, music and movement, and overall child development. HighScope advantages in initiative involved complex play and cooperating in program routines. HighScope advantages in social relations involved relating to adults and social problem solving. HighScope advantages in music and movement included imitating movements to a steady beat.

Significant positive correlations of .39 to .52 were found between classroom daily routine (measuring children's opportunities to plan activities, carry out their ideas, and review what they had done each day) and children's overall development, specifically their development of creative representation, initiative, music and movement abilities, and language and literacy.

The IEA Preprimary Project

The IEA Preprimary Project is a multinational study of preprimary care and education ([Montie, Xiang, & Schweinhart, 2006](#); [Olmsted & Montie, 2001](#); [Weikart, Olmsted, & Montie, 2003](#)). HighScope served as the international coordinating center. Working collaboratively with researchers in 15 countries, HighScope staff were responsible for sampling, instrument development, data analysis, and the writing of six published reports. The purpose of the study was to identify how process and structural characteristics of community preprimary settings affect children's language and cognitive development at age 7. The study is unique because many diverse

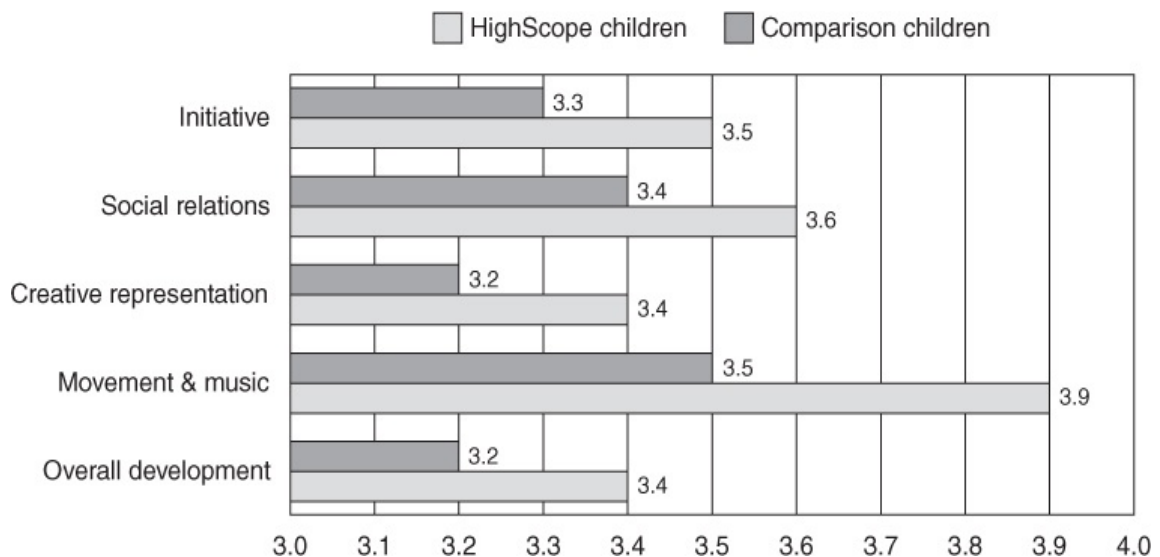


Figure 10–4 Findings: Training for Quality Children’s Study

Source: From *Training for Quality: Improving Early Childhood Programs Through Systematic In-service Training*, by [A. S. Epstein, 1997](#), Ypsilanti, MI: HighScope Press. Copyright 2003 by HighScope Educational Research Foundation. Adapted with permission.

countries participated, using common instruments to measure family background, teachers’ characteristics, setting structural characteristics, experiences of children, and children’s developmental status.

The study is rooted theoretically in the ecological systems model of human development, which views children’s behavior and developmental status as being influenced by multiple levels of the environment, some direct and proximal to the child, such as the child’s actual experiences in an education or care setting, and some indirect and distal, such as national policy. The study focused on the influence of young children’s experiences in community preprimary education and care settings on their language and cognitive development at age 7, controlling for family and cultural influences. Both proximal and distal variables are examined within that context.

The target population consisted of children in selected community settings who were approximately 4½ years old. Data for the longitudinal project were collected in early childhood care and education settings in 10 countries: Finland, Greece, Hong Kong, Indonesia, Ireland, Italy, Poland, Spain, Thailand, and the United States. Each country’s research team chose to sample settings that were used by large numbers of families in the community or important for public policy reasons. With expert assistance, each country’s research team developed a sampling plan, using probability proportional to size to select settings and systematic sampling procedures to select four children within each classroom. The age-4 sample included over 5,000 children in more than 1,800 settings in 15 countries. Ten of the initial 15 countries followed the children to age 7 to collect language and cognitive outcome measures. The median retention rate across countries was 86%, ranging from 41% to 99%. The number of children included in the longitudinal analyses varied from 1,300 to 1,897, depending on the particular analysis.

Working with HighScope researchers, measures used in the study were developed collaboratively by members of the international team. At age 4, data were collected with three observation systems and three questionnaire/interviews. Children’s cognitive and language performance was measured at age 4 and age 7. The observation systems collected time-sampled information about how teachers schedule and manage children’s time, what children actually do with their time, and the behaviors that teachers use and the nature of their involvement with children.

Interviews were conducted to collect family background information and gather information regarding teachers' and parents' expectations about what is important for preschool-aged children to learn. A questionnaire that focused on the structural characteristics of the settings was administered to teachers and caregivers.

The children were followed until age 7, an age across countries when they had all entered primary school. At that time, cognitive and language measures developed by an international team were administered to assess developmental status.

Based on the structure of the data, with individual children nested within settings and settings nested within countries, a hierarchical linear modeling approach was used for the analysis. Accurate estimation of impacts for variables at different levels was especially important for this study because effects at two levels—settings and countries—were often confounded with one another. Although the relationship between setting variables and children's later development was of primary interest, any such findings would have been hard to interpret if country effects had not been accurately estimated and adjusted for. A three-level approach enabled decomposition of variation of child outcomes into three parts: variation among children within settings, among settings within countries, and among countries. As a result, relationships between care setting variables and children's outcome scores are free of substantial influence from country-level effects.

Four findings emerged that are consistent across all of the countries included in the data analysis:

- Children's language performance at age 7 improves as the predominant types of children's activities that teachers propose are free rather than personal/social. From greatest to least contribution, activity types were as follows:
- Free activities, which teachers let children choose
- Physical/expressive activities (gross- and fine-motor physical activity, dramatic play, arts, crafts, and music)
- Preacademic activities (reading, writing, numbers, mathematics, physical science, and social science)
- Personal/social activities (personal care, group social activities, and discipline)
- Children's language performance at age 7 improves as teachers' years of schooling increase.
- Children's cognitive performance at age 7 improves as they spend less time in whole group activities (the teacher proposes the same activity for all the children in the class—songs, games, listening to a story, working on a craft, or a preacademic activity).
- Children's language performance at age 7 improves as the amount and variety of equipment and materials available to children in preschool settings increase.

The wide range of environments throughout the world in which young children grow and learn creates challenging questions for everyone concerned with providing high-quality programs for preprimary children. What are the essential program elements that promote optimum child development? How are these elements delivered in various communities? The findings tell us that teaching practices matter; how teachers set up their classrooms and the activities they propose for children make a difference.

Across diverse countries, child-initiated activities and teachers' education appear to contribute to children's later language performance; and minimization of whole group activities and a greater number and variety of materials in preschool settings appear to contribute to their later cognitive performance.

Although more research is necessary in the various countries to establish a pattern of cause and effect and to explore the learning mechanisms involved, early childhood educators and policy makers can use these findings to examine local policies and practices and consider if changes are advisable.

The Relationship Of Research To The Highscope Model

The HighScope model defined the essential program elements in the day-to-day experience of children and teachers that were largely responsible for the program effects, that is, plan-do-review and key developmental indicators as a basis of planning and observation. Also among the key program elements were staffing, staff planning and development, class sessions for children, and a high level of parent involvement. The staff/child ratio was 1 to 5 or 6, with 4 teachers for 20 to 25 children in the High-Scope Perry Preschool program; and 1 to 8, with 2 teachers and 16 children for each class in the HighScope Curriculum Comparison study. The teaching staff worked together in teams that planned, implemented, and evaluated each day's activities. Indeed, working in tandem with researchers and consultants, they developed and refined the HighScope educational model. The preschool program had two components: daily 2½-hr classroom sessions and weekly 1½-hr home visits by the teacher to each child and mother or other caregiver. These program elements can be applied with some flexibility. Staffing could safely go as high as 20 children in a class with two trained adults. Teachers need to develop intellectual ownership of the model, preferably through daily planning, evaluation, and teamwork, and with the active support of the administration and the provision of in-service model training opportunities. Home visits are not the key to program effectiveness, as witnessed by the data from the Direct Instruction group ([Schweinhart & Weikart, 1997](#)), but parents and teachers do need to work together as real partners in the education of children, which means regular, substantive communication concerning the developmental status of the child and concrete strategies whereby families can extend the curriculum learning into the home. In short, the HighScope Perry Preschool program group ([Schweinhart et al., 2005](#)) and the HighScope group of the Curriculum Comparison Study ([Schweinhart & Weikart, 1997](#)) were successful because they implemented the essential elements of the HighScope model and because they maintained consistent program policies that permitted the model to operate effectively.

To recapitulate, a high-quality preschool program observes these program policies:

- Teachers use and take ownership of a validated, child-development-oriented educational model through regular in-service training in the model.
- The teaching staff work as teams in planning, implementing, and evaluating each day's activities.
- The staffing ratio is no more than 10 children per staff member and group sizes are no greater than 20.
- Parents join with teachers as partners in the education of the child and engage in substantive discussion and home extension of the learning topics.
- The administration provides model leadership, supervision, and assistance.

Many existing programs of early childhood care and education are not of adequate operational quality. Improving them is the major task of caregivers and educators. As with elementary and secondary school programs, early childhood programs must meet basic standards. These elements are neither easy to put into practice nor cheap to maintain. Yet the advantages of high-quality programs far outweigh the effort and cost of providing them.

What is it about young children's development that presents the opportunity for such effective programs? The preschool years are a watershed for several dimensions of child development. Physically, by age 3, young children have matured to the point that they have achieved both fine- and gross-motor coordination and are able to move about easily and freely. Mentally, they have developed basic language capabilities and can use objects for self-chosen purposes. In the terms of Jean Piaget, they have shifted from sensorimotor functioning to preoperational thinking. Socially, they are able to move away from familiar adults and social contexts to unfamiliar ones. The fear of strangers so common earlier is much reduced and youngsters welcome relations with new peers and adults. What stands out among the basic accomplishments of early education is that children develop additional social, physical, and intellectual abilities. Armed with these acquired competencies, they learn to relate to new adults,

who respond to their performance very differently than their families do. In short, children learn to demonstrate abilities in novel settings and to trust new adults and peers enough to display these skills willingly. Children's willingness to try new things and develop competencies is the seed that is transformed into later school and life success. Early success grows grade by grade, year by year, into adult success; each stage leads to a better performance at the next. These steps are documented by the research. The thrust is captured in the old folk adage, "As the twig is bent, so grows the tree."

Conclusion

The HighScope model of early childhood education is an open framework of developmental theory and educational practices based on the interactive development of young children. It is currently used in thousands of early childhood programs throughout the United States and in other countries. Based on Piaget's child development ideas ([Piaget & Inhelder, 1969](#)) and teaching practices derived from the social learning theory of Vygotsky (1934/1962), the HighScope model views children as active learners who learn best from activities that they themselves plan, carry out, and reflect on. Adults arrange interest areas in the learning environment; maintain a daily routine that permits children to plan and pursue their own activities; join in children's activities and help them think things through; and provide language through conversations and observations. The adults encourage children to achieve key developmental indicators and help them learn to make choices, solve problems, and generally engage in activities that promote intellectual, social, and physical development. Decades of systematic empirical research indicate that the HighScope model works to significantly improve the life chances of participating children.

Reflect On

1. What convictions led the authors to develop the HighScope model of early childhood education?
2. What developmental principles guide the High-Scope model of early childhood education?
3. How does the "plan-do-review" cycle work in the HighScope model?
4. What are some of the outcomes of the High-Scope model decades later?
5. Can you make a convincing argument that supporting early childhood programs of this nature leads to less expenditures for taxpayers?

Selected Resources

HighScope Educational Research Foundation (United States)
600 North River Street
Ypsilanti, Michigan 48198-2898
www.highscope.org

International HighScope Institutes and Teacher Education Centers

Canada:

- Sheridan College, Ontario: Web site not available
- Western Canada: Squamish, British Columbia: Web site not available
- Moncton, New Brunswick: www.monctonheadstart.com

Chile: www.colegiosantacruz.cl and www.highscopechile.cl

Great Britain: www.high-scope.org.uk

Indonesia: www.highscope.or.id

Ireland: www.early-years.org/highscope

Korea: www.highscopekorea.com

Mexico: www.highscopemexico.org

The Netherlands: www.kaleidoscoop.org

Portugal: www.highscope-portugal.com

South Africa: www.khululeka.org.za

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Chapter 11 Tools of the Mind: The Vygotskian Approach to Early Childhood Education

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Tools of the Mind, Inc.

After reading this chapter, you should be able to:

- Discuss the theoretical foundations of the Vygotskian approach
- Explain the Vygotskian view of learning and teaching
- Describe the Vygotskian view of child development
- Illustrate the application of Vygotskian theory in the early childhood classroom

Conceptual underpinnings for Tools of the Mind come primarily from Lev Vygotsky's theory of development. Three important concepts are the cultural-historical view of development, "tools," and higher and lower mental functions.

The Theoretical Foundations Of The Vygotskian Approach

Cultural-Historical View of Development

To understand how Vygotskians view early childhood education, we must first understand the goal of education and the cultural-historical view of development that is its root. Vygotsky's approach is described by the Vygotskians themselves as the cultural-historical approach. It is important, however, that Vygotskians have their own and very specific definition of what the terms culture and history mean within this approach.

The term history in this approach refers to Vygotsky's idea that to truly understand psychological processes that are unique to humans, we have to study the history of the development of these processes. This history combines two distinct but interrelated aspects: an individual person's history, or ontogeny, and the history of humankind, or phylogeny. Fully developed psychological processes are difficult to study according to Vygotsky because they usually exist in an internalized and "folded"—or in Vygotsky's own words "fossilized"—form where many of the component processes are not easily visible. Processes under development, on the other hand, still have an extensive external—and therefore accessible to observation—component, which may provide researchers with an insight into the nature of this particular process ([Vygotsky, 1978](#)). Think, for example, of the processes you engage in when reading this paragraph: As an experienced reader, you probably carry out most of these processes automatically and cannot fully describe what is going on in your mind as you read. If you were a subject in a reading study, the researchers most likely would use some kind of indirect measure of your reading processes, such as giving you a comprehension test or perhaps scanning your brain as you read, because the processes themselves are not accessible to observation or measurement.

Contrast this with the behaviors of a child for whom reading has not yet been automatized: most of the behaviors

—pointing to the words, sounding words letter-by-letter, self-correcting, and so on—are external behaviors that a reading researcher can observe, measure, or manipulate. Thus, Vygotskians believe that studying reading from an individual’s historical perspective allows for our better understanding of this process, its components, and the dynamics. In a similar way, the study of the history of literacy in human-kind—from the knot writing of ancient Incas to pictograms to hieroglyphs to alphabetic systems—reveals the relationships between the functions of written speech and the processes involved in the mastery of writing.

The Vygotskian definition of culture in the cultural-historical approach is somewhat narrower than the meaning we commonly assign to this word. Vygotsky focuses mainly on one component of culture—various signs and symbols that serve as cultural tools—and their role in the development of uniquely human mental processes that he called higher mental functions ([Vygotsky, 1997](#)). Another place culture appears in the cultural-historical approach is when Vygotskians look at the specific sociocultural context of learning and development to see how specific cultural tools as well as culture-specific practices used to teach and learn these affect the development of higher mental functions in an individual or in a particular group.

The Concept of Tools

Vygotsky was in agreement with the view popular among his contemporaries that the difference between humans and lower animals is that humans use tools, make new tools, and teach others how to use them. These tools extend human abilities by enabling people to perform tasks that they could not do without them. For example, although you can break smaller twigs and branches using your bare hands, you can cut larger pieces of wood only using an ax or a saw. In a sense, these physical tools act as an extension of human bodies; instead of having stronger hands, you now have a “hand-ax” or a “handsaw,” making up for the fact that as a species we do not have bodies as strong as those of other animals.

Vygotsky applied the idea of human beings as “tool making animals” in a way unique to his contemporaries and extended the idea to include a new kind of tool: mental tools or tools of the mind. Similar to the way that physical tools extend our physical abilities by acting as an extension of our body, mental tools extend our mental abilities by acting as an extension of our mind ([Vygotsky, 1978](#)). For example, quite often we find ourselves in a situation when we need to remember too many things. It will not be a problem for few individuals who have a phenomenal memory, but for the rest of us our memory store is limited in its capacity and we can benefit from some tool that would expand our memory. In fact, over the course of centuries, humankind did develop many tools that serve as “memory extensions.” From a simple string tied around a finger to shopping lists to personal digital devices (smart phones)—these are all tools we use when we do not want to forget something important.

Similar to physical tools, mental tools make our lives easier; however, unlike physical tools, they do so not by helping us change our environment but by helping us change ourselves. Without a tool we remain at the mercy of an environment that may or may not accidentally prompt our memory (Think of all the times you walk into a grocery store only to realize that you forgot what you were supposed to buy and leave with something that has caught your eye!). On the other hand, with a tool such as a shopping list we take charge of our own behavior by deciding what we want to remember and when we need to recall this information. Our actions thus change as a result of tool use, from being “slaves to the environment” we become “masters of our own behavior.”

Another similarity between physical and mental tools is that humans teach their young how to use both; in other words, children are not born knowing how to use existing tools or how to invent new ones. Therefore, for Vygotsky, one of the major goals of education—formal as well as informal—is to help children acquire the tools of their culture ([Karpov, 1995](#)). Teaching children how to use mental tools results in children mastering their own behavior, gaining independence, and reaching a higher developmental level. As children are taught and practice an increasing number of various mental tools, not only their external behaviors but their very minds are transformed, leading to the emergence of a new category of mental functions: higher mental functions.

Lower and Higher Mental Functions

Like many of his contemporaries, Vygotsky divided mental processes into lower mental functions and higher mental functions. In Vygotsky's time, it was common to describe lower mental functions as something that can be manifested in reflex, perceptual, and motor behaviors that are easy to observe and measure (think of Pavlov's experiments with dogs). Higher mental functions, on the other hand, were thought to be more complex processes to which objective methods of study were not applicable and which could only be accessed through a person's self-report. Unlike his contemporaries, Vygotsky did not consider lower and higher mental functions to be completely independent of each other but instead proposed a theory in which these two sets of functions interact ([Vygotsky, 1997](#)).

Vygotsky describes lower mental functions as common to human beings and higher animals. These functions are innate and depend primarily on maturation to develop. Examples of lower mental functions include sensations, spontaneous attention, associative memory, and sensorimotor intelligence.

Sensation refers to using any of the senses and is determined by the anatomy and physiology of a sensory system in a particular species. For example, diurnal animals typically possess color vision while nocturnal animals are often color-blind. *Reactive attention* refers to attention that is drawn to strong environmental stimuli, as when a dog suddenly reacts to the sound of a garage door opening or a baby starts crying at the sound of thunder. *Associative memory* is the ability to connect two stimuli together in memory after repeated presentation of the two together—one stimuli triggers the memory of its pair. Remembering someone's face or the phone number when hearing this person's name is an example of associative memory. In a similar way, laboratory animals remember the shortest way to the food after having run the maze for numerous times. *Sensorimotor intelligence* in the Vygotskian framework describes problem solving in situations that involve physical or motor manipulations and trial and error.

Unique to humans, higher mental functions are cognitive processes acquired through learning and teaching. The main difference between lower and higher mental functions is that the latter involve the use of mental tools. Higher mental functions include mediated perception, focused attention, deliberate memory, and logical thinking. When we distinguish between different colors, placing lime green in a different category than olive green, we are using mediated perception. Focused attention describes the ability to concentrate on any stimulus, whether it stands out or blends with the background. Finding a particular word on a page filled with printed words calls for focused attention. *Deliberate memory* refers to the use of memory strategies to remember something. *Logical thinking* involves the ability to solve problems mentally using logic and other strategies.

All higher mental functions are acquired in a culturally specific way that affects their development via a system of practices common to a specific culture and the mental tools this culture has developed to carry out these practices. Mediated perception, for example, is a higher mental function found in all humans, but different groups may develop better differentiation of certain colors, smells, or tastes.

Vygotsky describes higher mental functions as deliberate, mediated, and internalized behaviors ([Vygotsky, 1997](#)). By characterizing higher mental functions as deliberate, he means that they are controlled by the person and not by the environment; their use is based on thought and choice. The behaviors guided by higher mental functions can be directed or focused on specific aspects of the environment, such as ideas, perceptions, and images, while ignoring other inputs. These deliberate behaviors become possible because they do not depend on the environment in an immediate and direct fashion, but instead are mediated by the use of tools. Nondeliberate behaviors depend on external circumstances. As an example, for some students whether they can answer a question on a test depends on whether this piece of information was something they read most recently or something they heard most frequently. In contrast, students who use focused attention and deliberate memory go through an extra step of using tools—for instance, they underline or highlight specific words and passages in the textbook—to make sure they will pay attention to these words later when studying for a test. By the time higher mental functions are fully developed, most of the tools used are not external but internal (such as mnemonics) and so are the processes involved in using these tools. Vygotsky describes this process as internalization, emphasizing that when external behaviors “grow into the mind,” they maintain the same structure, focus, and function as their external precursors.

For Vygotsky, higher mental functions do not appear in children in their fully developed form. Instead, they undergo a long process of development in the course of which a fundamental reorganization of lower mental functions occurs ([Vygotsky, 1994](#)). It means that as children start using higher mental functions more frequently, their lower mental functions do not disappear completely but are used less and less. For example, as children acquire language, they continue to use their associative memory but now they depend less and less on their ability to recollect things spontaneously and more and more on the use of various memory strategies.

Vygotsky described the mechanism of the development of higher mental functions as their gradual transformation from being shared by a child with two or more people to something that belongs to this child only. Vygotsky called this transition from shared to individual the general law of cultural development, emphasizing that

[e]very function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people (inter-psychological), and then inside the child (intra-psychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. ([Vygotsky, 1978, p. 57](#))

This view of higher mental functions differs significantly from other psychological theories that, while acknowledging other people's influences on a person's individual development, still ultimately place all mental processes in this individual's mind. For Vygotsky, in contrast, not only what a child knows but also how this child thinks, remembers, or attends is shaped by the child's prior interactions with parents, teachers, and peers.

For Vygotskians, early childhood education is the first step in a long process in which young children are engaged in the acquisition of "tools" and the development of higher mental functions that are learned from the people in the child's world.

The Vygotskian View Of Learning and Teaching

Vygotsky's ideas about learning and teaching center around the concept of tools of the mind acquired by children as they engage in social interactions with adults and peers across various contexts where formal and informal instruction take place.

Learning Can Lead Development

The cultural-historical approach holds that human development involves a complex interplay between the processes of natural development that are determined biologically and the processes of cultural development brought about by the interactions of the growing individuals with other people and cultural artifacts. In more practical terms, it means that although some learning cannot occur until the developmental prerequisites are in place—such as in the case of children not being able to write until they reach a certain level of development of their fine-motor skills—the opposite is also true: Certain developments in cognitive, social, or language areas cannot simply emerge as a result of maturation but rather depend on what a child learns. Based on research done on children of different ages raised in different cultures, Vygotsky concludes that some developments previously thought to be universally present at a certain age, such as the ability to use abstract reasoning, in reality are an outgrowth of a very specific kind of learning experience typically associated with formal schooling ([Vygotsky, 1987](#)). In the course of formal schooling, teachers teach—and students learn—a specific system of mental tools that brings these students' cognitive development to a qualitatively different level.

Zone of Proximal Development

Vygotsky's idea of the zone of proximal development, or ZPD, reflects both the complexity of the relationship between learning and development and the dynamics of the transitions

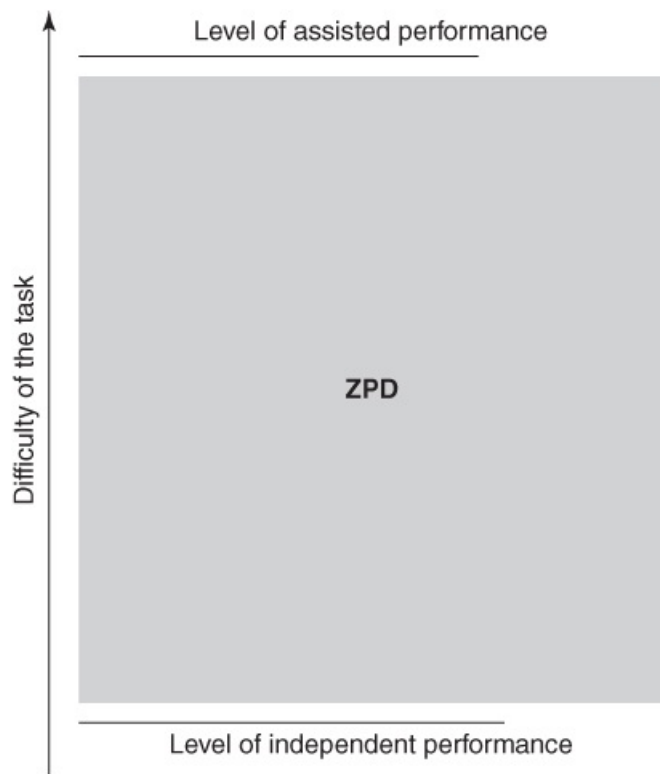


Figure 11–1 Zone of Proximal Development

Source: From *Tools of the Mind* (2nd ed.), by [E. Bodrova and D. J. Leong, 2007](#), Columbus, OH: Pearson.

from shared forms of mental processes to their individual forms (see [Figure 11–1](#)):

[What] we call the Zone of Proximal Development ... is a distance between the actual developmental level determined by individual problem solving and the level of development as determined through problem solving under guidance or in collaboration with more capable peers.

([Vygotsky, 1978, p. 86](#))

Vygotsky used the word zone because he conceived children’s development not as points on a scale but as a continuum of skills and competencies at different levels of mastery. By using the word proximal, he pointed out that the zone is limited to those skills and competencies that will develop in the near future. *Proximal* is meant to describe not all possible skills and competencies that will eventually emerge, but only those that are closest to emergence at a specific time, or as Vygotsky put it, are “on the edge of emergence.”

Two levels of performance define the boundaries of a child’s ZPD:

- The lower boundary is defined by the child’s level of independent performance. Independent performance is what the child is capable of doing alone, without any help from anyone else.
- The upper boundary is the most the child is capable of doing when given the help by a more knowledgeable person, such as the teacher. It is this child’s level of assisted performance.

Between the levels of independent performance and assisted performance lie skills and competencies that require varying degrees of assistance to surface: those that are closer to the lower boundary require only little help and those that are closer to the upper boundary cannot be displayed by the child without a great deal of assistance.

These skills and competencies do not determine children’s developmental level but rather their learning potential. In the absence of guidance or collaboration with more competent others, this potential might not be realized and consequently a higher developmental level would be never attained.

A child’s ZPD is fluid and changes as the child learns. What a child can only do with assistance today the same child will perform independently tomorrow. Then, as the child tackles more difficult tasks, a new level of assisted performance emerges (see [Figure 11–2](#)). This cycle is repeated, as the child acquires increasingly more complex skills and competencies.

Vygotsky used the idea of ZPD to demonstrate why methods of assessing children popular at his time cannot produce an accurate picture of child development. In the case of IQ testing, for example, these methods, which prohibited testers from providing any help to a

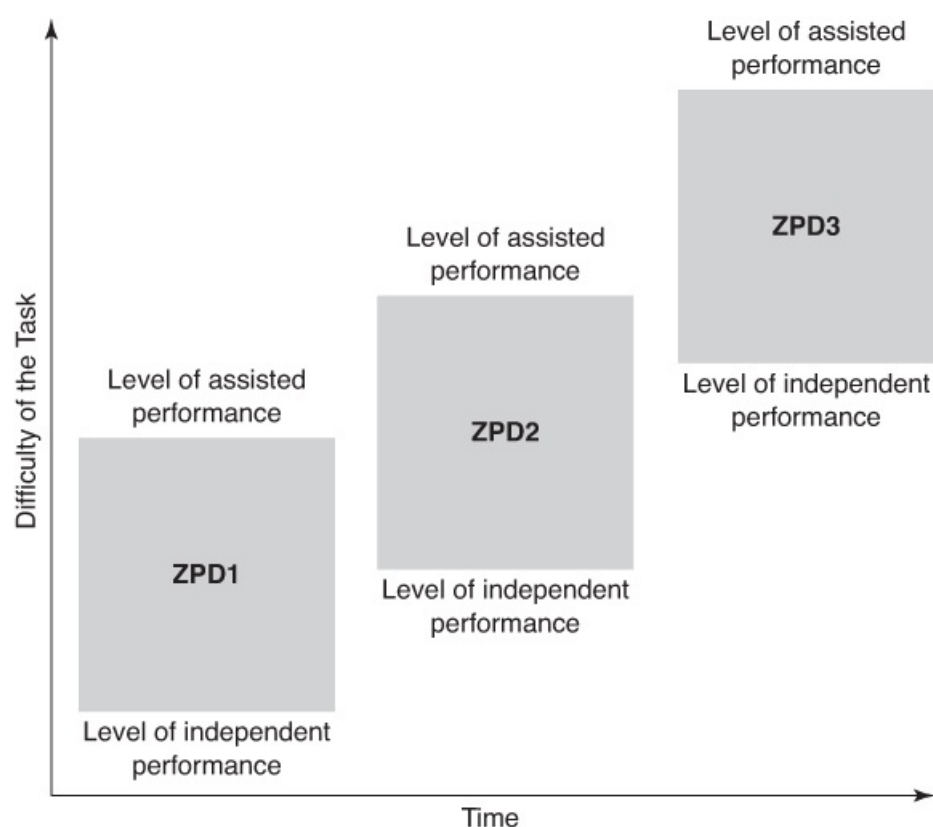


Figure 11–2 Changes in a Child’s ZPD Over Time

Source: From *Tools of the Mind* (2nd ed.), by [E. Bodrova and D. J. Leong, 2007](#), Columbus, OH: Pearson.

child, did not discriminate between this child’s low level of performance being a result of mental retardation or educational deprivation. Vygotsky suggested incorporating adults’ assistance in the form of hints, prompts, or rephrasing the test questions into the very procedure of assessment. This modification allows for assessing not only children’s existing skills and competencies but also the ones that have not yet surfaced because of the lack of adequate shared experiences yet nonetheless have a potential to develop ([Vygotsky, 1956](#)). Vygotsky’s insight later led to the emergence of a new methodology of assessment called “dynamic assessment” that is currently used in such fields as special education and educating culturally and linguistically diverse learners ([Poehner, 2008](#)).

Vygotsky also defined ZPD as the area that should be targeted by instruction. He pointed out that in order to be

maximally effective, instruction should be aimed at each child's individual ZPD ([Vygotsky, 1978](#)). Skills and competencies that are outside the child's zone cannot be affected by instruction either because the child has already mastered them completely or because they are so difficult that at this point in time the child is not yet ready to benefit from any assistance.

The Role of the Teacher in Children's Learning and Development

Consistent with his view of development as being culturally determined, Vygotsky believed that the role of the teacher is more than teaching facts and skills. Teachers, he noted, can actually shape children's development by helping them acquire the mental tools of their culture. This view is reflected in the following three main principles of Vygotskian-based education.

Teachers and Children Co-Construct Knowledge

Similar to other constructivists, Vygotsky believed that children construct their own understandings and do not passively reproduce what is presented to them. However, for Vygotsky, children's process of construction always takes place in a cultural context and is mediated—directly or indirectly—by other people ([Karpov, 2005](#)). In the classroom setting, a teacher can directly affect a child's construction of knowledge by focusing the child's attention on a specific object or by using specific words. The teacher can also affect the child's construction of knowledge in an indirect way by orchestrating the context for this child's interactions with other children or by providing certain instructional materials.

Scaffolding Helps Children Make a Transition From Assisted to Independent Performance

Even after children develop new skills and competencies sufficiently to perform a task with adult assistance, it may not mean that tomorrow they will be ready to perform this task independently. For most children, the transition from assisted to independent learning is a gradual process that involves moving from using a great deal of assistance to slowly taking over until eventually no assistance is needed ([Wood, Bruner, & Ross, 1976](#)). For a teacher, to facilitate this transition means that the teacher needs to scaffold student learning by first designing and then following a plan for providing and withdrawing appropriate amounts of assistance at appropriate times. Although not used by Vygotsky himself, the concept of scaffolding helps us understand how aiming instruction within a child's ZPD can promote this child's learning and development.

Instruction Should Amplify Child Development and Not Accelerate It

Vygotsky's idea of effective teaching aimed at a child's ZPD was further extended by his students, namely Alexander Zaporozhets, who applied this idea to early childhood education. Emphasizing the need to teach skills and competencies within rather than outside young children's ZPD, Zaporozhets condemned the practice of acceleration of development—something that intends to prematurely turn a toddler into a preschooler and a preschooler into a first-grader ([Zaporozhets, 1986](#)). An alternative to this unnecessary acceleration is amplification of development—using the child's ZPD to its fullest by making sure that all skills and competencies that have potential to emerge indeed emerge at the appropriate time.

The Vygotskian View Of Child Development

For Vygotsky, child development during the early years leading to school readiness is driven by the types of interactions children have with the social environment centered on accomplishing important developmental tasks.

Social Situation of Development as the Main Mechanism of Development

Vygotsky believed that child development includes both qualitative and quantitative changes. When qualitative changes happen, the entire system of mental functions undergoes major restructuring, resulting in the emergence of cognitive and social-emotional new formations or developmental accomplishments. Likewise, there are periods when no new formations appear, but children continue to develop their existing competencies. During these periods, growth occurs as a quantitative change in the number of things the child can remember and process. Although not strictly a “stage theory,” Vygotsky’s view of child development includes the concept of “age periods”—infancy, toddler-hood, preschool and kindergarten age, elementary school age, and adolescence—each building on the previous one and each defined by its unique set of developmental accomplishments ([Karpov, 2005](#)). Children’s progress from one period to the next one is determined by the interaction between children’s existing and emerging competencies on the one hand and their social situation of development on the other. *Social situation of development* is composed of what society expects of children at a certain age, what kinds of activities and interactions become available to them, and what kinds of mental tools adults help them to acquire. For Vygotsky, social situation of development “represents the initial moment for all dynamic changes that occur in development during the given period. It determines wholly and completely the forms and the path along which the child will acquire ever newer personality characteristics, drawing them from the social reality as from the basic source of development, the path along which the social becomes the individual” ([Vygotsky, 1998, p. 198](#)). Vygotsky sees the changes in the social situation of development as the mechanism that propels development forward by providing new and more advanced mental tools that continue to shape children’s growing competencies.

Developmental Accomplishments and Leading Activity

In the work of Vygotsky’s students, his original view of age periods was refined and expanded to form the theory of child development that contains well-defined stages along with the explanation of the mechanisms underlying children’s transition from one stage to the next ([Karpov, 2005](#)). One of the major innovations contributed by the post-Vygotskians to his theory of child development is the introduction of the idea of leading activity that replaced Vygotsky’s original notion of social situation of development. *Leading activity* is defined as a type of interaction between children and the social environment that leads to the emergence of the developmental accomplishments in one period of life and that will prepare them for the next period ([Leont’ev, 1981](#)). *Developmental accomplishments*, in turn, are defined as competencies and skills that are not only new to a specific age period but are also critical for the child’s ability to engage in a leading activity of the following period ([Karpov, 2005](#)).

Table 11–1 Leading Activities and Developmental Accomplishments in Early Childhood

Age Period	Leading Activity	Developmental Accomplishments
Infancy	Emotional interactions with caregivers	Attachment Object-oriented sensorimotor actions
Toddlerhood	Object-oriented joint activity with adults	Beginnings of symbolic thinking Beginnings of self-regulation Language Self-concept
Preschool and Kindergarten	Make-believe play	Ability to act on an internal mental plane Symbolic thought Self-regulation Imagination Integration of emotions and cognition
Elementary Grades	Learning activity	Theoretical reasoning Higher mental functions Motivation to learn

For example, the ability to think in images is a developmental accomplishment for toddlers because this ability is critical for the development of make-believe play, which is a leading activity of the preschool age. [Table 11–1](#) summarizes the characteristics of the developmental periods of early childhood in the Vygotskian tradition.

The Vygotskian Approach to School Readiness

Vygotsky's view on school readiness stems from his idea of social situation of development as a main force propelling child development. The transition from preschool to school means major changes in the social situations that the child participates in—a change in the nature of the interactions involved in schooling and in the expectations associated with the role of student. To gain awareness of society's expectations associated with the role of a student and to develop the abilities to meet these expectations, children have to actually participate in school activities and to enter specific social interactions with teachers and other students. In other words, for Vygotsky, school readiness was being formed during the first months of schooling and not before to school entry. However, certain accomplishments of preschool age make it easier for children to develop this readiness. Among these accomplishments are mastery of some mental tools, development of self-regulation, and integration of emotions and cognition. With these prerequisites in place, a preschool child could make the necessary transition from learning that “follows the child's own agenda” to learning that “follows the school agenda” ([Vygotsky, 1956](#)).

The Applications Of The Vygotskian Theory In The Early Childhood Classroom

Educational philosophy of teaching young children based on the Vygotskian theory can be summarized as follows:

- Teachers promote and foster development by engaging children in the activities that are the leading activities for their age such as make-believe play.
- Teachers focus on promoting the development of higher mental functions and on children's acquisition of cultural tools and not on learning of discrete skills and concepts.

- Interventions for children with special needs are based on the idea of re-mediation: Children are taught to compensate for the deficiencies in their lower mental functions by developing higher mental functions using specific mental tools.

Fostering Child Development by Engaging Children in the Leading Activities

Because make-believe play is the leading activity for preschool and kindergarten-aged children, supporting play is a priority in a Vygotsky-based early childhood classroom.

Vygotskian Definition of Play

As Vygotsky studied how play affects the young child's emerging higher mental functions, he concluded that play "is not the predominant form of activity, but is, in a certain sense, the leading source of development in preschool years" (1967, p. 6). This idea of play being the leading source of development for young children was later elaborated on by Vygotsky's colleagues Alexei Leont'ev and Daniel Elkonin, who considered play the "leading activity" for preschool- and kindergarten-aged children (Elkonin, 1972; Leont'ev, 1981). In their writings, however, Vygotsky and his colleagues limited their definition of play to the dramatic or make-believe play of preschoolers and children of primary school age. The Vygotskian definition of play does not include such activities as object manipulations and explorations that are considered precursors to play and such activities as games and sports that are considered an outgrowth of play. "Real" play, according to Vygotsky, has three components:

- Children create an imaginary situation.
- Children take on and act out roles.
- Children follow a set of rules determined by specific roles.

Although imaginary situation and roles in make-believe play had often been mentioned by other researchers in their analysis of play, the idea that play is not very spontaneous but is instead contingent on players abiding by a set of rules was first introduced by Vygotsky. At first, the notion of play being the most restrictive context for a child's actions may sound completely counterintuitive. However, Vygotsky argued that this rule-based nature is an essential characteristic of children's make-believe play:

Whenever there is an imaginary situation in play, there are rules—not rules that are formulated in advance and change during the course of the game, but rules stemming from the imaginary situation. Therefore, to imagine that a child can behave in an imaginary situation without rules, i.e., as he behaves in a real situation, is simply impossible. If the child is playing the role of a mother, then she has rules of maternal behavior. The role the child plays, and her relationship to the object if the object has changed its meaning, will always stem from the rules, i.e., the imaginary situation will always contain rules. In play the child is free. But this is an illusory freedom. (Vygotsky, 1967, p. 10)

Make-Believe Play as a Source of Development

Vygotsky assigned play a special place in his theory, listing it specifically as one of the social contexts responsible for creating young children's ZPD:

In play the child is always behaving beyond his age, above his usual everyday behavior; in play he is, as it were, a head above himself. Play contains in a concentrated form, as in the focus of a magnifying glass, all developmental tendencies; it is as if the child tries to jump above his usual level. The relationship of play to

development should be compared to the relationship between instruction and development... . Play is a source of development and creates the zone of proximal development. ([Vygotsky, 1978, p. 74](#))

Vygotsky's statement on play as a source of the ZPD means that young children's performance in play is higher than their performance in nonplay contexts. This idea was confirmed in a series of experiments done by Vygotsky's students. For example, [Zinaida Manuilenko \(1975\)](#) and [Zinaida Istomina \(1975\)](#) found that the young child's mental skills are at a higher level during play than during other activities, which represents operating at what Vygotsky identified as the higher level of the ZPD. Manuilenko, in particular, found higher levels of self-regulation of children's physical behaviors in play than in nonplay contexts. For example, when a boy was asked to be the lookout, he remained at his post and did not move for a longer period of time than he could when the experimenter asked him to stand still in a laboratory condition.

In another study, Istomina compared the number of words children could deliberately remember during a dramatic play session involving a grocery store with the number of words they could remember in a typical laboratory experiment. In both situations, children were given a list of unrelated words to remember. In the dramatic play situation, the words were presented as the items on a "shopping list" to use in a pretend grocery store. In the laboratory experiment, the instructions were simply to memorize the words. Istomina found that preschoolers remembered more items in the dramatic play condition, functioning at the level that older children could demonstrate in the nonplay condition that was similar to a typical school task. These findings support Vygotsky's view of play as the "focus of a magnifying glass" in the earlier quotation, indicating that new developmental accomplishments do become apparent in play far earlier than they do in other activities.

Vygotsky maintained that for children of preschool and kindergarten age, their mastery of academic skills is not as good a predictor of their later scholastic abilities as the quality of their play. In a 4-year-old's play, we can observe higher levels of such abilities as attention, symbolizing, and problem solving than in other situations—we can actually watch the child of tomorrow.

Implications of Vygotsky's Theory of Play for Early Childhood Educators

Vygotsky's theory underscores the value of make-believe play for child development, including the development of competencies that make children ready for formal schooling. First, play helps children develop the ability to self-regulate their physical, social, and cognitive behaviors, that is, to engage in these behaviors following some external or internalized rules rather than acting on impulse. Children who cannot pay attention or follow directions usually have a hard time mastering academic subjects, as do children who cannot control their emotions. Contrary to a typical adult's view of play as a time when children are free to do whatever they please, Vygotsky viewed play as the activity placing the most restraints on children's actions and thus forcing children to practice self-regulation far more often than in any other activity. These restraints come in the form of rules that a child has to follow: for example, once she agrees to play "baby" and not "mommy" (baby does not use a knife and needs to wait to be fed) or to use a paper plate to stand for a steering wheel and not for a pie (one can take a bite when holding a pie but not a steering wheel).

Not all play is equally beneficial for the development of self-regulation. Current studies of the relationship between play and self-regulation confirm Vygotsky's belief that make-believe play can improve self-regulation, especially in highly impulsive, "hard to manage" children ([Berk, Mann, & Ogan, 2006](#)). However, it happens only when children are able to create a joint imaginary situation, take on the roles of various pretend characters, and act these out using imaginary props, language, and symbolic gestures.

Another important outgrowth of make-believe play is abstract thinking. Using various props to represent "the real things" in play, children learn to separate the meaning or idea of the



Figure 11–3 Realistic Play Props



Figure 11–4 Nonrealistic Play Props

object from the object itself. When a child pretends to “drive” a block on a carpet as if it were a truck, this child separates the idea of “truckness” from a truck and attaches it to the block. This ability to separate the meaning from the object is a precursor for the development of abstract thought when a child has to manipulate ideas that may not have an immediate connection with the tangible objects:

A child learns to consciously recognize his own actions and becomes aware that every object has a meaning. From the point of view of development, the fact of creating an imaginary situation can be regarded as a means of developing abstract thought. ([Vygotsky, 1967, p. 17](#))

As with self-regulation, not all make-believe play equally promotes the development of abstract thinking. The best kind of play is where children use props that are unstructured and multifunctional as opposed to function specific and realistic. With realistic toys, there is no need to separate meaning from the object because the real object and the pretend one look alike and can be used in a similar manner (see [Figure 11–3](#)). On the other hand, when children use nonrealistic props they not only have to constantly change the meaning of these props but also have to use different words to describe these changes to their playmates (see [Figure 11–4](#)). For example, children can use the same cardboard box first for a garage, then for a gas station, and finally for a grocery store. Because the box

looks the same as it represents all three buildings, children will need to communicate the change in its function by naming it differently—otherwise a child playing “mechanic” will end up in the grocery store changing tires!

Table 11–2 shows the difference between the way a traditional early childhood classroom would support play and the way a classroom using a Vygotskian approach, such as in a Tools of the Mind classroom, would support play.

Promoting Children’s Acquisition of Mental Tools and Higher Mental Functions

For Vygotskians, the goal of education in general and early childhood education in particular is more than to equip children with a set of specific skills and knowledge. Instead, they see this goal as helping children acquire mental tools and higher mental functions (Bodrova & Leong, 2007). The examples of cultural tools that children begin mastering at a very young age include gaining control of their external behavior through the use of self-directed

Elements of Play	Most ECE Classrooms	Tools of the Mind Classrooms
Children engage in make-believe play. . .	Mostly in the housekeeping/dramatic play area	In all centers
The duration of play	Remains unchanged throughout the year and depends on the duration of center time in the class schedule	• Will increase as children gain better control of their behaviors • By the end of the year, children have up to 50–60 min of uninterrupted play
Play time is used by the teachers	• To provide additional one-on-one time to struggling students by taking them out of play centers, <i>or</i> • To use play context for teaching content skills (e.g., working on numbers and shapes in the block area)	• To support children’s use of play-related vocabulary • To support children’s imaginary use of nonstructured and multifunctional props • To support children’s development of pretend scenarios
Play theme	• May remain unchanged for most part of the year (e.g., children play “family”) • Often focuses on the objects • May change frequently (e.g., every week or every other week) as the teacher introduces a new unit (e.g., <i>apples</i> or <i>insects</i>)	• Lasts for 4–5 weeks to allow children to build background knowledge necessary for extended play • Focuses on people and the roles people play (e.g., the content of <i>apples</i> may be covered as children play <i>farm</i> or <i>store</i>)
Play props	• Often are heavily represented by store-bought toys and props or are made by the teacher • Often consist of very realistic replicas of objects	• Are largely multifunctional and/or unstructured • Can be made by children themselves or with minimal teacher’s help
Teachers intervene when . . .	Children argue or fight	Children need help to create, become involved in, maintain, or extend a play scenario

Table 11–2 Supporting Play as a Leading Activity of Young Children

► Alternate View

speech, developing deliberate memory through the use of drawing and writing, and performing arithmetic computation by counting on fingers. In all these instances, tools help children solve problems that require engaging mental processes at the levels not yet available to them (e.g., when a task calls for deliberate memorization or for focused attention). In a typical early childhood classroom, we can see many cases of children using various tools to aid their learning such as using alphabet charts to remind them of the associations between letter sounds and letter symbols or singing the ABC song to prompt their memory of the letter order in the alphabet. In the Vygotskian view, the use of these tools not only assists children with the task at hand but actually restructures their mind, supporting the development of higher mental functions ([Bodrova, Leong, & Akhutina, 2011](#)).

Private Speech as a Mental Tool

For Vygotsky, many mental tools are language based and language itself is the most powerful mental tool. Major transformations in a child's mind associated with the development of higher mental functions depend on how well the child masters the use of speech, first oral and later written. According to Vygotsky, it is during the preschool years that children start using their speech not only for communicating to others but also for communicating to themselves and a new form of speech—private speech—emerges ([Vygotsky, 1987](#)). When children use private speech they talk aloud, but many of their utterances are not addressed to anyone in particular and often cannot be understood by anyone but the child herself. Unlike Piaget who associated this phenomenon with children's egocentrism and considered it a sign of immature thinking, Vygotsky viewed private speech as a step on the continuum from public (social) speech to inner speech and eventually to verbal thinking ([Vygotsky, 1987](#)).¹ From this perspective, private speech becomes not a sign of immaturity but a sign of progressive development of cognitive processes.

Vygotsky described two major changes occurring in the use of private speech during the preschool years. First, the function of private speech changes. Used initially to simply accompany children's practical actions, private speech eventually becomes exclusively self-directed and changes its function to one of organizing children's own behaviors. At the same time, the syntax of private speech changes as well. From complete sentences typical for social speech, a child's utterances change into abbreviated phrases and single words unsuited for the purposes of communication to other people but sufficient for communicating to oneself. Eventually, private speech goes inside evolving into verbal thought. Vygotsky uses these two metamorphoses of private speech to illustrate the universal path of the acquisition of cultural tools: They are first used externally in interactions with other people and then internalized and used by an individual to master his/her own mental functions. The onset of private speech signals an important development in self-regulation: starting with regulating their practical actions, children expand their use of private speech to use it to regulate a variety of their mental processes ([Bodrova et al., 2011](#)).

The use of private speech as an essential mental tool for young children should be encouraged in the early childhood classroom. Because for Vygotsky young children "think as they talk," teachers should not try to keep young children quiet when they engage in thinking and problem solving. On the contrary, current research supports Vygotsky's observations that children's use of private speech increases as children attempt to solve more challenging tasks. Although it is natural for an adult to think quietly before speaking, for young children oftentimes the actual thought occurs in the process of expressing it, so a classroom full of very quiet kindergartners may be a sign that there is not much thinking going on!

Written Speech as a Mental Tool

The central part of Vygotsky's approach to early writing is the idea that children learn to employ the instrumental function of written speech to expand their mental capacities:

The development of written language belongs to the ... most obvious line of cultural development because it is connected with the mastery of an external system of means developed and created in the process of cultural development of humanity. (Vygotsky, 1997, p. 133)

Studies conducted by Vygotsky's colleague Alexander Luria in connection with Vygotsky's general research program demonstrated that even very young children do use written symbols as memory aids (Luria, 1998). Some of Luria's findings (such as the ability of 3-year-old children to reliably "read" and "re-read" their own scribbles) made their way into Western literature and inspired researchers to study early forms of writing that appear before the onset of formal schooling (see, e.g., Ferreiro & Teberosky, 1982). Vygotsky traced the roots of children's writing to their early drawings, concluding that these drawings are used in the function similar to written words, both conveying only essential and constant characteristics of objects. From that Vygotsky concludes that young children's drawings are "a unique graphic speech, a graphic story about something ... more speech than representation" (Vygotsky, 1997, p. 138). It means that learning to write does not start from learning to form letters but instead starts from learning to use symbolic marks to represent a message. Learning letters supplies the final component to move the child from idiosyncratic forms of "drawing speech" to a conventional way of recording speech in written words (see Figure 11-5).



Figure 11-5 A Sample Play Plan Done by a 4-Year-Old Child in the Context of Make-Believe

Play

Discussing the methods of teaching writing, Vygotsky emphasizes that “teaching must be set up so that reading and writing satisfy the child’s need” and that the goal of the instruction should be “to teach a child written language and not writing the alphabet” ([Vygotsky, 1997, p. 147](#)). In the absence of play and self-initiated drawing, children who learn to write master merely the skills of letter formation: they do not use written language the way it is supposed to be used in the culture, as means of communication with others and with oneself. Vygotsky uses an example of perfect handwriting produced by 4-year-olds attending Montessori schools: The content of their letters indicated that they did not use writing to express their own thoughts or feelings; they were writing what the teachers dictated to them or copied the teacher’s messages (coincidentally, make-believe play has never been and still is not a part of the traditional Montessori curriculum).

At the same time, Vygotsky advocates early instruction in writing (at ages 3 to 4) that emphasizes the communicative and instrumental function of written language and not the mechanics of its production ([Vygotsky, 1997](#)). True to his own belief that good instruction should lead development and not follow it, Vygotsky explains the value of learning to write early, not in the context of preparing children for formal schooling, but in the broader context of using cultural tools for supporting the development of higher mental functions.

[Table 11–3](#) summarizes the differences between how a traditional early childhood classroom and a Vygotskian-based classroom, such as in a Tools of the Mind classroom, would support the use of mental tools.

Re-mediation as the Core Principle of Special Education

Abnormal psychology and special education for Vygotsky were one of his passions and at the same time one of the main sources of his theoretical

Classroom Routines	Most ECE Classrooms	Tools of the Mind Classrooms
Large group	Teacher calls on an individual child to answer a question.	Children talk to each other as they answer the question
Small group	Children work on individual projects or tasks	Children work in pairs using visual aids to remind each partner of his/her role
Movement games	Children play movement games following music or teacher directions	Children play movement games that require them to follow more complex rules or to switch from one set of rules to another. As they play these games children are encouraged to talk to themselves to control their movements
Before center time	• Children are assigned centers by a teacher <i>or</i> • Children choose a center and say to the teacher where they want to play	Children make “play plans” representing what they want to do and whom they want to play with. They plan by engaging in talking, drawing, and writing (See Figure 5, Sample Play Plan)
During center time	• Teacher monitors children’s choice of centers making sure children stay where they said they will <i>or</i> • Children move between centers often interrupting each other’s play	Children monitor their own and their friends’ choice of centers by using visual reminders (e.g., colored clothespins or necklaces) that match the color of the center sign (Figure 6)
Cleanup time	The teacher signals when it is time to clean up by using a song or a timer	Children use a specially selected song as a strategy to keep track of time left until the end of cleanup

Table 11–3 Supporting Children’s Use of “Mental Tools” Throughout the Day

► Alternate View

insights. Vygotsky’s view of disabilities is consistent with his major principle of social determination of the human mind. For him, a disability is a sociocultural and developmental phenomenon, and not a biological one.

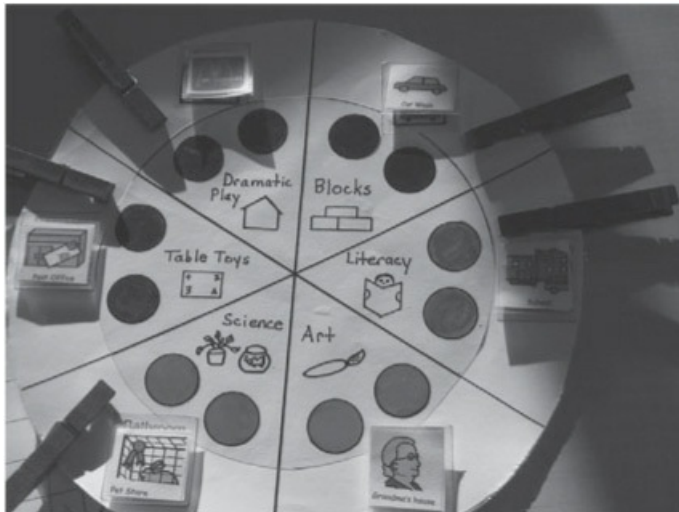


Figure 11–6 Center Planning Wheel

Social and Cultural Nature of Disabilities

Vygotsky believed that children with disabilities follow a different developmental path than their typically developing peers, with their disability affecting other areas of development in a complex and systemic way. To emphasize the complex and systemic nature of this relationship, Vygotsky used the term *disontogenesis* or “distorted development,” emphasizing that distortions of development as well as the normal path of development are always culturally specific. The major components that determine the course of development for a child with a disability include the primary disability (e.g., visual impairment or restricted movements) and the social context in which the child develops (Vygotsky, 1993). This social context would determine the extent to which this child would be considered (and will consider himself) “disabled.” For example, compare two children who experience similar problems in coordinating movements of their eyes while focusing on near objects. For a child living in a Western industrialized country, this problem will interfere with his ability to track print when reading. On the other hand, a child living in a herding community might not even have a need for tracking small objects because most of his daily tasks involve looking at larger objects at a distance. Evidently, the same visual “deficit” may go virtually unnoticed in a society that does not rely on written texts for carrying out essential tasks, but may put another child at risk of developing reading disability and sometimes even on the road to academic failure associated with the possibility of subsequent social and emotional complications.

As a result of the interaction between the primary disability and the social context, a secondary disability can develop. Although the child’s primary disabilities affect primarily lower mental functions, secondary disabilities are the distortions of higher mental functions. The reason that the secondary disabilities develop is because primary disabilities often prevent a child from mastering cultural tools critical for engaging in social interactions. In turn, limited social interactions prevent the child from acquiring even more cultural tools, which eventually leads to systemic distortions in this child’s mental functioning. By contrast, if the social context provides this child with an opportunity to learn an alternative set of cultural tools, this child may be able to participate in a wide range of social interactions and as a result develop higher mental functions.

Vygotsky’s Approach to Special Education

Unlike other approaches to special education that focus on restoring the very function that is affected, for Vygotsky the primary disability should not be the main focus of the re-mediation efforts (Vygotsky, 1993). He argues that, contrary to common wisdom, a primary disability is not the easiest one but the hardest one to

remediate because it affects lower mental functions. Lower mental functions are biologically determined (in today's language, we would call them "hard-wired") and it is exactly because of their biological nature that they cannot be changed by means other than radical medical intervention, such as inserting a hearing implant to improve hearing. On the other hand, higher mental functions are culturally and socially determined; as such, they can be successfully remediated in the course of specifically designed educational interventions. Vygotsky advocates focusing on higher and not lower mental functions in remediation, contending that "the developmental limitations in higher knowledge go beyond sensorimotor training which is possible in the elementary processes. *Thought is the highest form of compensation for the insufficiencies of visual perception*" ([Vygotsky, 1993, p. 204](#); italics in original).

For Vygotsky and his students, the way to engage higher mental functions to compensate for the deficiencies in lower mental functions is by using specific mental tools. Because all mental tools work as mediators, helping children gain control over their own mental functions, replacing a set of tools that do not work for a child with a disability with another set can be called remediation. The best-known example of such re-mediation is teaching visually impaired children to use Braille symbols instead of regular letters. Vygotsky's students as well as modern educators working in the cultural-historical tradition extended this approach to many other disabilities, designing many disability-specific tools as well as strategies to teach these, thus creating the system of special education based on the ideas of re-mediation ([Daniels & Hedegaard, 2011](#)).

Conclusion

In this chapter, we have discussed the Vygotskian approach to early childhood education, summarizing the major tenants of his theory and the application of these ideas to practical classroom interactions. The Vygotskian approach helps teachers to understand their role in the learning and teaching process with emphasis on "process" rather than product and the importance of developing higher mental functions. In the section on applications to the classroom, it is clear that this theoretical view leads to specific recommendations for the development of make-believe play, the development of literacy, and the kinds of interventions that should be used when working with children with special needs.

Reflect On

1. What are tools of mind and why is helping children acquire them a major goal of education for Vygotsky? How is this concern realized in the Tools of Mind curriculum?
2. How does adult mediation assist the internalization of higher mental functions in young children? Give an example from the Tools of Mind program.
3. Why is ZPD critical in teaching and assessment?
4. Does scaffolding and generally supporting the child amount to the same thing?
5. How is the Tools of Mind program similar to and/or different from other curricular models with respect to play and routines of the classroom?

Endnote

1. [1](#). Vygotsky used the term egocentric speech to describe audible self-directed speech; however, in the Western literature, this phenomenon is commonly referred to as private speech (see, e.g., [Berk & Winsler, 1995](#)).

Selected Resources

Web site on Vygotsky

en.wikipedia.org/wiki/Lev_Vygotsky

Vygotsky's Works online

www.marxists.org/archive/vygotsky/

Classroom Applications/Curriculum

www.toolsofthemind.org

DVDs

- Vygotsky: An Introduction, Davidson Films, 1994
- Play: The Vygotskian Approach, Davidson Films, 1996
- Scaffolding Self-Regulated Learning in the Primary Classrooms, Davidson Films, 1996

www.davidsonfilmsstore.com

- Lev Vygotsky Documentary, 2009

www.vygotskydocumentary.com/index.html

Books on Vygotsky

The Cambridge Companion to Vygotsky, by H. Daniels, M. Cole, and J. Wertsch (Eds.), 2007, New York, NY: Cambridge University Press.

Vygotsky's Psychology: A Biography of Ideas, by A. Kozulin, 1990, Cambridge, MA: Harvard University Press.

Vygotsky's Educational Theory in Cultural Context, by A. Kozulin, B. Gindis, V. Ageyev, and S. Miller (Eds.), 2003, Cambridge, England: Cambridge University Press.

Vygotsky and Education: Instructional Implications and Applications of Sociocultural Psychology, by L. C. Moll (Ed.), 1990, New York, NY: Cambridge University Press.

Understanding Vygotsky. A Quest for Synthesis, by R. Van der Veer and J. Valsiner, 1991, Oxford, England: Basil Blackwell.

Selected Readings From Vygotsky

The Vygotsky Reader, by R. Van der Veer and J. Valsiner (Eds.), 1994, Oxford, England: Basil Blackwell.

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Chapter 12 The Developmental-Interaction Approach at Bank Street College of Education

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and

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After reading this chapter, you should be able to:

- Describe the history and evolution
- Explain the basic principles
- Detail the curriculum
- Discuss the implications for teacher education

Some use the term the *Bank Street approach* to describe this method of early childhood education, but many practitioners and proponents prefer the term the developmental-interaction approach. Although admittedly more cumbersome, developmental-interaction specifies key features of the approach and removes it from its geographically specific site of origin. Many early childhood and elementary schools, as well as individual classroom teachers, consider themselves exemplars of this approach to teaching, but Bank Street College of Education claims the longest consistent association with this way of thinking about and practicing education.

The term developmental-interaction calls immediate attention to the centrality of the concept of development, the ways in which children's (and adults') modes of apprehending, understanding, and responding to the world change and grow as a consequence of their continuing experience of living. The term interaction refers to the tenet that thinking and emotion are interconnected, interacting spheres of development; it also highlights the importance of engagement with the environment of people and the material world. The term has been in use since 1971 (see, e.g., [Biber, Shapiro, & Wickens, 1971](#); [Goffin, 1994](#); [Nager & Shapiro, 2000](#); [Shapiro & Biber, 1972](#); [Shapiro & Weber, 1981](#)), but the basic ideas have a much longer history. We begin with the origins of these principles and practices both to indicate the forerunners of several of the key educational ideas and to demonstrate that programs for young children have a more extensive history than is often recognized.

History and Evolution

One notable aspect of the early days of the 20th century, a period now known as the progressive era, was that many women were rebelling against conventional restrictions on women's lives. Social reformers were exposing social inequities and working to show ways toward a more democratic, egalitarian society. For example, Jane Addams and Lillian Wald were pioneering social workers; Susan B. Anthony, Lucretia Mott, and Elizabeth Cady Stanton fought for women's suffrage. In New York City alone, there were innovative educators such as Caroline Pratt, who founded the Play School, later known as the City and Country School; Elisabeth Irwin, who founded the Little Red School House; and Margaret Naumberg, who began the Walden School.

Among the small, independent educational enterprises designed to model new ways of teaching and new social arrangements was the Bureau of Educational Experiments. Founded in 1916 by Lucy Sprague Mitchell, it later became Bank Street College of Education. Mitchell was strongly influenced by the work of John Dewey, a

philosopher, psychologist, educator, and prolific writer, whose ideas still inform thinking about education. Dewey's belief in the importance of education for the development of a democratic society was crucial. Central, too, was the proposition that school learning should be connected to children's lives in meaningful ways. The school that Dewey founded at the University of Chicago in 1896 was a laboratory, synthesizing the study of human development and the creation of curriculum. The school was an experiment in guiding children's development toward greater collaboration and living out democratic ideals (see, e.g., [Cahan, 1992](#); [Dewey, 1936/1991a](#), 1937/1991b; [Tanner, 1997](#)).

Mitchell founded the Bureau as a research organization; Harriet Johnson, who had been working for the Public Education Association, became the founding director of the Bureau's nursery school in 1919. The school was designed to be an arena for studying children and for devising teaching practices that fostered growth and development. When Bureau staff—teachers and researchers—spoke of development or of schooling, they did not refer only to cognitive gains. They saw children's growth as encompassing physical, social, emotional, aesthetic, and intellectual domains. The concept of "the whole child" captures a salient aspect of this approach to education (see [Biber, 1972](#)). The Bureau was part of an informal network of experimental schools that shared a commitment to progressive pedagogy and a spirit of inquiry (see [Winsor, 1973](#), for a compilation of bulletins from these schools).

Mitchell combined a full-scale career with an active family life; she was a pioneer of what her biographer, Joyce Antler (1981, 1987), calls "feminism as life process." Like Dewey, she was a strong believer in the then remarkable idea that schools that would enhance and support children's growth should be based on knowing more about how children learn, how to build on their interests, and how to introduce concepts and knowledge in ways that made sense to children. In *Two Lives*, a book that combines her autobiography and a biography of her husband, the economist Wesley Clair Mitchell, she wrote, "It seemed to me that knowledge gained through all the kinds of work I had seen ... was relevant to a study of children, and surely one had to understand children in order to plan a school that was right for their development" ([Mitchell, 1953, p. 273](#)).

Over time, interest grew in making this kind of education available to more children of preschool age and extending it into the elementary years. In 1930, the Cooperative School for Teachers was initiated to prepare teachers to work in these new ways and to help teachers learn as the children did: by active experimentation. This approach is compatible with what is now known as constructivism.

Subsequently, Mitchell and the Bureau (later, College) staff worked in public school classrooms where teachers volunteered to have staff members bring curriculum ideas and materials to their classrooms and model teaching techniques. The Public School Workshops, as they were called, continued for many years in New York City and neighboring communities. The staff introduced progressive educational ideas to many schools that followed basically traditional teaching methods. In turn, staff had the opportunity to work with a more diverse student and teacher population. In this sense, the workshops laid the groundwork for Bank Street's leadership and participation in national educational programs such as Head Start and Follow Through ([Shapiro, 2003](#)). More recently, Bank Street has been engaged in a notably successful collaboration with the public schools of Newark, New Jersey, in a multiyear restructuring of early childhood education ([Silin & Lippman, 2003](#)).

Mitchell was joined by dedicated colleagues who made important contributions to clarifying and expanding the fundamental philosophy of the developmental-interaction approach. Many deserve mention, but Barbara Biber stands out. A volume of her collected papers represents 50 years of thoughtful attention to the blending of psychological and educational insights ([Biber, 1984](#); see also, [Zimiles, 1997](#)). Her work demonstrated psychological depth, a keen understanding of children's development, and a pervasive faith in the potential power of schooling to provide a context for living democratic ideals.

Two concepts of broad scope were central to the evolving developmental-interaction approach: progressivism and mental health. Although the term mental health is no longer in common use, its meaning has been incorporated into generally accepted views of the potential of schooling for fostering healthy development. The school was seen as a vehicle for promoting mental health by providing opportunities for creative and satisfying work; by cultivating cooperation rather than competitiveness; by offering children meaningful and stimulating rather than rote and

fragmented learning; by nurturing individuality; and by furthering values of social democracy. The school was, and is, seen as much more than simply a place to learn basic cognitive skills. Certainly, the developmental-interaction approach does not fit what [Freire \(1970\)](#) described as a “banking model” of education, one in which the expert teacher deposits knowledge into the passive child recipient.

Basic Principles

As noted, the roots of the developmental-interaction approach are found in two major areas: educational theorists and practitioners—primarily John Dewey and early progressive pioneers such as Lucy Sprague Mitchell, Harriet Johnson, Caroline Pratt, and Susan Isaacs—and developmental theorists, especially those who viewed development in dynamic terms and in social context—such as Anna Freud (1974), Erik Erikson (1963), Heinz Werner (1961), Jean Piaget (1952), and Kurt Lewin (1935).

Several general principles about development and children’s interactions with the social and physical environment are basic to understanding the developmental-interaction approach. A fundamental tenet has already been mentioned in the definition but bears repeating because it is a distinctive feature of the approach: “that the growth of cognitive function ... cannot be separated from the growth of interpersonal processes” ([Shapiro & Biber, 1972, p. 61](#)). This guiding principle governs the theory and practice of the developmental-interaction approach. The concept of development is dynamic. It is not a simple maturational unfolding but, rather, involves shifts in the way individuals organize and respond to experiences. True to the constructivist paradigm, the child is viewed as an active maker of meaning; the school must provide opportunities for authentic problem solving.

Another basic principle is that engaging actively with the environment—both physical and social—is intrinsic to human motivation. Further, as children grow, they construct more and more complex ways of making sense of the world. In general, the direction of growth involves movement from simpler to more complex and integrated modes.

When thinking about developmental sequences, one must remember that individuals are never at a fixed point on a straight line but operate within a range of possibilities. Earlier ways of organizing experience are not eradicated but become integrated into more advanced systems. Although the concept of stages was invoked in the past to describe sequential patterns of developmental organization, recent research has raised serious questions about the invariance and universality of stage concepts.

A central idea shared with numerous other educational approaches is the importance of development of a sense of self as a unique and independent being. The idea of self described in developmental-interaction is informed by the thinking of George Herbert Mead (1934):

[T]he self is both image and instrument. It emerges as the result of a maturing process in which differentiation of objects and other people becomes progressively more refined and self-knowledge is built up from repeated awareness and assessment of the powers of the self in the course of mastering the environment. The shape and quality of the self reflect the images of important people in the growing child’s life. ([Biber & Franklin, 1967, pp. 13–14](#))

Growth and maturing involve conflict. Conflict is necessary for development—sometimes within the self, sometimes with others. The nature of interaction with significant figures in the child’s life and the demands of the culture will determine the way conflicts are resolved.

In recent years, the work of the Russian psychologist and educator Lev Vygotsky has had a major impact on our conceptualization of interaction. We cannot claim that his work influenced earlier formulations, because the relevant writings were not translated into English until 1978. However, his work and that of his followers is now providing an important perspective that highlights the social context for children’s learning and development and emphasizes the interactive nature of learning (see, e.g., [Moll, 1990](#); [Rogoff, 1990](#); [Vygotsky, 1922–1935/1978](#); [Wertsch, 1985](#)).

From these general principles of development and interaction, a picture emerges of the learner and future citizen. School becomes a place to promote the development of competence in all areas of children's lives and helps them attain a sense of autonomy and personal and group identity. The development of social relatedness is equally stressed.¹ The school empowers children to deal effectively with their environments. It is an active community, connected to the social world of which it is a part, rather than an isolated place for learning lessons. This means that the school shares responsibility with children's families and neighborhood institutions. Sharing responsibility means sharing power and actively seeking engagement. In a time of increased immigration and greater diversity in school populations, these points take on enhanced meanings.

Curriculum

Explicitly or implicitly, any theory or philosophy of education holds within it a view of the learner, consideration of the relationship between learning and teaching, and a statement of what knowledge is deemed most worthy of knowing. As evident throughout this volume, approaches to early childhood education differ in the degree of exactness and specificity required in the relationship between theory or philosophy and practice. Some educational programs translate theory into explicit goals and strategies and the teacher is seen as a skilled implementer of a delivered curriculum. In contrast, in educational programs like developmental-interaction, the underlying philosophy generates principles that guide, rather than determine, practice. In such programs, teachers are expected to develop curriculum content and practices within a stated framework of valued aims and beliefs ([Schoon-maker & Ryan, 1996](#)). From the history, philosophy, and developmental theory of Bank Street, how are ideas and expectations realized in and through practice? How does this approach to education respond to the fundamental how, what, when, where, and why questions of curriculum? What choices are made concerning knowledge? How are the teacher and learner portrayed?

The Learner

From birth, children are seen as curious beings who are actively engaged in interaction with their social and physical environment and who, through sensorial exploration and experimentation, work eagerly to make sense of the world in which they live. Each child has a history of experiences in a world shaped and influenced by the social forces of family, community, and culture. In their encounters with the social and physical environment, children respond with a wholeness of self. As [Lucy Sprague Mitchell \(1951\)](#) noted,

“[A] child is not to be regarded as a sum of special faculties to be trained or developed separately; [the child] is to be regarded as a person, an organism, reacting to experiences as a whole ... for purposes of discussion a child may be divided into a physical body; an intelligence with certain capacities and limitations; a social being reacting to others—either adults or his peers; a creature capable of definite social responses. But no one has ever met such split-off division of a child all by itself.” (p. [189](#))

The concept of a democratic society guides the development and education of the learner in the developmental-interaction approach, influencing curricular decisions about content, practices, and the quality of the social and physical environment. This all-permeating concept reflects Bank Street's historical roots in the progressive movement and the influence of Dewey's educational philosophy in which school and society, democracy and education, are intrinsically connected. The communication, participation, and associated living essential to a democratic society become a way of life to be experienced in the community of the classroom ([Cuffaro, 1995](#); [Dewey, 1936/1991a](#)). “If we really want to know what democracy is like, we have to have firsthand contacts with it—that is, we have to live democratically. This holds true for teachers and children alike” ([Mitchell, 1942, p. 1](#)). What might democracy look like in a classroom of 3- or 5-, or 8-year-olds?

Knowledge and Experience

In the Bank Street approach, social studies is the core or center of the curriculum. Social studies is about the relationships between and among people and their environment, the world in which we live and our place in it. It concerns the near and far and past and present. Fundamental to this approach is that the school provides consistent opportunities for children to experience democratic living.

[T]he responsibility of the social studies program is to give children a sense of man's use of his environment and the role which technology plays in the development of that environment, and understanding of the meaning and structure of society and appreciation of man's striving toward the beautiful, the attainment of his goals. ([Winsor, 1957, p. 397](#))

It is essential that the what and how of learning are interconnected. *What* one learns about the world is not separated from how that knowledge is gained and used. From its inception, fundamental to this approach to education is the concept of learning from experience.

To "learn from experience" is to make a backward and forward connection between what we do to things and what we enjoy and suffer from things in consequence. Under such conditions, doing becomes a trying, an experiment with the world to find out what it is like; the undergoing becomes an instruction—the discovery of the connection of things ([Dewey, 1916/1966, p. 140](#)).

To learn from experience, children must engage directly and actively with the social and physical environment and be offered varied opportunities to see, hear, touch, smell, and taste their world. Thinking, sensing, feeling children make connections and discover relationships. To make what is learned and discovered their own, children also need opportunities to give form to and express the connections they are making. [Mitchell \(1951\)](#) named this process intake and outgo—having an experience as children "take in" the world and the necessary "outgo" as children express, through art, writing, block building, and discussion, their view of the world they are creatively constructing.

For experience to be educative there must also be continuity—where "every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" ([Dewey, 1938/1963, p. 35](#)). *Experience, community, communication, connections, relationships, experiment, continuity*, and problem solving are key terms in the developmental-interaction approach.

The Teacher

The classroom is a learning situation in which the teacher becomes the link between the child's personal world of interests and experiences and the objective, ordered world of the fields of study ([Dewey, 1902/1959](#)). Teaching is complex and demanding, requiring knowledge, skills, and dispositions. Firmly grounded in knowledge of development, coupled with understanding each child's individuality, and with deep knowledge of the curriculum content, the teacher's task is to consider, analyze, and integrate meaningfully the what, how, when, and where of daily classroom life. Teachers must be knowledgeable in the content of the social study not for giving children information but as a guide to asking meaningful questions; to planning opportunities for their experiencing (trips, books, activities); to knowing available resources; and to assessing the development of the study. Academic and practical skills are embedded throughout the curriculum. Guiding the teacher's consideration of these many factors is the why of education, the principles of a democratic community. Consequently, attention is given to creating a social atmosphere in the classroom that will invite discussion and the presence of varied perspectives while also encouraging and supporting a common purpose in working together.

The Learning Environment

What does a developmental-interaction classroom look like? It is a dynamic environment that welcomes active participation, cooperation and independence, has variety and means and materials for expression and communication. There are unit and hollow blocks, clay, paint, water, sand, paper, crayons, and wood, materials

whose lack of structure invites activity, experimentation, imagination, and transformation. There are also more structured materials, such as puzzles, manipulatives, Cuisenaire rods, Dienes blocks, teacher-made materials, paper and pencils for writing, and a wide range of books. Also included are activities such as cooking, planting, weaving, and computer use in the primary grades. The inclusion of materials and activities is determined on the basis of the richness of the opportunities they provide for exploration, discovery, and further learning. The allocation of space provides ample room for dramatic play, block building, and group meetings, as well as space to work alone or in a small group. Flexibility in the schedule provides extended periods of time for children to actively explore the potential of materials, to take trips, to become involved in expanding ideas and interests, and to work together. Flexibility exists within the familiar context of the expected routines of snack, lunch, story, rest, specials, and outdoor periods.

A consistent part of daily classroom life is creating an environment that stimulates literacy with many and varied opportunities for speaking and listening, conversations and discussions, listening to and writing stories, reading, singing, and rhyming. Developments in the fields of anthropology, social theory, and linguistics have influenced our understanding of literacy. Ever-growing developments in technology also influence our thinking about literacy. To speaking, listening, reading, and writing, we now add viewing—what children do—as they respond to and interact with the increasing presence of computers, videos, and television in their lives. Printed and written words now include movement, action, sound, and images. As we enlarge and integrate our understanding of literacy, a range of strategies is necessary to respond to the individuality of children, including features from whole language and the earlier language experience approach, as well as phonetic understanding.

Understanding that words, printed or spoken, may be insufficient for young children to communicate their complex questions and concerns, other opportunities for communication are offered through art materials. It is with paint, clay, crayons, paper, and wood that children have varied opportunities to give form to and express their thoughts and feelings. From beginning colorful crayon strokes of “rain” on paper, to paintings that tell a story, to murals and models that integrate the trips and information gathered in their social studies, children construct and communicate their understanding of the world ([Gwathmey & Mott, 2000](#); [Levinger & Mott, 1992](#)).

In every classroom, beginning with the youngest children and continuing into the 6- and 7-year-old groups, there is a large area devoted to blocks. It is with this material, blocks, that young children engage in an exciting journey into the world of mathematics—an essential means for investigating, ordering, and making sense of their social and physical worlds. Exploring the harmonious relationships between and among blocks based on the size of the unit block, children experience and intuit patterns, part-whole relationships, fractions and geometric forms, adding and subtracting blocks as they construct their buildings. With time, what was intuited is named: “Next to the triangle I need a ‘brickie’ (the unit) but there are no more on the shelf ... I know, I’ll use two squares.”

Individually and in group discussions, mathematical thinking increasingly becomes a daily tool for investigating, recording, and understanding information about the world. Open-ended questions posed by teachers coupled with children’s curiosity can lead to graphs that record and tabulate how each student travels to school as well as surveys that gather data about the number of people in each family and record the number and type of pets in households. Through all these varied activities and probing questions that combine mathematical thinking and language, children work hard to create a firm, ordered foundation of understanding in their ongoing journey of imagining and making sense of the world.

Experiencing and Integrating Knowledge

In social studies, the history and story of people’s lives—their struggles, aspirations, accomplishments, hopes—are viewed from the perspective of different fields of knowledge. The centrality of the social in social studies brings questions and ideas back to people. As Dewey noted in a discussion of geography, one of the disciplines within social studies, “the ultimate significance of lake, river, mountain, and plain is not physical but social; it is the part it plays in modifying and directing human relationships” ([Dewey, 1909/1975, pp. 34–35](#)). [Lucy Sprague Mitchell](#)

[\(1934\)](#) adds further detail to this perspective in her discussion of “human geography”:

For human geography deals with the interrelations between the needs of human beings and the outside environment in which they must satisfy their needs. One half of human geography is what people do to modify the earth’s surface; the other half is what the phenomena of the earth’s surface do to condition men’s activities, most of which are concerned with their work. (p. [100](#))

In social studies, multiple opportunities are offered for questioning, problem solving, and making sense of the social and physical environment of our interactions. In such studies there is an ever-widening spiral of learning and understanding of self and the world—for example, 3-year-olds’ interest and exploration of themselves and their families; 5-year-olds’ study of community services and jobs; 8-year-olds’ research on the history of the original settlers of the area in which they live.

The Family

It is essential that the teacher be aware of the multiple meanings of family for the children in the class and makes no assumptions about the composition of the family or the values it holds. It seems safe to assume that all families want the best for their children, but it does not necessarily follow that we know what a particular family considers best. In many instances, family values may conflict with the values of the school and the larger culture (see, e.g., [Delpit, 2006](#); [Ramsey, 2004](#); [Wasow, 2000](#)).

Self and family are topics of abiding interest for children and a familiar place from which to branch out into the larger world. In a classroom of 3-year-olds, the study of family might be evident in photographs of children’s families posted at the children’s eye level. Conversations are stimulated between and among children as they make comparisons and find similarities and differences. Diversity among family structures is discussed at group meetings, and ideas and conversations are extended through books and stories that include the many ways in which families are constituted—traditional and extended families, gay and lesbian-headed families, single parents (see, e.g., [Casper, Cuffaro, Schultz, Silin, & Wickens, 1996](#); [Casper & Schultz, 1999](#)). From each family in the group there are songs and stories to hear, favorite foods to be tasted, and holidays and traditions to learn about. Trips within the school and in the immediate neighborhood begin to expand the children’s worlds and in their subsequent dramatic play, children reconstruct their experiences and experiment with their increasing understanding of their immediate world. Within such multiple sharing of interests and stories, of self and family, a sense of community begins to grow.

The Community

Gradually, children’s interest in the world outside the family broadens. Making sense of the world now includes unraveling the mysteries of a highly technological and complex world where origins are often hidden. “How does that work?” “Who’s the boss?” “Why?” are the questions of 5-year-olds. When the teacher adds a simple question, “What is a neighborhood?” a foundation can be laid for focusing, organizing, and directing children’s curiosities and interests and beginning a study of community life. In the discussions that follow, children have the opportunity to think about and express their ideas, their information, and misinformation. Extending the scope of the initial question, a new question can be posed: “What do families need?” This may lead to investigating different types of food and housing; the services provided in the community; the variety of neighborhood stores; available means of transportation; and people’s work. In researching and exploring these varied questions through interviews and observations, children come to know the details of people’s lives and work, the world in which they live.

Through trips and discussions, one question leads to another, increasing both the scope and depth of children’s learning. Children seek not only facts and information but also an understanding of relationships. As knowledge is constructed through many neighborhood trips, it is recorded through trip sheets, graphs, charts, children’s written stories and drawings, and murals. Trips and discussions are essential to developing a dynamic social studies

program at all ages. Connections are extended and strengthened in daily group meetings and in the children's imaginative dramatic play with blocks as they symbolically create the social and physical world of a neighborhood. In the interactions of their dramatic play, children test hypotheses using the data they have collected, and in the process they experience and reconstruct their knowledge. The perspectives of both scientist and artist are encouraged in the work of the classroom. In the reality of the world the children have constructed in play, new questions surface, interrelationships are discovered, and the need for further information becomes evident.

For example, on a Monday morning during the 5-year-olds' group meeting, the children choose what they will build. Painted on the floor are two blue lines for the river that will wind through the block scheme. The structures the children have chosen to build are a hospital, a pizza store, a school, a fire station, a house, a zoo, a bus company, and a doctor's office. During the morning discussion, the "bus drivers" state that they will build a bridge so that they can go back and forth between both parts of the town. This leads to children asking where the bus stops will be. An animated discussion ensues with questions such as: "Will you stop at every building?" "Should there be a bus stop in front of the fire station?" "What will happen if the fire engines have to rush out and there's a bus there?" "Should the fire station be next to the hospital (because sick people have to sleep and rest and siren noises would disturb them)?" "If there's a fire in the hospital, how will the sick people get out?"

By midweek there is much activity. The "teacher" at the school is gathering the wooden block figures to go on a trip to the zoo and asks, "Did everyone go to the bathroom?" Using the information they learned on a recent trip to a fire station, the "firefighters" are inspecting the hospital to check that it is safe. A sign is posted at the pizza store: "GD PIZA \$5 NO SMCNG." Beside the house, a child is holding a block figure and waiting impatiently for the bus. Then, with obvious irritation, the child says to the teacher, "They don't come! I just wait and wait. We need a meeting! It's not fair." And an argument is breaking out at the doctor's office: "No, they don't." "Yes, they do." "I'm going to ask." The building partners go to the teacher and ask, "Do doctors give shots or give lollipops?" Nearby, a child comments, "My doctor gives me a shot and a lollipop."

Interactions continue and multiply; conflicts emerge and are resolved. Observing individual children and the group dynamics, the teacher notes possible trips to take and questions to ask at the next group meeting.

Although the type of trip taken depends on the age of children, going out into the world often may include unexpected encounters with societal problems and issues. For example, on a trip to a local railroad station by a group of 6-year-olds studying transportation, besides gaining information about train tracks and workers, schedules and waiting rooms, the children also see several people who are homeless sitting on benches. Does the unexpected—homelessness—become part of the curriculum? In the partnership between children and teachers in the development of curriculum, how is this question answered? Does the teacher wait to see if the children include homelessness in their discussion, wait to see what appears as the children include the train station in their block scheme? If homelessness does not appear in the children's conversations or buildings, does the teacher introduce the topic?

These questions are fundamental to curriculum planning and are connected intrinsically to the why of what is worth knowing. Such questions go beyond the happenings of a specific trip because the world with all its complexities and problems always is in the classroom. Children are in and part of the world. They hear adults talk. They watch television. They feel adult tensions and anxieties. They hear words they do not understand. They have questions. Children



Child learning in a setting outside of the classroom.

encounter and are affected by societal issues and attitudes, whether directly or indirectly.

For children to truly make sense of the world, the social atmosphere of the classroom should create opportunities for children to express their thoughts and feelings. A democratic community invites rather than silences questioning and discussion. The questions that teachers ask, or choose not to ask, extend or narrow children's view of the world. At times, adults may believe that they must protect children from disturbing aspects of the world. In our protective caring, we may neglect that what we present to children shapes their vision of the world and their place in it. As Dewey noted, "The crucial question is the extent to which the material of the social studies ... is taught simply as information about present society or is taught in connection with things that are done, that need to be done, and how to do them" (1937/1991b, p. [185](#)). Raising questions offer children varied opportunities to reflect on their experiences and to extend their thinking. As children reveal their thoughts, feelings, and questions in their play, drawings and paintings, stories and conversations, adults have the opportunity to clarify, to support, to share concerns and feelings. It is in associated living, in the daily interactions and work of classroom life that children experience what is valued and the community we strive to achieve.

Communities of the Past

In the primary grades, children's curiosities gradually turn from interest in the here and now to the lives of people in the past. To be relevant and meaningful to children, and mindful of the still-emerging development of children's understanding of historical time, the teacher might select for study immigration or the early settlers of their community.

"What do people need?" remains a primary question, but it is now viewed from a different perspective as children must imagine and research change in the physical environment over time. Human geography comes explicitly to the forefront as children take local trips noting physical changes and the geographic features that have influenced the possibilities and direction of an area's growth. As [Mitchell \(1934\)](#) noted, "Everywhere people have been conditioned by the earth forces around them; and everywhere they have to a greater or lesser extent changed the earth they live in" (pp. [14–15](#)). Questions such as "How have people worked together to solve ever-present human problems?" come to the forefront, as do the concepts of change and interdependence. Trips in the area are supplemented with research in libraries and with museum trips during which children may study artifacts from the past. Times are also regularly scheduled for learning and practicing the skills necessary to read, write, and compute at increasingly complex levels—skills essential to recording their research.

To integrate and communicate their growing knowledge and research, children become deeply involved in refining their mathematical and mapping skills. They learn to work in scale. They create relief maps and models as ways of expressing and consolidating knowledge. Writing becomes an increasingly important tool as children write reports about researched information, such as family stories of immigration, or create imaginative reconstructions

of what it might have been like to be a child in their community in the past. Science experiments help children to understand how food was kept and preserved in the past, how herbs and plants were used to create simple remedies. Play appears again but in a more organized, planned manner as the children bring together what they have learned over months of study and create a play. They work on story development and dialogue, simple scenery, and props. The social studies may also culminate in an extensive exhibit created by the children in which they display their work—murals, science experiments, books, maps, dioramas, charts. In whatever form the culminating activities may appear, they are shared with other groups and parents.

Curriculum becomes integrated and whole as various skills and subjects are used as means or tools to organize and understand social studies content. At the same time, art, science, math, music, movement, and language all represent ways of knowing the world. These ways of knowing and expressing are explored in their own time within the days and weeks of classroom life. Further, independent of the social studies, there are animals to observe and care for; processes and changes in cooking to be investigated; seeds to be planted; simple machines to construct that illustrate basic laws of physics. Together, these activities encourage the development of a scientific attitude that requires observation, investigation, hypothesizing, and experimentation.

The educator's aim is to create a dynamic learning environment offering multiple opportunities for the expansion and realization of children's potential and capacity. Guided by the philosophical principles of the developmental-interaction approach, the teacher's choice of content will expand and deepen the children's view of the world and their place in it, while encouraging questioning, reflection, responsibility, shared work, and community. These attitudes and activities are necessary to experiencing democratic living.

Assessment

Multiple curriculum-embedded assessments provide the teacher an essential means with which to know how children are learning and growing and therefore how to guide curricular decisions in a seamless dynamic cycle, consistent with what is referred to as an "authentic assessment" or a "learner-centered" approach ([Cenedella, 1992](#); [McCombs & Whisler, 1997](#); [Meier, 2000](#); [Perrone, 1991](#)). Bank Street has long advocated a broad approach to assessment, based on understanding how the growing child makes sense of his or her world and providing a range of opportunities for the student to represent that understanding. Competence in basic skills, the development of an analytic capacity, and a wide range of knowledge in subject areas are fundamental to children's learning in school. Recently, Bank Street has used the Structure of the Observed Learning Outcome taxonomy (SOLO; [Biggs & Collis, 1982](#)) to examine ways in which teachers design and enact curriculum units to progress from the acquisition of information to more cognitively complex processes of using that information to analyze and generate new ideas ([Nager & Singh, 2008](#)). Of equal importance are attitudes and characteristics of the learner in interaction with the physical and social environment, such as the interrelated abilities to work both independently and collaboratively, to exercise initiative, to communicate effectively, and to be a socially responsible member of the community. This emphasis on social and emotional dimensions of learning is consistent with national polling indicating that Americans say the single most important purpose of public schooling is to prepare children and youth to become responsible citizens ([Cohen, 2006](#)).

In contrast, current federal policy primarily defines desirable outcomes for students in terms of test scores, particularly literacy and mathematical competencies, driving school reform movements to place assessment at the forefront of educational change to achieve higher standards of academic achievement. Many schools have responded to this emphasis by teaching to the test at the expense of complex curriculum. In our view, this indicates an oversimplified and narrow view of teaching and learning. In addition, the use of test scores as a high-stakes barrier to passing a grade or completing a program of study reflects a fundamentally undemocratic approach to the education of children ([Cuffaro, 2000](#); [Perrone, 1989](#)).

In a test-driven educational environment, the desired outcomes in social, emotional, and cognitive domains stressed in the developmental-interaction approach are often relegated to secondary status. This is compounded by the fact that no readily administered assessments adequately measure these attributes of the learner, a point made

by [Zimiles \(1987\)](#) some 20 years ago. Recognizing these realities, classroom teachers are urged to advocate for children in two important ways: first, by examining the quality of assessment tools and raising appropriate questions about implementation; second, by preparing children for test taking without sacrificing rich curriculum with opportunities for academic, social, emotional, and physical learning.

The developmental-interaction approach has long stressed rigorous and systematic assessment of children's learning and development. A central tool for assessment is reflective observation. [Haberman \(2000\)](#) provides a vivid example of how a student teacher observes, analyzes her observation, and achieves an important insight about the use of materials, curricular goals, and the range of conceptual development in the group:

Most of the other kindergartners also had difficulty with this problem. I definitely think it was too big a chunk to give them ... the problem was not necessarily too complex for Molly—I think she understood the underlying concept: that if you add up all the reds, yellows, blues and greens and then add all those together, you get the total number of tiles. I do think, however, that there were too many tiles. When the numbers get that high it is so easy to lose track and get confused... . The underlying concept would have struck her more consciously with a smaller number of tiles. Instead she got lost in the crazy mechanics of counting. (p. [211](#))

This student teacher's careful observation and analysis deepened her understanding of children's learning. Informed by strong subject matter knowledge and content-specific pedagogy, teachers analyze children's responses to understand each child's characteristic strengths and needs, what a child knows and can do, as well as what he or she needs to know. Equally important, the teacher shares insights and raises questions to help children learn to self-assess and guide their own learning. Data for this analysis include the full range of daily classroom activities, interactions, and work products (e.g., playing, reading, solving mathematical problems, working with materials, and interacting with others). In addition, close examination and assessment of portfolios of children's work over time provide an important story of growth through artwork, writing, computations, and constructions. For older children, teacher-designed techniques for checking the quality of student learning can take the form of reading and writing logs, lab reports, and inventories and culminating projects at the end of a unit of study.

This approach to assessment illustrates Dewey's (1938/1963) scientific method, as well as the experimental approach that permeates Bank Street. Articulating the goals of teacher preparation at the Bureau of Educational Experiments (recall this is Bank Street's original name), [Mitchell \(1931\)](#) described, "Our aim is to turn out teachers whose attitude toward their work and toward life is scientific. To us, this means an attitude of eager, alert observation; a constant questioning of old procedure in the light of new observations; a use of the world, as well as of books, as source material; an experimental open-mindedness, and an effort to keep as reliable records as the situation permits, in order to base the future upon accurate knowledge of what has been done" (p. [251](#)).

Assessment and instruction mutually inform each other in a constructivist, dynamic manner (see [Shepard, 2000, Chapter 8](#), this volume, for discussion of paradigms of assessment). Assessment data also provide a meaningful basis for parent-teacher conferences during which parents and teachers can share their differentiated knowledge of a child. In this way, assessment, learning, and the curriculum are integrated, a basic premise of the experimental attitude of progressive education.

Implications For Teacher Education

Bank Street's conceptualization of teaching applies equally to the education of children and adults, although its theoretical underpinnings and practical applications have been elaborated on more fully in relation to young children. Responding to this gap, [Nager and Shapiro \(2007\)](#) identified five interrelated principles for the education of teachers that emerge from Bank Street's history and practice.

1. Education is a vehicle for creating and promoting social justice and encouraging participation in democratic processes.
2. The teacher has a deep knowledge of subject matter areas and is actively engaged in learning through formal

study, direct observation, and participation.

3. Understanding children's learning and development in the context of family, community, and culture is needed for teaching.
4. The teacher continues to grow as a person and as a professional.
5. Teaching requires a philosophy of education—a view of learning and the learner, knowledge and knowing—that informs all elements of teaching.

Although enactment of these principles can and must vary in response to changing times and needs, the principles provide a coherent framework with which to evaluate and adopt new practices, thus ensuring their consonance, validity, and legitimacy. These principles are interrelated and overlapping, each having equal power. Thus, for example, a curriculum designed to further social justice must be based on a view of learning and the learner; deep knowledge of subject matter; and a sound knowledge of children, their families, and the sociocultural context of the school. Each principle is enriched by its necessary connection with the others. In this sense, the principles form an integrative whole that is greater than the sum of its parts.

These principles provide a vision of good teaching that infuses the preparation of teachers and comes to life in schools for children, as well as in the classrooms of the adults learning to teach. Informed by Lucy Sprague Mitchell's conviction that learning processes for adults and children are fundamentally similar, the teacher education program attempts "in all fields to give firsthand experiences (in studio, laboratory, and field work) to supplement 'book learning'" ([Mitchell, 1953, p. 471](#)). The developmental assumption is that becoming a competent teacher is tied not only to information but also to the ways in which teachers experience, internalize, and construct their growing knowledge and sense of self as a maker of meaning. It is a process of epistemological development in which teachers come to value their own voice, self, and mind, enabling them to create opportunities for children to achieve similar processes of discovery and invention ([Nager, 1987](#)). Active participation in real problems provides a basis for both child and adult learning. Therefore, the set of opportunities for teaching and learning that comprises supervised field work is vital to the teacher's personal and professional development.

A system of advisement encompasses the graduate student's entire academic program at Bank Street and thereby serves an integrative function. Advisement incorporates fieldwork, conference group, and course work. Guiding the student's work is the advisor, a member of the graduate school faculty. The term advisor rather than supervisor is noteworthy and indicates a process of guiding learning and thinking and modeling communication and interpersonal relations. The student has a biweekly individual conference with the advisor. One of these meetings follows an observation of the student's teaching and entails shared reflection on that work. Each student also participates in a yearlong weekly conference group with the advisor and a small group of students with whom the advisor is also working. This group provides an opportunity for peer learning and support, as well as an opportunity to participate in the broader and deeper project of democratic culture building ([Pignatelli, 2000](#)).

Students bring issues of personal and professional importance to the group, learning and gaining support from the advisor and the peer interaction. Considerable personal growth is required for faculty to assimilate and practice this approach to education ([Shapiro, 1991](#)). In attending to individual learning needs, advisement affords the same kind of nurturing and stimulating environment that teachers are encouraged to provide for children. Again, the parallel process of attending to the complex interrelationships between children's cognitive and affective development is made explicit.

Not surprisingly, knowledge of development constitutes a core foundation of the teacher education curriculum. Teachers learn to think about education in terms of children's developmental needs and characteristics; their knowledge and approach to learning; and the values their families and cultures have emphasized. Academic study of child development is combined with learning to observe and record children's behavior as a critical tool for understanding children and planning curriculum (see previous section, "Assessment"). The National Council for Accreditation of Teacher Education (NCATE) recognizes the vital importance of integrating developmental

science knowledge into educator preparation. In an NCATE publication, [Snyder and Lit \(2010\)](#) highlight Bank Street as an exemplar of that approach.

In all areas of curriculum, candidates in teacher education are immersed in principles and theory as well as the opportunity to experience them in practice. In curriculum courses, students explore questions about content—what is worth knowing—and consider how to enact the assumptions behind these choices through, for example, their room arrangements, scheduling, and curricular choices. Adult students take trips connected to social studies, and participate in block workshops. In addition, they have opportunities to paint, sculpt, and create; they visit schools to observe what different philosophies of education look like in practice; and they work with math manipulatives to reconstruct their understanding of number and mathematical problem solving. Writing logs and research essays, as well as creating portfolios, provide opportunities to use their growing knowledge to reflect on self, children, and curriculum.

Conclusion

In this chapter, we briefly summarize the developmental-interaction approach, long associated with the Bank Street College of Education. Its roots are in the progressive era and the educational philosophy of John Dewey and Bank Street's founder, Lucy Sprague Mitchell. Concepts found in the dynamic psychologies of Erik Erikson, Anna Freud, and more recently Lev Vygotsky contribute a developmental understanding of teaching and learning.

Principles of the approach serve as a context for the teacher's decision-making about choice of content, methodology, and the physical and social environment of the classroom. The developmental-interaction approach is not a codified set of procedures. Rather, the teacher has the complex task of using these values and principles to guide planning, implementation, and assessment of curriculum and children's growth.

These same principles apply to the education of teachers. Through direct experience, children and adults engage actively with the environment, expand their knowledge base, and strengthen their sense of competence and mastery. Teachers educated at Bank Street are expected to have a broad understanding of children's learning and developmental needs and the ability to create caring, intellectually challenging, and democratic classrooms.

Reflect On

1. What are two meanings of the term interaction in the Bank Street or developmental-interaction approach to early childhood education?
2. How are progressive education and mental health concerns linked to the development of Bank Street?
3. How is the concept of democracy realized in the Bank Street classroom?
4. Why is teaching social studies at the core of Bank Street's curriculum?
5. How does this approach's vision of teacher education comport with its model of early childhood education?

Endnote

1. [1](#). In an analysis of the evolution of the Bank Street approach, [Nager and Shapiro \(2000\)](#) point out that in earlier formulations the development of an autonomous and independent sense of self was seen as a goal. Until recently, the concept of individuality was so deeply embedded in developmental theory that its assumptions were seldom noticed or questioned. Today, however, we have become more aware that different cultural groups place quite different values on independence as opposed to community or collectivity. We are more sensitized to the depth and scope of the formative impact of culture on growth and

development. Learning is extended beyond the classroom setting to other sources of knowledge.

Selected Resources

Bank Street College of Education

www.bankstreet.edu

Bank Street Thinkers

<http://bankstreet.edu/archives/bank-street-thinkers/> www.bankstreet.edu/archives/

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Chapter 13 The Project Approach An Overview

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After reading this chapter, you should be able to:

- Provide a definition of a project
- Describe project work and other parts of the curriculum
- Explain the theoretical rationale for the project approach
- Discuss how to implement the project approach
- Outline the phases of project work
- Detail a kindergarten project on shoes

The inclusion of in-depth investigations in the early childhood and primary school curriculum has a long history. First inspired by the ideas of John Dewey during the progressive era, it was promoted by William H. Kilpatrick, who referred to it as the “project method.” At the turn of the twentieth century, Dewey’s Laboratory School at the University of Chicago used the project method ([Tanner, 1997](#)).

More recently, project work was a central part of preschool and primary education in Britain during the so-called Plowden Years in the 1960s and 1970s, which inspired many U.S. educators to adopt the project method using the term open education (cf. [Smith, 1997](#)). In the small northern Italian city of Reggio Emilia, preprimary schools use a highly creative variation of the project method as part of the curriculum ([Edwards, Gandini, & Forman, 1998](#); [Chapter 15](#)). A contemporary extension and elaboration of earlier practices, currently referred to as the Project Approach, has been adopted in preschool and primary classes in many parts of North America and is being widely adopted in many other countries as well (see [Helm & Katz, 2011](#); [Katz & Chard, 2000](#)). We have worked with teachers to help them to include project work in their curricula in Korea, China, Poland, The Philippines, Costa Rica, Mexico, Peru, Trinidad and Tobago, and many other countries. Many teachers in these countries have adopted the project approach as a significant part of the early childhood curriculum, as is common in North America.

We use the term project approach, rather than method or model, to suggest that children’s investigations (i.e., project work) constitute one of many important elements of an early childhood or primary curriculum. As a part of the curriculum for children from the ages of about 3 to 8 years, project work functions in a complementary relationship to other aspects of the curriculum, rather than as a total pedagogical method or curriculum model. It thus does not require the abandonment of a variety of other curriculum elements that support children’s development and learning.

Definition Of a Project

A project is an extended in-depth investigation of a topic, ideally one worthy of the children’s attention, time, and energy. Projects are usually undertaken by a whole class, sometimes by small groups within a class, and occasionally by an individual child. Even when a project is undertaken by the whole class, children typically work

in small groups and often individually on specific subtopics related to the larger one under



Collaboration on connected curricular activities is commonplace.

investigation. In discussions with their teacher, children generate a set of questions about specific aspects of the topic that the investigation will attempt to answer.

The investigation undertaken in a project involves the enactment of a variety of intellectual and social dispositions, as well as academic skills. Depending on the range of skills already available to the participating children, the work ideally includes the following elements:

- Sharing and discussing previous experiences and knowledge related to the topic in the first phase of the work
- Gathering and recording new data
- Sketching and drawing
- Painting, model making, creating stories, planning and engaging in dramatic play
- Interviewing experts on the topic
- Reading, writing, taking measurements, developing and distributing surveys and questionnaires
- Looking things up in a library and on the Internet

A project ideally also involves the acquisition of worthwhile knowledge, understandings, and concepts in a variety of disciplines, such as the sciences, social studies, language arts and literature, and all the fine arts. In addition, the activities usually employed in project work at all ages include collecting information through direct observations, conducting experiments related to subtopics of interest, making collections of related artifacts, and preparing visual and verbal reports of the findings.

Furthermore, in project work the children are encouraged to identify subtopics of special interest to them and to accept responsibility for particular types of tasks that will contribute to the overall investigation. In addition to the value of the new knowledge and understandings acquired and the skills applied, the feelings of mastery of a topic

resulting from such sustained effort can lay the foundation for a lifelong disposition to persist in reaching for in-depth understanding of worthwhile topics.

The main features of project work that distinguish it from the traditional didactic way of introducing children to new knowledge are these:

1. The children's role in generating the questions to be answered by their investigation
2. Openness to possible shifts in the direction of the inquiry as it proceeds
3. The children's acceptance of responsibility for the work accomplished and for the kinds of representations of findings that are prepared, documented, and reported.

Project Work and Other Parts Of The Curriculum

We advocate the project approach because during the primary years project work is the informal part of the curriculum that complements and supports its more formal components, such as systematic instruction in basic literacy and numeracy skills. *Systematic instruction* refers to formal instruction of an individual or of small groups of children—and in the case of older children, the whole class—who require adult assistance with learning the specific skills and subskills involved in becoming literate and numerate. By comparison, in the case of preschool children—for whom spontaneous play, informal activities, music, story reading, and so on are more typical and appropriate than is formal instruction—project work constitutes the more formal part of the curriculum.

In the early primary years, project work and formal instruction can be seen as complementary to each other in several ways:

1. Formal instruction aids children with the acquisition of basic skills, while project work gives them opportunity to apply the skills in meaningful contexts.
2. In formal instruction, the teacher addresses children's deficiencies, while project work gives children opportunities to apply and strengthen their proficiencies.
3. In formal instruction, the teacher directs the instructional sequences and organizes the work on the basis of expert knowledge of how the skills are best learned by individual children with particular learning characteristics. In project work, children are encouraged to choose the tasks and the level of task difficulty most appropriate for themselves.
4. During systematic instruction, learners are in a passive and receptive posture as the teachers provide them with information and instructions. In project work, children are actively engaged in planning and conducting the investigation, applying knowledge and skills, and making decisions and choices on all aspects of the work.
5. Although children tend to be intrinsically motivated to remain engaged in their project work, in systematic instruction the teacher takes advantage of children's motivation to please him or her and to meet his or her expectations. Furthermore, in project work the usefulness, relevance, and purposes of basic literacy and numeracy skills typically become self-evident. The experience of relevance tends to strengthen children's motivation to improve such skills and increases their receptivity to the teacher's help in mastering them through systematic instruction.

In project work, the teacher's role is more consultative than instructional. The teacher facilitates the progress of the work by guiding and monitoring the children's progress. The teacher uses observation of the children at work during the project to identify cues concerning the kinds of instructional activities that might be needed by individual children and notes the readiness of individuals or groups of children for the introduction of new knowledge and skills.

In the case of preschool children, the teacher's role includes both consultation and leadership in helping to organize the progress of the investigation, encouraging in-depth and extended attention to the work of answering the questions raised in discussion. The teacher arranges the time schedule so that the project can proceed. The teacher also makes suggestions for how children can represent their findings. At both the preschool and primary levels, the teacher plays an important role in documenting the experiences of the children as the work proceeds ([Helm, Beneke, & Steinheimer, 2007](#); [Katz & Chard, 1996](#)).

In summary, we suggest that young children's development and learning are best served when they have frequent opportunity to be involved in investigations about worthwhile topics, especially during the primary years, when the teacher's formal instruction in basic skills is also available for those who cannot achieve mastery without such assistance. Teachers are encouraged to balance these two important provisions for learning in the early years.

Children can learn to make increasingly sophisticated use of computers in the course of project work. With increasing age and experience, children can use computers for writing, preparing graphs, compiling posters, producing visual essays, designing simple games, and other forms of representation. They can also have access to a wide variety of types of information via selected Internet sites as they seek answers to the questions that represent the main thrust of their investigation.

The Theoretical Rationale for the Project Approach

The recommendation for including project work in the early childhood curriculum is based partly on our conception of the goals of education and partly on our view of a developmental approach to implementing those goals. Moreover, we find support for the value of project work in research on children's motivation and interactive abilities. [Schidt, Burts, Durham, Charlesworth, and Hart \(2007\)](#) compared the effects of developmentally appropriate versus developmentally inappropriate teaching practices on the growth of kindergarteners' social competence, indicating that the former provided genuine contexts for children to develop skills involved in working together and coordinating their efforts, a major element of project work. We begin by defining the goals and follow with the principles of practice based on combining the goals and our understanding of how young children develop and learn. A fuller discussion of these points can be found in Katz and Chard (2000).

Four Types of Learning Goals

We suggest that at every level of education four types of learning goals must be addressed: knowledge, skills, dispositions, and feelings. At the early childhood level, they can be broadly defined as follows:

1. *Knowledge.* During the preschool and early primary school period, knowledge and understanding can consist of ideas, concepts, schemas, facts, information, stories, myths, legends, songs, and other such contents of the mind. The experience of involving young children in projects leads us to emphasize the importance of helping young children to achieve deeper and more accurate knowledge and understanding of their own experiences.

Principles Related to the Acquisition of Knowledge

Recent insights into children's development suggest that, in principle, the younger the child, the more readily knowledge is constructed and acquired through active and interactive processes rather than passive, receptive, and reactive ones. With increasing age, children become more able to profit from passive reception of instruction. This developmental principle suggests that, in practice, young children in the preschool and early primary years best construct and master knowledge and understanding from their own firsthand, direct experiences and from interaction with primary sources of knowledge.

The interactive experiences from which knowledge and understandings can be constructed and acquired must

have content that is meaningful to the children—perhaps more meaningful to some of them than others, at least at first. We suggest that, in principle, the content of interaction should be related to matters of actual or potential interest to the children involved. However, because not all of children’s interests are equally deserving of attention, and because adults can and should help children acquire new interests, some selection by the teacher of what content is most worthy of attention is recommended. We suggest that the interests most worthy of strengthening in young children are those likely to extend, deepen, and improve their understandings of their own environments and experiences ([Dresden & Lee, 2007](#)).

We suggest furthermore that, in principle, the younger the learner, the more integrated the curriculum should be; conversely, as children increase in age and experience, their capacity to profit from subject- or discipline-based study increases. Young children do not differentiate their ideas, thoughts, and interests into categories such as science, language, and mathematics; they are more likely to gain knowledge and understanding by pursuing a topic to which scientific, linguistic, mathematical, and other discipline-related concepts can be applied.

2. *Skills* are defined as small, discrete, and relatively brief actions that are easily observed or inferred from behavior (e.g., cutting, drawing, counting a group of objects, coordinating activities with peers, fine- and gross-motor skills).
3. *Dispositions* are relatively enduring habits of mind, or characteristic ways of responding to experience across types of situations

(e.g., persistence at tasks, curiosity, generosity or avarice; the disposition to be a reader, to look things up, to solve problems, and so on). For example, curiosity can best be defined as a disposition or habit of mind. Unlike an item of knowledge or a skill, a disposition is not an end state to be mastered once and for all. It is a trend or consistent pattern of behavior and its possession is established only by its increasingly repeated manifestation in the appropriate context.

Some of the most important dispositions included in the goals of education are inborn. All children are born with the disposition to learn, to observe, to investigate, to make sense of experience, to play, and to develop attachments to others—granted, any of these dispositions may be stronger in some children than in others. Thus, experiences should be provided to young children that support and strengthen these inborn dispositions. Other dispositions, however—desirable and undesirable—are likely to be learned from being around and interacting with adults who have them and in whose behavior such dispositions can be observed frequently by the children.



These children work on an art project they planned.

Strengthening Desirable Dispositions

Parents, teachers, and school officials invariably include many dispositions in their lists of the desired effects of education. Among them are the desires to learn, to be cooperative and creative, and to be eager to approach and solve problems. The underlying assumption is that mastery of knowledge, understandings, and skills ideally should be accompanied by robust dispositions to employ them.

4. *Feelings* are subjective emotional or affective states, such as feelings of belonging, self-esteem, confidence, adequacy and inadequacy, competence and incompetence, anxiety, and so forth. Feelings about significant phenomena may vary from being transitory to enduring, intense to weak, or ambivalent.

Feelings related to schooling are likely to be learned as by-products of experience, rather than from instruction or exhortation. Both dispositions and feelings can be thought of as incidental learnings in that they are incidental to the processes by which knowledge and understandings are constructed and acquired and by which skills are learned. To label feelings as incidental is not to belittle them or to devalue the role of the teacher or the curriculum in their development; rather, it is to emphasize that feelings cannot be taught didactically. Children cannot be instructed in what feelings to have or not to have!

Feelings Related to School Experiences

Like dispositions, feelings cannot be taught directly; they are experienced and strengthened or weakened in the context of the interactions and activities that give rise to them. When a curriculum is focused on a narrow range of academic tasks (e.g., drill and practice in workbooks, lessons in phonics), it is likely that a substantial proportion of the learners will be unable to work effectively and thus will be unlikely to develop feelings of competence ([Marchand & Skinner, 2007](#)). Indeed, when a single instructional approach is employed with any group of children who are diverse in background, ability, development, and other ways, some feel left out and are prone to develop feelings of incompetence or inadequacy ([Slavin, Madden, Dolan, & Wasik, 1996](#)). The inclusion of project work increases the variety of tasks and levels of difficulty available, such that all members of the class are likely to find meaningful work that can enhance feelings of competence, of belonging, and of being a contributor to the group effort.

Implications for Practice

Learning in all four goal categories—knowledge/ understanding, skills, dispositions, and feelings—is facilitated in different ways. In the case of knowledge and skills, learning can be aided by active research, observation, a variety of types of data gathering, appropriate instruction, and many other processes. As already suggested, dispositions cannot be taught directly. We recommend that, in principle, if dispositions are to be strengthened, ample opportunity for their enactment must be available. For example, the disposition to be problem-solvers can be strengthened only if children have frequent real and meaningful problems to solve in the course of their daily activities. In a similar fashion, the disposition to be responsible can be strengthened only when children have appropriate responsibilities. The findings of the research in this area suggest that a curriculum that emphasizes child-initiated meaningful learning tasks is more likely to strengthen dispositions such as to seek mastery, to exert real effort in the face of difficulties, and to persist at challenging tasks—as well as many others usually alluded to in lists of goals and desirable educational outcomes.

In summary, all four categories of learning goals are worthy of the teacher's continuing attention and concern. The inclusion of project work in the curriculum helps to ensure that the construction and acquisition of worthwhile knowledge and the mastery of basic skills can occur in such a way that the dispositions to use them are also strengthened ([Katz, 1994](#)). Our assumption is that if knowledge, understandings, and skills are acquired in meaningful contexts with ample opportunity to apply them, then the dispositions to seek and deepen knowledge

and understanding, and to use the skills in the processes of doing so, can be acquired and can be strengthened. Conversely, without such meaningful application, the dispositions to use knowledge and skills may not be developed or may even be weakened. Our experience is that children's involvement in project work is typically accompanied by feelings of self-confidence, of engagement, of enthusiasm, and often of pleasure and satisfaction with what is accomplished, including satisfaction in overcoming setbacks encountered during the work.

In principle, then, the incorporation of project work in the curriculum helps to ensure that all four categories of learning goals are addressed concurrently.

The Development of Social Competence

Current research on young children's social development strongly indicates that the first 6 or 7 years of life constitute a critical period for the achievement of social competence and that failure to do so during the early years can have serious long-term negative consequences ([Flook, Repetti, & Ullman, 2005](#); [Katz & McClellan, 1997](#)). In general, a curriculum for young children is best when it provides frequent activities and experiences in which cooperation, collaboration, coordination of effort, and resolution of conflicts among the children are functional, consequential, and satisfying to them. The project approach provides frequent and real contexts in which children can be supported in developing a wide range of social knowledge, social skills, social dispositions, and feelings of an interpersonal nature. One such feature is that in the conduct of project work on a topic shared by the whole class, children usually work in small subgroups investigating subtopics that will contribute to the larger findings of the investigation. In such a context, each subgroup can solicit suggestions from classmates, make suggestions to other subgroups, prepare reports to give to them about the subgroup's findings, and in many other ways participate in real contexts in which they anticipate others' responses to, interests in, and feelings about their reports. Anticipation of the possible responses of peers, parents, and others with whom they will share their work is an important component of social competence.

In summary, the incorporation of project work into the curriculum of early childhood and primary education addresses all four main categories of learning goals and makes possible the application of the principles of practice derived from current knowledge of many important aspects of young children's development and learning.

How to Implement The Project Approach

To a large extent, the benefits of project work are related to the topic being investigated. The sheer number of possible topics is so large that some kind of selection process is advisable. Teachers have the ultimate responsibility for judging whether the topic is worthy of children's time and energy and of the preschool's or school's resources. To support good project work, teachers must often undertake extensive preparation, study, and exploration. Thus, topic selection warrants serious consideration by the teacher and by those who define the curriculum (see [Chard, 1998a, 1998b](#); www.projectapproach.org).

Selecting Topics for Projects

Many factors contribute to the appropriateness of a topic. Much depends on characteristics of the particular group of children, the teacher's knowledge and experience related to the topic and his or her own interest in it, the local resources available, the larger context of the school and community, and various mixes of all these factors. Furthermore, it is important to keep in mind that many topics of importance are not suitable for projects. It can also be difficult to predict which topics will work well with any given group of children.

Responding to Children's Interests

Teachers sometimes select project topics on the basis of the children's expressed or assumed interest in them. However, the interest of an individual, a group, or a whole class presents a number of potential pitfalls in topic selection. On a practical level, in a class of 25 children, the number of possible interests is potentially too large to be able to address in a single year. Thus, teachers need some criteria to determine which of the interests is worthy of being addressed because it is not clear what children mean when they say that they are interested in a topic. Interests can be of relatively low value to the child's total learning (e.g., interest in pirates or in the *Titanic* stimulated by exposure to a movie). Some interests might be passing thoughts or fancies, fleeting concerns, phobias, fetishes, or topics nominated by a child who wants to please the teacher.

That an individual or group expresses interest in a given topic (e.g., dinosaurs) does not necessarily mean that the teacher should support and strengthen interest in it. Children's enthusiastic response to a Disney movie about pirates, for example, does not mean that the topic is worthy of a project. The children can be given opportunity for spontaneous dramatic play involving pirates if the teacher agrees to it; they can be encouraged to discuss their reactions to the film and their understanding of its implication in a discussion setting; and so forth. Such interest, however, does not imply that an in-depth study of the topic of pirates is in their best developmental, educational, or even moral interests. We suggest that it is useful to distinguish between providing opportunity for childinitiated spontaneous play around a topic of interest to them and what may not be worthy of the kind of effort and energy required for conducting an in-depth investigation of it. The topic of a project should be part of the general commitment of the teacher and the school to taking children and their intellectual powers seriously and to treating them as young investigators of phenomena worth understanding more fully.

Adults have substantial responsibility to educate children's interests and to alert them to events and phenomena around them that are worthy of their attention and understanding. This does not mean that the teacher indicates disrespect or disdain for the children's own expressed interests. Children's awareness of the teacher's real and deep interest in a topic (e.g., the changes in the natural environment over a 6-week period) is likely to engender some level of interest in the topic among the children who respect and look up to the teacher. In this way, adults take responsibility for educating children's interests.

Sometimes teachers select exotic and glamorous topics in the hope of exciting the attention of children who are sometimes reluctant or uninvolved members of the group. For example, projects revolving around the rain forest in a kindergarten in a U.S. Midwest location may entice young children into participation and certainly do no harm. Again, our experience of working with many teachers all over the world indicates that young children can be no less fascinated and intrigued by the experience of close observation and study of their own immediate natural environments, whether cornfields, apple orchards, or a nearby bicycle shop. If the topic is an exotic and therefore remote one, it is difficult for the children to contribute to the direction and design of the project investigation. The less firsthand experience the children have in relation to the topic, the more dependent they are on the teacher for the ideas, information, questions, hypotheses, and so forth that constitute the essence of good project work. Young children are indeed dependent on adults for many important aspects of their lives. Project work is that part of the curriculum in which children are encouraged to take the initiative in setting the questions to be answered and the direction of the study; it is also where they are prompted to accept responsibility for gathering the data and to define the work to be accomplished.

Along similar lines, topics are sometimes chosen because they are expected to amuse or entertain the children. Such topics are thought by teachers to stimulate children's imaginations (e.g., "The Little Mermaid," teddy bears). In good project work, children have ample opportunity to use and strengthen their imaginations when they make predictions about what they will find before taking a field trip, when they predict the answers to their questions that a visiting expert might give, or when they argue with each other about possible causes and effects related to the phenomenon under investigation. Project work stimulates and strengthens young children's imaginations in many other ways as well; for example, during the early phases of a project, they are encouraged to report their actual experiences and memories related to the topic but also to make up their own stories related to it (e.g., stories of actual experiences of riding a tricycle and imaginary and fictional stories of bike rides).

Diversity of Experiences

In some classes, the diversity of the incoming pupils' experiences might be so great that it would be beneficial to begin the year with a topic that the teacher is reasonably certain is familiar to all children. At the beginning of the life of the classroom group, it is probably best to ensure that all the children have sufficient experience related to the topic to be able to recognize and share their own experience and participate in discussion with some confidence. As the school year progresses and children become adept at project work, they can more readily appreciate that classmates have different interests and prefer to work on different subtopics. In this way, children's appreciation of differences in experiences, interests, and abilities among their peers can be deepened.

Diversity of Culture and Background

The project approach is highly responsive to diversity of cultures and backgrounds within the group of children being served. One consideration to be made when selecting topics for diverse groups is that some topics may be considered delicate in some cultures but not others. Moreover, some topics might embarrass children of some backgrounds. We find it useful to make a distinction between a child's culture and a child's heritage. *Culture* refers to the current day-to-day experiences and environment of the children; heritage refers to historic and ancestral characteristics and past experiences associated with their origins. From a developmental perspective, young children can deepen their understanding of their culture through good project work; deepening their knowledge of their heritage is more appropriately accomplished through other parts of the curriculum, especially as children get older.

Preparation for Participation in a Democratic Society

An important consideration in the selection of the topics of projects is a commitment to building children's abilities to be able, ultimately, to participate competently in a democratic society. In the service of this goal, good topics are those that deepen children's understanding, knowledge, and appreciation of the contribution of others to the well-being of all. One of the many potential benefits of good project work is that it provides a wide range of experiences within the classroom that constitute participation in democratic processes: collaboration, listening and responding to each others' ideas, coordinating efforts and diverse contributions of members of the whole and of subgroups, negotiating disagreements, reaching consensus on how to solve problems and accomplish tasks, and so forth. All these processes help to lay the foundation for competence in democratic living.

In the interests of the goal of preparing for participation in democracy, we ask, "Will the study of this topic strengthen and/or deepen the disposition to examine closely the real world and its complexities?" Thus, we suggest avoiding topics that are frivolous, banal, or of trivial consequence. Instead, we recommend choosing topics that involve children in unpacking the familiar, deepening their understanding of what goes on behind the scenes and of how various people's efforts contribute to daily community life. These topics can contribute to children's growing capacity to appreciate the diverse ways that others contribute to their well-being, which is basic to a democratic community.

Criteria for Selecting Topics

Based on the preceding discussion, we offer the following list of criteria for selecting project topics: *A topic is likely to be a good one if...*

1. Relevant phenomena are directly observable in the children's own environments.
2. It is within children's experiences.

3. Firsthand direct investigation is feasible (and involves no potential dangers).
4. Local resources are favorable and readily accessible.
5. It has good potential for a variety of representational media (role-play, construction, multidimensional representation, graphic organizers, and so on).
6. Parental participation and contributions are likely; parents can become involved in the investigation with little difficulty.
7. It is sensitive to local culture as well as culturally appropriate in general.
8. It is potentially interesting to many of the children or is an interest that adults consider worthy of developing in children.
9. It is related to curriculum goals of the school and district.
10. It provides ample opportunity to apply basic skills appropriate to the ages of the children.
11. The topic is optimally specific—not too narrow and not too broad (e.g., a study of the teacher’s own dog at one end and the topic of “music” at the other).

The Phases Of Project Work

Once the topic of a project has been agreed on by the children and their teachers, a central feature of project work is the children’s involvement in identifying which aspects of it to explore, formulating the research questions, planning the work, and defining the kinds of representations of findings and reports to be prepared. In other words, project investigations can be thought of as having the same kind of narrative or sequential quality as any other scientific endeavor: The investigators develop a set of questions, predict where they are most likely to get useful answers, proceed to collect the data they predict will yield answers, analyze and summarize their findings, and report them to others who might also have some interest in them. Projects can be planned and conducted in three approximate sequential phases (see [Chard, 1998a, 1998b](#)).

Phase 1: Getting Started on a Project

In the first phase of a project, the teacher encourages the children to share their own personal experiences and recollections related to the topic and to review their knowledge of it, using representational and expressive competencies such as dramatic play, drawing, reporting their experiences, and writing about them. During these initial activities, the teacher can learn of the special interests of individual children and their parents; this sharing also helps establish a baseline of understanding for the whole group involved in the project. Parents may be able to contribute to the project in a variety of ways, such as arranging places to visit, lending items for display, being interviewed by the children, and providing access to information.

In the process of reviewing their current understanding of the topic during the first phase of a project, children raise questions about the topic. Often the questions reveal gaps in knowledge or even misunderstandings, which can form the basis for planning the second phase of the project. In the role of consultant, the teacher is not too quick to correct misconceptions that emerge during Phase 1; these can be excellent resources for learning as the children investigate and test their predictions and theories ([Table 13–1](#)).

An important part of question table development is to respond to children’s predictions of the answers to their questions by asking them (in a positive, serious, and encouraging tone) questions such as “What makes you think so?” By asking such questions from time to time, the teacher is supporting children’s development of the disposition to reflect on the bases of their predictions, ideas, opinions, and assumptions that should serve them

well throughout life. The question table can remain visible throughout the life of the project, as well as when appropriate during group discussions that might give rise to more questions and recent findings. Indications of the sources of their findings can be added to the table.

Phase 2: Developing a Project

The main thrust of the second phase is gaining new information, especially by means of firsthand, direct, real-world experience. The sources of information used can be primary as well as secondary, depending upon the ages of the children involved.

Primary sources include field trips to real settings and events, such as an actual construction site or the goods-delivery section of a supermarket to be observed. Interviewing people who have direct experiences related to the topic also provides firsthand information. All occasions for interviews should be carefully prepared in advance so that the children appreciate the activity's usefulness and spend the time productively. In addition, developing and distributing surveys and questionnaires can be included in the datagathering process for children of all ages. Secondary sources of information, such as books, relevant educational films, videotapes, brochures, and pamphlets can also be examined at this time.

Fieldwork

During Phase 2, the children can plan a field site visit together with their teacher. Field site visits do not have to be elaborate, involving expensive transportation to distant places. They can involve going to places close to the schools—shops, the town hall, stores, parks, construction sites, walks in the neighborhood, and such—taking note of the variety of buildings, types of windows and doors, and so on. With teacher aides and volunteer parent helpers, the children can go to these sites in small groups, enjoying the opportunity to talk with an adult about what they are observing. It is not usually necessary for the whole class to participate in a field site visit.

Table 13–1 The Question Table

Questions	Predictions	Findings	Sources
How many shoes do you sell in a day?	1. 100		
	2. 50		
	3. 10		
What do you do with the money?	1. Put it in a box		
	2. Take it home		

Preparing for fieldwork includes identifying questions to be answered and deciding on people to talk to who can be good sources of information about their topic or subtopic. To help them record their observations, children can carry simple clipboards and can sketch or write things of special interest to be reviewed on return to the classroom. During the visit, children can also be encouraged to count, note shapes and colors, learn any special words, figure out how things work, and use all their senses to deepen their knowledge of the phenomena studied. The benefits of project work are often increased when the children sketch and draw the relevant object and persons they observe. The focus for these experiences is not on the elements of art but on how best to represent what has been observed and to make it available for further inspection on return to the class.

In the classroom following fieldwork and site visits, the children can recall many details and review the information collected from interviews. The children can represent their findings in increasingly elaborate ways as they learn more about the topic. At this time, the children apply the skills of talking, drawing, dramatic play, writing, making simple mathematical notations, taking measurements, making charts, Venn diagrams and histograms, diagramming sequences of events, and so on. If a field site is nearby, such as a construction site in the

vicinity of the school, it can be visited on several occasions and comparisons can be made between what was observed on one visit and on subsequent ones.

The children's work can be accumulated in individual project folders, in computer files, in wall displays, and within group record books in which work is shared with others. Children can be fully involved in discussing and planning what will be displayed for others to see how it should be done. The work can also be stimulated and enriched by a variety of secondary source materials, books, charts, leaflets, maps, pamphlets, and pictures.

As the work progresses in Phase 2, the children often develop a strong concern for realism and logic about the topic; drawing real objects becomes an increasingly absorbing activity. In their observational drawing, young children can look closely at the plants and animals, see how the parts of a bicycle interconnect within the whole, or notice how the pattern inside a carrot dissected different ways indicates the way water and other nutrients contribute to its growth. Interest is stimulated by frequent recognition, review, and discussion of the progress of the project.

Phase 3: Concluding a Project

The main thrust of the last phase of a project is the completion of the individual and group work and summary and review of what has been learned. For older children, this last phase can include preparing the project's story documentation and sharing the findings. For the youngest children, it may be taken up with dramatic play in their project constructions. Thus, if they have built a store or a hospital, they will be enacting roles associated with those settings.

At the beginning of this final phase, at all ages, the teacher can engage the children in a discussion about what aspects of the project they think should be shared with others, as well as what they think might be of most interest to their parents about the project. This process should be initiated before their interest in the topic wanes. It is possible that a project can go on too long; almost any topic can be run into the ground.

The third phase of the project can include inviting visitors to see the work at an open house, or other classes in the school could be invited to see some of the displays of the children's work. It is also satisfying for the children to share their ideas with the director/principal and other interested teachers; this offers a good debriefing experience for the class following the investment of considerable effort. Preparation for such occasions provides real purpose for a review of the work achieved. At this time, the children can also be encouraged to evaluate their own work, to compare what has been discovered with the questions they generated during Phase 1. During this phase, the children can discuss what should be included in the completed question table shown in [Table 13-1](#). The children and teacher can come to agreement concerning what has been learned, their new understandings of the topic, and what more they might want to learn about the topic in the future.

Evaluation of Projects

To date no systematic formal evaluations of the project approach have been reported. However, teachers may use several criteria to evaluate their own implementation of the approach. Among them are the appropriateness of the topic under investigation and what was accomplished during each of the three phases. One important criterion for evaluating a project is the extent to which the children themselves did the essential work. Carefully developed documentation and displays that tell the story of the children's work and their experiences during the project can also help to evaluate the strengths and weaknesses of what was accomplished. We next present a brief outline of how a whole-class project on the topic of shoes might proceed.

A Kindergarten Project On Shoes

The following account describes a project on shoes undertaken by a kindergarten class. The teacher was having a

discussion with the children about footwear, provoked by the fact that several of them had new shoes at the beginning of the school year. The shoes had many interesting features: Some lit up, some made noises, and some had laces with different patterns and colors. The teacher thought of several possible lines of inquiry the children might pursue in a study of shoes. She brainstormed ideas and represented them in a topic web.

Phase 1: Getting Started on the Project

The children in the class talked about their shoes and their experiences of buying shoes. The children began to wonder about shoes and to raise questions. The teacher helped the children make a list of questions and added to it throughout the first week of the project. The children drew and painted pictures of shoes and of their experiences of buying shoes. The children were encouraged to ask their parents, friends, and neighbors for shoes they might give them to contribute to the class shoe collection for the study. The teacher brought in some shoes from her 16-year-old daughter's closet and added these to the dramatic play area. They set up a simple shoe store and tried on the different shoes there. The parents were informed of the topic of study and were invited to discuss shoes with their children. They were also invited to share with the class any special knowledge they might have about footwear of many kinds (e.g., ballet slippers, fishing boots, skates, skis, and so forth). At the end of the first week, the teacher arranged for one of the children in the class to bring in his baby brother to show the class his first pair of walking shoes.

Phase 2: Developing the Project

The teacher and the children talked about what they could do to find answers to their questions about shoes. The questions included the following: "What are shoes made of?" "Where are shoes made?" "How much do they cost?" "How do you know what size you wear?"

As the children began to discuss money, they talked about what the storekeepers did with the money people paid when they bought shoes. Some thought the salespersons gave it to poor people, others thought they took it home for their pay, and some thought the boss kept it all. The children predicted a variety of answers to their questions, which heightened their curiosity and desire to find out more details about what goes on in the shoe store. The teacher arranged a field site visit to a family shoe store nearby in their city. The children worked for a whole week to prepare for the visit. They decided which parts of the store needed to be investigated, who would take responsibility for drawing which parts of the store, and who would ask which questions of the manager and of the salespersons. The fieldwork was planned to get the information needed to make a more elaborate shoe store in the classroom on their return.

Five groups formed around the children's special interests. They were interested in the following:

1. The cash register, how many shoes are sold in a day, and the amount of money collected each day
2. The storeroom, how the shoe boxes are arranged (e.g., men/women/children, sizes, dress/sport, seasonal, colors, and so on)
3. The shoe salesperson's responsibilities and activities
4. Different kinds of footwear available and the sizes, colors, and number of shoes in stock
5. Where the shoes came from, where they were delivered, and the frequency of deliveries

The teacher discussed with each group the questions they wanted to ask and what they wanted to find out from the people, the possible answers to their questions, and other things learned at the store. The teachers helped the children think about ways to record the information to be gathered at the field site.

The teacher contacted the personnel in the shoe store in advance to prepare them for the visit. She explained the

expectations she had for the field experience. She outlined the questions the children wanted to ask and described the field sketches planned, the observations the children wanted to make of the salespersons at work, and the items in the store that the children wanted to examine closely.

When the big day arrived, the three personnel at the shoe store spent a few minutes with each group of children. The children returned to school with much to think about. The teacher led discussions in large and small groups to debrief the children about what happened during the visit.

Each subgroup told the others in the class about their experience and the information they had acquired. Then they set out to build a shoe store in their classroom. Throughout the next 3 weeks, the teacher talked to each group about their progress; the children listened to each other's ideas and made suggestions to each other.

Some children worked on making cars to get to the store. Others made a bird in a cage like the one they had seen in the store; some children made a television set like the one in the store. They made catalogs for the shoes in their own store. They marked the shoe boxes they had collected to indicate which kinds of shoes were in them and added price labels. Some children made money for the little cash register the teacher provided. They worked on a book to tell new shop workers how to sell shoes. They made a wooden bench for children to sit on while waiting to be served by salespersons. In some cases, several versions of these items were made because children wanted to be involved personally in particular contributions to the store. For example, many shoe catalogs were made.

During this period of investigating and representing the items the children wanted to put in their shoe store, the teacher invited several visitors to the classroom. Another teacher in the school was a dancer and showed her tap dancing shoes and her special jazz dancing shoes. A Chinese parent helped the two children from China to produce a Chinese version of a shoe catalog and to post advertising and directional signs in Mandarin. One father was a member of the police force and who helped the children understand the importance of the evidence of shoe prints at the site of a crime for finding criminals. Another parent visitor showed her special shoes for bicycle racing. A grandfather of one of the children had repaired shoes in his work and was able to tell the children about how shoes are usually made and of the different materials from which they are made. With this knowledgeable man's help, the children were able to examine the materials used in a shoe's construction: the leather, thread, tacks, and glue. Various other kinds of sports shoes were shown to the children by older siblings and their special features were discussed: ice skates, inline skates, ski boots, fishing waders, soccer shoes with and without cleats, wooden clogs from The Netherlands, ballet slippers, and cowboy boots and spurs.

During the field visit, the children had watched the process of selling a pair of shoes to a customer. They had followed the sale and purchase, noting the steps in the process from the point of view of the sales clerk and the customer. They were able to use four steps in the dramatization of the sale and purchase of shoes in their own shoe store: (1) interviewing prospective buyers as to the kind and color of shoe they wanted and the price they wanted to pay; (2) measuring customers' feet; (3) taking pride in the store's inventory and showing several pairs of shoes to customers; and (4) concluding the sale and putting the unsold shoes back in their boxes and on the storage shelves.

The children who made the money for the cash register also set up a bank so that the money could be used to purchase shoes in the store. A dollar amount was provided to help those children who wished to use it to count out an appropriate amount of money they wanted to spend.

Phase 3: Concluding the Project

The teacher arranged an opportunity for the parents to come to the school to visit the children's shoe store and see what had been learned in the process of developing the children's interests in shoe store construction and play. The parents had the opportunity to buy the shoes in the store and be served by their children.

After several weeks, the children became interested in new kinds of play. They wanted to explore the bus travel that had begun during the shoe project as some customers "came to town" to buy shoes using the local transit

system. Mean-while, the parents were able to look at the children's drawings and paintings. They could take note of the children's beginning attempts to write signs and other matters concerning price and to explore various aspects of arithmetic related to counting money and to measuring sizes and quantities of various shoe-related objects. The parents were able to read the documentation of the project. They read the word labels and captions written by children and the teacher on the representational work and the photographs taken throughout the project to record the high points and various aspects of the children's learning. Among the skills applied by the children were counting and measuring; using technical vocabulary; developing color, shape, and size recognition; interviewing; collaborating; and other social skills. The parents could appreciate the knowledge the children had gained concerning the processes of designing, manufacturing, and selling a wide variety of footwear and the information about the variety of materials used in making their different parts. The children also demonstrated their understanding of how a store worked and the interdependence of the number of different people involved in enabling people to wear something as basic as shoes. The parents who had participated in the final sharing of the children's work were left in no doubt that a wide range of valuable in-depth learning had taken place over the 8 weeks of the project.

Commentary

This project is described as typical for a class of kindergarten children. However, it is difficult to describe projects as typical because much of the work of any project with any teacher or group of children is related to the availability of local resources for firsthand investigation and to the interests expressed by the particular participants.

The availability of parent experts willing to help the children made a crucial contribution to the quality of what was accomplished. The parents of any class group might include a number of people involved in house construction, vehicle driving and maintenance, food services, farming, and the health services. Teachers can find out about the particular expertise of the parents of the children in the class and can plan some of the project work to enrich the children's experience with their special knowledge. Bilingual parents can help to sensitize the children to words used in different cultures to describe the same objects and processes (see, for example, ecrp.uiuc.edu/v3n1/wilson.html). This can help to ensure that all children in a group or class are involved in the investigation and that an awareness of different languages can begin early in children's lives.

The age of the children affects the extent to which project work can involve a class of children for an extended period of time. Younger children would probably not have benefited from quite such elaborate dramatic play and the project probably would not have continued to develop over so many weeks. Older children, on the other hand, might have seen a DVD or examined materials of a shoe factory on the Internet, built an assembly line on one side of the classroom, focused on their understanding of the process of shoe design and production, studied the workings of a shoe store, and included a variety of mathematical studies involving average sizes, costs, and surveys of classmates' shoes and preferences.

Conclusion

The inclusion of project work in the curriculum for young children addresses the four major learning goals of all education: the construction and acquisition of worthwhile knowledge; development of a variety of basic intellectual, academic, motor, and social skills; strengthening of desirable dispositions; and engendering of positive feelings about one's self as a learner and participant in group endeavors. Because project work is complementary to formal instruction, children have the opportunity to apply their basic skills in the course of studying meaningful topics. In this way, school experience becomes interesting not only to the children but to the teacher as well.

Reflect On

1. What is the theoretical foundation of the project approach?
2. What factors might you take into consideration in deciding what projects would be of interest to young children?
3. What phases are involved in implementing a project?
4. How appealing might the project approach be to early childhood educators in a high testing climate?
5. What types of assessments can you generate to evaluate learning outcomes in programs that employ the project approach?

Selected Resources

www.projectapproach.org

www.ecrp.uiuc.edu

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Part IV Specific Approaches—Europe

1. [CHAPTER 14 The Piramide Method](#)
2. [CHAPTER 15 Reggio Emilia in the 21st Century: Enduring Commitments Amid New Challenges](#)
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Chapter 14 The Piramide Method

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After reading this chapter, you should be able to:

- Describe the foundation of the Piramide Method
- Outline the basic concepts in coherence
- Explain how to optimize the two sources of development
- Characterize the content of the Piramide Method
- Delineate the levels of action and thinking
- Summarize the practices that optimize children's development
- List the three levels of intervention
- Understand how the practice is executed
- Illustrate how the Piramide Method is evaluated
- Discuss child assessment
- Discuss teacher evaluation
- Discuss program evaluation

The Piramide Method¹ is grounded in theory and practice. Coherently holistic, this method is designed to be an infrastructure for the teacher, a plan to manage the education of young children from birth to 7 years.

The Piramide Method is conceptually a developmental web for the teacher, in which all the components work together and provide an infrastructure to support child development and early education. One advantage of the method is that the user can immediately understand where she is and how she is connected to the developmental web. The teacher can add experiences or opportunities to meet the assessed needs of children and at the same time reflect on her practice when necessary. A bird's-eye view of the Piramide Method is offered in [Figure 14-1](#), with key terms identified and explained as follows:

1. Piramide: This method provides a guided approach for creating a safe, familiar educational environment where teachers, parents, and children from birth to 7 years feel free, safe, and challenged.
2. Four cornerstones: These are at the heart of Piramide's strong developmental foundation and grounding for the educational process:
 - Initiative of the child: The child's initiative is the beginning and end of the education process. With curiosity as the driving force, the child takes initiative to explore the world in order to fulfill life tasks independently later.

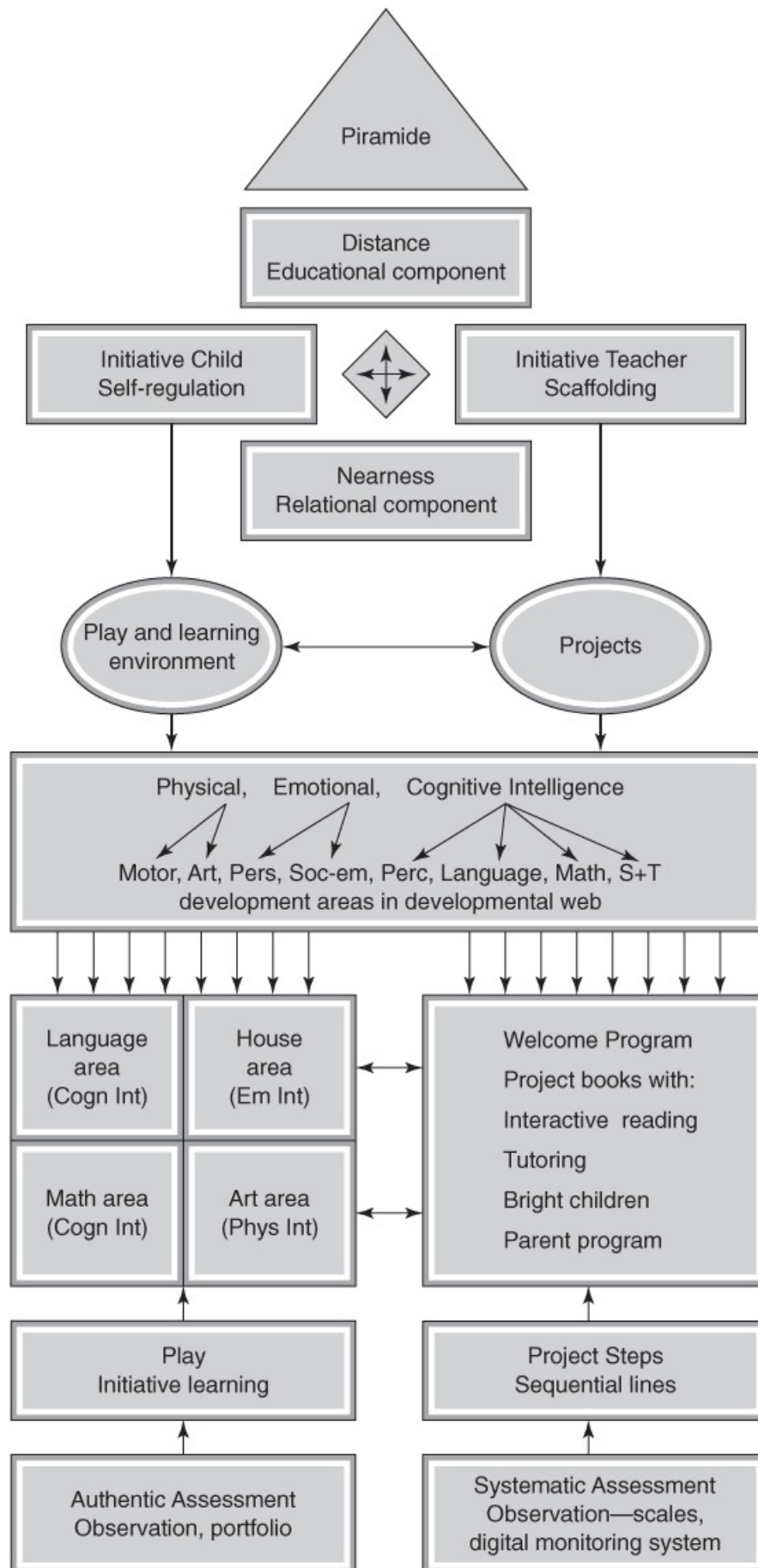


Figure 14–1 Key Terms Used in the Piramide Method: Art = artistic development; Pers = personality development; Soc-em = social-emotional development; Perc = perception; Math = mathematics; S = space; T = time; Cogn Int = cognitive intelligence; Em Int = emotional intelligence; Phys Int = physical intelligence.

- Initiative of the teacher has great influence on supporting the play and learning process, which she uses to scaffold children to the next level of development.
 - Nearness represents the attachment between teachers, parents, and children; it is the basis for the relational component in which the teacher uses positive and affirming ways to treat children. It is also how she offers safety, emotional support, and respect for autonomy, structure, rituals, and rules.
 - Distance refers to the distancing process that is the basis for the educational component in which the teacher starts near (familiar and concrete) and motivates children to engage in distancing (move toward complexity and abstraction). The aim is to help children think flexibly and creatively: move from near to distant, from small to big, and from concrete to abstract. If not, children will fail to provide the abstract representations they need for flexible thinking. The opposite way is not workable, because development starts with concrete perception and not with abstractions.
3. Sources for supporting and promoting development: These sources involve the play and learning environment for self-regulation and the projects for scaffolding. Both sources strengthen and feed on each other.
 4. Content for the Piramide Method: The content is the development of physical, emotional, and cognitive intelligence, worked out in various developmental areas. For physical intelligence, this would be motor and artistic development; for emotional intelligence, this would be personality and social-emotional development; and for cognitive intelligence, this would be perception, language, mathematics, and space and time. They are all brought together in a developmental web.
 5. Preparation: The teacher prepares the play and learning environment in such a way that children can find materials in various learning centers (corners, areas) and in cupboards to explore and use in support of development in all areas. In projects, developmental areas are ordered around a theme and are connected with tutoring, enrichment activities, and the Parent Program.
 6. Execution: The practices that stimulate the development of play and initiative learning as self-regulating instruments, the steps in the projects (increasing level of thinking), and the sequential framework (increasing difficulty in every developmental area) as scaffolding instruments for the teacher are prepared by the Welcome Program.
 7. Assessment: Self-regulating activities of children in the play and learning environment are authentically assessed by constructing a portfolio and through observations. Every 6 months the project activities are systematically assessed with a digital monitoring system and observation scales to help discover which

children need tutoring and extra support.

8. Implementation and Training: Teachers are trained and certified to use the Piramide Method.

Teachers jointly prepare the 12 projects per year that form the core of the Piramide Method. They put new play and learning materials into the environment to encourage children to play and learn independently, and based on their needs and interests carefully prepare activities that stimulate the development of children. This creates interplay between what children do on their own initiative and how the teachers challenge them. When children can open themselves up to explore and experience in an atmosphere of good feelings, they are better able to use what the play, the learning environment, and the projects have to offer.

The Foundation of the Piramide Method

The four cornerstones of the Piramide Method—initiative of the child, initiative of the teacher, nearness, and distance—are founded on successful theories, research, and practice.

Dynamic systems theory ([Fischer & Bidell, 2006](#); [Fischer & Rose, 1998](#); [Van Geert, 2006](#)) forms the general basis for the Piramide Method. Piramide also incorporates and builds on the theories of Piaget (1970) and [Vygotsky \(1962\)](#). Dynamic systems theory, built on the premise that humans are self-regulating beings, has opened new perspectives for the education of young children. The theory consists of a series of dynamic long- and short-term cycles. During these growth cycles, the child learns and relearns new skills through self-regulation, which refers to the initiative of the child, and through scaffolding, which refers to the initiative of the teacher. Two other concepts are also crucial to the Piramide Method: the developmental web, which refers to coherence in optimizing development that places education in a positive view, and the importance of the teacher ([Fischer & Bidell, 2006](#)). These two concepts have shaped the sources for development of the Piramide Method: the play and learning environment and the projects. The development areas are stimulated through the play and learning environment and through the project themes that are structured in short- and long-term cycles ([van Kuyk, 2011a](#)).

Educating children requires that the attachment between children and the educator be solid ([Ainsworth, Blehar, & Waters, 1978](#); [Bowlby, 1969](#); [Erickson, Sroufe, & Egeland, 1985](#); [Riksen-Walraven, 2008](#)). Feeling that the educator is close by allows children to feel safe, secure, and free enough to go forward and explore the world. The educator provides children this freedom while creating a clear structure and establishing rules ([van Kuyk, 2008](#)). These rules are not to restrict the child, but to indicate where there is space for playing and learning. Structure and rules also give the child a sense of safety and well-being. The task of the educator is to pick up signals and to help children find the answers that will allow them to find the inner self. We refer to this as sensitive response attitude. In the relational component, based on attachment theory, we also pay attention to good (positive) feelings ([Fischer & Bidell, 2006](#); [Klein, 2002](#)). Good feelings create a positive social climate and stimulate the development of more good feelings. Good feelings are aroused by movement, helping to make learning processes more successful and optimal.

In a society where change is a persistent characteristic, an important factor is dynamic and flexible thinking ([Fischer & Bidell, 2006](#)). The main concept in learning and teaching flexible and dynamic thinking in the Piramide Method is distancing ([Sigel, 1993, 2006](#)). The teacher starts near the children's world of experiences and interests and then helps children to move toward a more symbolic distance from the concrete here and now in the proximal level of development ([Valsinger & Van der Veer, 1993](#); [Vygotsky, 1962](#)). Children take cognitive distance from what was or will come, things in the direct environment and in situations that are far away, events that happened in the past or will happen in the future, or in imagination. Research has shown that children who have educators who engage them in these distancing activities develop optimally, but those whose interactions and experiences remain in the here and now are less well developed ([Sigel, 1993](#)). The basic principle is this: Begin close with concrete situations and materials and then help children represent things and events that are not in the here and now by using symbol mediators and questions that make abstract concepts comprehensible and accessible. Distancing theory is the basis for the project steps, to be discussed later in this chapter.

A second concept is the flexibility to think with the right and left hemispheres of our brain ([Sperry, 1980](#); [van Kuyk, 2011b](#)). The left hemisphere controls details, sequences, analyses, and words. The right hemisphere governs the big picture, synthesis, the whole story, the metaphor, and the context. The left brain knows how to handle experiences in the world, whereas the right side knows how the world works, the consciousness of what is happening. We call this “big thinking.” The left half is more for “small thinking,” focused on details. Both ways of thinking are needed and used by young children.

We have studied successful practices in The Netherlands and in other countries around the world. Although Piramide is conceived differently, in developing educational materials we have built upon Montessori’s insights (see [Chapter 16](#)). Recent developments in the education of young children on different continents have increased the universality of Piramide. Implementing the Piramide Method in Germany, Belgium, Japan, Indonesia, and the United States has made it clear how languages, cultures, and educational systems influence the adaptation of an educational concept in diverse settings.

The Basic Concepts in Coherence

The four basic concepts that form the cornerstones of the Piramide Method are embodied in what we define as the paradox of education: The teacher takes care of and protects the vulnerable child who is not yet independent and at the same time attempts to lead the child toward developing independence. Supporting the child so that he or she will be able to develop the confidence to explore the world is worked out in the relational and educational components (see [Figure 14–2](#)).

Relational Component

The relational component focuses on how we care for and treat children. As stated earlier, the relational component is based on attachment theory ([Ainsworth et al., 1978](#); [Bowlby, 1969](#)). The essential characteristic of the connection between the initiative of the child and the initiative of the teacher is sensitive responsiveness. The teacher notices the signals of the children and reacts in a sensitive way. In the early stages of the development of very young children, the initiative resides more with the child than with the teacher. The teacher observes what the child is doing and follows the child’s initiatives. This way, the child can

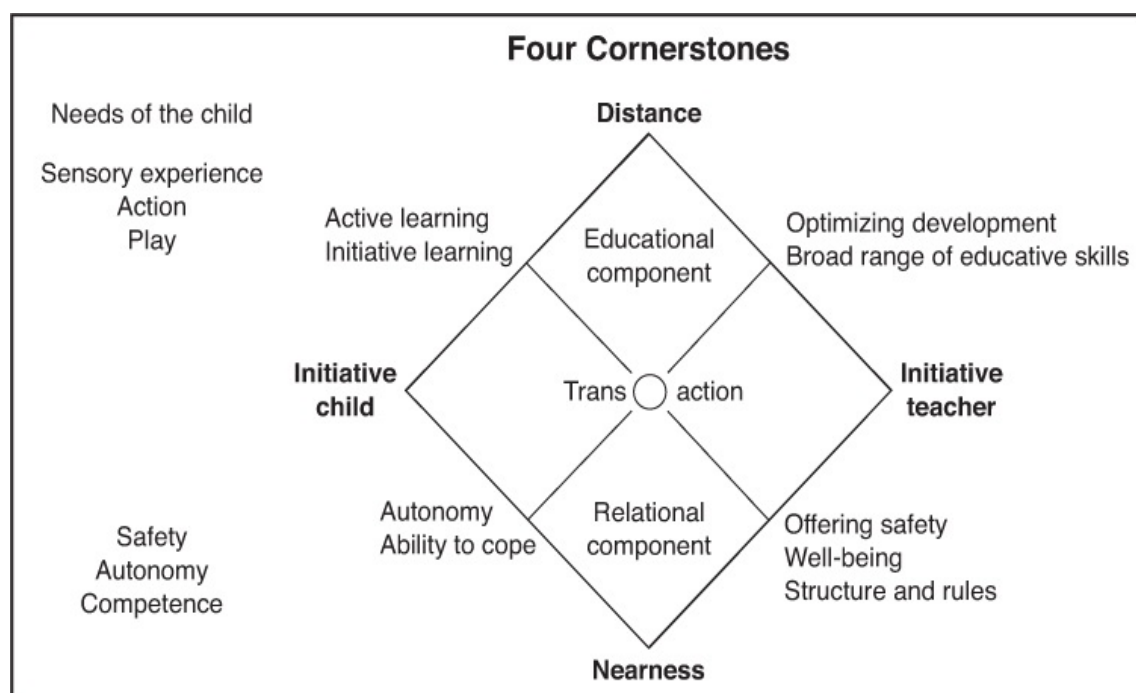


Figure 14–2 Relational and Educational Components

develop independently, and at his or her own pace. Because children are curious and motivated to develop, praising them for what they do is often not necessary. In short, teachers can:

- Offer children a feeling of safety and well-being
- Support them emotionally
- Respect their autonomy
- Offer clear structure and rules, and rituals

These characteristics are consistent with the needs of young children—the need for safety, the need for autonomy, and the need for competence ([van Kuyk, 2003](#)). A significant aspect of the relational component is what we denote as “positive education.” Recent neuroscientific studies suggest that negative feelings and depression have a constraining influence on brain development, while positive emotions keep the brain alive, so new connections (synapses) are formed ([Klein, 2002](#)). Thus, happiness is an important phenomenon for the development of the brain. Warm, natural communication, attention, pleasure, optimism, and a relaxed atmosphere all promote involvement in social and cognitive activities. Young children can learn positive feelings and how to manage anxiety, negative feelings, and gloominess. If children are managing negative feelings, such as anxiety, anger, and distress, little energy is available for learning processes. In contrast, positive emotions help children be receptive to learning and to the reinforcement of learning processes. A primary goal is to focus on what is going well and reinforce that. This increases self-esteem and promotes children’s need for safety, autonomy, and competence.

The teacher creates a cheerful, even mood, and a socially and emotionally positive atmosphere in which negative feelings are prevented and children are supported to cope with negative emotions in a positive way. A teacher has to be engaging and ready to help. Children love a positive, kind outlook, but expect the teacher to be decisive. This creates safety and order in the play and learning environment.

A simple opportunity to create a positive climate is to let children move. Through movement, the brain secretes hormones such as serotonin and endorphins, which bring lightness in the brain ([Klein, 2002](#)). The brain interprets cold hands and muscle tension as anxiety, producing a feeling of light discomfort. After a short period of movement, children become warm, their muscles loosen, and their hearts beat quicker; this gives the children a sense of well-being. Other ways to awaken positive feelings are playing and singing together and creating the element of surprise. All these activities should be done daily to sustain a positive socio-emotional classroom climate ([van Kuyk, 2011b](#)).

Educational Component

Imaginative play is a central part of the educational component. According to Vygotsky (1962), children can function beyond their usual capacity when they play. Theater, poetry, and storytelling are useful instruments or mediators for big thinking because of the play and the use of metaphors in the daily practice of these activities.

Emphasis is on how to recognize the educational needs of children. Children like to do things in a perceptual, “using the senses” way. They like to act and do things in a playful manner ([van Kuyk, 2003](#)). These perceptual and playful approaches are not only a child’s needs—they also can be useful educational tools. In playing and initiative learning (both contexts for self-regulation), children’s needs will be met if there is a rich play and learning environment and enough perceptual, well-ordered materials to challenge children and allow them to make their own choices. However, the teacher has to make the effort to meet the needs of children. If children are not intrinsically motivated, teachers have to learn what motivates them and apply this knowledge accordingly.

There has to be a balance between effort and relaxation, but most important, next to teaching strategies, is an environment that offers challenge. Children must have the feeling that they can perform activities independently; moreover, they must have the expectation that they can accomplish the activity successfully. Making an effort to reach a goal gives children positive feelings ([Csikszentmihalyi, 1996](#)). Challenges excite children. When a part of the task is completed, they feel encouraged and the effort is reinforced. We have to help children learn how to set goals and benchmarks in between goals. When this is done in a compassionate environment, activities and experiences can be very meaningful.

In the Piramide projects, the teacher starts near the experience and makes distancing demands on the child. The steps in the projects start with Orientation and Demonstration, in which the use of the senses is central, and the sequence ends with Broadening and Deepening, in which language and problem solving are the main characteristics. Self-regulation by the children and scaffolding by the teacher are used in balance in the Piramide Method.

How to Optimize the two Sources of Development

There is a major difference between development through self-regulation and development through scaffolding. Through self-regulation, a child can reach a normal (lower) level of development; through scaffolding by the teacher, the same child can reach an optimal (higher) level of development. Is it desirable for a teacher to try to bring children to an optimal level at all times? Both child and teacher have limits. The teacher needs to distribute her energy and time to meet the needs and interests of every child in her classroom. Children switch between tension and relaxation and need time for both self-regulation and scaffolding.

There are two sources for optimal development in the Piramide Method: (1) the play and learning environment and (2) the projects. Research has shown that children do not always function at the same level, but they can function at many different levels of action and thought ([Figure 14–3](#)). The level at which they function depends on the circumstances ([Fischer & Bidell, 2006](#)).

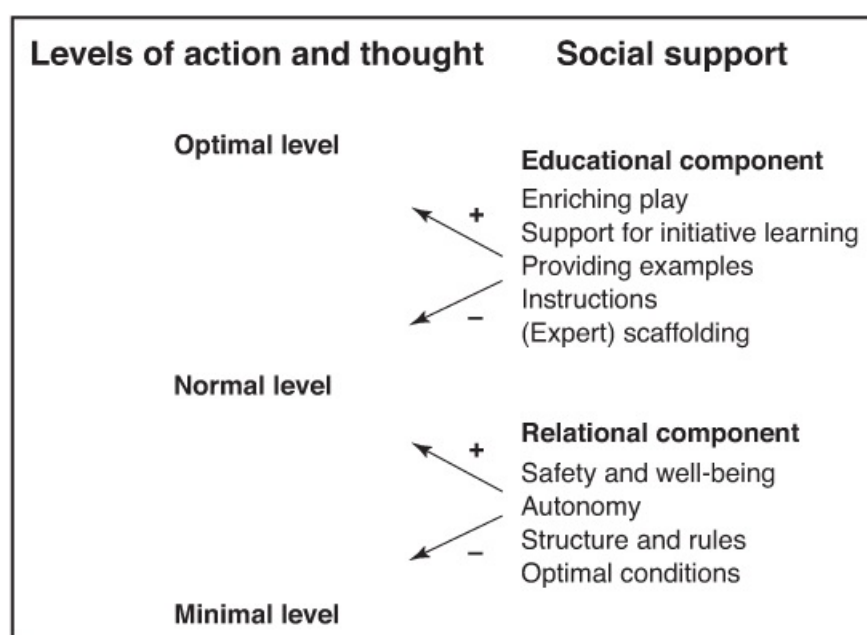


Figure 14–3 Levels of Action and Thought and Social Support

A child can act at a developmental level appropriate for his or her age if the relational component is optimal. If

circumstances are less favorable—for example, if there is unrest or stress when children are pressed too much or when there is an emotionally unpleasant atmosphere—then the children function at a reduced level. If children are disturbed by lack of structure and rules, they will not be able to function at a level appropriate for their age.

Through education, children can be stimulated to rise above the normal developmental level to an optimal level ([Fischer & Bidell, 2006](#); [Sigel, 1993, 2006](#)). In Piramide, we strive for this outcome using the play and learning environment and the projects.

The play and learning environment supports children in their play and stimulates their initiative learning. Not just any environment, but a well-prepared environment, will allow children to benefit from as many opportunities as possible to take initiatives and to make their own decisions. The space should be well structured, so that children can play and learn productively.

In the projects, the second source for optimizing development, a well-prepared environment is also the basis for play and initiative learning. In every project, there is a theme around which all the development areas are grouped. The areas (corners) and places in the play and learning environment are changed for every project in such a way that there are always new challenges. However, the teacher also has the means to stimulate the development of children. In every project, there are four steps to bring children to a higher level of development, or, in [Vygotsky's \(1962\)](#) terms, the proximal level of development. There are project books, one for every month of the year, that specify directions and suggestions for how teachers can make each area challenging, adaptable, and renewable.

Within carefully constructed child-friendly areas, children can play and learn better. In group activities, the teacher can provide clear examples, describe the main features of a situation, guide the process of understanding a phenomenon, or challenge problem solving. To help children learn in an active way, scaffolding provided by teachers with considerable knowledge and experience is the best form of support. Therefore, we attach special importance to stimulating the development of children in the Piramide Method.

The Content of the Piramide Method

In the introduction, suggestions (see relational and educational component) were given on how to work with children to optimize their development. The questions we now pose are the following: What is the focus of our efforts to optimize development, and what kind of development is being fostered? In constructing an elementary, multiple-intelligence model, we have been inspired by dynamic systems theory ([Van Geert, 2006](#)), the theory of emotional intelligence ([Salovey & Mayer, 1990](#)), and by multiple intelligence theory ([Gardner, 1993](#)).

The content of the Piramide Method is discussed in terms of three intelligences across developmental areas ([van Kuyk, 2003](#)). In the Piramide Method, the three intelligences are given equal importance ([Figure 14–4](#)).

Three Intelligences

Simply stated, we distinguish three gifts (3 H's) or intelligences: the gift of the hand—physical intelligence; the gift of the heart—emotional intelligence; and the gift of the head—cognitive intelligence. Children possess these intelligences in varying degrees. We want to offer children a balanced set of developmental pathways that is composed of all three. Because the intelligences are abstract and general, they are specified in developmental areas that should be recognizable to all involved in teaching young children.

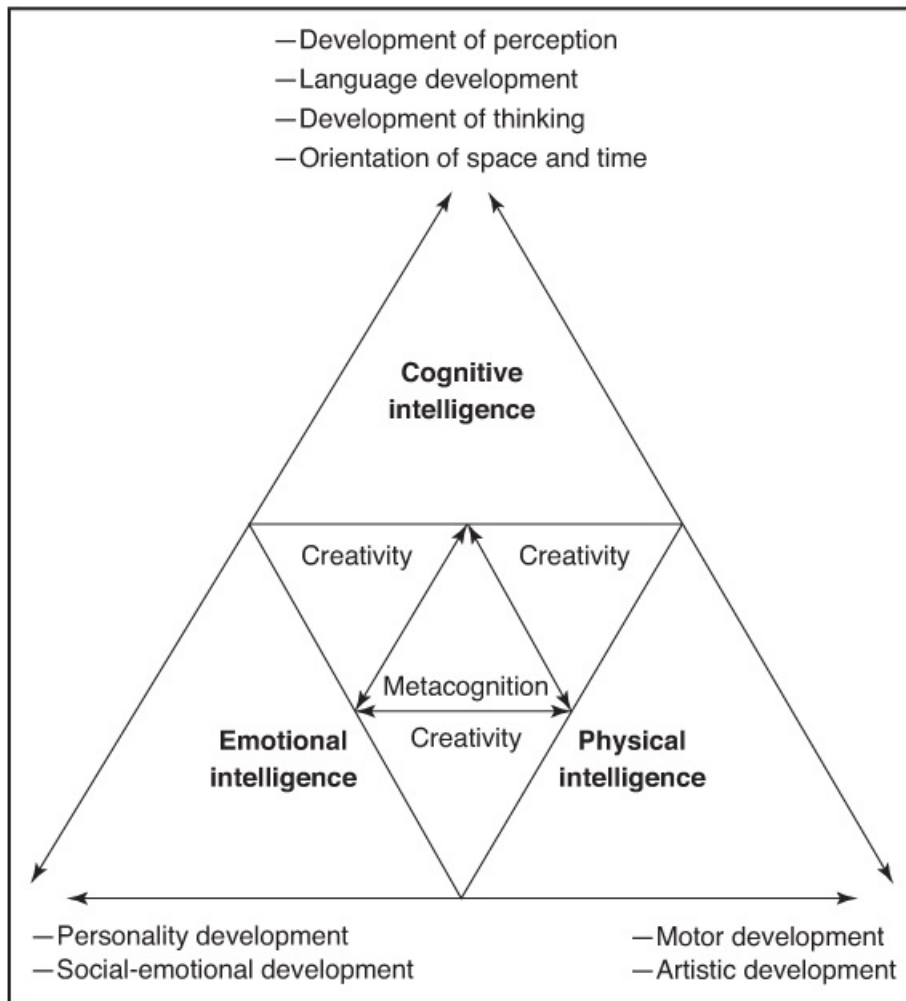


Figure 14–4 Intelligences and Developmental Areas in the Piramide Method

Physical Intelligence

Physical intelligence is the capacity to initiate movement, to control it, and to express oneself creatively. Here a distinction is drawn between motor development and artistic (music and art) development. Within these areas, children learn to move, to act, to control their bodies, and to know their boundaries. They learn to be creative in relation to their own body, how to develop body language, and how to work with appropriate materials, tools, and instruments to create new things and to express themselves in art and music. This is, for the most part, a total experience.

Emotional Intelligence

Emotional intelligence refers to the capacity to sense one's own emotions and the emotions of others and to conduct oneself socially. This intelligence area includes personal development and social-emotional development. Children learn to develop self-confidence, perseverance, and self-regulation. In addition, they learn to recognize their own feelings and those of others. They show respect for others and develop empathy, the ability to imagine themselves in someone else's position and to sense what that person is feeling (Pink, 2006), and they behave and conduct themselves appropriately (moral development).

Cognitive Intelligence

Cognitive intelligence is the capacity to learn, reason, plan, solve problems, think abstractly, control language and thought, and work with them all. This intelligence is worked out in the development areas: perception, language, thinking, and orientation of space and time. All perception, language, and thought take place in space and time. Children learn to grasp their everyday world by developing these areas. They learn to distance themselves from the here and now. Language has a double function. It is the means whereby children can communicate and learn from the teacher; it is also an important educational enrichment tool.

The Levels of Action and Thinking

Here we identify three levels of action and thinking, reflecting an increasingly individualized, more flexible and conscious use of what is being learned.

Basic Level

The basic level is one of simple knowledge and skills. This is what the child copies and learns from others through imitation and example. Children learn this in the first steps of the projects and in the sequential activities.

Creative Level

The second level entails creativity. By this we refer to the capacity to make or think of something new and worthwhile. At this level, children use their basic skills and knowledge in a creative way during play and initiative learning and in the project steps. They play with what they have learned and begin to follow new paths. Active learning is indicated, especially in Broadening and Deepening.

Metacognitive Level

At the highest level of knowledge and skills, we speak of metacognition. This level is attained when children are aware of their knowledge and skills and consciously change their own behavior. Under the direction of cognitive intelligence, children can become conscious of their physical, emotional, and cognitive actions and work with them in a flexible and creative manner. During reflections on play and initiative learning (“What is important? Can you find the solution?”) and during the active learning of projects, children are stimulated to learn and think on a metacognitive level. The teacher helps young children in metacognition by verbalizing what the children are doing and by verbalizing what the teacher herself is doing. By verbalizing the actions of children and what the teacher does, the child becomes conscious of what he or she is doing and what the teacher did, especially when the teacher helps the child to verbalize his or her own actions.

The Practices that Optimize Children’s Development

In the Piramide Method, we operate with four practices to optimize the development of the child. Two practices are connected to the initiative of the child: play and initiative learning. *Initiative learning* is a new term indicating that children themselves take the initial steps to learn. Two other practices are connected to the initiative of the teacher: the projects, in which the teacher explores the outside world with children, and the sequential framework ([Figure 14–5](#)), in which a hierarchy of activities is offered for children to learn.

Figure 14–5 Four Practices in the Piramide Play and Learning Environment: Play, Initiative Learning (Initiative Child), Project Steps, and Sequential Activities (Initiative Teacher)

Initiative Child	Initiative Teacher
Play	Project steps
Initiative learning	Sequential activities

In the Piramide Method, we focus on children's ability to regulate themselves. Children are stimulated by a rich and exciting play and learning environment to take the initiative to be engaged and to make choices for themselves.

However, children cannot learn everything by themselves. In fact, they learn a great deal from other children and especially from their teachers. The teacher's initiative is important in teaching children new things. In looking at the group as a whole, the teacher has to determine where differentiation is needed in individual children.

Low-scoring children need extra support on an individual basis through tutoring ([Slavin, Madden, & Karweit, 1994](#)). For example, a teacher gives guidance to individual children who need extra support or more learning time. High-scoring children need extra stimulation to feed their self-scaffolding and to promote their problem solving ([Van Geert & Steenbeek, 2006](#)). But individual tutoring and motivating bright children takes extra time and energy. Although tutoring and stimulating bright children is incorporated in the Piramide project book, this can be done more efficiently by exploring subjects in groups with the help of projects and sequential activities. Division of roles in doing activities is part of structured or semistructured cooperative learning ([Kagan, 2003](#)). Group learning provides children with more possibilities to cooperate and to communicate. In these situations, children are active and can engage simultaneously in intentional actions such as handling, talking, and thinking and sharing ideas about the same problems.

The Three Levels of Intervention

The co-construction process ([Goldstein, 1999](#)) of children and teachers is differentiated into three levels of intervention ([Figure 14–6](#)).

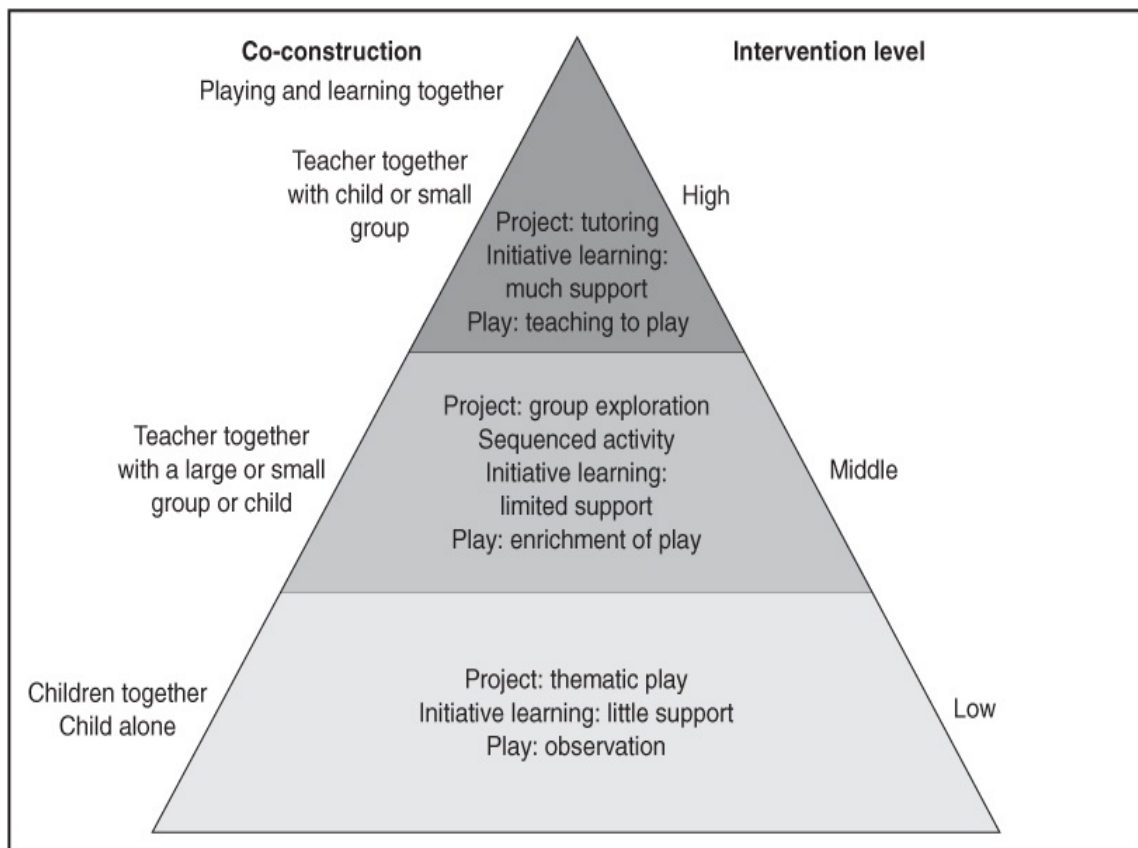


Figure 14–6 Three Levels of Intervention

This is done to ensure that the support children need when they decide to take the initiative and what they must learn—as individuals or in a group when supported by the teacher’s initiative—are in balance and attuned to each other.

Low Level

Children play and learn independently, without intervention from their teacher. The teacher gives little or no support. If support is necessary, the teacher will adjust it to the development level of the child and the degree of independence displayed. For bright children in particular, there is ample opportunity to play and work at a high level, because most engage in activities for extended periods independently.

Middle Level

Children play, explore, and learn together with the teacher. A middle level of support is given either in large or small groups. The structural cooperative learning provides possibilities to act in small groups during activities. During the projects, the teacher initially gives more than the average amount of support to help get the process started. The amount of help offered depends on the level of development and the degree of independence the children display. The teacher then slowly tries to hand over activities, bit by bit, to the children.

High Level

The teacher or tutor plays with or teaches a child or small group of children who require extra help. This teacher

or tutor therefore offers considerable support for low-scoring children (tutoring) and for high-scoring (bright) children. The intensity of support is in proportion to what is needed to bring children to a higher level of development and to make them more independent.

How the Practice is Executed

Welcome Program

To provide children with a clear understanding of how the Piramide Method works in practice and what they can expect, we start every year with a Welcome Program. It forms the connection between the relational and educational component. The children feel welcome and safe; they feel that the teacher is available for them, and discover what they can find in the play and learning environment. They practice the rituals and rules and learn by doing. Further, the children discover how to become self-reliant, and how to play and learn independently with self-confidence. After spending two weeks practicing the rituals, rules, and expectations together with their parents, the children are ready for Piramide. The basis for the practice is structuring and furnishing the play and learning environment.

Play and Learning Environment

From research we know that “the brain takes what the environment offers” ([Shonkoff & Philips, 2000, p. 216](#)). Teachers then must offer children a rich and high-level structured environment in which the students can find new social opportunities and challenges for play and learning that enhance the development of self-regulation.

High-Level Structure

The environment offers new challenges to play and explore. Children can find materials and situations that fit their level of development and that challenge them to attain higher level skills. They have opportunities to make their own choices and can make their own flexible decisions. In this environment, we need learning centers with storage areas containing different levels of materials and discovery tables that offer structures for learning and play. An example of this kind of structure

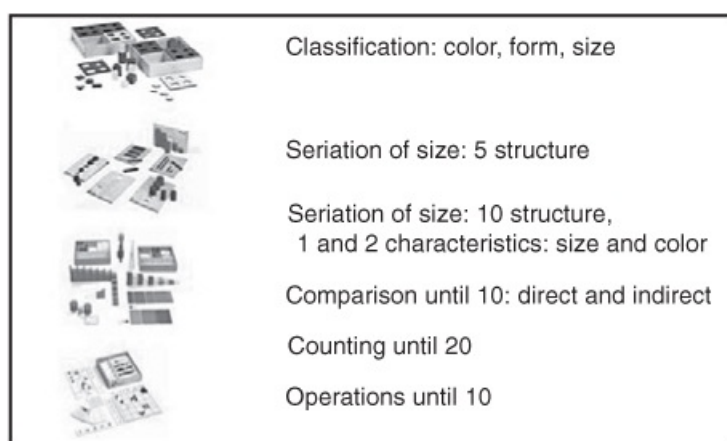


Figure 14–7 Developmental Materials for Mathematics in a Sequence

is the series of developmental materials for mathematics—classification, seriation, comparison, and operations—that have been developed for 2- to 7-year-old children ([van Kuyk, 2004a](#), *Leerboek* [Learning book]; [Figure 14–7](#)). Children can find their own level of development and choose higher level materials as well.

To practice a project, the teacher changes learning centers to challenge children to experience new materials and new ideas. He or she offers open cupboards so children may choose educational materials for assignments. The teacher has to provide physical and psychological space to create an environment that stimulates children to take initiative.

Physical Space

The teacher offers every child enough room to play and opportunities to take initiative in order to support learning. In the learning centers, the teacher offers enough materials for each child to choose activities that represent the different developmental areas. Children can do this alone or with other children. [Vygotsky \(1962\)](#) stated that through communication with other children, the child has to react to the ideas, actions, and language of other children. Each child has to constantly change his or her mind. This stimulates flexible and resilient thinking.

Psychological Space

The teacher allows or stimulates children to take initiative in ways that make them feel what they are doing is received well. Children do not have to ask for confirmation within the bounds of structure and rules. The teacher creates psychological space and thus affirms what the child is doing. The teacher accomplishes this by smiling, nodding, using positive gestures, and providing informative feedback.

Six Features of the Piramide Method

Play

In the Piramide Method, there are three ways to optimize involvement in play.

Creating Rich Play Situations

We identify different types of play. Each type places different demands on the play environment. In the Piramide Method, we consider five kinds of play: material play, motor play, experience play, imaginary play, and rule play. In addition to creating play situations in the material environment, we motivate children toward rich play. If there is not enough rich play, then we move to play enrichment.

Play Enrichment

In the past, teachers often thought they should not disturb children when they are engaged in play; this is certainly still the case when children are playing richly and deeply. In the Piramide Method, we proceed from the idea that adults can and should play an active role in enriching play. Children like to play with adults. However, what is more important and what scientific research has confirmed is that children will act and think at a higher level if an adult guides them in their play ([Fischer & Bidell, 2006](#)). The process of enrichment can take two forms.

Joining in the Play

By playing together with the child or a group of children, the teacher shows that he values and enjoys the play in which the child is engaged. The child feels valued; from this vantage point, the teacher can “enter into the play” and work to enrich the play activities. If the teacher begins to instruct by saying, for example, “Take the cups,” he is an instructing teacher and not a playing teacher. Once the teacher is involved as a participant in the child’s or group’s play, he can offer suggestions, but only if this fits his role.

Enriching Play

The things that show that the play is not rich enough—lack of persistence in play, limited use of imagination, and poor scripts—can often be a source of inspiration for enriching play. The teacher can observe children’s play and assess their degree of involvement. Do the children take the initiative to engage in play? Do they make their own rules? Is the play still exciting enough? Are the roles becoming too stereotyped? Is fantasy being used? The teacher can introduce a new role into play: “What do I hear? Is that a bell? Who can that be? Who is coming to visit us?” She can add a new role, or provide the play with more structure or a play plan.

Learning to Play

Sometimes there are children in a group who do not play. They may feel ill, worried, or afraid. Others may not have a good command of the language and feel left out. There are also those who are not used to playing: Their play has not been appreciated, has been forbidden, or has been rejected. How can we get these children to play? In the Piramide Method, we teach children to play in three stages: by showing them how to play, by encouraging them to play by themselves, and by allowing them to play independently ([van Kuyk, 2003](#)). In connection with the play activities, we offer the Piramide play book, in which the teacher can find different kinds of play activities, as well as the 10 golden rules for imaginary play and ideas on how to challenge children to play individually and in groups. The book also includes ideas on how to teach play and how to enrich play.

Initiative Learning

Children do not only want to play—they also want to explore ([Johnson, Christie, & Wardle, 2005](#)). They are motivated to understand the world around them to find out how things work. They set goals for themselves. As suggested earlier, this is initiative learning, which can be readily observed in beginning literacy, in beginning numeracy, and in exploring the world. Children embrace this process fully when two conditions are fulfilled: (1) the play and learning environment is rich for initiative learning, and (2) the child must develop essential life skills ([Galinsky, 2010](#)), such as the ability to focus and express self-control; the ability to take and confront the perspectives of others; and the ability to take on challenges, be self-directed, and engage in learning. In the Piramide Method, the rich environment and life skills spark curiosity and motivation, allowing initiative learning to work. The teacher inspires, provides good examples, and is supportive whenever and wherever necessary.

Creating Rich Initiative Learning Situations

In the Piramide Method, learning centers are designed (language center, discovery center, and math center) and developmentally appropriate materials are introduced to encourage initiative learning. Children can find and select materials to develop or expand their ideas. Because the learning centers are designed and coded so that children know about the levels of difficulty of the materials, they can choose the materials themselves. There is richness in the kind of materials they can choose. As an example, for writing there are different kinds and formats of paper, different kinds of pens and stamps, and different examples of letters to write and of writings. In another instance,

there are developmental materials for counting, building, grouping, and ordering, and materials that children can use to build up a sequential line in math (e.g., Classicant, Serio, Seriant I and II, and Comparant; [van Kuyk, 2004a](#), *Leerboek* [Learning book]; see also [Figure 14–7](#)). A discovery table that is created for every project is another possibility to provide opportunities for initiative learning.

In the play and learning environment, children also use computers, usually in a designated area. The project books contain games and diverse materials. Many educational games can be downloaded or purchased at attractive prices through an i-Pad. The i-Pad is also useful as an e-reader, to show and read picture books. In the future, many similar media will be available that can be used individually and in groups. There are already new apps that will usher in a revolution in the use of picture books. (See, for instance, *The Fantastic Flying Books of Mr. Morris Lessmore*, by William Joyce, 2011.) This app is changing the interactive reading of picture books completely, because it interacts in adorable ways with the child or a group of children. In addition, the i-Pad is capable of generating text and pictures so that children can learn to read and write on their own. The teacher can also present the products (pictures, Web sites, videos, games) with a beamer and a smart board for all the children.

Promote Life Skills

Life skills are learned by doing, but also by teaching. There are different kinds of activities that teach life skills. It is important that the teacher be aware of what the child has to learn. [Galinsky \(2010\)](#) emphasizes the importance of placing special attention on life skills, and she provides examples of activities to promote them. She also advises on how to select materials that promote those skills. For instance, to promote focus, computer games that require children to pay attention can be selected. Another approach is to choose materials and activities that are challenging for children. Csikszentmihalyi (1990, 1996), like Galinsky, proposes strategies to provide children with challenging materials and activities. He advocates for clear goals that give the child the feeling that he or she can fulfill the activity successfully (as direct feedback). Challenging activities that slightly excite in a timeless action lead to a “flow experience,” providing a feeling of enjoyment. A flow experience occurs when one is in full concentration and absorption in an activity. This pleasurable state can be controlled and not left to chance by creating challenging tasks that are neither too difficult nor too easy for children’s abilities.

Inspiring Initiative Learning

A Good Example

In general, the desire for initiative learning will come directly from the child; however, we can also inspire children and challenge them to learn on their own. The best way to do this is to give children good examples. In the beginning, the emphasis is put on developing interests, not skills. The teacher can achieve this by allowing children to see many examples of reading, writing, math, and experiments. For instance, the teacher makes notes on the board, writes notes using text and numbers, studies the water to see how the tadpoles are getting on in spring, and checks to see if the seeds are germinating.

Talking About What Is Important

Another source of inspiration is for the teacher to talk to the children about what she is doing. The teacher can talk about the value of writing and math and their usefulness later in life. The teacher gives children meaningful examples of where communication is necessary (e.g., shopping). Children must look for ways to formulate what they want (e.g., in the shop you need a shopping list) and how to pay for what they buy in the supermarket (e.g., the grocer receives money for what he or she sells). With young children it is necessary to make links between their experiences by beginning close and slowly fostering more distance.

Offering Support With Initiative Learning

It is clear that knowledge and skills are needed to support young children. The most important condition is that the children themselves retain the initiative and a feeling of competency. That is, they feel they have achieved the best possible result. It is therefore necessary to offer strategic help, but only as much as children need to complete their chosen task. We have already referred to this strategic help as scaffolding. Before the teacher provides support and determines a strategy, that teacher observes the level of development, the degree of independence, and the amount of motivation in the child. In connection with initiative learning, the teacher can find suggestions in the Piramide Learning Book ([van Kuyk, 2004a](#)) about how to furnish learning centers for children to experience reading, writing, and math, and to experiment. The book includes materials that range from simple to difficult, and information on how to order them. The teacher will also find suggestions on how to work with educational materials and how to support initiative learning with little, limited, or a lot of involvement.

Projects

A project is a well-balanced body of activities. These activities are closely linked to one another and are built around a particular theme that fits the experiences and interests of young children. Each year, there are 12 projects. The subjects are chosen on the basis of the children's interests and experiences. During the year, the projects increase in difficulty. Two strategies are used to increase the difficulty and the level of thinking. The first is embedded in distancing theory ([Sigel, 1993, 2006](#)). This is the basis for the four progressive project steps (Orientation, Demonstration, Broadening, Deepening) in which children learn to go from near to distant, from simple to complex, and from perception to problem solving. The second is a sequential framework ([van Kuyk, 2006](#)) that is used to order every developmental area from simple to difficult. Both are incorporated in a holistic approach to bring about coherence to the activities, creating a developmental web ([Fischer & Bidell, 2006](#)). A network of concepts based on the sequential framework forms the foundation of each project. In the Piramide Method, the teacher brings the outside world inside the classroom. The teacher integrates each new project into the play and learning environment and explores each project theme together with children.

A project is a body of activities, set out in a project book. Each project begins by furnishing the play and learning environment. On the basis of a project theme, children can make play choices for themselves and carry out initiative learning activities within the context of a rich play and learning environment. This play activity can be compared to free play, with one difference: The teacher introduces new elements into the play and learning environment during each project to give children new challenges to play and learn. In the new generation of project books, there is a strong connection to Web sites referring to the content of the project theme, to pictures on the Web site (for instance, Vincent Van Gogh paintings in the Art project), to songs, to films that show processes, and the like. This creates possibilities for the teacher to bring the outside world inside the classroom. With a beamer and a smart board, the teacher can present all types of images, such as videos, maps, and Google Earth, to children. The teacher must decipher what is most interesting to children and what will present the best learning opportunities. The combination of the i-Pad and its successors and the smart board projector can help children make choices for a higher level of learning that is dynamic and flexible. Children learn to interact with the new media in a playful manner while in a rich play and learning environment.

Important to each project is group exploration, during which children investigate a topic that is introduced or encouraged by the teacher, more recently through technology. The teacher differentiates the activities in the group exploration. Activities are made easier or more difficult; the teacher presents these activities in an interactive way in which the children are active learners. As noted, along with the Web site references in the project book, the teacher makes differentiations in the project for children with special needs and for gifted children; she also offers structural cooperative learning ideas to activate the whole group ([Kagan, 2003](#)). After the group exploration has been completed, the skills learned can be implemented during individual and small-group processing in the learning centers. At the end of every project book there is a Parent Program that provides parents with information about the project, the kind of activities the children engage in at school, and activities to do at home.

The teacher can also make a digital newsletter that is sent via e-mail to parents.

Learning to Take Distance

As mentioned, one of the basic concepts in the Piramide Method is distance. Children whose parents or teachers go beyond the here (other places, close by and far off) and now (what has happened previously and what will happen) appear to develop well.

[Figure 14–8](#) provides an example. Imagine a picture of an elephant against a green background. When the picture is shown to children, we ask a few “nearby” questions (the answers can be found

Figure 14–8 Question Types and Illustrations

“Nearby” Questions	“Distance” Questions
What color is the elephant?	Where is the elephant going?
Where is his trunk?	What does an elephant eat?
How many ears does the elephant have?	Why is his trunk so long?
Where is the elephant standing?	Where does an elephant live?

in the picture) and a few “distance” questions (the answer must be figured out by thinking creatively or by using existing knowledge).

Asking only distance questions may not be sufficient. Nearby questions are also important because they are closer to children, give them something to hold on to, help to make things more logical, provide them with a feeling of safety, and give them stable, basic knowledge. But simply asking nearby questions is not challenging enough. In fact, we should ensure that we ask many distance questions. These are much more difficult to prepare, but they also are more effective in promoting learning ([Sigel, 1993](#)). Learning to take distance occurs in two ways: in short-term cycles and long-term cycles.

Short-Term Cycle

A number of steps are taken in the group exploration of each project. We begin close to the world as the child experiences it, and then, bit by bit, we take distance from it. The child must learn to make representations: Mental images begin to develop from the age of 2 and enable the child to think ([Fischer & Rose, 1998](#)). At first these representations are very concrete, but they slowly become more abstract: first simple representations and later more complex ones. The period between 2 and 6 years of age is a particularly sensitive one, during which children take action and begin to make representations on their own. This process takes place in four steps: Orientation, Demonstration, Broadening, and Deepening ([van Kuyk, 2003](#)).

Activity From Orientation

MAKE LEMONADE

Read the book *Amanda Pig and the Really Hot Day* by Jean Van Leeuwen. Show children the individual pictures, but also the whole book.

Talk about how hot the day is (Amanda is as droopy as the plants in her father’s garden).

Ask the children how Amanda cools off (a cool shower with a hose and lemonade).

Let the children talk about what makes them thirsty and what they like to drink when they are thirsty.

How do they know when they are thirsty?

What signs do their bodies give them?

Next, give each child a cup and plastic spoon.

Let each child pour water from a pitcher into his or her cup.

Give to each child a wedge of lemon to smell and lick.

Talk about how it smells and how it tastes.

Ask them if they can think of any other food that is sour.

Now, let the children squeeze the lemons into their cups of water.

Tell the children to take a sip and see how it tastes.

Pass around a bowl of sugar cubes and let children sweeten their lemonade.

Ask how it tastes.

Which way do they like it best, sour or sweet?

Then ask, "How can we make it colder?"

"Have ice in a cooler ready to let each child scoop out an ice cube with a spoon.

Ask them to stir the ice around and then taste again.

"How does it feel now?"

Do you like it better warm or cold?

"What drinks do you like to drink when they are warm, and what drinks do you like to drink when they are cold?"

"Intent: Understand various uses of water * Compare sour and sweet tastes * Observe sugar dissolving in water * Compare temperature of water * Follow sequence of story

1. Orientation. This first step is intended to help children orient to the context of the project theme. It takes place mainly by linking into children's experiences and what they already know about the subject. Moreover, it gives them a sense of safety and the feeling that they can trust the upcoming activity—putting them in a good mood.

In every step the teacher can choose from activities for every day.

2. Demonstration. This first learning step begins close to the world as the children experience it. In this step, a great deal of work is done with the senses because this is the way children gain multifaceted experiences. In discussing concepts, the teacher simultaneously shows (displays) and tells children what he is doing. The teacher makes use of concrete situations and materials and, on this basis, children build up a great deal of sensory experiences as the teacher verbalizes what he is doing and names the objects. The teacher provides clear examples to help children understand. The teacher also uses pictures to illustrate the points.
3. Broadening. This refers to the expansion of concepts. Relevant characteristics are sought in various examples, comparisons are made ("What are the similarities and what are the differences?"), and more difficult examples are introduced. Language plays an important role in comparison. The teacher draws

heavily on children's own

Activity from Demonstration

HAULING WATER UP AND DOWN

Tie a long rope to a plastic bucket handle ahead of time.

Gather the children on the playground. Throw the rope over a beam to create a pulley.

Show the children a picture of a well with a bucket attached to a rope (can be found in Project Resources).

Ask them if they know how to get the water from the well.

Sing the nursery rhyme "Jack and Jill" and talk about the fact that they are going up the hill to the well to get some water to take home.

Show the children the rope and bucket.

Ask a child to pull the empty bucket up using the rope.

Let each child take a quick turn.

Now, challenge them with the question, "What could we use to make the bucket really heavy?"

Let them fill the bucket with whatever they think will make it the heaviest.

Ask children what they hear as they put the different things in the bucket.

Now, let each child try to pull the bucket up with the rope.

What do they notice? Let them help each other if necessary.

Fill the bucket with different amounts of water and let children experience the change in weight.

Leave the bucket outside on the playground for the remainder of the project so children can continue to experiment with it.

Intent: Demonstrate use of rope and pulley * Solve problems collaboratively * Observe changes in weight * Describe differences in weight

experiences in the comparisons and helps them take more and more distance. The teacher begins to ask "distance" questions. He reminds them about things that have happened previously and refers to things that are not actually present or have not yet happened.

4. Deepening. This last step is for encouraging the child to use what has been learned through Demonstration and Broadening in new and often more difficult situations. Some of these situations will be familiar, others will not. Children must learn to solve problems by themselves. The business of thinking things through plays an important role alongside sensory experience and language. By going into more depth, children learn to be flexible in using what they have learned and experienced. They learn to switch between different senses and between different types of representations. Distance questions become the main type of question asked. The teacher allows children to anticipate new situations. He encourages them to reflect on what they have learned and to make conclusions from what they have experienced (metacognition). In this process, representations become more complex and abstract. These representations are necessary for future learning. "Playing" with these representations is the motor for flexible and dynamic thinking, what we termed left- and right-side thinking, or small and big thinking. Here the focus is more on big thinking: being conscious

of the big picture, seeing the context or the metaphor, because that is not immediately visible. Let children switch from small to big, big to small, and near to distant.

To go more deeply into a subject (expert scaffolding), a certain amount of knowledge is necessary to ask the most appropriate distance questions, and “big pictures” are needed to provide the best problems to solve.

Activity from Broadening

CLEAN AND DIRTY WATER

Put out three tubs of clean water on a large plastic sheet.

Ask the children if the water in the tubs is clean or dirty.

Ask what we can use clean water for (washing, drinking, cooking, and so on).

Then, ask them how water can get dirty (bathing in it, washing dishes, pollution).

Break the children into three groups, one for each tub of water.

Give each group ingredients to make their water dirty.

The first group will wash some dirty dishes with soap.

The second group will clean some paintbrushes.

The third group will add dirt, small stones, and leaves.

Let the children look in all three containers and talk about what they notice.

Next, ask the children how we might be able to make the water clean again.

Try pouring some of the water from each tub through coffee filters or cheesecloth and ask the children what they observe.

Do this several times and see what happens to the water the more times it gets filtered.

Put the jars of filtered water in the Discovery Center with magnifying glasses so children can look more closely at the water.

Finish by reading *Harry the Dirty Dog* by Gene Zion.

Intent: Observe and compare clean and dirty water * Work collaboratively with others * Demonstrate understanding of filtering water * Follow story sequence * Expand vocabulary

Activity from Deepening

HOW DOES WATER CHANGE THINGS?

On a large plastic sheet in the middle of the circle, place an assortment of items such as a piece of dark cotton cloth, a sheet of aluminum foil, a coffee filter, a plastic container lid, a piece of waxed paper, several sugar cubes, a facial tissue, a piece of paper towel, and a small bowl of cooking oil. A question in small thinking could be “What is a facial tissue for?” A question in big thinking could be “Why did I put all these materials together?”

Talk with the children about each item and ask what they know about it.

Tell them you are going to experiment to see how water affects each of the items.

Let one child use an eyedropper to wet the first item.

Observe and discuss any changes that occur.

Before each of the next experiments, ask children to predict what they think will happen.

When you have experimented with all of the items, ask the children to help you put them in order from things the water affected least to things the water affected most.

Intent: Predict the effect of water on various substances * Test predictions through hands-on experimentation * Observe the effects of water on various substances * Discuss the ways water affects things * Expand knowledge of the properties of water

In taking initiative, the teacher is supported by a wide range of educational tools designed to motivate children at each step. During the first step, the teacher assumes that the group does not have much information about the subject. She gives examples and instructions. During subsequent steps, the teacher motivates children to use what has been learned by providing expert scaffolding. This enables children to make use of their deeper knowledge and reflections in other learning activities and helps them to think independently.

With the projects Piramide offers, there are picture books that focus on interactive storytelling. From research ([Stoep & van Elsäcker, 2005](#)) it became clear that “reading” picture books more than once in a structured manner is more effective than reading them only once. In the Piramide Method, we use one or two picture books, along with each project book that is related to the project theme. Together with the proficiencies needed for interactive storytelling (providing children with psychological space), we use the four project steps to elaborate the storytelling in an interactive way. The same is true for activities for gifted children. For the most part, gifted children need steps such as Broadening and Deepening on a high level to stay connected to the project. For practicing projects on an individual level, we make use of many digital materials. Children work with more than one computer in the classroom.

Long-Term Cycle

For children between the ages of 0 and 7 years—the period of action and representation ([Fischer & Rose, 1998](#))—a 7-year plan is implemented. Each year Piramide begins with a Welcome Program, followed by 12 projects that are carried out every 4 weeks.

The 2.5- to 4-year-olds, the middle groups (4- to 5-year-olds), and the older groups (5- to 6.5-year-olds) explore the same theme on different levels (see [Figure 14–9](#)). The youngest group (0- to 2-year-olds) receives suggestions related to the project themes. For 6- to 7-year-olds, there are projects connected to formal reading, writing, and math. Each year the teacher and children expand on the level of distancing. Initially, it is closely aligned with the child’s world of experience and that child’s needs. Later, the child has to imagine more distance from the here and now. Children learn and relearn to make representations at an increasingly higher level and with greater complexity and abstraction.

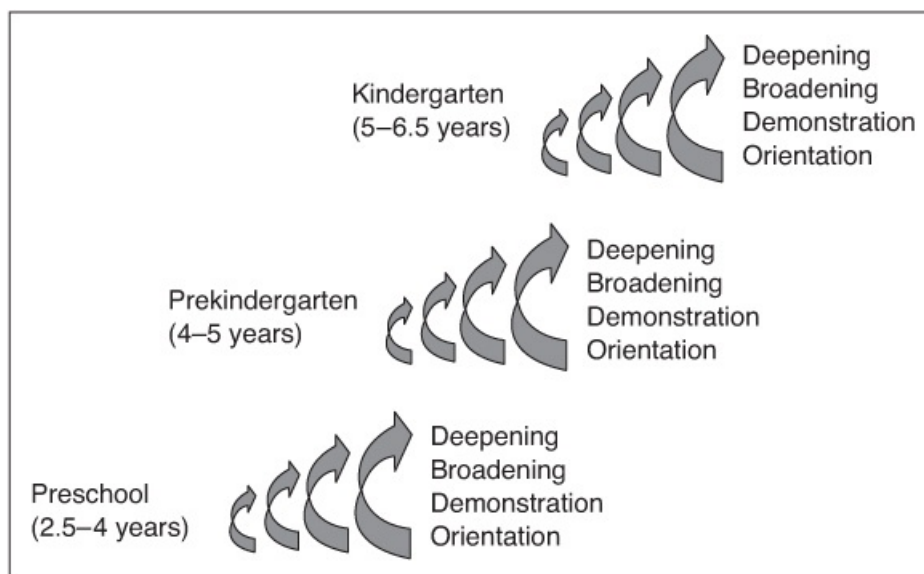


Figure 14–9 Short-Term and Long-Term Cycles in the Piramide Projects

Source: Based on “Growth Cycles of Brain and Mind,” by K. W. Fischer & [S. P. Rose, 1998](#), *Educational Leadership*, 56 (3), 56–60.

Sequential Framework

In a sequential framework, the goals of all developmental areas are listed from simple to complex. They constitute the basis for choosing the activities in the projects in a holistic way. In other words, the developmental areas are connected to the project theme. There are three benefits to this. The activities are natural and not artificially chosen. In the project activities, there is an increase in difficulty and challenge for children, and the activities are holistically connected to the developmental web. This takes place in the context of either a large or a small group.

Sequenced Activities

The sequenced activities in the projects are designed for children between the ages of 4 and 7 years. The activities are related to these areas:

- Fine-motor development, drawing, and writing skills
- Language development and preparation for reading and writing
- Thinking and math development
- Orientation of space and time and discovering the world

The sequential activities are organized according to the degree of difficulty and are placed in the context of the project theme. As a matter of fact, the sequential framework is the foundation for the projects ([van Kuyk, 2006](#)) and provides the teacher with insight into the structure of every development area. The sequential goals enable the teacher to support children in emergent literacy, emergent numeracy, writing, and orientation in space and time. The teacher knows what follows and what came before, and is therefore able to help children in a focused way. Sequential activities have an important function in the preparation of children for primary school. In every project

book, the teacher can find a list of activities of the developmental areas ordered from simple to complex.

The Tutor Program and Activities for Bright Children

The Tutor Program is a mirror of the group exploration in the project book. [Slavin et al. \(1994\)](#) have shown that tutoring is effective and that the best tutoring is directly related to the daily activities as a preventive measure. In the Piramide Method, we use tutoring not only in primary school for learning to read, but also in the younger groups (3- to 6-year-olds) on a much broader scale ([van Kuyk, 2003](#)). The same four steps as in the group exploration are used to challenge the tutored children. Prior to group exploration, a special teacher tutors low-scoring children, mostly individually, to create a positive spiral so that children feel more involved in the group activities and have a better level of participation. They receive extra and more intensive learning time. The activities are performed informally with play, a lot of action, and intensive use of the senses (children's needs). Children who do not receive enough preventive tutoring and have yet to master the basic concepts in a project receive remedial tutoring after each project.

The Parent Program

Parents provide strong support for the Piramide Method that runs parallel with the yearly projects. Parent involvement is important. This has been shown in a pooled analysis of studies conducted by Royce, Darlington, and Murray (1983). The educational task is shared by the school and parents ([Gestwicki, 1987](#)). Parent activities are the manifestation of the cooperation between education at home and at school to create optimum development. Parents can help to extend the child's play and learning time, which can have an important effect on child development.

Parents can be involved in the following ways:

- The teacher makes an annual parent plan outlining the various interrelated parent activities.
- Every morning during "open-house play," parents are free to play with their children in the classroom. This links the education at home with the education in the preschool, prekindergarten, and kindergarten.
- At the beginning of each year a Parent Week is held, during which parents work with their own child in the group after the teacher has demonstrated an activity—for example, interactive reading (storytelling) or explaining an assignment. These activities may be continued in the home environment.
- In the Welcome Program, offered at the beginning of the year and for all projects, parents take home play and learning activities to extend their child's play and learning time at home. These activities enhance the project activities in the group or classroom. If necessary, instruction is given in the parents' own language. Parents are also encouraged to provide their children with theme-related materials, including materials that are part of their culture, to take to school with them.

The involvement of parents in the project activities creates a special "binding agent." Open-house play and the discovery table, which accompany each project theme, introduce parents to the project theme in a very visible way. Children benefit frequently and permanently from activities that can be carried out in the home environment.

How the Piramide Method is Evaluated

Because we work toward optimizing the child's development, it is necessary to follow the development of each child over the whole Piramide period and, where possible, improve the education process. In doing so, we take note of children's behavior (Can the child work independently?) and the results achieved (e.g., vocabulary expansion). We study both the individual child and the whole group. We refer to this as child assessment. We also

approach the evaluation process from the perspective of the teacher. How does the teacher interact with children? (Is the teacher available for each child? Is the teacher capable of organizing the process in such a way that the children are able to achieve good results?) We refer to this as teacher evaluation. We then ask ourselves whether the Piramide Method is a valid approach to early childhood education and whether it is worth using in practice. (Is it as good as or better than other methods when compared with control or reference groups?) We refer to this as program evaluation.

Child Assessment

Child assessment is the most important part of the three evaluation processes and helps us support the child's play and learning process. A balanced assessment is sought to reveal how development takes place in each developmental area and how well the objectives or teacher goals are achieved. Development steps, described for each developmental area, provide a good reference point in evaluating play and initiative learning. The objectives described in the program goals are used to evaluate the learning process initiated by the teacher. We have selected evaluation procedures that best suit these two processes.

Authentic and Individual Assessment

To come as close as possible to what the child does, we use reliable procedures that focus on the individual child. These are procedures that fit into the child's natural play and learning environment.

We examine the child's actual behavior: How does the child behave and what are the child's achievements ([Figure 14–10](#))? This approach allows us to come close to the uniqueness of the individual child, the child's creativity, and the child's own "learning power," as formulated by Piaget (1970).



Figure 14–10 Portfolio: Child's Drawing

Systematic and Communal Assessment

To ascertain the extent to which children have realized the objectives set for them, we use systematic, standardized procedures that relate to all children to the same degree. We look at their behavior and achievements to measure how they use their own initiative and how much they rely on the initiative of their teacher.

Instruments

In conducting the various evaluations, we make use of several different instruments because no single instrument is suitable for all goals. Each instrument has advantages and disadvantages. Moreover, we look at the quality of the instruments, the importance of the decisions reached, the period to which they apply, and the consequences they have. The quality criteria are reliability (each teacher comes to the same conclusion), validity (to measure what should be measured), and practicality (easy collection of information over a short period). More than 2,000 teachers have tested the practicality of these instruments and Cito (International Institute for Educational Assessment, based in The Netherlands, also established in the United States as Cito USA) has studied their reliability and validity using item response theory ([Eggen & Sanders, 1993](#)). We use observation scales and tests that require decisions made over a longer period. These instruments are used to support both relational and educational decision making. The two types of evaluation—daily evaluation and semiannual evaluation—use different procedures. These are tailored to specific functions and involve as few disadvantages as possible (objectivity is maintained in observation by making observation scales and using computer-assisted testing to prevent subjectivity in data collection).

Daily Evaluation

Daily evaluation takes place in the everyday, natural environment of the group. In the Piramide Method, both the child's behavior and the results that child has achieved are assessed.

Observation

As she works, the teacher uses her relational and educational knowledge to observe each child. As far as the relational component is concerned, the focus falls on safety, autonomy, emotional support, structure, and rules. In the educational component, the activities that the child undertakes on his own initiative, such as playing and initiative learning, are emphasized. The teacher also observes the child during group exploration sessions as the child carries out tasks.

Recordkeeping and Portfolio

The teacher keeps a register of what each child has done. To maintain an overview of work the child produces, the teacher keeps a portfolio and collects examples of work created on the child's own initiative. This can be anything related to art development, such as drawings and three-dimensional objects (digital photographs are useful here), as well as written pieces or products related to beginning literacy, numeracy, and discovery activities. Every 6 months the most important pieces of work are taken out of the portfolio and saved in the archive portfolio.

Semiannual Evaluation

Twice a year the teacher takes time off from everyday duties and assesses children by using observation scales and administering some digital tests with children in a child-monitoring system ([van Kuyk, 2004b, 2004c](#); [Figure 14–11](#)).

This assessment focuses on each child's behavior and what the child has learned from the initiatives undertaken by

the teacher, for example, from the projects and sequenced activities. The objective of this evaluation is to find out what the child has learned or whether the program that the child has followed during the last 6 months should be improved. The teacher also notes which children should receive tutoring (25% lowest scoring children) or the special attention for gifted children (25% highest scoring children) in the upcoming 6 months.

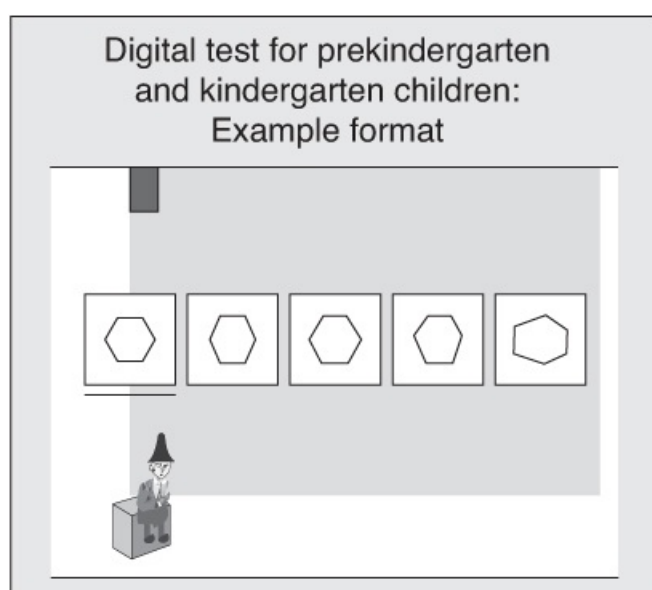


Figure 14–11 Digital Test for Prekindergarten and Kindergarten Children

In assessing physical and emotional intelligence, we make use of observation scales; for cognitive intelligence, we use tests. In these assessments the development of the child can be followed every 6 months. Using set norms, we can compare the behavior and skills of each child with those she possessed 6 months earlier and with the norms of the reference group.

Observation Scales

To observe motor skills, social-emotional development, and play-work behavior of children, the teacher uses two observation scales: the preschool scale and the prekindergarten/kindergarten scale ([Figure 14–12](#)). All children are observed.

Digital Tests

The three digital tests for cognitive intelligence are language and reading development, the development of thinking, and numeracy.

Adaptive Tests

After extensive research into whether it was actually possible for children to take a digital test, computer tests were developed. Studies have shown that young children can work easily with a computer mouse and

Creativity			
30. The child takes pleasure in being creatively occupied.	3	2	1
31. The child dares to experiment with material.	3	2	1
Play			
32. The child starts playing on his or her own initiative.	3	2	1

Figure 14–12 Example from the Preschool Observation Scale

that, after practicing with a mouse module and with the help of a funny figure that keeps motivating and supporting them (a virtual coach called “Primo”), they can easily complete the test themselves. The tests are adaptive, so children only do those assignments that are appropriate to their skill level; they are not given tasks that are either too difficult or too easy for them. In addition, the computer ensures that the procedure is objective and the same for each child and not influenced by differences in interpretation on the part of the teachers. Registration and the making of graphs and tables can be automatically generated when the computer program developed by Cito is used. According to the Netherlands Institute for Psychology (NIP), these tests conform to a high psychometric test standard. Information from the preschool scale illustrated in [Figure 14–11](#) is another tool used by the teacher to follow the development of each child in the same way.

Teacher Evaluation

Teacher evaluation focuses on the way the teacher deals with each child (relational component) and the extent to which that teacher optimizes the development of each child (educational component). Teachers working with the Piramide Method receive professional training from a certified Piramide trainer. The training takes 18 days and is spread over a period of 2 years.

Training

During the training the teacher is coached on the “work floor.” To carry out the training effectively, the trainer uses the Piramide Implementation Assessment (PIA; [van Kuyk, 2007](#)). This instrument covers all the relevant objectives of the Piramide Method and is presented in an easily recognizable way. Trainer and trainee can decide together how they will work to optimize the skills that the trainer can observe.

After the Training

After the training has been completed, keeping these skills up to date is important. Every certified teacher gets a PIA to check the status of their skills based on PIA goals. Teachers are confronted with a number of questions that

address both the desired behavior and the actual behavior displayed by the children.

Program Evaluation

Evaluation is an important dimension of the Piramide Method and is done internally as well as externally.

Internal Evaluation

Within the school system, internal evaluation is an acceptable procedure. Schools can evaluate their own teaching with the help of the Piramide instruments (curriculum independent) developed by Cito. Standardized tests can be used to establish results from a school, groups of schools, a municipality, or a random, national sample of schools. Thus, a child's development can be followed over a period of 3 years. Using the computer program from Cito, available data can be aggregated to a higher level. It is therefore easy for each school and municipality to use the computer assessment programs to discover the effectiveness of the Piramide Method.

[Figure 14-13](#) illustrates a scale used to establish the results of an internal evaluation of a 3-year experiment. From the scale we can read average results and the distribution of results set against a national reference group whose norms are already established.

It appears that at pretest 75% of children who started the Piramide Method when they were 3 years old were at the E or D level, compared with a national reference group that took the test. At the end of the experiment 3 years later, there was a 50% decrease of at-risk children.

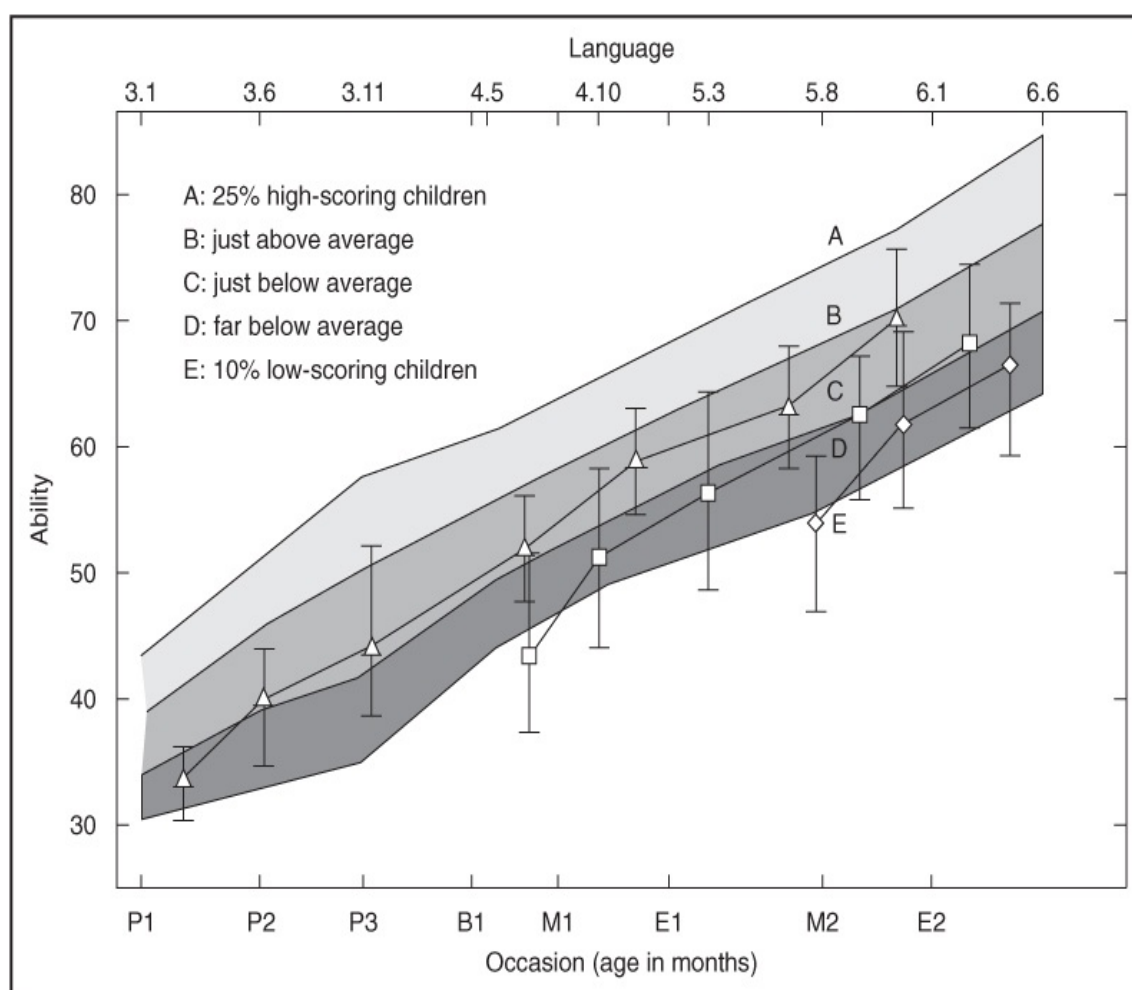


Figure 14–13 Language Results, Means, and Variations

In a period of 3 years, children in a Piramide program achieved a result that is roughly the average level of the reference group. Children who started later—when they were age 4 or 5—also scored at the D or E level initially but went on to achieve good results, although to a more limited extent than the group that followed the Piramide program for 3 years. It is clear that children who follow the whole program from beginning to end have the best results. The same can be seen when examining performance on mathematics and on the space and time tests.

Conclusion

Children have the best results when they begin at 3 years of age and remain with the Piramide Method over the entire 3-year period. These children accelerate in development, leading to better opportunities for a successful primary school education. This does not mean that only low-scoring children profit from the Piramide Method. Comparing the children at the beginning of the experiment who scored D and E (lowest 25% in the reference group), less likely to be successful in mathematics, and A, B, and C (highest 75% in the reference group), most likely to be successful, 60% of children were at D and E levels and 40% were at A, B, and C levels. After 3 years, the percentage of D and E children was 21% (lower than in the reference group) and the percentage of A, B, and C children was 79%, higher than in the reference group. Thus we conclude that the Piramide Method works for at-risk children and for successful children.

Tutor Evaluation

It is important to ask, “Is the program efficacious, and what role does tutoring play in ameliorating risk?” To examine the effectiveness of tutoring, pre/post assessments were conducted. We looked at all of the children who took part in the Piramide Method over a period of 6 months. The ability scores (language, mathematics, and space and time) are known for all of these children at pretest. Part of this group was given tutoring in the period after this pretest (experimental group); another part was not (control group). If tutoring is effective, then in the experimental group (tutoring), the percentage of at-risk children (E and D scores) should be considerably lower in the posttest than in the pretest. In the control group (no tutoring), the percentages should be about equal. If the percentages decrease only in the experimental group, we can conclude that the effect is caused by tutoring ([Figure 14–14](#)).

The percentage of children at risk in the experimental group dropped considerably. There was no such drop in the control group. We can conclude that tutoring is indeed effective.

External Evaluation

Two Experiments

In a national experiment (1996–1998), carried out by the University of Amsterdam ([Veen, Roeleveld, & Leseman, 2000](#); see [Figure 14–15](#)), subsidized by the Dutch government, the Piramide children ($N = 59$; with a high rate of immigrant children and Dutch children with needs) scored significantly better in

Figure 14–14 Pretest and Posttest Percentages of Risk Children (Tutored and Not Tutored)

	No Tutoring (n = 855)		Tutoring (n = 219)	
	Pretest	Posttest	Pretest	Posttest
Thinking	43.2	41.6	74.4	53.4
Language	48.1	48.4	88.1	73.5
Space and Time	51.2	48.9	84.4	74.0

Figure 14–15 Results of Two Experimental Studies, 1997–2001

National Experiment Amsterdam Experiment

Amsterdam University Groningen University

Cohen: .20 = weak, Cohen: .20 = weak,

.50 = moderate, .50 = moderate,

.80 = strong .80 = strong

Language .29* 1.08***

Thinking .36**

Mathematics .88*** .73***

10% = * , 5% = ** , and 1% = ***

terms of [Cohen \(1988\)](#) effect sizes (.20 = weak, .50 = moderate, .80 = strong) than control children ($N = 52$) in language (.29 = weak to moderate), thinking processes (.36 = weak to moderate), and mathematics (.88 = high).

A second study (1998–2000; see [Figure 14–15](#)) was carried out by Groningen University ([De Goede & Reezigt, 2001](#)) in the Piramide schools of Amsterdam. From this study ($N = 97$, $C = 67$), comparable with the national experiment, it became clear that in terms of Cohen's criteria the results were strong in comparison with the control group: language (1.08 = strong) and mathematics (.73 = moderate to strong).

Prima Cohort Study

The Amsterdam local authorities and the University of Amsterdam used the findings from the Prima Cohort Study ([Veen, Roeleveld, & van Daalen, 2005](#)) to select 30 Amsterdam schools that work with different educational concepts to support at-risk children, most of whom were the children of immigrants, to examine best practices. The majority of these Amsterdam schools work with the Piramide Method, a smaller number with HighScope, and one with Reggio Emilia and other approaches. From the 30 Amsterdam schools that participated in the Prima Cohort Study, 10 schools had data from 3-year-old children (primary school starts at 4 years). The results of the Amsterdam

Figure 14–16 Results in Uncontrolled, Controlled, and Intensive Programs in a National Cohort Study

Test	Uncontrolled	Controlled	Intensive
Language -6		+0.1	+2.8
Thinking -2.5		+1.5	+.2

schools were compared with the National Cohort Study of the 6-year-old children. All children participated in language and math assessments and in three observation sessions focusing on behavior, work attitude, and self-confidence. The 10 schools that worked with an intensive program, such as the Piramide Method or High-Scope, scored 1/3 standard deviation higher than the national average (see [Figure 14–16](#)).

On average, children in the experimental group had better work attitudes than children in the reference group. The 6 best-achieving Amsterdam schools were selected as “best-practice schools” and assessed on “best-practice” characteristics. The key question was, How can we explain the results of those high-achieving schools (the qualitative part of the investigation)? Invariably, the best-practice schools were overwhelmingly viewed in a positive light on 26 best-practice characteristics (60% of the questions as positive, only 4% as negative). Of the 6 best-scoring schools with best practices, 5 were Piramide schools. It was concluded that most of the Piramide schools proved to have best practices.

Conclusion

In all four studies, the Piramide Method was shown to have positive effects on developmental outcome. We also see these effects in the local studies. The Piramide Method, therefore, appears to be effective and practical in supporting teachers in implementing successful measures for preschool and kindergarten education. Piramide is a robust method that can be applied in favorable and challenging situations. The method is more effective when tutoring is applied.

Piramide is a balanced method that offers optimal opportunities for children to develop independently with the support of teachers. It offers balance in the initiative of the child and the initiative of the teacher, in the relational (safety) and educational (challenge) components, in content (three intelligences are developed in a holistic concept), and in the possibilities of children (at-risk children are reached as well as bright children). Last, there is balance in evaluation procedures (authentic enough for teachers to assess children’s characteristics and creativity, and systematic enough to see if the goals of the teacher and programs are realized).

Reflect On

1. How is this method a developmental web for teachers? What are the components of the developmental web?
2. What are distancing activities, and to which major influential psychologist do we owe our gratitude for this approach to educating the young thinker?
3. How is imaginative play used in the Piramide curriculum, and how does it serve the 3 H’s (Heart, Head, and Hands) or three intelligences—cognitive, emotional, and physical?
4. How do the three levels of intervention employ Vygotsky’s zone of proximal development and follow developmentally appropriate practice guidelines?
5. How has this model been evaluated? Do you think this is an effective model?

Endnote

1. [1](#). *Piramide* is Dutch for pyramid; the Dutch Piramide is the term used worldwide.

Selected Resources

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Piramide: The Method for Young Children (English version), by [J. J. van Kuyk, 2003](#), Arnhem, The Netherlands: Cito.

Nienhuis Montessori, Industriepark 14, 7021 BL. Zelhem, The Netherlands. Publisher of the educational materials Classicant, Serio, Seriant I & II, Comparant.

Piramide USA, The Netherlands, and International

Cito International—Corporate Office

Amsterdamseweg 13

NL-6814 CM Arnhem

The Netherlands

www.cito.com

Piramide Germany and Austria

Cito Deutschland GmbH

www.de.cito.com

Educationally Appropriate Materials

<http://www.nienhuis.com>

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Chapter 15 Reggio Emilia in the 21st Century: Enduring Commitments Amid New Challenges

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After reading this chapter, you should be able to:

- Retell the Reggio Emilia story
- Characterize Italian early care and education as these regard children's right and society's responsibility
- Describe Reggio Emilia's municipal commitment to young children
- Identify the essential components of putting key principles of the Reggio Emilia approach into practice
- Discuss new changes and challenges in Italy and Reggio Emilia
- Explain the influence of Reggio Emilia on the United States in regard to new challenges and possibilities

Reggio Emilia is the capital city of the province by the same name, one of eight in the wealthy Italian region of Emilia-Romagna. The most densely populated of the province's 45 municipalities, the city of Reggio Emilia is home to and namesake of what is arguably the most famous early childhood education classrooms in the world. Previous versions of this chapter (2005, 2009) have provided detailed descriptions of Reggio Emilia's history and cultural context, of key features of its municipal services for young children, and of its early influence on early childhood education in the United States.

The Reggio Emilia Story

Generally, creative inventions and collaborative enterprises are named for their pragmatic functions or in honor of the person or persons involved in their design. Less often are projects, works of art, or social innovations named for the city in which they were born. Notable exceptions that come to mind include the Oslo Accords and Detroit's MoTown Sound. But of all the educational movements to take place in the last 100 years—Froebel's kindergarten, the Montessori method, Bank Street, HighScope, the project approach, to name but a few—none has been named after an entire community of people dedicated to changing the culture of early childhood. That the “Reggio Emilia approach” is named after the city is the first clue that this Italian import is grounded in the cultural traditions and identity of that contemporary yet ancient society.

Most of this chapter will describe characteristics of Reggio Emilia that distinguish it from other Italian communities. Yet Reggio Emilia's local pride is also what makes the city typically Italian. Italian citizens routinely identify themselves, even to foreigners, as members of the local community first, nationality second. The Romans, Florentines, Sicilians, and Milanese all share a history of distinguishing, with unabashed pride and some degree of prejudice, their particular ways of doing things. Reggio Emilia has other things in common with its neighbors besides the national passion for promoting local interpretations of quality ... wine, cheese, and pasta. Each of these flavors of daily living serves as markers of identity as well as elements of *la dolce vita*. Reggio Emilia shares this emphasis on “local ways of doing things” with all other Italian cities, notwithstanding its agreement with Parma to share the name on their famous cheese.

Reggio Emilia also joins other Italian communities in many social routines such as closing most of its stores during midday so citizens can enjoy lunch followed by a leisurely afternoon stroll. Reprimands of children or errant husbands may take place in public, as do expressions of affection. Greetings among friends as well as new acquaintances include kisses on both cheeks. So what is it about this city that is so different from other wealthy communities in Italy?

Reggio Emilia has played an important role in Italy's early and contemporary history. Residents point with pride to the *Sala del Tricolore* (Room of Three Colors) an impressive building in one of the main piazzas where, in 1796, regional representatives adopted the three-color red, white, and green flag to represent their newly formed republic. This flag was later adopted as the national flag of Italy. Reggio Emilia has also served as a strong business model. Reggio Emilia's early investment in agricultural cooperatives grew to include other forms of successful business enterprises. In all of its efforts, Reggio Emilia has maintained its reputation for hard work and collaborative creativity.

Reggio Emilia was a productive and wealthy community throughout most of the 19th and 20th century, sharing a cultural and political history with the region that included ample industrial innovation and a well-deserved reputation for its cuisine. Reggio Emilia also has a reputation, shared with neighboring cities in the region known by some as the "red belt," for taking a stand based on principles of social justice, as represented in the city's leadership roles in the resistance movement during World War II and, a few decades later, the Italian women's movement. Reggio Emilia's municipal early childhood services grew out of this same culture of collaboration and activism ([New, 1993](#)). In this light, it is easy to understand why an educational approach based on this ethos would carry the city's name.

In spite of its national reputation, Reggio Emilia was relatively unknown outside of Italy when the city's early childhood services were first introduced to American educators ([Gandini, 1984](#); [New, 1990](#)). Today, Reggio Emilia is a burgeoning multicultural city that hosts thousands of visitors every year,¹ most of whom have come to see and learn more about the city's early childhood services.

Italian Early Care and Education: Children's Right and Society's Responsibility

Central to the national provision of early care and educational services are the Italian cultural values of the central role of the family in the life of the community and an interpretation of children as a shared social responsibility. Thus it was that, after widespread public debate and social unrest in the *autunno caldo* (hot autumn) of 1967, these principles were put into law. In 1968, Italian Law 444 proclaimed the rights of all children to a high-quality pre-primary² early childhood experience; this law also called for innovations and experimentation in communities, schools, and classrooms about how best to promote young children's early learning and development. A subsequent 1971 law (1044) went several steps further, calling for incremental provision of services for working families of infants and toddlers. Thanks in part to advocacy by Reggio Emilia leaders [Loris Malaguzzi \(1998\)](#) and [Sergio Spaggiari \(1998\)](#), the law also called for mandatory participation by parents and other community members in running the local services, an organizational principle known as *gestione sociale* (social management).

By the time the larger world had heard about Reggio Emilia, most Italian communities had one or more of three forms of early childhood services, known at the time as *scuola materna* ("maternal" schools):³ *scuola materna privata* (private programs), (such as those provided by the Catholic Church); *scuola materna comunale*, services provided by the local municipality (with some contributions from the state), and *scuola materna statale*, services provided by the state in communities where there is demonstrated need. Common organizational practices were consistent with those in state-run elementary schools, e.g., children remain with the same group and the same teachers throughout their time in the particular setting (e.g., 6 years in elementary school; 3 years in a preprimary class), reflecting a broader cultural value of long-term and stable relationships ([Corsaro & Emiliani, 1992](#); [New, 1993](#)).

Throughout the 20th century, Italian early childhood and elementary teachers received no formal preservice university training and were instead expected to learn from their children and with each other. Practices of documentation, *inserimento* (the gradual transitioning of children from home to school), and the promotion of family involvement were seen as essential to helping teachers learn more about children in their care ([Mantovani, 2001](#)). Malaguzzi's rapport with leaders of other cities' services helped to ensure continued support for local innovation and experimentation ([New, 2001](#)).

So how has Reggio Emilia distinguished itself within this larger cultural context?

Reggio Emilia's Municipal Commitment To Young Children

Reggio Emilia's municipally funded early childhood services were formally established in 1966, in anticipation of the 1968 national law proclaiming the rights of all Italian children to pre-primary schools. The city's commitment to young children was in evidence several decades prior when, shortly after World War II, a small group of parents gathered, determined to obtain a new kind of child care for their children. Rejecting the custodial model of care developed by the Catholic Church, parents sought a new type of school where their children could learn how to live in and contribute to a free and democratic society and where parents could be active participants ([Barazzoni, 1985](#)). Their conviction was compelling to young philosopher-journalist Loris Malaguzzi, who soon enough joined the cause ([Malaguzzi, 1998](#)). Malaguzzi played a leading role in articulating these demands to community leaders along with his own views, in particular the notion that traditional custodial child care "made children stupid" (L. Malaguzzi, personal communication, 1986). Malaguzzi was also highly critical of traditional schooling's emphasis on learning to read and write at the expense of children's other communicative and creative potentials; he convincingly argued for the hiring of artists and art educators (*atelieriste*) to work with children and teachers. His belief that pedagogical "theory should derive from practice," and not the other way around, led to an image of the city's early childhood services as "spaces, not programs" to serve as stimulating learning environments for teachers as well as for young children. Malaguzzi credits an array of Western European and American theorists, philosophers, and social scientists for his own emerging convictions about children's learning potentials ([Malaguzzi, 1998](#)). He marshaled his vast knowledge of these literatures to support his compelling presentations to other members of the community. By 1963, thanks in great part to sustained advocacy, the first city-run school for young children opened; over the next 5 years the city council was subject to repeated and persuasive arguments to support municipal services for children ages birth to age 6. At the same time, Reggio Emilia played a leadership role in the national campaign for public schools for all children ages 3 to 5 years. Those early convictions and victories were foundational to what would soon become hallmarks of the "Reggio Emilia approach" ([New, 1993](#); [Malaguzzi, 1998](#)).⁴

As Reggio Emilia's pride grew in the city's services for its youngest citizens, so, too, did the urge to share their innovations in early care and education. By the late 1970s, city leaders agreed to fund a traveling exhibition that proved instrumental in launching Reggio Emilia into the international arena. The first European exhibition, *L'Occhio se Salta il Muro* (When the Eye Jumps Over the Wall), opened in 1981, hosted in Sweden, Germany, Portugal, Denmark—nations already somewhat familiar with this Italian city's early childhood initiatives. With encouragement from a small group of American educators, an English-language version was created ("The Hundred Languages of Children"), arriving in the United States in the fall of 1987. The exhibit traveled across the United States and, in 1990, was on display in Washington, DC, concurrent with National Association for the Education of Young Children's (NAEYC's) annual conference. By this time, a growing number of U.S. early educators had read or heard about Reggio Emilia and they were eager to know more. Thus, when Reggio Emilia educators first spoke at NAEYC, it was to a standing-room-only audience. U.S. early childhood education as it was previously known was catapulted into a state of exuberant uncertainty. New exhibitions followed, including one for Japan and another that traveled all the way to Australia. The most recent exhibit, *The Wonders of Learning*, is scheduled to remain on tour in the United States until 2014.⁵

Overwhelming in size, complexity, beauty, and message, each iteration of the exhibition has been credited as awakening viewers to the possibilities inherent in children's unrealized potentials ([New, 2002](#)). The exhibitions and ongoing work in Reggio Emilia challenge viewers everywhere to consider a new image of children and their families and teachers.

Putting Principles Into Practice: an Ongoing Process of Collaboration and Inquiry

The political dimensions of Reggio Emilia's municipal early childhood services—expressed as children's rights to quality early care and education, parents' prerogative to have a say in their children's early educational experiences, and the community's responsibilities to its youngest citizens—are coupled with a philosophical orientation to schooling reflected in the structure, design, and operation of the city's infant-toddler centers and pre-primary schools. Three principles are consistently described as foundational to Reggio Emilia's municipal services:

- The critical importance of an “image of the child” that acknowledges children's creative, intellectual, and communicative potentials
- An interpretation of schools as systems of relations, such that the well-being of children is interdependent with the well-being of teachers and families
- The value of doubt and uncertainty as ethical premises as well as incentive for teachers to dedicate themselves to learning about and with the children they hope to teach

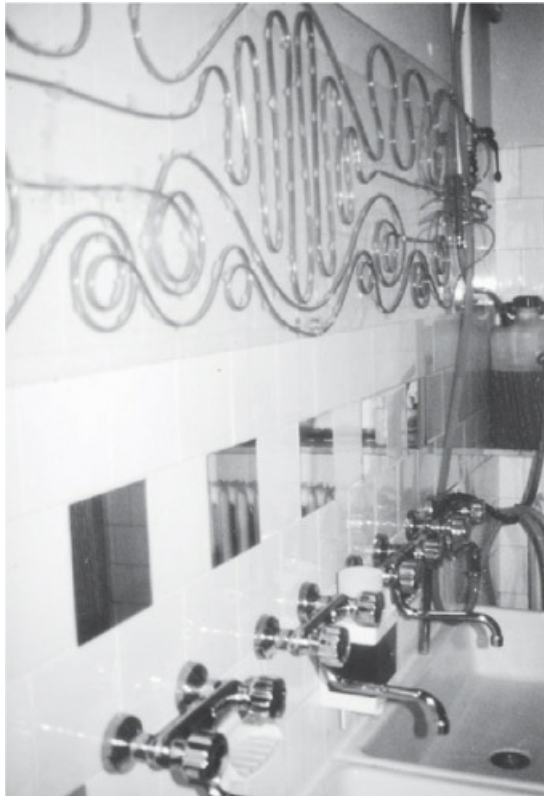
We suggest that it is Reggio Emilia's persistent and unwavering efforts to translate these principles into sustainable praxis that has been most essential to its success and the most difficult for others to emulate. So what is it that visitors see and children and families experience as a consequence of these principles?

An interpretation of (1) the environment as a space and place for learning through relations, both adult and child; an orientation to (2) curriculum that legitimizes children's curiosities, relies on teachers' collaborative research, and underscores the value of symbolic representation and documentation; and insistence on the (3) rights of parents to serve as partners in the community's early care and educational services are the most challenging instantiations of Reggio Emilia's underlying philosophical principles.

Although these characteristics can be found in varying degrees in high-quality early childhood services throughout Italy, none has been developed, documented, debated, and disseminated to the extent found in Reggio Emilia.

La Bella Figura: An Environment That Welcomes, Nurtures, Impresses, and Inspires

The Italian word *ambiente* reminds us of the English term *ambiance*, a key feature of restaurant ratings in the United States. In Italy, however, this term refers to what is surely the most visible feature of Reggio Emilia's infant-toddler centers (*asili nido*) and pre-primary schools (*scuole dell'infanzia*)—the physical space dedicated to children's early care and learning. Described in a previous iteration of this chapter as a culturally constructed “developmental niche” ([New, 2004](#)), Reggio Emilia's schools for young children are purposefully designed to reflect and promote the values and goals of the larger community. The creation of a large central space, the use of natural lighting, and non-industrial furnishings and plants—together these generate the communal ethos found in open piazzas in every Italian city. There is a sensibility nurtured here as children, parents, and teachers cross through these spaces while they move about the school.



Even the bathroom becomes a space for play and contemplation. Parents and teachers designed this tube arrangement through which colored water flows when children turn on the faucets.

The oft-repeated claim that “space is our third teacher” is represented in the active use of school spaces to convey both “messages and possibilities” ([Filippini, 1990](#)). Materials for children’s work and play—whether blocks, crayons, paint, glitter, paper, dramatic play dishes, dolls, or woodworking tools—are within easy reach. Never dumped indifferently into boxes or buckets, these materials are purposefully and sometimes creatively arranged, stored, or displayed to convey the message that they are important, interesting, and worthy of respectful attention ([Topal & Gandini, 1999](#)). Carefully determined spaces for large- and small-group activities, dramatic play, and the display of children’s finished works as well as works in progress hint at the purposefulness with which teachers promote children’s successful engagements, whether with ideas, materials, or each other, within these environments. And yet the benefits of small mini-atelier (translated as “mini-studios”) within each classroom versus a larger atelier space available to mixed-age groups of children remains an open question, suggesting that the notion of space’s educative potential remains a work in progress for these Italian adults ([Gandini, Hill, Cadwell, & Schwall, 2005](#)). In addition to ongoing reflections among teachers of how best to arrange materials and spaces within their classrooms, these ideas have also been explored in collaboration with architects, e.g., Italy’s well-known Domus Academy ([Ceppi & Zini, 1998](#)).

Other aspects of the environment that appear, to the casual observer, to have more to do with aesthetics than with a purposeful pedagogy include the pervasive use of mirrors and other reflective surfaces in open spaces, classrooms, and bathrooms. A keen appreciation for physics and possibilities of light can be found in the light boxes and light tables used to display artifacts and manipulations of objects with various degrees of translucency. Large windows that open up to the outside allow shadows and sunshine to enter the classroom and encourage children’s observations of the world outside.

To ensure that the environment promotes social engagement and the development of new relationships, classrooms may have Plexiglas windows to rooms below or next door. Simple “talking tubes” crafted of funnels lead out of classrooms to the hallway and invite children to call to one another. Centrally located dress-up clothes invite children from different classes to play together and assist with zippers and buttons. Kitchens are highly visible places, often surrounded by glass divides or open windows, and frequented by children and parents on

arrival. Teachers also have spaces to gather, work, and talk together, alternating turns at the kitchen table during lunchtime. Adult relations are further promoted by the environment through the careful placement of adult-size furniture in the central space and in classrooms, the rocking chair a clear invitation to the visiting parent or grandparent to linger long after the initial period of inserimento (Bove, 1999).⁶ As described by Reggio Emilia's long-time collaborator Lella Gandini, these educational environments are, in each case, highly "particular" (1984) and caring spaces (1998).

Among the most important "messages" conveyed by the environments of Reggio Emilia's infant-toddler centers and pre-primary schools is the value of the experiences children share in the classroom. Photographs and examples of children's collaborative work are carefully displayed in ways that draw attention to individual contributions to group experiences. Through the public display of children's heated debates about a mathematical problem, the meaning of love, the source of gender identity, and the consequences of war, Reggio Emilia teachers invite the casual visitor to rethink a deficit image of childhood and early childhood education and replace it with one in which children have vast untapped potentials.

The spaces across the infant-toddler centers and pre-primary schools in the Reggio Emilia municipal system are designed with consistent pedagogical aims and at the same time they reflect the local identities of their particular places in the city. So, for example, the *Scuola Diana* (Diana School), located in the middle of the city's central park, reflects the urban life of its participants; similarly, the *XXV Aprile* (April 25th) school⁷ in the more rural outskirts of the city, contains many textures, colors, and artifacts that reflect the country life of the participants who live there. These characteristics of Reggio Emilia's early childhood environments stand in sharp contrast to catalog and marketing efforts focused on "quick and easy bulletin boards" and "safe and easy to clean" furniture. Perhaps this is why Italian educators more often refer to their early childhood environments as places rather than programs. The sense of place, the respect for children and families, and the deep intellectual work of teachers conveyed by the environment give visitors pause, and make possible other features of the "Reggio Emilia approach."

Curriculum as a *Projection* of Possibilities

In a conversation with Carlina Rinaldi about curriculum goals, she noted, "Of course we want children to learn the names of colors. But more important is that they understand what colors can do, why they are important, how they can use them." Certainly for U.S. educators and administrators, Reggio Emilia's refusal to identify curriculum goals is perplexing. And yet the outcomes of their progettazione, otherwise known as long-term projects have inspired tens of thousands of educators who have seen the traveling exhibitions and especially those who have visited and studied in the city's early childhood classrooms (Katz, 1998). Reggio Emilia's interpretation of a successful curriculum is based on three beliefs: a belief in the merits of children's and teachers' questions; in the value of multiple "languages" as both vehicles of knowledge construction and as forms of knowledge representation; and the benefits of documentation as a compelling means to capture, analyze, guide, and promote these elements of the teaching/ learning process. Sometimes treated as separate (and separable) components of Reggio Emilia's approach to early education, this discussion considers these features as inextricably linked to and responsible for this Italian city's interpretation of an early childhood curriculum.

Curriculum Planning: Creating Conditions for Asking and Exploring Good Questions

Many who first examine the projects displayed in the exhibit(s) and on the walls of early childhood settings in Reggio Emilia assume that the children are gifted (or that the adults had too much of a hand in making the products). The skill and attention to detail found in children's drawings and clay representations, for example, suggest vastly superior competencies than what are typical of 3-, 4-, and 5-year-old children. When observers learn that children may stay engaged in a project for weeks and sometimes months, they further marvel at children's

attention spans. Doubters have a point—the children’s focused discussions and graphic representations are not typical or average. Nor are the children’s learning environments and experiences. Operating under the premise espoused repeatedly by Malaguzzi—that children are far more capable than how they have generally been viewed—teachers in Reggio Emilia watch for and create opportunities for children to become deeply engaged in meaningful explorations and problem solving and in representing their emerging understandings through a variety of expressive media.

This esteem for children’s intellectual and social competencies is inclusive of children with special needs—who are regarded, in Reggio Emilia, as children with “special rights” ([Smith, 1998](#)).

The projects and classroom routines that characterize life in a Reggio Emilia classroom are consistent with and expand on contemporary interpretations of inclusive early childhood education. As a key part of this inclusive curriculum process, teachers are alert to children’s conflicts and questions. When teachers intervene, it is typically in the form of a guiding question, followed by the provision of time, tools, and contextualized work on particular skills. However it is that teachers respond, it is always with care and purpose, so that children can collaboratively explore and represent their questions as well as their new understandings. In planning for these experiences, Reggio Emilia teachers do not craft lesson plans as generally understood by U.S. educators. Rather, they identify pathways by which to pursue questions with the hope, as described by Tizianna Filippini, of creating a “playground” of possibilities with room for everyone to grapple with and then contribute to a problem. This premise of a “big enough” playground where it is safe to play, take risks, and try out new skills helps to expand interpretations of schools and classrooms as “communities of learners” ([New, 1998, 2007](#)).

This orientation to curriculum is radically different from what is generally espoused in the U.S. early childhood literature or required in terms of state curriculum standards. Rather than identify skill-based goals and objectives, curriculum goals in Reggio Emilia are defined in terms of broadly construed cultural values such as developing relationships, learning how to collaborate, and appreciating diversity in ideas and their expression. With these aims always in mind, long-term projects have resulted from both simple and profound questions posed by children: “Why won’t the birds come back?” “Where do baby kittens come from?” “Why can’t I run away from my shadow?” “How do our bodies work?” “Whose god is real—yours or mine?” Such curriculum provocations engage children as well as teachers and families. Although much easier said than done, this interpretation of curriculum both emerges from and contributes to the shared experiences of children, teachers, and families ([New, 1998; Rinaldi, 1993, 1998, 2006](#)). Such curriculum practices also reflect a fundamental Reggio Emilia principle of respect for children’s lives outside the classroom and what Luis Moll would call their funds of knowledge (1992). Life in the classroom must “enable children to utilize their own skills and competence” ([Rinaldi, 2003, p. 1](#)).⁸

Reggio Emilia teachers are not solely reliant on children’s curiosities to make curricular decisions. Rather, they use what they are learning about children—their interests as well as their understandings—to design challenging project work that promotes the development of new skills and understandings, including those that children will be expected to master as they move through the educational process. Thus, for example, opportunities for children to express their ideas through writing are interspersed throughout project work and their efforts are encouraged along with those involving other forms of symbolic representation. Children of different language traditions compare their constructions of names, labels, multilingual signs, and symbols for the classroom.

Teachers also trust the legitimacy of their own questions and concerns as consistent with the expectation that they will learn about the children as they teach. A well-known example of a project came about when teachers observed that children in the 5-year-old classroom (akin to a U.S. kindergarten) were making scant use of their knowledge of mathematics. After careful deliberation, the classroom teachers proposed a real problem—the need to accurately convey the measurements of a rickety table so that a new one could be built to size (this project was carefully documented and eventually published as *Scarpe e metro* [*The Shoe and the Meter*]). This and other *progettazioni* have uncertain outcomes and yet, with careful attention to levels of children’s engagement, teachers help to promote and sustain children’s creative and exploratory efforts. These efforts inevitably result in new understandings—in this case, a sophisticated exploration of measurement tools and mathematical principles.⁹ In other less well documented cases, teachers learn that they intervened too early, or too late, or that the “problem”

was insufficiently intriguing to capture the children's long-term engagement. In all cases, teachers are also learning—in this case, about how children think about, understand, and use their relationships and representational skills to promote emerging mathematical skills and understandings. Rinaldi describes this orientation to teaching as a purposeful and sustained “pedagogy of listening” ([Rinaldi, 2006](#)).

Curriculum Resources: The Hundred Languages of Children

One of the pedagogical practices that helps teachers in understanding children's understandings is the level of creative exploration and symbolic representation associated with children's collaborative work. Malaguzzi's strong belief in the relationship between creativity and intelligence led, when the schools were first established, to the hiring of an atelierista (art educator) to work closely with teachers in discovering and promoting children's “symbolic languages.” Teachers have transformed his belief into purposeful instructional practices. With continual support from the school's atelierista, teachers routinely ask children to “show me what you mean” through drawings, clay, sculptures, and other constructions. It is not unusual to find a small group of 4-year-olds working together on a model or design to help others envision their ideas for a problem-solving agenda.

This orientation to what U.S. educators would call “art” is interpreted, in Reggio Emilia classrooms, as a vital means to exploration and communication. As children share their understandings with one another, they are often challenged to revisit and revise their own ideas ([Forman & Fyfe, 1998](#)), especially if they have used tools with different affordances (e.g., felt-tip pens or wide-brush water colors). Within the classroom as well as in the school-wide studio spaces or mini-atelier, children—including infants and toddlers—have daily opportunities to experiment with a variety of materials and tools, including clay, paint, wire sculpture, pen and pencil, and large and small construction resources ([Gandini et al., 2005](#)). Today, Reggio Emilia educators are highly skilled at creating conditions through which children can themselves become impressively skilled at representing, sharing, revising and refining their understandings and hypotheses. This sequence of representation and exploration is an indispensable component of curriculum planning and evaluation; children's symbolic representations serve as valuable mediating tools for the co-construction of new understandings with their peers and among the adults.

Children in Reggio Emilia classrooms do not spend all of their time engaged in long-term progettazione. A typical day's schedule suggests that children are engaged in activities similar to those of high-quality early childhood centers elsewhere: morning meetings, small teacher-led activities, free play in blocks, dress up, outdoor play, snack time, naps, and lunch time. One of the most immediately apparent differences in a typical day in a Reggio Emilia classroom is the role of the teachers. The very presence of two teachers in each classroom enables teachers to devise complementary roles to support and learn from the children they teach. Thus, Reggio Emilia educators often rearrange the environment for children's activities in advance of their arrival in the morning and then, while one teacher guides and facilitates children's activities, the other observes, records, and documents children's responses to the new materials or arrangements. In other cases, one teacher may work with a small group, recording discussions and collecting artifacts to share later with the teacher who is supervising the larger group of children. Teachers' work as collaborative researchers is highly dependent on this well-developed process of task sharing, planning, and exchange of information. This process, in turn, is highly dependent on Reggio Emilia's interpretations of documentation as a mediating tool.

Documentation as Tool for Collaborative Inquiry

The practice of documentation originated in community and city centers established to support elementary teachers to design and share materials to use in teaching young children. The concept of documentation—recording and examining information about children and their learning—was eventually appropriated by early childhood educators. Among the first to recognize the value and potentials of documentation were educators in Reggio Emilia, Pistoia, and San Miniato ([Gandini & Edwards, 2001](#)). Inspired by Malaguzzi, educators in those

municipal programs were also colleagues of Lella Gandini, who played a supporting role in their development of this now-highly-sophisticated way of understanding and supporting children's early learning and development. Educators in each of these municipal settings have capitalized on documentation as a means of carefully recording, studying, and debating what takes place in the classroom.

Documentation in Reggio Emilia is central to teachers' roles as researchers in the classrooms ([Gandini & Goldhaber, 2001](#); [New, 1994](#); [Rinaldi, 2003](#)). Teachers take photographs, collect artifacts, and record conversations of children's conversations with each other and with adults. These data are then analyzed, sometimes with other teachers, often including the pedagogista, and frequently with children's parents and family members in order to make sense of what has been learned and to plan what to do next. The atelierista is also a part of this process, proposing alternative means by which children might explore and express their ideas and understandings. In many cases, the atelierista is invited into the classroom to do the actual recording of children's activities. These adults move through the progettazione in a process remarkably similar to the one that characterizes the children's learning. Whereas children's ideas and understandings are communicated and debated through a variety of symbolic languages, teachers' insights and interpretations of their observations are facilitated through documentation—an essential mediating tool for the “projecting curriculum” previously described ([Rinaldi, 1998](#)).

Other collections of images and stories are gathered into small books, some of which are for sale by Reggio Emilia through their Web site. Documentation efforts are used in teacher planning periods and are also incorporated in elaborate displays in the hallways and classrooms. In each case, documentation “Reggio Emilia style” functions as advocacy for their city's high-quality early childhood services; as information to guide curriculum planning; and as an invitation for parents to participate in those experiences.

Reggio Emilia teachers also share, with early childhood teachers in San Miniato and Pistoia, the strategy of using documentation as a “seductive” means of keeping parents involved in and informed about their children's experiences in the infant-toddler centers. It is hard to imagine parents spending time in these cities' municipal nidi and scuole and not being struck by the compelling images of their children at work and play, at rest and in moments of joyful exuberance. Although much of documentation efforts focus on children's collaborative activities, some of the final products take the form of individual portfolios or diari (memory books) for parents ([Edwards & Rinaldi, 2009](#)). Documentation supports children's learning through all of these pathways: as a guide for curriculum planning, a tool for teacher development, and a resource to support parent engagement ([Gandini & Edwards, 2001](#)). Making documentation possible is the provision, in teachers' weekly work schedule, of 4 to 6 hr a week to collaborate with each other, the atelierista, and the pedagogisti—and sometimes parents as well—on the possible meanings of documentation they have collected and the implications of these understandings for a project's next steps.

Partecipazione: Raising the Bar on Family Engagement

The concept of parent engagement as interpreted in Reggio Emilia can be traced back to Western European socialist labor movements ([New, Mallory, & Mantovani, 2000](#)) and draws on half a century of activism in the name of partecipazione, a form of civic engagement that has attracted scholars of history and political science to Italy ([Putnam, 1993](#)). Reggio Emilia played a leadership role in the legislated mandate to involve parents in the management of these public services. In most Italian municipal early childhood programs, the concept of gestione sociale (local social management) is interpreted in the form of parent–teacher–citizen advisory councils. Reggio Emilia has elaborated on the advisory council concept to include an array of practices that promote the collaborative engagement of families in the early childhood services.

The process of involving parents and family members begins long before their children enter the infant-toddler and early childhood centers. The meaning of inserimento is interpreted, in Reggio Emilia, as an important beginning to what will become a long-term collaborative relationship. Teachers and parents meet in individual

and small groups, the cook gathers information about children's eating preferences, and elaborate arrangements are made to host alternating groups of parents in their children's first days of schooling. In addition to these planned and spontaneous early encounters, parents and other family members are well represented in the physical environment, where they can see images of themselves and their children and artifacts from their homes and communities. Parents are informed about and contribute to curricular decisions, not only as a result of the extensive documentation that teachers share with them about their children's emerging but also through individual and class meetings focused on ongoing events in the classroom. Consistent with the principles of *gestione sociale*, parents are active protagonists in negotiating organizational and structural features of their children's early care and educational environments. Thus parents participate in hiring staff, determining the menu in consultation with the cook, and helping to plan culminating events for long-term projects. Those elected to advisory councils debate, yearly it seems, on such major issues as the point system to be used in determining eligibility for enrollment and the less critical but no less engaging question of whether to continue to take on the work of laundering the tablecloths for children's lunch tables. Each of these examples illustrates the potentials of young children to serve as catalysts for adult engagement ([New & Mallory, 2005](#)).

Other ways in which parents are supported as "co-protagonists" ([Spaggiari, 1998](#)) of their children's early care and education include informal gatherings of parents and sometimes grandparents, who may be invited to meet with the cook in the evening or come to the school on the weekend to make something to surprise the children. All-school meetings may include guest speakers invited to talk about a topical issue or concern regarding children's development or early learning. And in every case other than those requiring more privacy, meetings with parents are documented and displayed to ensure that everyone is kept informed of new decisions; all are reminded of the importance of their presence in these events.

The emphasis on authentic and essential family engagement is clearly and directly linked to the philosophical premise of schools as "systems of relations" and the city leaders' earliest advocacy for parents' sustained involvement with the educational enterprise. The meaning of *partecipazione* in Reggio Emilia builds on a previous generation's refusal "to delegate their potentials and their responsibility" ([Spaggiari, 1991, p. 112](#), translated from Italian).

The Reggio Emilia Approach: an Orientation to Early Childhood Education as a Principled Way of Living

Reggio Emilia's creation of a school environment that nurtures adults as well as children, the interpretation of curriculum as a catalyst for children and teachers' collaborative investigations, and a commitment to ensuring active participation by families and community members in toto represent much more than an approach to early childhood education. This combination of philosophical and political values, beliefs, and practices is a municipal "project" fueled by the convictions of the larger community. In evidence before World War II and articulated explicitly in the decades following, *Reggiani* citizens imagined a society that is socially just, creative, collaborative. Malaguzzi and his colleagues imagined that such a society would—could—live up to the premise of children's rights and the promise of their potentials. These ideas resonate with John Dewey's vision of a democratic society ([Dewey, 1916](#)). In this Italian community, however, this vision has been transformed into sustained efforts with visible results. That this communal ethic goes beyond what is now known as "Reggio Emilia approach" is evident in the municipality's responses to recent changes within the Italian culture writ large.

New Changes and Challenges in Italy and Reggio Emilia

This chapter began by describing Reggio Emilia's place within the Italian culture. This relationship continues to inform and be reflected in Reggio Emilia's activities, both within the city and with its global partners. Two

changes in Italy over the last decade are especially relevant to Reggio Emilia's 21st-century initiatives: changing teacher education requirements; and the rise in and global diversity of immigrants to what was once a society of emigrants.

Teacher Education: Changing Concepts of Competence

After a century of reliance on locally determined in-service professional development for teachers in scuola materna and elementary schools,¹⁰ a 1998 law required all early childhood and elementary teachers to enter the profession through university teacher education. New teachers of infant-toddlers must now complete a 3-year university program focused on the pedagogy for children from birth to 3 years. The plan for teachers of children ages 3 to 6 as well as those in elementary schools (children ages 6 to 11) has been more complicated. Initially, those teachers were required to complete a 4-year university degree with course work in pedagogy, psychology, science, math, literature, history, and art. The final 2 years entailed separate strands with concentrations in preschool or primary education. The first cohort graduated in 2003. After much debate—among educators as well as policy makers—a new policy was established in 2010 requiring a 5-year university-based program leading to a common license (*Maestro Unico*) for all teachers of 3- to 11-year-old children. In addition to previous program requirements, this new degree program must include course work in teaching English as a second (or third) language and children with special needs ([Mantovani & New, 2011](#)).

Reggio Emilia has been responsive to these changes in several ways, in addition to their ongoing work with educators around the world. In collaboration with teacher educators at local and state universities (e.g., Modena and Milano), they have developed a graduate program of study for pedagogiste (curriculum specialists). In collaboration with the state ministry, Reggio Emilia has established new and reciprocal relationships with other municipal programs in Italy, especially in the south; further, the city now hosts an increasing number of Italian delegates who wish to visit municipal infant-toddler centers and pre-primary schools. Along with other northern cities with high-quality municipal programs, Reggio Emilia now participates in “twin” partnerships with municipalities in southern Italy to exchange experiences on early care and education. Reggio Emilian educators are also now engaged in an innovative partnership to experiment with one of the more controversial changes taking place at the state level.

In response to the new mandate to prepare teachers for the full spectrum of teaching 3- to 11-year-old children, the municipality of Reggio Emilia reached a unique agreement with the national education ministry to include first- and second-grade classes alongside classrooms for 3-, 4-, and 5-year-old children in one of the city's newest schools. This school is not tucked away so that it can experiment in isolation, away from the prying eyes of citizens and paying delegations; rather, it is located in the Loris Malaguzzi International Center, which receives thousands of visitors annually. For the first time in Reggio Emilia's history, municipal early childhood teachers now have daily opportunities to work with teachers hired by the state educational system and responsible for the state-required elementary curriculum. Reggio Emilia had no role in the selection of the elementary teachers who would join their staff and began with a plan for their integration based on living and learning together. A recent visit to Reggio Emilia (by RN) to discuss teacher education initiatives included an opportunity to visit the school with this new cohort of children and teachers. Although time spent in the classrooms and open spaces was brief, there were obvious differences between the physical and learning environments of the primary classrooms and those prepared for the 3-, 4-, and 5-year-old children. In the classrooms for the preschool-age children, teachers and children were engaged in a variety of small-group projects and activities that appeared to link to long-term project work; documentation and examples of children's work were abundant and the presence of visitors was only cursorily acknowledged. In the elementary classrooms, children were more often observed attending to the teachers' directions or working individually at their desks. The place where it seemed that these two historically separated groups—of children as well as teachers—were successfully coming together was in a large open area dedicated to a shared project involving the 5-year-olds and the first-graders. The focus of the project was on the human body, and the floor of the space was covered with children's life-size drawings. According to the resident

atelierista, this sort of project, involving the integration of academic content with art materials, had thus far proven most successful as a means of bringing teachers and children together and establishing common points of reference. In addition to documenting what and how their children are learning from each other, Reggio Emilia educators are also attentive to the learning opportunities and challenges associated with their own new adult partners. This expansion of the city's municipal early childhood services into the public elementary school has much to offer to the United States' ongoing efforts to translate Reggio Emilia's educational principles for the primary grades (cf. [Wein, 2001](#)) and bridge prekindergarten, kindergarten, and the primary grades ([Takanishi, 2011](#)). Also apparent during this brief visit was the cultural and linguistic diversity of children, as evidenced through the variety of languages represented in children's symbolic representations in the early childhood classrooms and the enthusiastic greetings of the primary grade children, some of whom greeted the visitor in English before turning back to their conversations in Italian or Russian or French or ...

No Longer Just for Tourists: Italy as a Newly Pluralistic Society

Once a nation of emigrants, Italy is now host to a rapidly growing population of immigrants from all over the world.¹¹ At last count, almost 10% of residents in Italy were from other nations, the largest number coming from the Eastern European nations of Romania, Albania, and the Ukraine, followed by African nations (especially Morocco) and Asia (a majority from China; ISTAT, 2009). The rapid influx and diversity of immigrants have not been easily accommodated by Italians or the foreigners themselves. One report suggests that the lifestyles and living conditions of foreigners residing in Italy vary in a number of ways from those of native Italians, including family configurations (more young people, average age 30 vs. 43 years in Italian households) and conditions of "severe housing deprivation" (ISTAT, 2009, 2010). In contrast to immigration patterns of previous years, labor market statistics indicate that immigrant households in Italy increasingly include entire families. Previously a mostly male endeavor, now men and women from these widely different cultural and linguistic groups are providing new resources and new concerns for this previously homogeneous country. Population statistics illustrate the complex interaction of resources and concerns. Although the overall birth rate in Italy has increased modestly over the past decade, this change is primarily from immigration.¹² That 22% of immigrant households (as of December 31, 2009) included mixed couples also provides evidence of the integration of (some) immigrants into the community. Nowhere are these changes more profound than in Reggio Emilia.

Once a deceptively sleepy little town that tourists passed by on their way to other Italian destinations, Reggio Emilia is now host to thousands of visitors on study tours from all over the world. The changes required to host delegates of educators are modest in contrast to the challenges now facing Reggio Emilia because of its popularity among immigrants. Joining tourists snapping photos of the lion in the piazza and Italian families who have lived in the province for generations are significant numbers of Italy's new immigrants from all over the world.

Reggio Emilia's demographics confirm and exceed the national trends in population changes. As of January 1, 2010, of the more than four million residents of Italy who are of non-Italian origin, 10.9% of them were in Emilia Romagna—26,508 of whom resided in the city of Reggio Emilia. Clearly, Emilia Romagna in general and Reggio Emilia in particular are among the most popular destinations for those seeking a new life in a new land. Not only does Reggio Emilia have one of the largest and fastest growing populations of immigrants (as a percentage of the total population) in Italy; it also has the largest percentage of infants, toddlers, and young children born to foreign-born parents.

In comparing percentages of births to at least one foreign-born parent across a 10-year span, the region of Emilia Romagna had the highest percentage in the country in 1999 (10.1%) and again in 2008 (26.1%). This dramatic increase is reflected in more recent statistics of the city of Reggio Emilia. By January 1, 2010, approximately one third (32%) of all children (534 girls + 1730 boys) ages 0 to 6 years born in the city were children of an immigrant parent or couple (ISTAT, 2010). These statistics, coupled with the fact that Reggio Emilia continues to lead the nation in the percentage of children who attend municipal infant-toddler programs in 2009, 29.5%

compared to the 11% national average (ISTAT, 2010), explain the growing presence of children from culturally and linguistically diverse traditions in the city's infant-toddler centers and classrooms. It is difficult to imagine a more dramatic change in the city's self-image, nor one that could more seriously put the communal spirit and ethos—otherwise known as the Reggio Emilia approach—to the test.

Not surprisingly to those familiar with the city's history, Reggio Emilia's citizens have risen to the occasion. A 2007 proposal on Immigration in Reggio Emilia put forth to the city council¹³ includes a strategic plan to support, facilitate, and heighten attention to the successful integration of immigrants within the city. Described as a much-needed contrast to the negative attention directed to *casi di devianza* (cases of deviance), the proposal outlines a number of initiatives designed to reduce the "invisibility" of hard-working immigrants who rarely make the headlines. Following a review of city "cultural councils" that inadvertently fostered separation rather than integration of cultural groups within the community, the proposal establishes elective intercultural councils with the primary aim of increasing the active participation of immigrants in the social and business community as well as city governance. Rationale for these efforts goes beyond the pragmatic observation that "immigrant labor produces benefits for the economic development of entire communities." The basic premise of Reggio Emilia's strategic plan initiative was one consistent with its history of social activism: We "want to make the most of diversity as one of the founding values of the community of the municipality, and in the State" ("Immigration in Reggio Emilia," 2007).

Reggio Emilia's municipal infant-toddler centers and pre-primary schools have joined this endeavor with the aim of creating more welcoming and inclusive *servizi dell'infanzia*. Accordingly, the question of how best to integrate children and families from the immigrant community into the classrooms has been treated like all questions are treated in the Reggio Emilia pedagogy—they have placed it at the center of a collaborative inquiry. In a recent visit (RK) to Reggio Emilia, educators and researchers described observations and shared documentation of discussions and experiences regarding what they saw as the central problem of intercultural engagement: the means of improved cross-cultural exchanges and understanding. Toward this end, they invited adult mediators from immigrant communities to come into the classroom and serve as cultural "informants." The role of the informants was to mediate interactions, interpret children's words and actions for each other, and support the construction of mutual understanding among adults (parents and teachers) as well as children.

This initiative and similar efforts are now referenced in the most recent exhibition of Reggio Emilia ("The Wonder of Learning") and described in the accompanying catalog ([Cavallini, Filippini, Vecchi, & Trancossi, 2011](#)). The narrative outlining these developments and what the authors rightly describe as "the innovative flair" of the continued educational experimentation in Reggio Emilia is a powerful rebuttal to the critique that the Reggio Emilia pedagogy is only suitable for (and possible with) upper- middle-class children in homogenous environments. More recent projects on display in the exhibit use multiple languages and multiple media, adding rich and concrete examples to the metaphor of the "democratic piazza" that is open to the exchange of opinions essential to this interpretation of a newly pluralistic citizenry ([Cavallini et al., 2011](#)).

Reggio Emilia's purposeful responses to these changes in the Italian culture in general and the field of early education specifically provide compelling evidence that the relevance of Reggio Emilia's pedagogy is not limited to homogenous and stable communities and schools. Even as Reggio Emilia-the-city and Reggio Emilia-the-pedagogical-approach illustrate the situated and cultural nature of an educational enterprise ([Bruner, 1996](#); [New, 2007](#)), the city and its schools also demonstrate pragmatically ethical and potentially transportable means to bring diverse perspectives to the table on behalf of any community's young children.

Reggio Emilia and the United States: New Challenges and New Possibilities

It is difficult to summarize, much less assess, Reggio Emilia's continuing influence on U.S. early childhood education. Initially a compelling but confusing point of reference based on firsthand stories by those fortunate enough to travel to Italy, Reggio Emilia was often confused with other European educational approaches that have

found favor in the United States ([Edwards, 2002](#)). As understandings deepened of how these Italian children and teachers collaborate and learn together, Reggio Emilia became a counternarrative to outdated theoretical and ethnocentric notions of U.S. early childhood education. Reggio Emilia's arrival in the United States was timely, arriving as it did when policy makers and journalists were entranced by research on children's brain development. As one educational leader after another endorsed the city's intellectually challenging and inquiry-oriented curriculum ([Gardner, 1998](#)), Reggio Emilia quickly became a new reference point for high-quality early care and education. Within a few years following the first publication ([Bredenkamp, 1987](#)), the particulars of developmentally appropriate practice were being challenged by Reggio Emilia ([Bredenkamp, 1993](#); [New, 1994](#)). Revised guidelines ([Bredenkamp & Copple, 1997](#)) made frequent reference to this Italian city and placed greater emphasis on children's cultural heritages, the social nature of developmental processes, and the necessity of negotiating the means and aims of early care and education with children's families.

As the first English-language exhibit traversed the country, increasing numbers of teachers sought more information about the city's early childhood programs. NAEYC established a special track for conference presentations focused on Reggio Emilia and the first book-length publication was printed, with chapters by American as well as Italian educators ([Edwards, Gandini, & Forman, 1993](#)). Articles on Reggio Emilia could be found in parent magazines as well as early childhood journals and textbooks; the audience for Reggio Emilia grew exponentially, in the United States and abroad. As its popularity abroad grew, so, too, did questions about the less obvious features of what was now known as the Reggio Emilia approach. Following initial hesitations about being the subject of others' research, the leadership of the city's servizi dell'infanzia eventually joined in collaborative research partnerships with American researchers who wanted to learn more about the how of its efforts, e.g., the nature and nurture of home-school partnerships ([New et al., 2000](#)) and the processes by which adults' and children's learning could be made visible ([Project Zero, 2003](#); [Project Zero & Reggio Children, 2001](#)). By the end of the 20th century, Reggio Emilia had established or was the subject of multiple Listservs, study groups, conferences, workshops, and dozens of Internet reference sites. By that time it was hard to find an early childhood educator who did not know how to pronounce the city's name.

That Was Then, This Is Now

In spite of—or perhaps because of—its early popularity with U.S. educators, the relationship between the U.S. early childhood community and the Reggio educators has changed in recent years. For example, NAEYC used to sponsor whole-day Reggio programs in its annual international conference program; today, individuals present workshops or papers related to Reggio pedagogy, but the organization no longer highlights the approach at the previous level. Even though advanced theoretical understandings made visible in Reggio Emilia continue to be well represented in the newest interpretation of developmentally appropriate practice guidelines ([Copple & Bredenkamp, 2009](#)), attention has shifted to evidence-based “best practices” deemed most likely to ensure children's school achievement. Although history suggests that this shift represents the facile nature of American curiosity and the perennial search for quick fixes to complex problems, an equally compelling explanation is the 21st-century interpretation of schooling as preparation for testing, an ideology as contrary to Reggio Emilia's vision of early education as it is to many U.S. early childhood educators.

Few could have anticipated the influence of (and damage wrought by) the 2001 act of Congress now known as No Child Left Behind (NCLB) on early childhood classrooms. In a bipartisan effort to close the achievement gap, NCLB mandates, among other things, standardized testing at specified grade levels in the name of accountability. Subsequent educational reform initiatives have been based on the belief that high standards and measurable goals are the keys to improving student achievement—aka “outcomes”—in education. Public schools are now required to set and achieve assessment goals, measured by regular testing, in order to receive federal funding—hence the label of testing as “high stakes.” Within this measurement-oriented context, funding for (the improvement of teaching of) reading increased exponentially. For administrators and educators dependent on federal dollars to support their schools, the presumed “untestability” of Reggio Emilia's pedagogy seems, to many, too great a risk.

Yet the very obstacles to bringing the Reggio Emilia approach into U.S. classrooms is what continues to inspire

many in the field. Teachers and administrators in other nations also continue to explore the possibilities of Reggio Emilia in their own settings (cf. [Rosen, 2010](#)). Within the United States, private schools (both for profit and non profit) are generally freer to explore with Reggio Emilia ideas, often emboldened by parent responses to what their children are learning through engagement in long-term projects enhanced by their exploration of multiple symbolic languages. Many of these early childhood professionals find support and collaborative possibilities in local, state, and national groups of Reggio-inspired colleagues. The largest such group—North American Reggio Emilia Association (NAREA; www.reggioalliance.com) has annual meetings, summer conferences, and a map of schools across the country where Reggio Emilia principles are being put into practice.

Within the public school arena, there is no question that the current policy climate, with its focus on measurable outcomes and high-stakes testing, has created new obstacles for educators who wish to (continue to) explore the Reggio Emilia pedagogy in their classrooms. The universal prekindergarten movement in the United States, resulting in a move of prekindergarten children into public elementary school settings, has made it all the more challenging for advocates of the Reggio Emilia approach to find receptive audiences. Yet there are scores of classroom teachers and researchers still deeply engaged with these ideas who persist in finding ways to implement them while respecting the mandate for accountability to local, state, and federal standards. A recent encouraging example comes from the field of science education. A research study conducted in a Reggio-inspired preschool classroom examined the relationship between Reggio Emilia's inquiry-oriented pedagogy with science instruction aligned with the state's early learning content standards ([Inan, Trundle, & Kantor, 2010](#)). Through the use of ethnographic data collection techniques and interpretative analytic perspectives using multiple lenses, the study illustrated the coherence between Reggio Emilia-inspired pedagogical principles and the early learning content standards that guided teachers' work with the students. Not only was this study published in a major journal in the field of science education (*Journal of Research in Science Teaching*); it was also selected by the National Association on Research in Science Teaching as one of the top five articles from *Journal of Research in Science Teaching* for the year 2011 ("Articles Teachers Should Read!"; [Van Driel & Wallace, 2011](#)). This development is encouraging in several ways: first, that a new field—science education—would see the value in an approach in which teachers and students work together to understand complex scientific phenomena; and second, that with inspiration from Reggio Emilia, U.S. educators are not only "holding onto innovation" in the midst of the "accountability storm," but breaking into new fields ([Van Driel & Wallace, 2011](#)).

Continued exploration of documentation as a pedagogical tool has also expanded into new territory. Long inspired by Italian approaches to the observation and study of child development, processes of documentation have now been adopted by many U.S. classroom teachers, transforming the banal bragadocio ("All about me!") of classroom bulletin boards to purposeful displays of children's questions and discoveries as they engage in meaningful activities. Project Zero, in collaboration with Reggio Children ([Turner & Krechevsky, 2003](#)), led the way in demonstrating documentation's usefulness to illuminate processes of teaching and learning ([Project Zero, 2003](#)). Australian educators have capitalized on documentation as a mediating tool for self-reflection and understanding ([Fleet, Robertson, & Patterson, 2006](#)). Early childhood teacher educators have also embraced documentation as a means of helping preservice teachers learn how to observe child development in action ([Gandini & Goldhaber, 2001](#); [Moran & Tegano, 2005](#)) as well as a means to transform the nature of the "laboratory" in university-based lab school (e.g., [Moran, Desrochers, & Cavicchi, 2007](#); [Fu, Stremmel, & Hill, 2002](#)). This work has led to more purposeful efforts to determine—and then create—the conditions and contexts in which preservice students might more successfully embrace an inquiry orientation to their professional development ([Tegano & Moran, 2005](#)). Supporting these efforts are strategies of documentation in the form of video-facilitated exchanges, effectively demonstrating its communicative and generative potentials ([Moran, Lamb, Newton, Worthington, & Carow, 2007](#)). More recently, this orientation to documentation has been used as a vehicle for conversations among more experienced teachers in diverse educational settings, including those within the United States (e.g., Head Start and public prekindergarten programs) and those on opposite sides of the ocean (lab schools in Milan, Italy, and Knoxville, Tennessee; Moran, 2011).

Research on the nature and consequences of these (video-recorded) cross-cultural exchanges reveals new possibilities for documentation's mediating potentials for negotiated learning ([Forman & Fyfe, 1998](#)). Results of these studies suggest that this documentation-fueled discourse can help both experienced and new educators

become more cognizant of their multiple ways of interpreting their roles in children's learning and more open to alternative ways of understanding and responding to children's learning and developmental potentials. The teacher-to-teacher discourse has provided valuable sources of data for the understanding of such ephemeral but critical dimensions of teaching as inter- and intrasubjectivities and the socioemotional components of cognitive change. This particular appropriation of documentation has served less to inform practices with young children and more to advance theories of adult learning and development.

In these and other cases, Reggio Emilia's work has continued to help U.S. scholars and teacher educators translate and make visible to teachers the basic principles of sociocultural and activity theories ([New, 1998](#); [Strong-Wilson, 2007](#)), including the concepts of participatory appropriation ([Rogoff, 1990, 1995](#)) and other complex tenets of theories of social cognition ([Lave, 1989](#); [Lave & Wenger, 1991](#); [Salomon, 1993](#)). But as Malaguzzi cautioned, theory should derive from practice. It is the proof of Reggio Emilia's existence that has the most to teach early childhood educators. The new edition of *The Hundred Languages of Children* ([Edwards, Gandini, & Forman, 2011](#)) will surely inspire new drives to translate their efforts for use in our own reform initiatives.

Conclusion

Italian educators regard Reggio Emilia's global success with a mixture of amusement and envy. *Sono proprio tosti!* ("They are really stubborn!"), noted one who requested anonymity. Most of those familiar with the city's history attribute the success of Reggio Emilia to Loris Malaguzzi's unwavering and passionate convictions, including his rejection of standardized interpretations of child development and his moral stance of the imperative of family and community partecipazione (civic engagement) in children's early education. These convictions found a nourishing environment in which to grow. There are now deep roots that ground Malaguzzi's education initiatives within the city's long-standing activism and rejection of the status quo in favor of purposeful pursuit of a more socially just world. His convictions are a vital part of the fabric of this northern Italian city.

We know of no city in the United States that has identified and sustained such a mission on behalf of its youngest citizens for 40-plus years no matter the economic and social challenges; that has sustained its commitment to family engagement—no matter where those families are from, to teachers' collaborative research—no matter what training the teachers have or haven't received, and to children's creative and intellectual potentials—no matter what languages they speak. The contrast—between what Reggio Emilia offers its youngest citizens (as well as resident noncitizens) and what is available in the United States—was dramatic a decade ago. As the United States struggles with heightened economic and social challenges similar to those now facing other industrialized nations, we have moved further away from an equitable and high-quality early educational system ([New, 2010](#)). In this changing light, Reggio Emilia seems all the more a mirage rather than a real possibility. Yet the people of Reggio Emilia persist. Surely it is this particular stubbornness, expressed by taking social justice issues seriously and working together to find solutions to what appear to be intractable social problems, that warrants the global acclaim directed to the city's approach to an early childhood education.

Reflect On

1. What tenets are at the heart of the Reggio Emilia approach to early care and education?
2. In what ways is Reggio Emilia more than an approach to early childhood education?
3. How do teachers and parents work together to promote children's learning?
4. What value is there to documentation? How does it support child learning?
5. How has the Reggio Emilia community responded to the changing demographics of families and children in northern Italy?

Selected Resource

www.reggioalliance.com

Endnotes

1. [1](#). Reggio Children hosted 4000 delegates in 2010.
2. [2](#). Although Americans generally refer to Italian early childhood services for 3- to 5-year-old children as preschool, the term is inaccurate, for two reasons. First, it includes what would be, in the United States the kindergarten year. Second, and perhaps more importantly, the notion of preparing children for primary school is inconsistent with the cultural value embedded within the law, which is that children are entitled to high-quality out-of-home experiences for their own sake, not as a form of preparation for what is to come. Although most English language descriptions of Reggio Emilia's municipal services now use the term preschool, in this chapter we continue to use the term pre-primary, even though that, too, fails to capture the ethic of the national commitment to young children.
3. [3](#). Most Italians have since rejected the gendered label of scuola materna in favor of the concept of servizi dell'infanzia, or early childhood services, to refer to those for children from birth through age 6.
4. [4](#). For more information on the history of Reggio Emilia's early childhood services, see both editions of *The Hundred Languages of Children* ([Edwards, Gandini, & Forman, 1993](#), 1998) and a video dedicated to the story of Reggio Emilia's infant-toddler centers and pre-primary schools (*Not Just Anywhere*, Washington, DC: Reggio Children, 2002).
5. [5](#). More information about the exhibition and other activities in countries around the world can be found on Reggio Emilia's Web site: zerosei.comune.re.it/inter/rc_contacts.htm
6. [6](#). *Inserimento* refers to the initial period of home– school transition, a time and process treated with a great deal of attention and respect in Italy. Most communal early childhood services have devised distinct ways of ensuring that children, families, and teachers have ample opportunity to get to know one another.
7. [7](#). Many of Reggio Emilia's infant-toddler centers and preschools are named after historic events or social rights activists. Among the latter are the *Scuola Anna Frank* and *Scuola Iqbal Masih*. Iqbal was the Pakistani child sold into slavery and killed at age 12 after publicly calling for an end to child labor. Among his postmortem accolades is the annual Iqbal Masih Award for the Elimination of Child Labor, established in 2009 by U.S. Congress (en.wikipedia.org/wiki/Iqbal_Masih; retrieved August 26, 2011).
8. [8](#). As noted in the 2009 chapter, many of the progettazione found in Reggio Emilia's municipal schools are based on children's curiosities about the physical and social worlds or practical propositions, topics that might also be pursued in the United States. Other topics of potential exploration, however, are much less likely to be pursued by U.S. early childhood educators, including children's philosophical dilemmas ("Can an enemy become a friend?" "What is love?" "Who is God?"), as well as their anxieties about the world around them (including their views of sexuality, children's rights, and their fears for themselves and soldiers during times of war). These topics, rare or taboo in the United States, are not only highly engaging for children. They also attract adult attention as parents and teachers seek ways to participate in and support children's collaborative explorations ([New & Kantor, 2009](#)).
9. [9](#). This small publication and those of other projects are available for purchase through Reggio Children, Washington, DC 20005-3105.
10. [10](#). Secondary teachers in Italy must have a university degree in their content area(s).

11. [11](#). This discussion on immigrants in Italy, Emilia Romagna, and Reggio Emilia is based on data found on Italy's national statistics Web site ISTAT, including demo.istat.it/str2009/index.html; en.istat.it/salastampa/comunicati/non_calendario/20110404_00/Famiglie_straniere_disagio_2009_EN.pdf; and demo.istat.it/strasa2010/index02_e.html
12. [12](#). "In 2008, foreign female citizens had on average 2.31 children per woman—a decline compared to recent years but still one child more than Italian women (1.32). The greater propensity to have children among foreign female citizens significantly contributes to the recovery of the overall fertility rate of the resident population: from 1.19 in 1995 to 1.42 children per woman in 2008" (ISTAT, 2010).
13. [13](#). www.coe.int/t/dg4/cultureheritage/culture/Cities/regioimmigrazione.pdf; accessed August 12, 2011.

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Chapter 16 Montessori Education Today

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After reading this chapter, you should be able to:

- Describe the background and key tenets of the Montessori method
- Explain Montessori's view of human development
- Detail the program characteristics
- Outline the curriculum areas
- Discuss the role of the teacher
- Characterize Montessori education in the elementary years
- Summarize research on Montessori

Maria Montessori (1870–1952) was an extraordinary person by any standard who overcame great difficulties to become one of Italy's first female physicians. Her gift of observation was sharpened by her studies in anthropology, resulting in her first book, *Pedagogical Anthropology* ([Montessori, 1913](#)). She also worked with what were then called “defective children” at the state Orthophrenic School in Rome. In her work with this very diverse population, she drew from the work of Jean Itard and Edouard Seguin, French physicians and educators of developmentally disabled children ([Loeffler, 1992](#)). In 1907, she was asked to create a program to care for the children of families in a housing project in Rome serving a lower income population of 4- to 7-year-olds; this was the first *Casa dei Bambini*, or Children's House.

In the United States, there was a great deal of interest in Montessori education from 1910 to 1920 (Montessori's program was demonstrated with a model classroom in San Francisco at the 1916 World's Fair), but declined dramatically until the late 1950s. However, during these three decades, Montessori schools increased in Europe and India. What caused this initial failure in the United States? [Elkind \(1998\)](#) suggests that one reason for the poor reception may have been that modern parents at that time in the United States viewed childhood as a time of innocence when children are best cared for by their mothers. Four other reasons that contributed to the rapid downfall seem to have been (1) poor or uncomprehending reception by the educational leadership; (2) adaptation of Montessori's methods in a variety of ways with which she disagreed; (3) a focus on academics by demanding middle-class parents; and (4) a flood of “trainers” and authors eager to capitalize on Montessori. J. McVicker Hunt, in his introduction to a new edition of *The Montessori Method* ([Hunt, 1964](#)), claimed that on five central issues, educators and psychologists of the day disagreed with Montessori.

[Table 16–1](#) shows the major differences between Montessori's ideas and the dominant theories in education and psychology in this country in the early part of the 20th century. In terms of the effects of environment (vs. heredity), the mutability of intellect, motivation, the role of the senses in learning and development, and the focus on observable, testable behavior, Montessori was completely out of step. So much so that Kilpatrick's 1914 book-length criticism, *The Montessori System Examined*, was taken by most professionals as the last word—in fact, the only word needed. But most of the mismatches between Montessori and current theories have been resolved through advances in our understanding of child development and learning and her once-radical theories, such as

the importance of children learning through hands-on activity, the preschool years being a time of critical brain

Table 16–1 Montessori Versus 1910–1920 Contemporaries

Montessori's Position	1910–1920 Contemporaries' Position
Importance of experience for 3- and 4-year-olds	
Absorbent minds: Montessori's concept of a period of development when certain kinds of things (e.g., language) are absorbed without external motivation.	Fixed intelligence.
Specialized group settings could provide appropriate stimulation.	Only families (not outside agencies) should be involved in the education or care of young children.
Importance of predetermined development and	usefulness of early teaching
Appropriate learning environments can allow for growth and change.	Development is predetermined. Early studies of the “fade out” of practice (with traditional elementary school methods) showed uselessness of education before about age 8.
Motivation	
Internal motivation; children are intrinsically motivated to practice, especially at the edge of competence.	All behavior needs to be motivated externally, usually by primary drives such as food, painful stimuli, and so forth.
What should be the focus for education?	
Emphasis on the senses and the experience of the child. Little emphasis on testing.	Emphasis on behavioral responses.
Role of the teacher	
Facilitator, guide, teaching through the environment, short individual or small-group lessons; large part of day in free-choice time.	Traditional teacher role: direct, whole-group instruction. Froebel's “gifts.”

Source: “Introduction,” by J. McVicker Hunt in *The Montessori Method* by [M. Montessori, 1964](#), New York, NY: Schocken.

development, and parents being included as essential partners in their children's education, are currently accepted as standard thinking in the field of early childhood education.

The contemporary U.S. Montessori movement began in the late 1950s as a set of private schools serving an almost entirely middle-class population. Many of these early schools were founded by parents. In 1959, the American Montessori Society (AMS) was established. Its founder, Nancy McCormick Rambusch, asserted that not only adoption but also adaptation of Montessori's method was necessary so that it be both translated and “naturalized” into the diverse American cultural setting (Rambusch, cited in [Loeffler, 1992](#)). A teacher shortage, predicated by the mushrooming number of schools, resulted in the opening of private Montessori teacher training centers, typically free-standing—not associated with a college or university. The word *Montessori* has been used widely in the public domain in the United States; and thus both schools and teacher education programs proliferated and were licensed without name-brand regulation or restriction. Some schools (then and now) used the name *Montessori* to refer to programs that have little relation to the schools she described. The AMS, the Association Montessori Internationale (AMI), and a number of other organizations have established criteria as to what constitutes a quality Montessori school. But membership in these organizations is voluntary and organizational

criteria do not apply to state licensing standards.

Beginning in the late 1960s, parents in several school districts began to advocate for the public schools to offer the Montessori model for their children, many of whom had graduated from private Montessori preschools. This push was given a strong boost by the availability of federal funds for magnet programs. Today, more than 400 schools in 150 districts nationwide ([Kahn, 1990](#); [Schapiro & Hellen, 2011](#)) offer some form of public Montessori program.

The Background and Key Tenets of the Montessori Method

Because there are no restrictions on the use of the word *Montessori*, many people rely on a school's affiliation with a major Montessori organization to determine whether a program is in fact Montessori. Two of these organizations are the AMI and AMS. But many private Montessori schools and most public Montessori school programs have chosen not to affiliate with any organization, usually citing financial considerations. What are some of the characteristics of a Montessori classroom, then, that differentiate it from a traditional early childhood classroom? What might a visitor to a contemporary Montessori classroom expect to see?

The first thing that an observer might notice is the mixed-age grouping: typically 3-, 4-, and 5-year-olds are together, as are 6-, 7-, and 8-year-olds, and so on. Another difference is the arrangement of the room, with low, open shelves holding many carefully arranged materials from which the children can choose. Tables and desks are grouped to facilitate individual or small-group work, rather than an arrangement in which furniture is oriented in one direction to facilitate whole-group instruction. Open floor space allows for work on the floor. The amount of shelving needed to hold the required Montessori materials is more than is generally seen in other educational models, with all walls of the classroom typically containing some shelving and shelving extending into the classroom at several points to create bays or focus areas. The Montessori manipulative materials are designed for use by individual students or small groups rather than as teacher presentation aides. For example, small globes are provided for children to handle and to explore instead of one big globe provided at the front of the room for teacher-centered instruction.

The single most important criteria for judging a program to be a good implementation of Montessori is the activity of the students. In full-day programs, students should be engaged in individual and small-group work of their own choosing for 3 to 4 hr. These choices, of course, are guided and supervised by the teacher. (See the The Role of the Teacher section later in this chapter.) Classrooms that spend more than 1 hr a day in whole-group instruction have moved away from the Montessori model (see [Baines & Snortum, 1973](#); [Feltin, 1987](#)).

A prevailing attitude in Montessori classrooms is one of cooperation rather than competition in completing work. For example, in an elementary classroom, the answers to math problems and science or geography questions are freely available to students. Students complete work independently and then check responses with the "control" material. Children in Montessori classrooms commonly ask other children for help, not perceiving the teacher as the sole source of information in the room. The availability of a correct answer accompanies a reduced emphasis on conventional forms of testing.

Although public and private Montessori schools comply with school district or state-level requirements for mandated achievement tests, these are seen by many Montessorians as being somewhat irrelevant to much of the learning that goes on. The new emphasis on authentic assessment methods, which include portfolios and performance-based assessment, is welcomed by many Montessori educators. In fact, assessment in a Montessori classroom is typically based on extensive teacher observation. During individual and small-group presentations, students are asked to practice the relevant activities, giving the teacher an immediate assessment of



Children working together using Montessori materials inventively.

the success of that lesson. Ongoing systematic teacher observation of children's work adds to the teacher's cumulative knowledge of child progress. Intervention to support a child who needs more individual instruction with a given skill or concept is always an option as a result of such observation.

Finally, there is strong emphasis on the development of individual responsibility. For example, children return materials to their place after use, the classroom is cleaned and maintained at least in part by the children, and they participate in the development of classroom rules.

Montessori's View of Human Development

Montessori viewed education as a vehicle for "giving help to the child's life ... helping the mind in its process of development" ([Montessori, 1949/1967a, p. 28](#)). Her oft-cited phrase "follow the child" is meant to infer that by following the child's development, the educator can make the most helpful match between instructional methods, curriculum, and child. A discussion of Montessori's educational philosophy, then, must begin with her view of human development.

In Montessori's view, development does not progress in one continuous inclined plane, (the implication of that model being that the child is simply a small adult), or in a linear or constant fashion from birth to maturity. A further implication of the inclined plane model is that mental activity on the more elevated end of the scale—representing an older, more developed person—is inherently more valuable than that of a very young child. On the contrary, Montessori viewed the first period of life to be the most developmentally dynamic and of the highest importance. Her developmental paradigm depicts a series of four related triangles, which she termed, "the constructive rhythm of life" (see [Table 16-2](#)). Each triangle represents a 6-year period (or plane) of development: birth to 6 years of age (infancy); 6 to 12 years of age (childhood); 12 to 18 years (adolescence); and 18 to 24 years (maturity). Two of the planes, the first and third, are described as particularly volatile and active with respect to

physical and psychological changes, with the other two as relatively stable periods of strengthening and integration ([Grazzini, 1996](#)).

Each plane is distinct unto itself, having its own particular characteristics; at the same time, each prepares the child for the one that follows. The key characteristics or mental tendencies that distinguish each plane are described as “sensitive periods.” “These periods ... are transitory, and confined to the acquisition of a determined characteristic. Once the characteristic has evolved the corresponding sensibility disappears” ([Montessori, 1966, p. 38](#)). Montessori viewed the sensitive periods as the most opportune time in life for an individual to develop key characteristics or abilities. For example, Montessori noted that beginning at birth, but peaking in the 2- to 4-year-old, a sensitive period for order is manifested. During this period, young children exhibit an almost ritualized interest in putting or finding things in their exact place in the environment. This sensitivity manifests itself in many ways, including children becoming upset when events occur out of their usual order or delighting in hearing the same story told in the same way, many times over.

Montessori viewed this love of order as the outward manifestation of the child’s inner need for a precise and predictable environment. The child’s drive for external order generally diminishes by about age 5 to 6 years, according to Montessori. By this time, the needs of this sensitive period will have been met, given time and experience in an appropriate environment. The child will have formed an “inner conceptual framework,” which will serve her in the next plane of development, as she moves toward more abstract thinking, reasoning, and complex problem solving.

The Absorbent Mind

Montessori noted, with great respect, the unique capacity of the very young child to assimilate, or to take her/his surroundings. She observed that from infancy, this capacity enables the child to absorb each experience in a powerful and direct way. Through the process of such absorption, the mind itself is formed. Thus, the child directly assimilates the physical and social environment in which s/he child is immersed, simultaneously developing his or her innate mental powers. As Montessori phrased it, “Impressions do not merely enter his mind; they form it. They incarnate themselves in him. The child creates his own ‘mental muscles,’ using for this what he finds in the world about him. We have named this type of mentality, *The Absorbent Mind*” ([Montessori, 1949/1967a, pp. 25 – 26](#); emphasis in original).

According to Montessori, this powerful mental construction occurs between birth and the age of 6 years and consists of two distinct phases: From birth until about 3 years of age, the child is in the phase of the unconscious absorbent mind, during which time the child explores the environment through the senses and through movement, also absorbing the language of the surrounding culture. The child retains memories of these experiences, but they are not conscious—that is, they cannot be called on at will for the child’s use. Montessori asserted, “If we call our adult mentality conscious, then we must call the child (of under 3 years) unconscious, but the unconscious kind is not necessarily inferior. An unconscious mind can be most intelligent” ([Montessori, 1949/1967a, p. 23](#)).

At about the age of 3 years, according to Montessori, the child’s capacity for such powerful absorption shifts to a more conscious, purposeful type. At this point, the child becomes a factual as well as a sensory explorer, noting relationships between things and making comparisons. At this point, the child begins to classify and refine sensory experiences, bringing to consciousness many impressions previously absorbed. In so doing, “he constructs his mind step by step till it becomes possessed of memory, the power to understand, the ability to think” ([Montessori, 1949/1967a, p. 27](#)). This process evolves throughout the period of the “conscious absorbent mind,” approximately between the ages of 3 and 6 years. It is worth noting that Montessori’s period of the unconscious absorbent mind correlates closely with Piaget’s sensorimotor period (birth to 2 years); the period of the conscious absorbent mind correlates closely with Piaget’s preoperational stage (ages 2 to 7).

Discipline: The Development of the Will

As children enter the learning environment, they are unaccustomed to its materials, social expectations, and ground rules. They can be impulsive and seem to lack focus. But when they discover something that is of deep interest, they begin to act on it. According to Montessori, such purposeful engagement deepens the experience and children's ability to concentrate and direct actions in other situations as well. Through such a series of actions on the environment, children's will, or ability to direct their own actions, begins to develop. Although "the school must give the child's spirit space and opportunity for expansion" ([Montessori, 1949/1967a, p. 264](#)), this is not a laissez-faire or permissive method in which anything goes. If this were the case, chaos would reign and only the teacher's direct imposition of control would restore harmony. Rather, behavioral limits are designed and implemented so that all may work in peace.

In other words, within Montessori classrooms, an atmosphere of freedom within limits is maintained—freedom to choose and use materials with purpose and care, to direct one's own learning, to interact with others, to move about the space freely. Limits are imposed to offer children guidelines for peer consortium and bounds of appropriate use of materials and to maintain a sense of social dignity and peace. Ground rules are often described as being in place to ensure respect for oneself, for others, and for the environment. The peace that can arise through such a balance between freedom and limits is not to be mistaken for inaction or immobility. Rather, "a form of active peace" ([Montessori, 1949/1967a, p. 254](#)) is said to prevail in a disciplined Montessori classroom.

The Program Characteristics

The Prepared Environment

The child, in Montessori's view, is a constant inquirer who "absorbs his environment, takes everything from it, and incarnates it in himself" ([Montessori, 1949/1967a, p. 66](#)). Not a passive recipient of experience, the child ideally interacts purposefully and freely with a specifically designed, learner-sensitive environment for optimal development to occur. The Montessori-prepared learning environment is both physical and psychological. The physical environment is designed to be ordered, proportioned to the child's size, aesthetically pleasing, and visually harmonious. Although the environment is carefully prepared before children's entry, it is constantly refined and adjusted to keep pace with the ongoing needs and interests of a particular group. In other words, it is orderly but not rigid, prepared but not fixed. The teacher constantly re-prepares or fine-tunes the environment based on observations of the children's interests and needs.

The preparation and subsequent refinement of the environment are central tasks of the Montessori teacher. Although not the central figure in the class, the teacher in a Montessori classroom is far from passive: The teacher supports the child's engagement with the environment by initiating a psychological tone of calm and focused activity; by responding genuinely, warmly, and with dignity to each child and his or her needs; and by helping to make the "good match" between child and material. Much of the success of the prepared environment will depend "on the teacher's ability to participate with the children in a life of becoming" ([Lillard, 1972, p. 61](#)). [Lillard \(1972\)](#) outlined six essential components of the Montessori learning environment: (1) freedom, (2) structure and order, (3) reality and nature, (4) beauty and an atmosphere that encourages a positive and spontaneous response to life, (5) Montessori learning materials, and (6) the development of community life. Another characteristic that distinguishes a Montessori learning environment from others is its provision of extended, uninterrupted blocks of time for child-centered activity. These blocks of time enable children to repeat activities as often as they wish, to extend their concentration spans, and to socialize, rest, reflect, and engage in a wide range of possible work choices within each routine day.

Freedom

In Montessori's view, the natural thrust of the child is toward independence, independence of the "I can do it myself" variety. In addition, the child internally possesses the blueprint for his or her own development, which will

unfold quite naturally given an appropriate environment and the freedom to act on the directive thrust of this inner guide. Freedom is necessary so that the child can choose from among the materials and experiences offered those that are of most use and interest at any point. The adult in turn observes the child's interest and activity, gaining insight into the child's personality and development, and fine-tunes or modifies the environment to meet the child's needs. It is only in an atmosphere of freedom, according to Montessori, that true discipline can begin.

When a child undertakes a purposeful task that satisfies an inner developmental need, attention is fixed on this task in a manner that lengthens the focus, attunes the "will" toward a purpose or object, and thereby begins growth toward self-discipline. The quality of freedom in a Montessori classroom is dependent on this internal development of focus and self-discipline. According to Montessori, one cannot logically occur without the other.

Structure and Order

"The child, left at liberty to exercise his activities, ought to find in his surroundings something organized in direct relation to his internal organization which is developing itself by natural laws" ([Montessori, 1965, p. 70](#)). The external organization of the environment, in other words, should both mimic and promote the internal order unfolding within the child. Given the young child's acute sensitivity to order (see [Table 16–2](#)), it makes sense that the rhythms and routines of the classroom should be predictable, the learning materials should be organized in a logical fashion, and the delivery

Table 16–2 Planes of Development

Planes	Characteristics/Sensitive Periods
0–6	The child is constructing himself from experiences.
	• Need for order in the environment
	• Exploration of the environment through use of hands and tongue (leads to language development)
	• Movement
	• Fascination with minute and detailed objects • Interest in the social aspects of life
6–12	The child has constructed tools to explore the world, now wants to move outside the classroom.
	• Exploration of culture
	• The imagination
	• Morality • Social relationships
12–18	Child reconstructs himself now as a social being, in relationship with adults, peers, and society. This important social task means less attention is available for academic work, especially work with no obvious connection to the real world.
	• Humanistic explorers

- Interest in justice
- Need for work in the real world

The young adult, having done the needed social reconstruction, now is able to make full use of available educational resources.

- 18–24
- Self-motivation in learning, application of knowledge to real-world problems
 - Moral and spiritual development noticeable, have influence on choices

Source: Based on “The Four Planes of Development,” by C. Grazzini, 1996, *The NAMTA Journal*, 21 (2), 208–241.

of lessons as guides to action should be exact and concise.

The word rigid, however, does not apply. Such appropriate structure manifests in many forms in a Montessori classroom, from a routine cycle of activities each day, to finding a material in an expected location, to the carefully designed symmetry of the learning materials, to the predictability of the basic ground rules or limits that govern the behavior of all.

Reality and Nature

Because of the absorbent quality of the young child’s mind, Montessori felt that the material placed in a child’s hands should be of authentic quality and tangibly represent the real world. She shunned the practice of offering materials of inferior quality to the young child as well as that of presenting fantasy-based images. Children are provided with real, workable, child-sized tools of everyday living in the Montessori environment. Objects such as child-proportioned brooms, dust pans, and glassware are commonplace. The Montessori didactic materials are generally made of sturdy hardwoods, glass, and (in this age) high-quality plastics. Quality and authentic materials are advocated in teacher education programs.

Montessori felt strongly that young children should be immersed in a world of reality, not fantasy. Her position was that the child’s imagination develops from a sensory base and a foundation in real-world experiences, rather than from an immersion in adult-created fantasy ([Montessori, 1965](#)). Lillian Katz seemed to concur on this point, applying it to the modern era of media and mass marketing. “I believe the majority of our young children suffer from a surplus of adult-generated fantasy. We have reached a stage that I call the abuses of enchantment; it is another aspect of treating children like silly empty-headed pets that have to be amused and titillated” (Katz, quoted in [Loeffler, 1992, p. 193](#)).

Beauty and Atmosphere

Because the child is inherently drawn to the natural world—to its cycles, rhythms, and inherent order—Montessori felt that nature should be a part of the learning environment. Plants, animals, and small gardens cared for by the children are standard in many Montessori classrooms. She believed that the environment itself convey a sense of overall harmony. The environment should be clean, attractive, and well cared for. It should be colorful to attract the child, yet uncluttered so as not to overstimulate. In addition to the aesthetic qualities of beauty, Montessori advocated an overall environment of peace, nurturance, and, in a sense, spiritual beauty in which to immerse the developing child. Anita Rui Olds, in an essay entitled “Places of Beauty” (quoted in [Bergen, 1988, p. 185](#)), echoed this sentiment: “Japanese architecture features an arch called a ‘torre’ to signal the transition from profane to sacred territory, from that which is spontaneous and ordinary to that which is spiritually and

aesthetically integrated. I have often thought that every child space should be framed by such an arch, and that the space should be designed to fulfill its meaning. Passage beyond the torre would then surround each child with beauty, wholeness, and care.”

Montessori Learning Materials

“The ‘prepared environment’ is designed to help the child achieve a sense of himself, self-mastery and mastery of his environment through the successful execution and repetition of apparently simple tasks which are nonetheless linked to the cultural expectations the child faces in the context of his development” ([Rambusch, 1962, p. 71](#)). These “apparently simple tasks” refer to the Montessori didactic materials, generally associated with the Montessori method. To some, the sheer presence of these materials distinguishes a learning environment as Montessori in practice. However, it is not the materials themselves but, rather, their design principles that make them necessary, but not sufficient, components of a Montessori setting. These inherent design principles isolate a particular concept or difficulty and contain a built-in control of error (i.e., auto-educational). They involve movement or activity by the child and begin as relatively simple activities but add complexity as the child gains experience and judgment. Moreover, Montessori materials are designed to prepare the child both directly and indirectly for other subsequent learning. They have visual appeal and are aesthetically pleasing.

The isolation of a single difficulty is intended to induce clarity in the child’s learning experience and to focus attention on a key concept. For example, the tower of cubes (or pink tower) is a series of 10 cubes, graded in size at exact increments. Each cube is exactly identical except for the single variable of size. This draws the child’s attention to that quality, allowing the exploration of the size relationships among the cubes without unnecessary distraction. In contrast, many contemporary commercially made materials are designed with the notion that “more is better.” In the commercial version, such sized cubes might be adorned with a variety of colors, letters, numerals, or textures. In Montessori’s view, the child may be entertained by using such multifaceted cubes but also may be unnecessarily distracted by the extraneous stimuli offered.

The notion of control of error is often misunderstood to mean that children should be ushered by the materials through drill toward a sort of methodical perfection. Montessori, a scientist, viewed error to be inherent and a constructive component of all learning. Errors are considered essential tools for cognitive self-construction in that the perception of “errors” stimulates the child’s careful observation and analysis of the learning experience at hand. Montessori designed controls of error (or design cues) into her materials to offer feedback that children can read and interpret, liberating children from dependency on adult approval or disapproval. Montessori has assessed, “The control of error through the material makes a child use his reason, critical faculty, and his ever increasing capacity for drawing distinctions” ([Montessori, 1948/1967b, p. 103](#)).

The most frequently cited example of this design principle lies in the Montessori cylinder blocks, which are blocks of solid wood containing 10 knobbed cylinders of graduated dimension, each of which exactly corresponds to an equally sized socket. In general, children quite naturally match cylinder with socket; any “error” in the match becomes apparent from a cylinder not fitting into a socket, wobbling through having been placed in a socket too large, or remaining socketless from a prior mismatch. The child detects “errors” through the process of observation and experimentation and thereby engages in a cognitive dialogue with the material. As the child gains such experience and therefore judgment, the external and obvious control of error in subsequent materials is diminished. For example, the knobless cylinders (a more advanced material) duplicate this initial experience except that there are now no blocks and no sockets into which to place the cylinders. The child grades the series without the benefit of a preset form to follow, replacing the guiding construct of the material with independent judgment.

Appreciative of the neuro-muscular connection between physical movement and cognitive development, Montessori intended that child activity or movement be a part of all of her didactic materials. Children in Montessori classrooms lift, carry, balance, stack, pour, sweep, assemble, and grade various objects as they actively engage and manipulate the learning environment. Such motor activity serves to sustain the child’s interest in the learning experience. Montessori claimed, “The ability of a thing to attract the interest of a child does not depend

so much upon the quality of the thing itself as upon the opportunity that it affords the child for action” ([Montessori, 1948/1967b, p. 104](#)). Integrating movement with perceptual learning helps embed the activity or concept into the child’s “muscle memory” and affords the child the opportunity to develop control of movement. The child adapts physical movements to the demands of a given activity, developing coordination, balance, and overall motor refinement.

Montessori didactic materials generally progress from simple to complex, adding one degree of difficulty as the child progresses to the next experience. This enables a child to reach a sense of internal mastery of a skill, material, or concept, before moving on to something that has more steps or requires increased judgment. Because the curriculum is child-driven rather than teacher-driven, there is no one blueprint for progression through the didactic materials. Materials are presented to each child according to interest and the requisite preparatory skills—the goal being child success and independence, not completion of a preset curriculum or a preset timetable. Moreover, Montessori materials are generally designed as scaffolding or as indirect preparation for other, subsequent learning. For example, by grading sets of size-related materials such as the pink tower or red rods, children indirectly prepare themselves for comprehension of the base-10 number system, as all of these graded series contain 10 elements. By using a three-finger grasp to handle the knobbed cylinders, children indirectly prepare their fingers for handwriting. By pouring liquids from one larger container into three equally sized smaller containers, children indirectly prepare themselves for fractions and division.

Overall, materials are evaluated in their composite, not in terms of one exclusive set of materials. The greatest hallmark of a good Montessori classroom is the teacher as scientific pedagogue; under the guidance of this type of teacher, the Montessori materials become a well-designed set of possibilities, not a complete instructional package.

The Development of Community Life

It would be a mistake to take the thrust toward independence and individual development in Montessori classrooms as an indicator that little socialization occurs. In fact, some might say that nothing could be further from the truth. “To the question ‘what provision is made for socialization?’ one could reply that the very condition of learning in this Montessori environment depends on socialization as an atmospheric element” ([Rambusch, 1962, p. 79](#)). Liberated from spending long periods of time in teacher-led large-group instruction, children routinely interact with each other, sharing work, watching another’s activity, offering or seeking peer help with a material, or sharing snack and conversation. Productive sociability, not mere togetherness, should be a prominent feature of a good Montessori class ([Rambusch, 1962](#)). Children are free to choose friends from a wide range of possibilities and to discover and explore qualities in others unlike themselves. Cooperation and respect for others are foundational concepts in a Montessori classroom community.

The Curriculum Areas

The Montessori learning environment for 3- to 6-year-olds is generally divided into four basic areas: practical life (everyday living); sensorial (materials focusing on one or more of the senses); language; and mathematics. Also, music, art, movement, and drama are included in the curriculum ([American Montessori Society, 1994](#)).

Practical Life

Practical life is generally seen as the sine qua non of the Montessori curriculum. Through involvement with practical experiences in everyday living, the child begins to develop these skills and tendencies that will support focused learning in all other classroom endeavors. Through involvement with familiar, home-based experiences such as sweeping, sewing, and gardening, the child begins to focus attention on a single activity. This child learns to follow a sequence from beginning to end, to coordinate movements toward a particular goal, and to organize each step of a given task, thereby attaining independence through self-directed activity. Thus, although the direct

or practical aim of an activity such as carrot cutting may be the peeling, cutting, and serving of a carrot, the underlying or indirect aims include the development of independence, order, concentration, hand–eye coordination, community life (through serving the carrot to others), and realistic self-esteem (through accomplishment). Practical life activities invite the child’s participation in the surrounding culture through offering child-sized versions of activities commonly done in the home—reinforcing for the child a fluent transition from home to classroom. Specific activities involve self-care (e.g., teeth brushing, dressing frames for practice with various types of fasteners, nose blowing, hair combing); care of the environment (flower arranging, shoe polishing, table scrubbing, gardening); life skills (sewing, food preparation); fine-motor development (transferring activities, e.g., pouring and basting); and community living (setting a table, saying “excuse me” or “thank you”).

Few practical life activities are standardized. Therefore, teachers create most materials for this curricular area. Great diversity exists from one classroom to the next as each teacher responds to the needs, interests, and cultural makeup of the class. For instance, in a Hawaiian Montessori school, teacher adaptations are made to reflect Hawaiian culture and the surrounding natural environment: Stringing is done with flowers, seeds, or leaves; pouring and scooping are done with small shells and seeds—large shells are often used as pouring vessels; dressing frames are made with Hawaiian tapa-cloth designs; food preparation includes making rice sushi, pounding poi, and drying fruits and seeds Chinese style ([Bogart, 1992](#)). As children mature, practical life involves more complex cooking activities, first aid, bicycle repair, telephone manners, computer skills, and knowledge of simple machines ([Chattin-McNichols, 1992](#)).

Sensorial

From birth, children are immersed in a stimulus-rich environment and unconsciously use all of their senses to absorb sensory impressions, in the absorbent mind ([Montessori, 1973](#)). In the third year of life, according to Montessori, the child can begin to order and classify impressions through hands-on examination of specifically prepared materials. Adapted from the work of Jean Itard and Edouard Seguin ([Montessori, 1967b/1948](#)), the sensorial materials were designed with this purpose in mind.

The sensorial materials are a series of sequenced exercises, aesthetically pleasing and seemingly simple in design, which are offered so that the child can “catalog and classify” ([Montessori, 1948/1967b](#)) sensory impressions. These activities refine and sharpen the senses and create a sensory foundation for further intellectual development. “The training and sharpening of the senses, has the obvious advantage of enlarging the field of perception and of offering an ever more solid foundation for intellectual growth” ([Montessori, 1948/1967b, p. 99](#)).

Materials appealing to the visual, muscular-tactile, auditory, gustatory, and olfactory senses are presented serially, each isolating one specific concept or sensory perception: the long rods (which isolate length), the color tablets (which isolate color), the touch tablets (which isolate rough and smooth textures), the sound cylinders (which isolate sound volume), and the smelling jars (which isolate particular scents). Each series proceeds from simple to complex. For example, in using the first color box, the child matches only the primary colors: red, yellow, and blue. In the final work of this series, the child grades seven shades of each of nine colors, from darkest to lightest. As the child progresses through the series, increased judgment and refined perception gained from prior lessons serve as inner guides.

These open-ended exercises also advance from an immediate and concrete experience to the child’s more abstract awareness of the relevant concept or quality. For example, when using the geometric cabinet, an early activity that introduces geometric figures, the child handles a blue knobbed wooden triangle and places it into a corresponding inset (like handling a piece of a simple knobbed puzzle). The name triangle is introduced by the teacher at some judicious point. Through subsequent activity, the child eventually recognizes a thin blue outline on a card as triangle and later locates other triangles in the environment (“I see a triangle on your shirt!”). By doing this, the child has internalized the image and identity of triangle, and knowledge has reached the conceptual stage. Later, the child will construct a definition of triangle as well as of the various types of triangles earlier explored in this hands-on way.

Language

- [Language] is not a material; it is a process. If we consider the Montessori legacy for “language as process,” the language area ... expands to include much more—the whole learning environment and, in fact, the whole world. The language curriculum becomes a context rather than a content, a smorgasbord rather than a carefully prescribed diet; and the key to the pantry is the child’s own spoken language. ([Turner, 1995, p. 26](#))

Language development in a Montessori classroom is fostered throughout the environment: the social environment of community and free exchange between children; the exact terminology offered by the teacher through specific lessons; the songs, rhymes, and conversation shared during whole-group gatherings; the selection of quality books found in the library corner; and the specific didactic materials developed to promote language and literacy development. The Montessori classroom provides a rich context for oral language development, which lays the groundwork for the child’s eventual conquest of the mechanics of written language. Montessori would concur with current whole-language theorists that spoken and written language are corollaries as means of self-expression ([Montessori, 1964](#)). According to Montessori, for the child to learn to write (which is seen as social activity), that child must first acquire the mechanics of writing. This is accomplished in part through use of didactic material called the “metal insets,” which are a variety of metal geometric templates that allow for a large number of different tracing and drawing activities, appropriate to a wide range of pencil skills ([Chattin-McNichols, 1992](#)). The child’s hand is prepared for these activities in the previous handling of practical life and sensorial materials.

Development of the mechanics of writing is also accomplished through the child’s handling of individual wooden letters, as well as tracing sandpaper letter forms, which have been glued to masonite plaques (the sandpaper letters; [Montessori, 1964](#)). Through the activation and association of visual, muscular-tactile, kinesthetic, and auditory modalities (the teacher makes the letter’s sound as the child handles the letter), the child, with practice, retains a mental image of each letter as well as its related sound. Eventually, the child, with a storehouse of symbols and their sounds embedded in memory, begins to investigate printed language through “writing” (sound-spelling) words and messages, at first using a large box of wooden letters (the movable alphabet) and later forming such words with a pencil or some other writing utensil.

Most contemporary Montessori teachers consider the metal insets, the sandpaper letters, and the movable alphabet as core language materials expanded on by a variety of teacher-generated materials, all designed to meet the needs and interests of specific children. Other activities commonly found include nomenclature cards, rhyming objects and pictures, sequence story cards, go-togethers, boxes of objects grouped by phonetic commonality, picture–label matching sets, dictation games, command games (which use both pictures and words to offer instructions), and grammar games. The Montessori language sequence assumes that writing (or encoding) generally precedes reading (or decoding), but that the two are highly interrelated. Many specific activities supporting the skills of beginning readers (labeling activities, sight-word cards, as well as an array of phonetic and predictable texts) are included in most classrooms.

Mathematics

Mathematical thinking originates in many other seemingly unrelated activities that happen prior to experiences in the math area proper. Montessori felt that the order, precision, attention to detail, and sense of sequence fostered through use of the practical life and sensorial materials lay the foundation for what she termed the “mathematical mind.” “Prerequisite activities prepare a child for the exactness and logical order required for mathematics” ([Scott, 1995, p. 26](#)). The concept of one-to-one correspondence, for instance, is embedded in the use of dressing frames (one button for each hole), the knobbed cylinders (one cylinder for each socket), and all matching activities. The child explores and compares similarities and differences through all grading and sorting activities, explores spatial relations through making relational patterns with sensorial materials, and explores temporal relations through experiencing the predictable pattern of daily routines. The child is indirectly introduced to the base-10 system

through grading sensorial series that contain 10 objects (tower of cubes, broad stair). Moreover, grading various series (e.g., long rods, knobbed cylinders) acquaints the child with the concepts of greater than and less than.

The math sequence proper begins as a logical extension of a familiar sensorial experience. The child who previously graded the 10 red rods according to length is now introduced to identical rods on which red and blue segments, denoting quantity, are included. The child orders these rods from shortest to longest, counting each segment. Later, following a visual and tactile introduction to numerical symbols (sandpaper numerals), the child returns to the rod activity, relating numerical symbol to quantity. In similar fashion, all of the Montessori mathematical materials progress gradually from the concrete and known to the abstract and unknown, targeting one difficulty at a time; math materials are the physical manifestations of abstract concepts, or “materialized abstractions” ([Montessori, 1948/1967b, p. 174](#)).

Montessori math materials are grouped into four categories: (1) 0 to 10 numeration and quantification; (2) linear counting (systematic number-line counting of increasingly large numbers); (3) the decimal system (using the classic golden bead material to represent place value—unit beads, 10 bars, 100 squares, and 1,000 cubes); and (4) operations (addition, subtraction, and so on). As is generally the case with the use of Montessori materials, presentations of the math materials are brief and always offered to a willing and interested child; materials are chosen by the child, not assigned by the teacher. The purpose for their availability and use is not to push early academics, artificial abstraction, or memorization of math facts. Rather, Montessori believed mathematics to be a natural and satisfying function of the human mind. Systematic discovery of the relationships among numbers lead children to become mathematical thinkers and problem solvers. “Abstraction is a creative process undertaken by the child to construct knowledge” ([Chattin-McNichols, 1992, p. 97](#)). As stated in the American Montessori Society’s “Position Statement on Mathematics Education” ([American Montessori Society, 1996](#)), “mathematics arose as a way of solving problems associated with daily life—involving space, size, and quantity.” Children are urged to think clearly and to use concepts learned in new and imaginative ways. The ability to understand and use concepts in problem solving is considered the purpose of all education, not just mathematics education.

Artistic Expression

“Concurrent with emphasis on the developing cognitive skills must go attention to the child’s affective life, inner thoughts and feelings, and modes of self-expression” ([American Montessori Society, 1996](#)). It is toward these ends that contemporary U.S. Montessori programs emphasize child self-expression through the visual arts, music, dance, and drama ([American Montessori Society, 1994](#)). Montessori was a pioneer in environmental aesthetics in education and saw the profound effect that aesthetic quality and overall balance in the environment can have on the young child’s development. She favored an indirect environmental approach to aesthetic education during the early years, feeling it important to include beautiful and carefully selected works of art in the early childhood environment ([Montessori, 1964](#)). A rich array of sensory experiences, both through classroom materials and from the natural world ([Montessori, 1964, 1965](#)), provide an ample palette for the child’s later blossoming of creative expression.

Today’s Montessori classrooms reflect this focus on aesthetics and rich sensory experience as well as on an awareness of the importance of the visual arts in child self-expression and symbolic meaning making. A wide range of expressive art media, such as paints, clay, collage materials, various drawing and coloring media, and papiermâché, are generally included in contemporary Montessori environments. U.S. Montessori training courses offer core instruction in modes of child artistic expression ([Montessori Accreditation Council for Teacher Education \[MACTE\], 1996](#)) and many professional development workshops (AMS and North American Montessori



Developmentally appropriate ways to teach academic content with specialized tools of learning—a major contribution by Montessori to education today.

Teachers Association [NAMTA]) are offered to deepen teachers' awareness and skill level in this important area of child development.

Music

Musical awareness and expression and training in the basic elements of music are inherent in Montessori programs ([American Montessori Society, 1997](#)). Exercises that prepare the ear for the distinction of sounds, such as the “silence game,” the sound cylinders, and the Montessori bells (for distinction of pitch), are considered core curriculum in Montessori early childhood programs ([Montessori, 1948/1967b](#)). Rhythmic activities, listening to classical and other types of music, group singing, experimentation with simple musical instruments, and simple music notation (using movable wooden notes on a large staff) are music activities additionally described by Montessori and found in contemporary settings ([Montessori, 1948/1967b](#)). Montessori programs in elementary schools typically offer children the opportunity to study various instruments, as well as to read and write music and to engage in group musical experiences. For example, two schools, one located in Albuquerque, New Mexico, and one in Cincinnati, Ohio, boasted elementary and high school steel drum bands, respectively ([Leto, 1996](#)).

The Cultural Subjects: Geography and Science

Embedded in Montessori's philosophical frame is a cosmic view of the systematic interrelatedness of all living and non-living things ([Montessori, 1973](#)). This view is based on assumptions that the universe is an organizing force

and that in order for the child to reach understanding of individual facts and phenomena, that child must also gain an appreciation of the interdependent nature of all life forms and elements ([Duffy & Duffy, 2002](#)). This view, in addition, underlies the Montessori approach to the life and physical sciences, as well as to what Montessori calls physical and cultural geography. She viewed the needs of humans as universal and the study of the diverse cultures of the earth as an investigation of the ways in which humans interact with nature to meet such needs ([Montessori, 1965](#)). Cultural celebrations, unit studies of a particular culture, or the use of objects or vessels from a varied range of cultural contexts—all are ways in which the child may absorb an awareness and knowledge of different cultures within a Montessori classroom. The child is invited to choose freely from a range of areas and activities that are provided to grant many possibilities in an integrated curriculum.

In most Montessori classrooms, children are offered physical models of land forms (e.g., an island to surround with water, a lake to fill with water) and puzzle maps of the continents and other areas of the earth. Scientific exploration, for preschoolers, involves “direct observation (which provides the basis for generating and testing informal hypotheses). The role of the senses in direct observation of nature provides the experimental base for later abstract thought” ([American Montessori Society, 1996](#)). For the young child, this means direct daily contact with the natural world; the opportunity to experience, label, and begin to categorize natural phenomenon; the opportunity to ask “what?” and “how?” questions; and routine interaction with an adult who is willing to serve as mentor to the child’s inborn sense of wonder.

The Role of the Teacher

Montessori’s goal was nothing less than to recreate the world into a more peaceful, compassionate, and purposeful place by focusing on both the nature and development of the child. Within this scheme, the teacher’s role is to regard the child respectfully, appreciate the unfolding of each child’s development, and protect the child’s natural impulse or drive to create her own personality ([Cossentino & Whitcomb, 2003](#)). This being the goal, Montessori realized that a new paradigm or model of the role of the teacher would have to be created ([Montessori, 1964](#)). The school and the teacher must permit freedom within a prepared environment if the goals of this new type of education are to be reached. Within this perspective, the child who is given such freedom in a carefully prepared environment will develop according to the child’s own natural timetable and tendencies. Therefore, the teacher’s job is not to artificially “teach in” what the child lacks but rather to be a careful observer of each child’s development, providing learner-responsive materials as well as guidance in the form of instruction, consistent structure, and appropriate encouragement.

The role of teacher as observer differed most radically in Montessori’s day (as it still does today) from the common notion of the teacher as the controlling, central force in the classroom. Misunderstood by some as a laissez-faire or passive stance, the observation of a trained Montessori teacher is, on the contrary, the studied observation of a scientist. “The book for the teacher, the book which inspires her own actions, and the only one in which she can read and study if she is to become an expert, is the constant observance of the children as they pass from their first disordered movements to those that are spontaneously regulated” ([Montessori, 1948/1967b, p. 55](#)). As the teacher first observes these “disordered movements” exhibited (even today) by children new to the environment and unfamiliar with the routines and materials therein, that teacher sets in motion active imagination; the teacher begins to imagine a child “who is not yet there.” The teacher trusts in the eventual appearance of a focused and calm child who will reveal him- or herself through the purposeful activity referred to as “work” ([Montessori, 1963](#)).

The teacher’s primary roles beyond this central one of keen observer (or in today’s vernacular, “kidwatcher”) are to carefully prepare and maintain the learning environment, to respond to disorderly children through redirection and attention to their perceived difficulty, and to present lessons with didactic materials to those children who show interest. Teachers are also responsible for conducting large-group meeting times and for maintaining careful records on each child. They are generally expected to maintain close contact with each child’s family through periodic communication such as conferencing.

The classic Montessori didactic materials, along with teacher-generated materials, do play a vital role in the child's activity in a Montessori classroom. The teacher plays an active role in establishing the initial connection between child and materials and, as such, invites the child to investigate materials and provides specific lessons on their use ([Montessori, 1948/1967b](#)). These lessons should be brief, simple, and exact. They are offered to clearly demonstrate the purpose of an activity—blueprints for subsequent investigation by the child but not standards of perfection to be exactly emulated. Paradoxically, although the teacher is expected to have worked each lesson to mastery, this same standard is not to be imposed on the child. The offering of each lesson is intended “to stir up life, but leave it free to develop” ([Montessori, 1948/1967b, p. 111](#)).

Upon the child's purposeful involvement, the teacher should take a back seat to the child's active interaction with the material. The primary learning is seen to reside in the child's doing, not the adult's teaching. “It is the child who uses the objects; it is the child who is active, and not the teacher” ([Montessori, 1948/1967b, p. 149](#)). The trained Montessori teacher, in fact, must specialize in observing the delicate balance between intervention and nonintervention in a child's activity. The control of error, designed into the material, is intended to assist the child in successfully investigating the material. But how does this work in practice? One survey examined teachers' reported intervention in cases when children were making errors in seriating and classifying tasks. Teachers from four countries with a wide range of experience and from seven different Montessori teacher education backgrounds were quite consistent in reporting that they would be unlikely to intervene in these situations; however, their responses were much less consistent when asked about intervening in math and language errors or in fantasy play ([Chattin-McNichols, 1991](#)).

The teacher's role is to intervene and actively redirect whenever children exhibit roughness, rudeness, or disruptive behavior, but to sensitively observe and remove herself from interference with the child's spontaneous interest and involvement whenever the child's behavior corresponds with the intended purposes of the material ([Montessori, 1948/1967b](#)). The teacher observes, records, and thereby comes to know the needs and interests of the children, preparing and maintaining an attractive, ordered learning environment that contains both traditional Montessori learning materials and those originally developed. The teacher seeks the good match between children and materials through observation, serving as a potent but subtle catalyst for child activity. The teacher offers polished, streamlined, and concise lessons, demonstrating a clear set of impressions as to the purpose and direction of a given material. The teacher redirects in cases of inappropriate or abusive acts and maintains a watcher's stance when the child is engaged in purposeful, focused activity.

Montessori Education in the Elementary Years

Montessori elementary programs are increasingly common in both the private and public sectors in the United States. A traditional framework for the Montessori elementary curriculum is a series of “Great Lessons” (the story of the universe, the coming of life, the coming of humans, the story of communications in sign, and the story of numbers; [North American Montessori Teachers' Association, 1995](#)) designed to capture the child's imagination and inspire a keen interest in the disciplines related to each question. From the core of the story frameworks, which offer the big picture of an epoch to the child, come the details of the related disciplines: mathematics (including arithmetic, geometry, and algebra); language (including speaking, writing, reading, and grammar); science (including botany, zoology, chemistry, and geology); and geography (including physical and cultural geography). Because of the unifying picture offered through the Great Lessons, one subject stands independent from the others.

- Elementary classrooms are usually organized around the same 3-year age spans found in the early childhood programs: a 6- to 9-year-old and a 9- to 12-year-old grouping are typical. The children stay with the same teacher for 3 years; at the start of the year, only one third of the children in a class are new to the teacher.
- The attitude is one of cooperation, rather than competition. Of course, Montessori education is not magical, and an observer would certainly find examples of competition among children in a typical American classroom. But a number of practices serve to reduce this, such as the following:

- The cooperative nature of many of the tasks, rather than a focus on who finishes first or who gets the best grade. The availability of the answers in many of the activities;
 - This focuses the attention on understanding rather than “who got the right answer”?
 - An explicit commitment, as well as materials and curriculum, in the areas of conflict resolution and peace education.
- There are a large number of manipulative materials in every subject area for the students to work with. It is important to understand the difference between occasional use of manipulatives, for example, to demonstrate math operations in a traditional classroom, and what happens in a good Montessori elementary classroom. In the Montessori elementary classroom, the most common form of instruction is a short introduction to a material, which is typically given to an individual or small group, followed by the child or children working with the material. The Montessori principle of *Control of Error* finds expression in the elementary classroom through having most answers (to math problems, for example) available to the child. Finally, the range of the curriculum is truly impressive. Math work for the 9- to 12-year-olds includes volumes of things such as cylinders and pyramids, areas of regular polygons, square and cube root, and quite a bit of work with other number bases. Work in grammar, as well as in life and physical sciences, is also available in areas most of us did not work in until high school or even college. But the number of manipulatives and the more advanced content are only a part of the picture.

Montessori elementary social studies make use of a series of lessons called the “Fundamental Needs of People.” A variety of presentations, discussions, and work by the children leads each class to their own ideas about what needs of humans are fundamental. Typical needs are food, clothing, shelter, heat and light, defense, and transportation. These needs, studied first in the children’s own culture, allow interdisciplinary ties in life science, cooking, architecture, physics (simple machines, for example) and other areas. These four strands—physical and political geography, history (with extensive use of timelines), and the fundamental needs—can be viewed to contrast Montessori’s vision from the expanding horizons framework. First, we should acknowledge that the Montessori approach delays social studies work until the intermediate grades because of all of the foundational content work described earlier. Second, this approach is at odds with some constructivist ideas on curriculum, which argue that the starting point should be the child’s own neighborhood, based on the direct experience of the child. But imagine how a Montessori upper elementary (9- to 12-year-olds) teacher would approach a unit on Japan. The lesson might start with a review of fundamental needs applied to the new area of study. Imagine how the teacher might decide to “zoom” in on foods: What sort of protein might be available in Japan? Which group/individual would like to check prices for beef and tuna in Tokyo? Which will look at the physical geography of Japan to see how much grazing land and how much coastline is available? Which will look at the timeline of civilizations to see the cultural heritage of the Japanese people? Now, what about their grains? Wheat, corn, rice? Similarly, clothing and housing can be studied as a logical consequence of things that the students know about (geography and history) based on the very same fundamental needs we all share. So the rice and sushi, the kanji and the shoji screens, silk clothes, and so on are both understandable choices and actually serve to show similarities among humans, rather than highlighting differences.

Research on Montessori

The research base on Montessori education is small, especially considering the approximately 5,000 schools in the United States alone ([Schapiro & Hellen, 2011](#)). Although well over 100 studies have been published, the numerous problems that beset the research literature make it impossible to draw other than very tentative conclusions ([Boehnlein, 1988](#); [Chattin-McNichols, 1981, 1992](#)). Methodological problems include the difficulty of separating the effects of parents who have chosen Montessori from the effects of the model itself. Another common weakness is the use of a single or small number of teachers in a classroom or school that is assumed (rather than demonstrated) to be representative of best Montessori practices. The short-term nature of most studies also is incompatible with the Montessori idea of a 3-year time in a single classroom with the same teacher.

A further difficulty lays in the lack of specification of the Montessori model in some study samples. Nevertheless, studies have shown that children who attended Montessori schools scored above the average on achievement test scores as compared to the general population ([Glenn, 1999](#)). Further, Montessori children in middle school had more positive attitudes about the school environment and their teachers and spent more time engaged with school-related tasks, chores, collaborative work, and individual projects than students in traditional schools ([Rathunde & Csikszentmihalyi, 2005a, 2005b](#)). These students also had better mathematics achievement scores than other children ([Miller & Bizzell, 1983, 1985](#); see also [Reed, 2000](#)) and performed better in both English and Spanish reading abilities on the Iowa Test of Basic Skills than controls ([Rodríguez, Irby, Brown, Lara-Alecio, & Galloway, 2005](#)). But researchers have failed to find significant differences between children who attended Montessori and other educational programs (e.g., [Fero, 1997](#); [Manner, 1999](#)) or differences favoring children in traditional preschool programs (e.g., Kraft & Berk, 1999).

Perhaps the most important recent works are two publications by Angeline Lillard ([Lillard, 2005](#); [Lillard & Else-Quest, 2006](#)). The book *Montessori: The Science Behind the Genius* ([Lillard, 2005](#)) is a major contribution to the scholarly literature on Montessori and is especially important as a “bridge” book, one that will help increase understanding between Montessori educators and the educational mainstream. Lillard, a developmental psychologist, gathered research intended to show which parts of the Montessori approach are supported by current research findings and which are not. She found that, except for the devaluation of pretend play for children under 6, all of Montessori’s major ideas that have been studied have been validated by research on human learning and development. The book is organized around eight core Montessori principles, each of which is contemporized and critiqued through the lens of relevant research studies:

- The impact of movement on learning and cognition
- Choice and its impact on learning
- Interest and its role in human learning (i.e., how we learn better when the topic or method of learning is one in which we are interested)
- Extrinsic rewards and their negative impact on motivation
- Collaborative arrangements and their impact on learning
- Meaningful contexts for learning
- Adult interaction styles and optimal child outcomes
- Order in the environment—its impact on learning process and outcomes

Overall, Lillard’s excellent review of mainstream educational and developmental research shows strong support of a number of Montessori’s basic concepts.

In a well-designed study, [Lillard and Else-Quest \(2006\)](#) compared Montessori students (N = 59) in the Milwaukee public Montessori program with students who had applied for entry but had not won the lottery to be accepted (N = 53). This clever strategy helps to alleviate the usual difficulty with effects of parent choice, socioeconomic status, family pattern, values such as educational aspirations, ethnicity and so on. Comparisons were made between 5-year-olds and 12-year-olds in both the Montessori and control groups, respectively. The 5-year-old Montessori children performed significantly better on three of seven scales in the Woodcock-Johnson Test Battery: Letter-Word Identification, Word Attack, and Applied Problems (math) than controls. Furthermore, Montessori 5-year-olds had better executive functioning, which is “thought to be important for success in school” and were more likely to “use a higher level of reasoning by referring to justice or fairness” in a test in which they are given stories and asked how to resolve the problems presented than controls. Two measures of social behavior observed during playground time also favored Montessori children at age 5. In a False Belief task that examined children’s understanding of the mind, 80% of Montessori 5-year-olds vs. 50% of control 5-year-olds were successful at the task.

There were fewer significant differences at age 12. Montessori children wrote more creative stories, using more sophisticated sentence structure; on social/behavioral measures, Montessori children were more likely to choose the “positive assertive response” to social problems and reported a greater sense of community than controls. These findings should be viewed cautiously because children were selected from a single Montessori school, the Montessori sample had a higher percentage of girls than the control group, and the study did not take into account the influence of peers in the Montessori setting, compared to the control setting.

Conclusion

The Montessori approach to education has both historic and contemporary significance. Rooted in the early 20th-century work of one person, it is tempting for critics to view this as a personality-based movement that is rigidly fixed in time, too structured, religious, for the rich, and for special learners. In truth, some of Montessori’s most ardent proponents, in an effort to replicate her method, do little to correct this impression, and many of her writings do appear dated, at least in style. Yet Montessori’s central vision as well as many key practices were well ahead of their time and remain as viable and relevant today as they were 100 years ago. Practices and constructs such as multiage groupings, peer tutoring, individualized and child-centered learning, holistic education, the prepared and learner-responsive environment, the teacher as observer and guide, the use of hands-on manipulatives as tools for learning, respect for each individual’s inherent potential—all are central to the Montessori philosophy. Much more so than a particular set of didactic materials, these aspects are integral to good Montessori practice and make the Montessori approach a viable option with potent possibilities for contemporary educators. The Montessori approach seen in a high-quality, fully implemented program accords with developmentally appropriate practices as espoused by the National Association for the Education of Young Children ([Humphries, 1998](#)).

Currently, the core Montessori curriculum continues to be developed and expanded by innovative teachers applying Montessori principles to new situations and to meet the interests and needs of diverse individual learners. Over the past two decades, Montessori programs have been incorporated into many public school systems as an experimental model, expanding the availability of this largely private school movement to a wider base of socioeconomic, racial, and cultural groupings. The efficacy of the Montessori approach in educating children in public and private schools is being further evaluated and substantiated. Hopefully, a range of longitudinal studies that employ experimental and naturalistic methods can be undertaken to further document current practice and to seek answers to far-reaching questions regarding the nature and effects of the Montessori school experience.

Reflect on

1. How are Montessori’s ideas about early development radically different from those that we embrace today?
2. Is the general assertion that Montessori programs are too structured justified?
3. How is play woven into the Montessori curriculum?
4. What is the role of the teacher in the Montessori classroom?
5. Does the Montessori approach to early education provide superior cognitive and social benefits to young children compared to those of other early childhood programs?

Selected Resources Montessori web Resources

Who Was Maria Montessori?

www.montessori-namta.org/Maria-Montessori

All About Montessori Schools
www.montessori.org/

All About the American Montessori Society
www.amshq.org

All You Need to Know About NAMTA or NAMTO
www.montessori-namta.org

Major U.S. Montessori Organizations

American Montessori Society (AMS)
281 Park Ave. South, 6th Floor
New York, NY 10011
www.amshq.org

Association Montessori Internationale (AMI/USA)
410 Alexander St.
Rochester, NY 14607–1028
www.montessori-ami.org

Montessori Accreditation Council for Teacher Education (MACTE)
17583 Oak Street
Fountain Valley, CA 92708
www.macte.org

North American Montessori Teachers Association (NAMTA)
11424 Bellflower Rd. NE
Cleveland, OH 44106
www.montessori-namta.org

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Chapter 17 The Waldorf Approach to Early Childhood Education

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After reading this chapter, you should be able to:

- Discuss Rudolph Steiner and anthroposophy
- Detail the Waldorf program's characteristics
- Explain how to assess children's learning
- Characterize the Waldorf relationship with families
- Compare Waldorf and other approaches

Continuing its growth worldwide, Waldorf education is an attractive alternative to and an inspirational model for improving traditional education ([Edwards, 2002](#)). The Waldorf model is relevant to early childhood education because it seeks to promote a healthy, unhurried, developmentally appropriate learning environment for young children. Waldorf early childhood education has been applied in a variety of service delivery settings including home- and center-based child care, parent and child groups, parent support programs, and kindergarten and mixed-age programs for children from 3 to 7 years of age ([Oldfield, 2001](#)). Rudolf Steiner founded this approach, which was first implemented in Germany.

Rudolf Steiner and Anthroposophy

Steiner (1861–1925) was greatly influenced by the Romanticism of the Johann Wolfgang von Goethe period, which contrasts with the rationalistic philosophy based on the science of Isaac Newton. For Steiner, history and nature are shaped by the spirit and each person is part of a single universal process. Steiner presents a peaceful and beneficent worldview. The spirit is in charge of the world and shapes it via inner vision and imagination.

Any overview of Steiner's philosophical beliefs would have to begin with anthroposophy (from the Greek: anthropo = man + sophia = wisdom). Most simply stated, anthroposophy is the exploration of humanity in combination with the spiritual. The goal of anthroposophy is to bring about truths or new knowledge not wedded to any particular tenets or dogma that would make it an orthodoxy. Central is the quest to hear the truth about spiritual things ([Wilkinson, 1996](#)).

Anthroposophy is a spiritual-science movement with its roots in Christianity. Begun by Steiner, it has grown to be widely recognized among followers all over the world. Two important components of anthroposophy are oneness with the world and search for self. Oneness with the world encompasses the idea that everything is interconnected, from the cycles of the moon and planets, including Earth, to the cycles of the seasons, to the cycles of human life and death. Each choice that we make will affect others in ways that we may not foresee.

An example that comes to mind is the current situation with the planet's rain forests. As we continue to destroy the trees that make up the rain forests, not only are we destroying the plant and animal life there; our actions are

having many other far-reaching consequences. Because trees serve to “clean” our air by using carbon dioxide and producing oxygen, we are seeing an abundance of air pollution that was previously at least partially filtered by the vast acreage of forest. We are also seeing the effects of global warming caused in part by abundant amounts of carbon dioxide in the atmosphere. Destruction of rare species of plants and animals in short periods also seriously disrupts the food chain, affecting other species that depend on those that are disappearing. These effects, not even considered when the choice was made to harvest the rain forests, demonstrate the interconnectedness of every facet of our world. Anthroposophy sees the value in being aware of those connections, suggesting that life can be much more fulfilling and meaningful when we recognize and act on them.

A second important component of anthroposophy is the search for self. Steiner stressed the importance for each individual to develop his or her own faculties in a variety of areas, in order to obtain a “wholeness.” Through the study and exploration of intellectual subjects, artistic endeavors, craft and skilled labor, and spiritual meditation, a person can strengthen his or her spirit and sense of self. “The human being cannot escape—indeed, should not seek to escape—worldly experiences, but he must be in a position to discriminate and not be dominated by them” ([Wilkinson, 1996, p. 53](#)). Steiner felt that through the philosophy of anthroposophy, the value of preparing the body, mind, and spirit for a life of continued learning and growth could be realized.

Steiner’s Theory of Child Development

Consistent with his anthroposophical beliefs, Steiner created his own theory of child development. He proposed 7-year cycles that incorporate both physical and spiritual development. In the first 7 years of life, Steiner believed that children’s development is focused on their physical body. They imitate the adults around them to learn about their world. They practice “real” work through their play and through craft projects. Simultaneously, spiritual development is occurring, or positive approaches to learning and doing is nurtured through imitative play. Important during this period is the exploration of fantasy and imagination. At this stage, Steiner thought that formal academic instruction is inappropriate.

The next 7 year cycle encompasses the ages 7 to 14 during which the child is becoming more aware of the surrounding world and is thus ready to begin academic instruction. The spiritual concept of “Feeling” is being realized at this time, and therefore the child is intrigued by imagery and pictorial stimulation that evoke emotions. Personal relationships are important at this stage as well.

The third 7 year cycle ranges from ages 14 to 21 years and begins with the onset of puberty. At this time, young people are ready to combine their intellect with more abstract thoughts and applications, hence the spiritual development of “Thinking.” A sense of independence takes root at this stage and propels the student to seek individually relevant explorations and connections. Steiner outlines 7-year cycles and their corresponding characteristics throughout the life span until the age of 85 ([Wilkinson, 1996](#)).

Closely connected to Steiner’s theory of development are his beliefs about education. Steiner observed that schooling should stress the child’s all-around development of body, mind, and spirit. The focus should be on educating the “whole” child because developing a child’s faculties is more important than teaching subjects. This can be interpreted to mean that it is more important to teach children to learn and think for themselves than to teach children facts and book knowledge. Steiner also believed that specific types of learning were appropriate primarily at certain ages and stages. These basic tenets later served as Steiner’s guidelines when he was given the chance to open a school in Germany to put his ideas into practice.

Context of Waldorf Education

Some Waldorf schools only provide kindergarten education, while others provide schooling from kindergarten through the 12th or 13th grade.

Waldorf Kindergarten

The kindergarten in Waldorf schools is very different from the other levels of schooling, as well as being different from most typical kindergartens with which we are familiar. A Waldorf kindergarten serves children between the ages of 3 to 6 years, consistent with the first 7-year cycle in Steiner's theory of development. The curriculum consists of imaginative play, fairy tales, fables, folklore, imitation, art activities, "real" work such as knitting and baking bread, musical instruments, dance, drama, and awareness of nature, cycles, and seasons. This curriculum is based on Steiner's ideas about the child at this stage. Because Steiner felt that young children are working to develop their physical body and their will, the activities are not academic in nature, but hands on. Many opportunities exist for creativity and make-believe, traits that Steiner felt enhance the development of the will. The toys at school are simple and open ended to encourage imaginative uses. Many objects found in the classroom are natural materials, such as gourds, pine cones, branches, and pebbles. The purpose of these materials is to foster connections with nature and the concept of "oneness with the world."

Going into this kind of classroom environment has been compared to "stepping back into the 19th century" in the sense that the toys are simple and natural, the teachers are often busy mending clothes or baking bread, and the children are actively engaged in imaginative play or imitative work. The Waldorf kindergarten is designed to be an extension of the home. There is no formal academic instruction. Educational toys and even books are rarely found in the classroom; this is based directly on Steiner's theory that academic instruction at this first developmental stage is inappropriate. A rich and stimulating environment is required with teachers providing language and literacy experiences through stories, poems, and songs. Mathematical experiences occur naturally through cooking and imaginative play. Art, music, drama, and science experiences also have a place—but not in the overt manner so prevalent in the typical public school setting.

In the Waldorf kindergarten, children are expected to be children first and foremost. The stage of development they are in is well understood and appreciated by the teacher. Waldorf in this way contrasts with the reality today in which children are often rushed through their childhood in an attempt to help them become the best and the brightest; unfortunately, many children thereby miss the opportunity to simply be, to have the childhood to which they are entitled.

Waldorf education respects the child holistically, the stages that a child goes through, and supports the belief that there is a right time for everything. Take the Waldorf approach to reading, for example. It is not unusual for a Waldorf student to begin to read in Grade 3 or 4, much later than does the typical public school student. Rich literacy experiences, but none that include formal reading instruction, will lay a strong foundation of language, imagery, and comprehension that will serve students well when the time is right.

There has been much discussion about Steiner's seemingly delayed approach to reading instruction. In the public sector of the United States, there has been a very strong emphasis placed on teaching pre-reading skills to preschoolers in an effort to prepare them to begin kindergarten at age 5. The premise is that this early start will ensure they begin reading early, which will in turn propel them forward as strong academic scholars. Because of this belief, many parents and teachers balk at Steiner's method of waiting until a child is 7 years old to begin this type of instruction. So this begs the question: "Do early readers maintain their advantage, or do late readers catch up?"

A groundbreaking dissertation submitted in 2009 by Sebastian Suggate at the University of Otago, New Zealand compared students in state schools who began formal reading at the age of 5 with students in Waldorf schools who began at age 7. His data suggested that the two groups equalize by 11 years of age. So it would appear that the essential matter is not how early reading occurs. What is important is to build a solid developmental foundation that will contribute in the long term to a happier, healthier, and more well-rounded and competent child.

Waldorf Grade School

At 7 years of age, the child enters the next stage of development and schooling, corresponding to Grades 2 through, 8. During this period, the child remains with the same teacher and class of students for the entire cycle. This serves to sustain important relationships (a key part of the second 7-year cycle) and to create more consistency in the child's schooling. This also is a way to keep the teacher from becoming stagnant, as that teacher will have to grow with the students over the 7-year period.

According to Steiner's theories, children at this second stage are now ready to learn academic subjects. They have a strong foundation from proper kindergarten experiences and can build upon it. Their awareness of the outer world is steadily growing. They are also developing their spiritual sense of "Feeling," so subjects, images, and pictures that evoke emotion are very effective learning tools. The main academic areas covered at this point are typically reading, writing, language skills, math, geography, history, and the sciences. It is the teacher's challenge to present these materials in such a way that the students can explore and master the content to the fullest extent possible.

A typical daily schedule in a Waldorf Grades 1 to 8 class would proceed as follows. Each morning, the teacher greets students individually as they arrive, assessing their mood and state of being in an attempt to be sensitive to their needs. Then the class gathers to recite the morning verse. This is usually an inspirational passage that the class adopts for the entire year. Next, the main lesson begins and its study lasts for 2 hr. This block is used to approach the subject in a number of ways—not simply through lecture but also through various related activities. The same subject is usually explored during this time for 3 to 4 weeks, and then a new subject is chosen for study. Two more lessons follow, of approximately 45 min each, with lunch perhaps in between. Then the afternoon is spent on less intellectual topics, such as art, music, and practical activities, which would include craft and skilled work. Time periods and activities are adjusted according to the developmental level of the class.

Waldorf Teacher Training

Because the Waldorf philosophy is well organized and contains so many interlocking components, Waldorf teachers must be trained in the philosophy and theories behind their craft, as well as in proper ways to incorporate these ideals into the classroom. Currently, there are over 50 full-time training schools worldwide, with at least 17 of these located in North America. The Rudolf Steiner College in California is one of these. The college offers a variety of programs and courses that train teachers, teacher educators, followers of the anthroposophy movement, and others who are interested in Steiner and his applications. Programs are available full time, part time, during the summer, and through weekend seminars. Teacher training in Waldorf education focuses on the lectures and writings of Rudolf Steiner; a solid understanding of his theory of child development is required to guide ECE practice. Based on a thorough understanding of Steiner's theory of child development, a teacher can better recognize the needs of individual children.

Diversity

Waldorf education originated in Germany and has been adapted to other cultures worldwide. In the United States, adaptations have taken several forms. In public schools, in order to comply with separation of church and state regulations, Waldorf has been stripped of all religious and spiritual exploration. Even with such profound changes, Waldorf programs have been very successful, especially in inner-city public schools, by changing heavily Eurocentric readings and history to include U.S. literature, history, and diversity perspectives. Moreover, multicultural perspectives and interests have been added. Private schools have been better able to keep the spiritual side intact while also adding U.S. literature, history, and multicultural perspectives. Overall, and especially in private schools, the basic tenets of Steiner's original educational philosophy have remained at the heart of Waldorf education.

Waldorf education has been successfully adapted to numerous other cultures as well, such as those in Europe, Africa, the Middle East, Japan, and Australia. Waldorf schools in these cultures all profess the same original ideas, concepts, and philosophy of the very first Waldorf school in Germany. The curriculum is similar in subject matter

and materials, although modified to incorporate the literature and culture of each particular country. Waldorf education is mostly found in countries that accept Christianity, given



Wooden stands draped with cotton or silk cloth invite child-centered imaginative play.

anthroposophy's connection to this religion, even though Waldorf does not require the students to be of any particular faith. Each school is different because curriculum and administration are not fixed, leaving room for innovations. Waldorf curriculum is easily modified to accommodate multicultural points of view without compromising the basic philosophy.

Many embrace the ideals of Waldorf education because of its simplicity. In this time of technology, busy schedules, competition, and fast food, there is a growing sense of disconnectedness, a feeling that something is missing. Waldorf education strives to eliminate the rush, allowing us to focus on what is really important, to remember where we came from and what life is all about. Waldorf helps children to learn how nature supports us and how we must support nature, to be aware of its rhythms and cycles, and to become one with the world. Waldorf education is about learning who we are as individuals, learning what we can do and what we know, “finding ourselves,” so to speak, and recognizing the spirit within us. It is about taking time to “smell the roses” and to appreciate where we came from, an ideal that transcends cultural boundaries.

The Waldorf Program's Characteristics

Creating a Caring Community of Learners

The Waldorf approach for ECE incorporates certain community elements into its design. The importance of the physical environment, age groupings, planned activities, schedules, and social relationships have all been discussed in great detail by Rudolf Steiner. Each element is an integral part of the Waldorf kindergarten.

Children's Sensitivity to the Environment

Steiner begins with the environment, which includes the layout and design of the classroom as well as the outdoor area used by the children. As it will set the stage for future learning, the environment is an important place to

begin. The aesthetics of the room play a key role in the general feel of the learning space and, as such, are tailored to the developmental needs and interests of the children who are served. The Waldorf early childhood environment nourishes the child's senses with beauty and order ([Trostli, 1998](#)).

Steiner felt that young children are extremely sensitive to their environment, absorbing information through all five senses and experiencing it throughout their entire body. For this reason, Steiner specifically addressed issues such as the color on the walls, classroom materials, and furniture. He suggested that the walls of the early childhood classroom be solid pastel shades, free from patterns and design ([Grunelius, 1991](#)). Colors play a very important role—for example, loud, bright colors can be overly stimulating, grays and browns can be dreary, plain light colors will promote a light airy feeling, reminiscent of cherry blossoms or spring leaves. This aesthetic beauty stimulates the child's imagination and is at the same time also calming. The simplistic charm of the classroom is achieved by incorporating natural materials, such as solid wood furniture polished with beeswax, curtains made of natural fibers and colored with plant dyes, and toys handcrafted from natural materials.

The Waldorf early childhood classroom is seen as an extension of the home, in both design and function. The prevailing atmosphere is that of the traditional home, where daily chores provided the rhythm of family and community life. In these hurried times, when the pace of life dictates processed foods, synthetic products, entertainment in a box, and gadgets and machines that perform much of the chores that once provided satisfaction, Waldorf provides a sanctuary for children.

The Importance of Imitation and Play

Steiner emphasizes two valuable ways in which young children develop a sense of community. One is imitation, the other is play. Young children are innately curious about the work of adults and instinctively imitate what they see to deepen their own understanding. Waldorf teachers find it very important to give children something valuable to imitate. Therefore, they engage in the work of the home/classroom, such as mending classroom materials, preparing food for snacks, polishing tables, washing floors, and caring for the plants that adorn the windowsills. Each of these tasks is rooted in meaningful, day-to-day necessity. The children are never forced to do this work alongside the teacher and are always welcomed when they choose to imitate the teacher's actions. Through this self-initiated imitation, children learn not only to do their part for the classroom community but also to rely on others.

Play is another crucial method through which children develop a sense of community. Play provides "safe" opportunities to practice social interactions. Children can try out different roles, work through conflicts, and attempt various methods of communication, all under the pretense of play. In terms of social development, play is an opportunity for children to practice their social skills and to learn how to function within a group. Lengthy periods of time designated for true imaginative play in the Waldorf classroom allow children to experience community in a nonthreatening manner, while developing their emotional maturity.

Benefits of Mixed-Age Grouping

Another factor that contributes to Waldorf's caring community of learners is the mixed-age grouping of children. Children in a Waldorf kindergarten range in age from 3 to 6 years old, meaning that they have the continuity of building a relationship with one another and with the teacher for up to 3 years. This design also promotes a family atmosphere in the sense that the class replicates siblings with a stratification of ages, which is much more natural than a class of children all the same age. This diversity in ages offers the younger children role models, with older children to look up to and learn from their example. The youngest children's learning is scaffolded by the nurturing assistance that they receive from the older children. The older children benefit from this design as well. They gain an attitude of caring and responsibility and sharpen their social and cognitive skills. There is much beauty in watching a child begin as the youngest, attempting to imitate the actions of the older children, and progress over 3 years to become one of the oldest, looking out for and nurturing the younger children.

Establishing Rhythm and Routine

The rhythm and routine that are an integral part of the Waldorf kindergarten also serve to foster a sense of community. Teachers take it upon themselves to establish routines that are repeated daily, weekly, seasonally, and yearly. There is a rhythm to each day that involves a balance of time spent “breathing in” and “breathing out.” These times offer children experience with both self-expression and communal moments. There is a rhythm to each week, with Monday designated as “bread-baking day” and Tuesday as “vegetable soup day,” and each other day of the week with its own identity that the children come to recognize and depend on. It is this predictability that lifts children’s anxieties and builds their trust in their social worlds and in the teachers. Children feel safe and secure in the community of their classroom—they know they can trust in what they will find there.

Teaching to Enhance Development and Learning

Underlying the very premise of Waldorf education is a profound respect for childhood. Sally Jenkinson, a former Waldorf kindergarten teacher, expresses Steiner’s beliefs beautifully: “[W]hat remains constant (in Waldorf education) is a deeply held belief that childhood matters; that the early years are not a phase of life to be rushed through, but constitute a stage of tremendous importance needing to be experienced fully in its own right” ([Oldfield, 2001, p. xvii](#)). There are three feelings regarding ECE that Waldorf teachers espouse: reverence, enthusiasm, and protection. These three words demonstrate how Waldorf teachers respect and value the children that they work with daily.

Reverence, Enthusiasm, and Protection

Reverence can be described as the attitude of a teacher toward a child. Steiner speaks of the first 7 years of a child’s life as critical. The child is very impressionable, absorbing stimuli from the environment through all senses and experiencing it with the whole body, making it vital for the teacher to provide beneficial stimuli. When a teacher approaches a child with reverence, caution should be taken to speak clearly so as not to confuse the child, to be worthy of imitation, and to allow the child to proceed at his or her own pace, recognizing that it is the quality of development, not the speed, that is important.

Recognizing that the art of teaching presents many challenges, Steiner urges that those persons called to teach must accept their role with enthusiasm. Not every person’s nature includes being a teacher, but those who choose this career should be truly dedicated and enthusiastic about the responsibility that they are undertaking. This will translate to the child, who senses a teacher’s enthusiasm and cannot help but to get caught up in it. It is that true spirit of childhood—the sense of wonder, the inquisitive nature, the naiveté—that affords a child the ability to explore the world with such excitement and awe.

The third duty of the teacher is protection of all children in their care, physically, emotionally, socially, and psychologically. The Waldorf early childhood classroom is a sanctuary from all that works against the healthy development of young children. The teacher provides a stress-free environment with a slow, calming pace that allows children to take the time to build the foundation that will support their future learning. Children do not feel the pressure of standards, testing, or the necessity to read, but enjoy rich literacy experiences that call on their imagination to take them to fairy-tale lands of elves and gnomes. They are protected from the fast-paced, over-stimulating bombardment of images from television and computer games. Instead, they dig in the earth under a tree fragrant with apple blossoms and discover the purpose in a worm’s slow deliberate movement. In addition, the food that children in a Waldorf kindergarten eat is free from processing, free from pesticides and insecticides, and free from genetic alteration. It is natural and pure, promoting a healthy physical constitution.

Providing an Engaging and Responsive Environment

Teaching to enhance development and learning requires that teachers create an engaging and responsive environment. In a Waldorf classroom, this takes many forms. The aesthetic beauty and welcoming feeling of warmth discussed previously is one important component. Another is the toys and materials that teachers make available to children. Waldorf kindergartens are full of materials that invite young hands and minds to touch, manipulate, create, and imagine. Baskets of natural items, such as sticks, seashells, and moss, are arranged in areas where children will incorporate them into their play. Wooden stands will be pulled out and draped with play cloths made of natural fibers, such as cotton or silk. Using them children can create houses, stores, spaceships, or stages. Toys are handcrafted from wood in various forms that inspire creativity, unlike commercial toys marketed today for young children that have but one purpose and are often so realistic that they leave nothing for the child to add to the experience. Such commercial toys will not be found in a Waldorf classroom. Instead, you find children having a particular wooden toy for a phone one day, and then on desire or necessity it will be transformed into an airplane on another day. This perspective on toys affords children the right to open-ended thinking. They learn that the possibilities are endless, rather than learning that there is one correct way to do something.

Children's Connection With Sensory Experiences

Another aspect of the environment of the classroom concerns Steiner's belief that young children are "wholly sense organs," meaning that young children are inextricably connected with their sensory experiences. A child is "united with sensation, and therefore deeply affected by what it conveys, and her psychological development is influenced by the immediate surroundings" ([Oldfield, 2001, pp. 101–102](#)). The natural materials in a Waldorf classroom—the lightly colored walls, the soft play cloths, the rich watercolor paints, the smell of the bread baking, and the rhythm of hands clapping in ring time—all provide sensory stimulation without creating sensory overload. Because of children's vulnerability to the environment and all that takes place within it, Waldorf educators take great responsibility in providing worthy sensory experiences.

Also important to consider is the quantity of sensory experiences that children encounter daily. Waldorf again seeks to protect its children from the bombardment of images, smells, sounds, tastes, and touches afforded by our fast-paced, thrill-seeking society. Children can become overstimulated by factors in their environment and their bodies react by shutting down. They may withdraw, manifesting a zombie-like trance, such as fixating on the stimulus or looking off into space ([Healy, 1999](#)). The child may also react by losing self-control and acting out in socially unacceptable ways. Waldorf education with its calming natural environment is an antidote to the excitability that children so easily internalize.

Collaborating With Peers

Collaborating with peers is another essential part of healthy development and learning that Waldorf teachers foster in the kindergarten. Teachers provide many opportunities for children to work and play together. When children choose to imitate a teacher's work, perhaps kneading dough for the morning bread baking, they often join together with peers in this united purpose. From the youngest ages, children are working side by side kneading their



Waldorf green spaces and gardens nurture serenity, free thinkers, and the creative impulse.



Natural environments and materials are valued highly in Waldorf programs.

own piece of dough while enjoying the comfort of a common activity. Older children learn the give-and-take of working together, perhaps taking turns or assigning “jobs.” These events and opportunities widen and deepen children’s social and emotional experiences, thereby enriching their development.

Learning Through Doing

Waldorf teachers do not employ direct instruction as a teaching method in the kindergarten classroom, as they find it counterproductive to require this form of child participation. Rather, Waldorf teachers encourage the children in self-discovery. When children choose to engage in imitation or play, they will do it wholeheartedly and

gain much more than if they had been coerced. Steiner promotes the idea that children learn from doing, and whether they do it correctly or incorrectly, they still receive valuable information. The teacher's role, then, is to ensure that there are plenty of opportunities throughout the day for social and cognitive engagement.

Responsibility and Self-Regulation

One of the foremost goals of the Waldorf early childhood curriculum is to help children develop a sense of responsibility and self-regulation. Steiner gives much attention to this topic in his lectures and writings. Again, this is one reason why children are not forced to participate in any activity but are given the freedom to choose their own activities. By having choices to make, young children can begin to exercise their own self-control.

An important part of this approach is recognizing that the development of responsibility and self-regulation is a process. For this to happen, children need sufficient time, space, and opportunity to practice making choices and exerting independence and interdependence under careful adult supervision and guidance. Because young children have limited self-control, teachers set goals that are reasonable for their level of development and allow for approximation of meeting these goals. Moreover, with imitation as a valuable teaching tool, Waldorf teachers can gradually guide their young children through this transformation. A sense of self-regulation, as well as group regulation, “involves the development of self control of movement, i.e. also knowing when not to move—for example, holding back inappropriate behavior” (Oldfield, 2001, p. 56). Lynne Oldfield also offers a beautiful vignette to illustrate this concept:

One morning at snack-time, a mixed age group (3–6 years) was gathered around a table. On one side was seated a group of three and four year olds. One boy accidentally fell off his chair and then began to hit his chair, saying “Silly, silly, chair!” Immediately, all the other three and four year olds threw themselves on the floor and began banging their chairs, with a great deal of laughter. Across the table, seated next to the teacher (their favorite spot since they had turned six) were two girls. One said “I want to fall off my chair, but I won’t,” and her friend replied, “So do I. But I won’t either!” (2001, p. 57)

Constructing Appropriate Curriculum

The Waldorf early childhood curriculum is designed to educate the whole child (Easton, 1997). It speaks to the development of the social, emotional, spiritual, moral, physical, and intellectual aspects of each individual child. It nurtures these important elements of the human being through a curriculum that seems very simple on the surface, yet in reality is amazingly complex.

Nurturing the Whole Child—“Head, Heart and Hands.”

The curriculum can be described by just a few activities, but the depth that they reach requires lengthy discourse. A typical kindergarten day is marked by the rhythm of familiar activities, alternating between “breathing out” (a time of self-expression) and “breathing in” (a time of quieter, teacher-led reflection).

The morning begins with a full hour of uninterrupted time in which children are free to choose their activities. They can be found caught up in artistic endeavors, imitating the teacher as they prepare the snack, or swept away in a playful adventure that is only bounded by their own imaginations. This time allows for all manner of developmental growth, from practicing social skills in a “restaurant” to learning the fundamentals of engineering by making a suspension bridge with the blocks. Yet the freedom of play alleviates any pressure for performance and gives wings to children's sense of self-direction. And, singing a familiar song or verse, the teacher gently signals the transition from this activity to the next, which is ring time.

Transition periods themselves are important parts of the curriculum. As the teacher carefully and deliberately places the art supplies back in their rightful spots and washes the bowls and spoons used to prepare the snack, for instance, the children can absorb the teacher's sense of reverence and imitate the teacher's purposefulness. With the room returned to order, all gather together in a circle or ring.

Ring time is one part of the daily schedule when the children participate as a large group with the teacher directing their activity. They often begin with a morning verse, repeated daily to allow even the youngest children to pick up the language and rhythm with which it is recited. Ring time may involve movement, songs, poems, or finger plays. It is a dynamic yet predictable time of the morning when the children direct their learning inward as they enjoy the sense of community that comes from participating in a group.

Next the teacher leads the group outside, where the children are free to explore the natural world. They revel in the changing seasons, comfortable with the pleasures each one affords. Out of doors their senses are stimulated—the colors of the changing fall leaves, the smell of fresh-cut grass, the feel of mud between their toes, and the taste of sweet snowflakes on their tongues. Again, they will play and imitate as they busy themselves.

When children return to the classroom, they wash themselves and settle at the small tables and chairs for a snack. The teachers light a candle and they all join together in reciting a poem of gratitude. The snack that the children help to prepare is served and they enjoy each other's company as they nourish their bodies. They transition easily from snack to the circle again for the culmination of their morning together. It is at this time that they engage their fullest mental capacities as they visualize the story that the teacher presents to them. The teacher does not read from a book, but tells the story, being careful to include a rich vocabulary of imagery, assisting the young children in painting pictures in their minds. At the end of the story, the children will gather their things and leave the kindergarten with fairy-tale creatures dancing in their minds. This seemingly simple curriculum incorporates much content.

Enhancing Holistic Development

Waldorf strives to develop the whole child—not just intellectual capacities but a balance among all faculties.

Social development is stimulated and practiced through imaginative play. Conflicts arise and children must work through them and find a solution. The give-and-take of social discourse is learned also during snack time, as the children converse with one another.

Emotional development is supported in the close personal relationship that each child develops with the teacher and through friendships that the child builds with peers. The child learns to gain greater control of emotions with development as it occurs in an environment that is safe, secure, and free of stress. The child plays out situations and role-plays various emotions, internalizing appropriate actions to accompany feelings. It is also through the arts that the child cultivates knowledge of feelings. The entire Waldorf early childhood curriculum is infused with an artistic element. From the design and decoration of the classroom to the art experiences offered, the child learns to feel the colors and shapes. The child learns that art is a form of expressing what is inside.

Spiritual development is fostered through imitation of the teacher's reverence for childhood, nature, the materials in the classroom, and the food eaten for snacks. It is also learned through the sense of gratitude that permeates each aspect of the day. "Indeed, fortunate is the child who can thus imitate the very gestures and language of gratitude, thereby learning from early years to turn his attention to the source of the many and varied gifts of life, instead of concentrating on his own wants" (Pusch, 1993, p. 28). Steiner wrote often of the spiritual nature of children and the responsibility that adults have to respect and nurture this element of the child's development. Spiritual development manifests itself as social responsibility and concern for the world; the foundation for both of these concepts is laid in the community of the Waldorf kindergarten classroom.

The importance of self-regulation has been discussed previously. Children need to learn how to control their behavior and to make good decisions. Waldorf education is designed to lay these foundations for moral

development. “If the goal is responsibility, inner discipline, the willingness to do one’s share, and eventually the ability to give oneself direction and purpose in life, the soil for this blossoming will have to be prepared early in life” ([Pusch, 1993, p. 27](#)).

Physical development is nurtured through movement. Waldorf teachers recognize that young children learn through movement about spatial relationships and they internalize the essence of whatever they touch and move. Children are very active, and Waldorf teachers support this high level of activity throughout the morning. Significant amounts of time spent outdoors encourage large muscle movement and development, while the many artistic projects encourage fine-motor skills.

Intellectual development comes not from direct instruction but through self-regulated discovery and imitation. Young children should be building a love of learning that will inspire them to continue to seek knowledge throughout their lives. Best accomplished by respecting a child’s own pace and in anticipation of subsequent stages of development and education, teachers provide an enriching, stimulating environment that offers many opportunities for children to build a strong cognitive foundation.

Incorporating a Variety of Disciplines

Through the Waldorf curriculum of play, imitation, art, and stories, children also gain experience in a variety of disciplines. Many schools are struggling today to develop integrated curricula. Often teachers identify with their disciplines. Waldorf teachers, on the other hand, have always taught math, science, literature, the arts, and so on as part of an organized whole. The foundations for literacy and numeracy, for instance, are laid through everyday experiences such as puppet shows and setting the table for snack time. Science-related concepts are an inherent part of many activities, including cooking, with the tasks of chopping, measuring, pouring, and weighing. Problem-solving skills and divergent thinking are instilled through the use of simple open-framework toys that leave much to the imagination.

Maintaining Intellectual Integrity

A key component of the curriculum is intellectual integrity, which Steiner considered very important. Because young children imitate the actions of those around them, the teacher must provide actions that are worthy of imitation. The teacher models everyday tasks necessary for the care of the school and home, including mending and cleaning, cooking and washing. These are all valuable, purposeful tasks worthy of imitation. With the decline of family farms and the trends of city living, fewer children have quality model behaviors to imitate. They need real-life experiences, activities that foster a sense of satisfaction for a job well done.

Embracing Diversity

Waldorf education can be viewed as a model multicultural program because it easily adapts to the cultures and heritage of the children and community that it serves. Persons not familiar with Waldorf often have a difficult time understanding this, especially when they confuse Waldorf education with its Christian roots. In fact, the worldview or philosophy of anthroposophy, which guides Waldorf education, is not a religion at all. Anthroposophy promotes the idea that all human beings have a spiritual core, and it maintains harmony with many world religions and philosophies while eschewing the tenets of a religion. Anthroposophy per se is not taught in Waldorf education, but its influence can be seen in the curriculum and festivals. Many of the festivals are based around religious holidays—but not just Christian ones. Waldorf teachers are careful to delve “into diverse world cultures with as much reverence and depth as possible” ([Ward, 2001, p. 3](#)). The purpose of Waldorf education is to provide children with an “education toward freedom,” which is why the goal is to help children develop strong independent judgment. Rudolf Steiner believed that the best way to accomplish this is to expose children to a wide range of world religions and the values and traditions that they espouse. So the answer to the

question “Is Waldorf education Christian?” is “no.” This answer is based on the understanding that although stories from both the Old and New Testaments are introduced to children, and some plays and festivals are centered on biblical events, such experiences form only one set of influences in their studies of world cultures and religious traditions:

A more relevant and revealing approach is to ask: What image of the human being do the Waldorf schools seek to bring to the children as a model and inspiration? Here the answer is unequivocal. It is an image of the human being as loving, compassionate, reverent, respectful, engaged, tolerant, peaceful, joyful, patient, good, upright, wise, balanced, in harmony with the cosmos, nature and humanity. No religion or code of ethics can arrogate these fundamental and universal values as its unique possession. ([Ward, 2001, p. 3](#))

Numerous Waldorf schools are in countries all over the world. Each one is unique in its culture, language, and materials, but each one upholds Rudolf Steiner’s ideals. Tina Bruinsma, a teacher from Amsterdam supporting the Sloka, India, initiative, writes,

The Waldorf curriculum brings meaning to education. In an Indian context it can de-Anglicize the curriculum and promote the dignity of labour. Teachers and children come to the school with thirteen different mother tongues and seven different religions, and yet this form of education can embrace this diversity. In a country where education has come to mean merely performance, memory and competition bordering on rivalry, a Waldorf school brings with it the deeper meaning behind education. ([Oldfield, 2001, p. 28](#))

Ann Sharfmann, teacher trainer, Centre for Creative Education, Cape Town, South Africa, writes,

Our work is to prove that Waldorf education can happen in less affluent circumstances, such as the South African township environment. And it does, and it works! Definitely not at all like the European Waldorf kindergarten model, and definitely not yet at all as we want it to be. But we are making a difference in our own small way and we are being noticed. ([Oldfield, 2001, p. 21](#))

Introducing play kits of dolls, puppets, blocks, and other materials gradually allowed the children to enter different play worlds and experience their childhood in a new way. Ann Sharfmann continues:

In some classes, where the children have a daily ring time, stories, puppets and the opportunity to draw, model, paint, the difference is astonishing. ([Oldfield, 2001, p. 21](#))

The Waldorf curriculum, by its very nature, embraces diversity and creates a caring community.

How to Assess Children’s Learning

The purpose of the Waldorf ECE curriculum is neither to teach basic academics and test-taking skills nor to help prepare students to meet government-declared “standards” for various ages and stages or grade levels. In fact, standardized testing is not part of Waldorf education at any grade level. It is interesting to note, however, that many Waldorf graduates do pursue a college education and have performed well enough on the Scholastic Aptitude Test (SAT) to gain acceptance at such highly esteemed universities as Harvard and Yale ([Oppenheimer, 1999](#)). In fact, a recent survey based on the responses of about 550 Waldorf high school graduates in the United States and Canada and published by the Research Institute for Waldorf Education discovered that “94% of the graduates taking part in this survey reported having attended college” ([Gerwin & Mitchell, 2007, p. 7](#)).

Assessment is necessary even in the kindergarten to ensure that students are meeting the objectives of the curriculum. Waldorf teachers are very aware of the developmental progress of each of their individual students. So why and how do they achieve this without using conventional methods of assessment? The answer follows.

The purpose of Waldorf education is to foster in children a sense of individuality, self-esteem, and wholeness. Each day includes rich opportunities to develop all aspects of growth and learning—social, emotional, spiritual,

psychological, physical, and cognitive. Children learn through art and music and movement and exploration and experience, through rhythm and routine and gratitude and beauty. Children learn to respect one another and to find their strength in community, not competition. Traditional methods of assessment pit one child against another and create stress and feelings of self-doubt. Steiner wrote that each child is filled with potential; it is simply a matter of giving every child a nurturing environment and the freedom to unfold at one's own pace. This is respecting childhood. Waldorf teachers exhibit the patience of gardeners, taking a long view of education. They believe that when the seeds of learning are sown in fertile soil and tender shoots emerge, there will be a rich harvest when they all bear fruit at the end of the growing season ([Petrash, 2002](#)).

So many early childhood programs do not appreciate this process and rush children into learning for which they are not ready. Steiner warned against this:

Even though it is very necessary, particularly in modern civilization, for people to be completely awake later in life, it is just as necessary to allow children to live in their gently dreamy experiences as long as possible so that they grow slowly into adult life. They need to remain in their imaginations, in their pictorial capacities without intellectualism, as long as possible. In our modern civilization if you allow the child to be strengthened without intellectualism, children will later grow into the necessary intellectualism in the proper way. If you beat a child's brain ... you will ruin the person's soul for the remainder of life. ([Trostli, 1998, p. 113](#))

Waldorf education is based on the understanding that it is important for a child to develop a strong foundation and a love of learning as a prerequisite to developing necessary academic skills, which will come later when a child is ready.

In light of this perspective, the assessment of young children is approached very differently by Waldorf teachers. Rather than pressure students to meet predetermined standards of learning, teachers use Steiner's theory of child development as a guideline and adjust curriculum and instruction to the pace of each individual child. They focus on the whole child, on individual areas of strength and weakness, with the purpose of helping the child to develop into a well-balanced human being with a love of learning that will act as a motivator and guide throughout life. Waldorf kindergarten teachers gather information about each student's development and learning, but discreetly so as not to pressure the child. Teachers begin with perhaps their most valuable resource—parents. Parents are employed to give insight into the child's home life and experiences; the teacher will visit the child at home before the first day of kindergarten.

Classroom observation is perhaps the most frequently used tool to keep track of children's growth. ECE teachers are especially concerned with all areas of development and can learn much by simply observing a child during imaginative play. Insights into social development are apparent through interactions with other children. Play offers information about cognitive development and social-emotional well-being. In fact, it could be argued that true imaginative play is a window into the child's developmental state and well-being.

Once gathered from many sources and many situations, teachers use assessment data not to grade or scale the students but simply to develop a deeper understanding of the child so as to best facilitate development and learning in the classroom. Even in the upper grades, most Waldorf schools hold off giving letter grades as long as possible. Teachers take a more holistic, formative, and interpersonal approach to assessment. One teacher was observed to write a poem and draw a picture about each of her students at least once a year as part of her strategy of assessment. This method allowed the teacher to express creatively some of the traits that she was observing in her students and to encourage the development of other aspects of their characters. This type of assessment provides important educational information in a meaningful manner while encouraging a personal intimacy between the teacher and student ([Uhrmacher, 2007](#)).

The Waldorf Relationship with Families

Waldorf education is so integrally entwined with the family that the two cannot be separated. Waldorf educators

place great value on the role that parents play in their children's lives. Parental involvement and support have primary influence on a child's success, and when combined with a school's influence that promotes this dynamic, potential is tremendous. Teachers need the support of the parents; the parents need the support of the teachers. Education is seen as a partnership, with both parties working together to further the natural and holistic development of the child.

Developing a sense of community is an important goal of Waldorf education. For this reason, many Waldorf schools offer informational sessions for prospective parents. Parents are encouraged to learn how Waldorf schools approach education. They learn some fundamentals, receive applications, and then are invited to ask questions. This is often the beginning of a relationship of mutual respect between teachers and parents.

Given the deep reverence that Waldorf holds for the parental role, teachers naturally make every effort to further their connection with parents, to work together with them to develop goals for each individual child's learning, to share a sense of responsibility for the child's growth and development, and to strive for consistency between the home and school environments. This can only truly be accomplished through the continual communication between parent and teacher that is fostered by the welcoming nature of the Waldorf kindergarten. Frequent seasonal celebrations, parent education opportunities, and other events allow ample opportunity for parents and teachers to build their relationships and to share ideas and information within the community of the Waldorf school ([Oldfield, 2001](#)).

Waldorf education holds high standards for parents because much of a young child's learning occurs in the context of the home environment. With only part of the day spent in the kindergarten, parents are responsible for seeing that the important aspects of development are encouraged at home. Taking care to acknowledge parents' goals and choices for their children, Waldorf teachers also find themselves educating parents about Waldorf's goals for their students. An example that lends itself well to this topic is the issue of television. In the first stage of child development, from birth to 7 years of age, children learn best by doing, so they need ample time to move—run, jump, dig, climb, and explore. Critical also is protection from potentially harmful environmental influences. For these reasons, Waldorf educators encourage parents to limit their child's time spent in front of the television in favor of more appropriate activities that promote healthy development. Teachers also find that observing the parents and child at home is helpful, and this usually can be arranged.

As a matter of policy, Waldorf teachers make home visits before the first day of school to gain a sense of the environment that has been provided for the child as an infant, toddler, and preschooler and to learn what sources of imitation were made available to the child. This visit can provide much insight into the child's development. Being aware of the child's home life is considered just as important to teaching as being aware about what is done in the classroom ([Trostli, 1998](#)).

Waldorf and Other Approaches

The Waldorf approach to early education seems to possess certain distinct appeals and, arguably, compares very favorably with other well-known models. Certainly Waldorf has a great deal in common with developmentally appropriate practices (DAP) as set forth by the National Association for the Education of Young Children (NAEYC; [Copple & Bredekamp, 2009](#)). In [Table 17–1](#) we compare in summary form the

Table 17–1 Comparison of DAP Guidelines and Waldorf Education

DAP Guidelines	Waldorf Education
1. Creating a Caring Community of Learners	Waldorf Aspects of Community
The setting functions as a community of learners.	

- Consistent, positive relationships with adults and children further healthy development.
- Social relationships are an important context for learning.
- A safe and stress-free environment promotes community.
- Children thrive on organization and routine.
- Children's sensitivity to the environment.
- The importance of imitation and play.
- Benefits of mixed-age grouping.
- Establishing rhythm and routine.

2. Teaching to Enhance Development and Learning

- Teachers respect and value children.
- Teachers make it a priority to know each child well.
- Teachers create an intellectually engaging, responsive environment.
- Teachers foster collaboration with peers.
- Teachers use a variety of teaching strategies.
- Teachers facilitate the development of responsibility and self-regulation.
- Reverence, enthusiasm, and protection.
- Respecting and valuing children.
- Providing an engaging and responsive environment.
- Children's connection with sensory experiences.
- Collaborating with peers.
- Children learning through doing.
- Responsibility and self-regulation.

3. Constructing Appropriate Curriculum

- Curriculum provides for all areas of development.
- Curriculum includes a broad range of content across disciplines.
- Curriculum builds on what children already know and are able to do.
- Curriculum integrates across subjects briefly.
- Curriculum promotes the development of knowledge, understanding, processes, and skills.
- Curriculum content has intellectual integrity.
- Curriculum provides opportunities to support children's home culture and language.
- The curriculum goals are realistic and attainable.
- Technology is physically and philosophically integrated, when used.
- Constructing Appropriate Curriculum in Waldorf
- Nurtures the whole child: head, heart, hands
 1. Emotional
 2. Spiritual
 3. Moral
 4. Physical
 5. Intellectual
 6. Social.
- Incorporates a variety of disciplines.
- Maintains intellectual integrity.
- Embraces diversity.

4. Assessing Children's Learning and Development

- Assessment is ongoing, strategic, and purposeful.
- The content of assessments reflects progress toward important learning goals.
- Methods of assessment are appropriate to the age and experience of young children.
- Assessment is tailored to a specific purpose.
- Decisions are never made based on a single assessment device.
- Developmental assessments are used to identify needs and plan accordingly.
- Assessment recognizes individual variation and allows for differences.

Assessing Children's Learning and Development in Waldorf

- Nontraditional approach to assessment (e.g., Teacher poem about child).
- Freedom to unfold at own pace.
- Assessment of each child as an individual.
- Observation to gain insights into child's development.

5. Establishing Reciprocal Relationships With Families

- Reciprocal relationships require mutual respect.
- It is important to establish and maintain regular, frequent, two-way communication.
- Parents are welcome in the program and participate in decisions about their child.
- Teachers acknowledge parents' choices and goals for their children.
- Teachers and parents share knowledge of the child.
- The program involves families in assessing and planning for individual children.
- The program links families with a range of services.
- Developmental information about a child is shared among all with educational responsibility for that child.

Establishing Reciprocal Relationships With Families in Waldorf

- Parents welcomed at school from the beginning.
- Communication as a key element.
- Parents' role in child's development seen as critical.
- Promotes a community of families.

DAP guidelines with Waldorf early childhood education. Waldorf's approach contains features that qualify it as falling under the DAP orientation to the education of young children in all five categories: (1) creating a caring community of learners; (2) teaching to enhance development and learning; (3) constructing appropriate curriculum; (4) assessing children's learning and development; and (5) establishing reciprocal relationships with families.

Although in general correspondence is good between DAP and Waldorf under the five categories of program characteristics discussed in this chapter, DAP guidelines would appear to recommend a more differentiated approach to assessment than what is offered in Waldorf's nontraditional approach to assessment. An even more glaring discrepancy is found within the dimension of constructing appropriate curriculum, where DAP recommends or at least acknowledges the use of technology and urges its integration into a program. Indeed, mainstream ECE today recognizes the need to prepare future techno-citizens of the 21st century and has

computers in programs for young children. Waldorf bucks this trend. Computers, to be sure, are part of Waldorf education, but only with children and adolescents well past the early childhood years.

Nevertheless, Waldorf early childhood education has many redeeming virtues. The case can be made that Waldorf contributes to cognitive and social competence, even school readiness. Of course, school readiness would not be a priority in Waldorf ECE given its devotion to the integrity of childhood and the fact that children tend to stay in Waldorf throughout their school careers. Especially commendable, it would appear, is Waldorf's use of projects similar to the project approach and Reggio Emilia (see [Chapters 13](#) and [15](#)). Children in Waldorf ECE have a full hour of indoor and outdoor freedom to engage in fruitful learning encounters that usually take the form of long-term investigative activity. Moreover, like the Spectrum approach (see [Chapter 11](#) in the previous edition of this volume), diverse activities available in the curriculum stimulate various budding talent areas in young children, consistent with the notion of multiple intelligences. These program features can serve to enrich intellectual and social-emotional development in children by providing an engaging learning environment that fosters positive dispositions and work habits.

How Does Waldorf Approach Special Education?

Rudolf Steiner called special education by a different name altogether: curative education. The very name suggests a novel way of thinking about the education of children with special needs. The attitude toward these children is one of respect with the recognition that each person, whatever the disability, has something to contribute to society.

In curative education, an essential view is that a child's spiritual integrity remains intact regardless of the nature and severity of a disability that may be physical, sensory, mental, emotional or social, or a combination of any of these. The special child is viewed as in need of special soul care and the children are helped to cope with and overcome their disabilities in a carefully designed therapeutic setting in which their diverse and unique developmental, educational, and therapeutic needs can be met. ([Juil & Maier, 1992, p. 212](#))

Teachers work with these children "in need of special care" in residential schools or villages designed to create a humanistic and holistic environment. These communities cater to the needs of their members, in an attempt to reach the whole child: head, heart, and hands. Teachers work with children in an integrated setting, striving to achieve a balance within each child that will enable them to develop their abilities and work to overcome their disabilities. The curriculum is similar to that of a traditional Waldorf school but also includes therapeutic art activities, adaptive physical procedures, vocational training, and occupational experiences ([Juil & Maier, 1992](#)).

Waldorf ECE has been popular in the United States for affluent families that have children with disabilities, as well as for children born into difficult circumstances worldwide. Waldorf ECE is nondenominational, holistic, and based on a deep respect for children as people and a profound understanding of human development and worth. There would appear to be something intrinsically therapeutic about Waldorf ECE, with its homelike physical features (curtains, carpets, subdued lights and colors, simple and natural furniture, and so on), its emphasis on creative play and artistic expression, and its delicate order and reassuring rhythmical nature. Accordingly, Waldorf seems ideally suited for children experiencing anxiety and stress-related symptoms, such as refugee children who have lived in refugee camps, grown up in slums and poverty, or lived through conflicts rife with violence or war. Waldorf ECE reaches out to these children ([Oldfield, 2001](#)).

Criticisms of Waldorf Education

So far, we have highlighted the strengths and benefits of Waldorf education, but all models of education have critics. Thus we ask, what is being criticized about Waldorf? Certainly we can criticize Waldorf ECE for its neglect of technology. We also may see limitations in the way Waldorf views early literacy learning goals, or its laid-back approach to reading, or its nonchalant stance concerning assessment. These are valid concerns. However, other

valid or less-than-valid objections to Waldorf have also been advanced.

An organization named People for Legal and Nonsectarian Schools (PLANS) has created a Web site (www.waldorfcritics.org) that offers critics and “survivors” (of Waldorf schools) a forum to voice their opposition to Waldorf education. From the information available on this Web site, it is apparent that this group has very strong opinions about the Waldorf approach and that it is very outspoken in its concerns. Three major criticisms of Waldorf education seem to continually surface on the PLANS Web site: (1) Waldorf schools are religious schools, (2) Waldorf curriculum is based on Steiner’s anthroposophical theory, and (3) Waldorf schools do not inform parents of their philosophy or ties to anthroposophy.

The first complaint relates to the movement of Waldorf schools into the public school sector. “Waldorf-inspired” public and charter schools in the United States, critics feel, are a violation of the separation of church and state laws. Members of PLAN argue that the religion of anthroposophy and Rudolf Steiner’s spiritual beliefs are inseparable from Waldorf education and that any re-creation of Waldorf methodology in the public sector retains its anthroposophic roots and therefore is not acceptable. One example noted that changes being made to festivals celebrated in public Waldorf-inspired schools in an attempt to remove the religious nature are merely window dressings, leading critics to believe that the same “spiritually based” rituals are being performed under different names.

Another issue is the influence of anthroposophy on the curriculum as children are introduced to theories of history and science. Anthroposophy promotes some nontraditional ideas about the functions of the body’s organs, reincarnation, karma, and historical events, to name a few. PLANS claims that this is “pseudo-science” in Waldorf education—“crazy” anthroposophical ideas infiltrating the classroom. Proponents of Waldorf, however, hold the position that teachers study anthroposophy but do not teach it in the classroom.

Still another concern is that some parents are generally unaware of the philosophical beliefs surrounding Waldorf education, even intentionally kept in the dark by teachers who were unwilling to offer clear answers to their questions. The PLANS Web site (2008) also contends the following:

A huge amount of literature about Waldorf education has been produced within the closed system of Anthroposophy. Much of the available information fails to describe the spiritual mission of the Waldorf school system honestly. We have found that even experienced parents of Waldorf students usually know little about the Anthroposophical principles that determine the teaching methods and the Anthroposophical doctrine that permeates the curriculum.

As a rejoinder, parents who choose not to send their child to a public school have the responsibility of educating themselves about the philosophy of the school that they decide on for their child. Being informed about what a chosen school believes and how and what it teaches is the parents’ responsibility. Parents can find a great deal of information about Waldorf on the internet. They can also observe in the classrooms and talk with numerous teachers before the child is enrolled, limiting the chance of surprises later.

Can Waldorf Education Be Replicated in Public Schools?

This question is an important one to address with the popularity of this movement currently on the rise. With increasing attention on Waldorf education in the United States, many new initiatives have been undertaken for Waldorf-inspired elementary school programs. Bruce Uhrmacher, an education professor at the University of Denver, has written a very informative article on the topic of borrowing ideas from alternative education. He offers two important factors to consider when making a decision about using an idea from another model or approach to education: recognizing where ideas come from and reflecting on where ideas go ([Uhrmacher, 1993, 1997](#)).

First, the teacher must consider the context or framework from which to borrow and how that idea fits within that context. An example from Waldorf early childhood education might be the idea of providing a full hour of imaginative playtime at the beginning of the day. A teacher wishing to borrow this strategy and implementing it in the classroom must understand the philosophy behind its use in the Waldorf approach. The teacher must understand that Waldorf values childhood and sees imaginative play as one of the most important expressions of childhood. True play to Waldorf teachers means giving children the freedom to be self-directed, allowing their inner thoughts and ideas to manifest in truly creative ways. A teacher who does not recognize this may apply this concept in an inappropriate manner, perhaps by interrupting the children's play in an attempt to encourage teacher-directed learning, such as asking children to explain what they are doing or to describe the colors they are using when building with the blocks. In the eyes of a Waldorf teacher, this draws the children out of their play experiences and undermines the importance of what they are doing.

According to Uhrmacher (1997), it is also important for a teacher who is considering borrowing an idea to anticipate how the application of this new idea will affect the current curriculum. With any change to an established routine, disruptions may certainly be experienced. The teacher must carefully reflect on how this new idea will fit with personal philosophy and even the administration under which the program functions. Will the teacher have to compensate elsewhere to balance this new addition? These are all-important considerations and must be thoroughly addressed in advance. There is much debate about taking ideas from a particular approach to education and transplanting them in other programs. Some people feel that borrowing, when done properly, can be helpful and beneficial. Others feel that borrowing will always remove ideas from their intended context and cause inappropriate application.

In terms of Waldorf education, even Waldorf teachers are divided on this issue. Many feel that a Waldorf education has much to offer. If their particular methods of teaching are working for children, then why not encourage the widespread use of those methods, even if it means taking them outside of the Waldorf schools? On the other hand, many other Waldorf educators feel that these ideas will lose their meaning, and therefore their inherent value, when taken out of the context of the Waldorf schools. Teaching ideas based on Steiner's principles of child development are closely tied to the tenets of anthroposophy. Teachers fear that without this contextual framework, the ideas will not hold the same purpose or benefit to students. The strong spiritual aspect of Waldorf makes the transition to public schools nearly impossible because of the separation of church and state. Can there be Steinerian education without the spiritual aspect? Waldorf educators take varying stances on this hotly debated issue.

Nevertheless, many success stories exist regarding Waldorf-inspired public school programs in the United States. One was the Urban Waldorf School of Milwaukee, Wisconsin, opened in 1991 as the first public school to attempt to adapt Waldorf pedagogy as an effective model. This program was evaluated by seven educational researchers not affiliated with Waldorf ([Easton, 1997](#)). These researchers found that after three years of operation, the school successfully provided a safe, warm educational environment for inner-city children. Standardized test scores had risen dramatically and there was relatively little evidence of aggression, considering the violence and other negative social behaviors children were exposed to in their neighborhoods. Teachers were able to develop meaningful relationships with children, assisted them in negotiating misbehavior, and helped them in the development of cognitive learning strategies in preparation for good citizenship ([Easton, 1997](#)). Although this evidence suggests that this school was successful in meeting the needs of its students, questions remain. How well did it apply the Waldorf pedagogy? Was it the Waldorf influence that was responsible for the students' success or were there other factors? Perhaps a Hawthorne effect—a temporary and usually positive change to behavior or performance because of a change in environmental conditions—was operating.

Conclusion

Despite its humble beginnings in war-torn Germany, Waldorf has remained timeless in its philosophy and is every bit as dynamic and progressive today as it was in 1919. Waldorf ECE and best practices in ECE as epitomized in the DAP guidelines ([Copple & Bredekamp, 2009](#)) are closely aligned. Both seek an appropriate approach to ECE

based on an understanding of child development. Both value the child as an individual and respect the importance of childhood.

Furthermore, we feel that in many ways Waldorf may have even exceeded the standards set forth by the NAEYC, taking basic concepts to new heights through both application and attitude. For instance, while NAEYC addresses the whole child as physical, social, emotional, linguistic, aesthetic, and cognitive, Waldorf takes this wholeness to a deeper level by also considering a child's spiritual and moral development.

Currently, there are more Waldorf kindergartens than Waldorf grade schools in the United States, even though much of the published information tends to focus on Grades 1–12. Although having more information on the education of younger children from the Waldorfian perspective would be helpful, having research data from third parties are even more important for a comprehensive and fair analysis of the philosophy and developmental and educational ideas of Waldorf to our field of early childhood care and education. We do not pretend to cover this topic here, but it appears that a new interest is beginning to emerge in the area of empirical research ([Gerwin & Mitchell, 2006](#)). Much remains to be learned about Waldorf pedagogy in the early years. It seems an especially promising approach to educating young children, particularly in these troubled times and with the accelerating pace of our lives.

Reflect on

1. Why is the Waldorf model of education important today—or is it?
2. How are play, learning, and imitation different and/or similar in the Waldorf classroom and the home setting?
3. How alike and unlike are Waldorf's methods of fostering self-regulation compared to other models in ECE such as HighScope and Tools of the Mind?
4. Should spiritual development be part of the stated goals of ECE and early learning standards?
5. Can one argue that Waldorf ECE represents value added or an improvement over DAP guidelines?

Selected Resources web Sites of Interest

Alliance for Childhood

<http://www.allianceforchildhood.org>

Anthroposophical Society in America

<http://www.anthroposophy.org>

Association of Waldorf Schools of North America

<http://www.whyywaldorfworks.org>

European Council for Steiner Waldorf Education

<http://www.ecswe.org>

People for Legal and Nonsectarian Schools (PLANS)

<http://www.waldorfcritics.org/concerns>

Rudolf Steiner Archive

<http://www.rsarchive.org>

Rudolf Steiner College

<http://www.steinercollege.edu>

The Online Waldorf Library
<http://www.waldorflibrary.org>

The Steiner Books Spiritual Research Center
<http://www.steinerbooks.org/research>

Waldorf Early Childhood Association of North America
<http://www.waldorfearlychildhood.org>

Waldorf Homeschooling Sites
<http://www.waldorffamilynetwork.com>
<http://www.waldorfwithoutwalls.com>

Waldorf in Public Schools
<http://www.allianceforpublicwaldorfeducation.org>

Waldorf Materials Shopping Sites
<http://www.waldorfshop.net>

Waldorf-Related Blogs
<http://littlecornlearning.com>
<http://themagiconions.blogspot.com>

Waldorf-Related Online Magazines
<http://rhythmofthehome.com>
<http://thewonderofchildhood.com>

Waldorf Research Educators Network
<http://www.ecswe.org/wren>

International Waldorf Schools on the Internet

Southern African Federation of Waldorf Schools
<http://www.waldorf.org.za>

Steiner Schools in Australia (language: English)
<http://www.steiner-australia.org>

Steiner School in Italy (language: Italian)
<http://www.rudolfsteiner.it>

Steiner Waldorf Schools Fellowship in the United Kingdom and Ireland (language: English)
<http://www.steinerwaldorf.org.uk>

Swedish Waldorf Schools (language: Swedish)
<http://www.waldorf.se>

Books Related to Waldorf Education

The Harvest Craft Book, by T. Berger, 1992,
Edinburgh, Scotland: Floris Books.

Gnome Craft Book, by P. Berger and P. Berger,
1999, Edinburgh, Scotland: Floris Books.

Transformational Teaching: Waldorf Methods in the Public School, by M. Goral, 2009, London,
England: Rudolf Steiner Press.

Genius of Play, by S. Jenkinson, 2001, Gloucestershire, England: Hawthorn Press.

Nature Corner, by M. V. Leeuwen and J.
Moeskops, 1990, Edinburgh, Scotland: Floris Books.

Waldorf Songbook, by B. Masters, 1984, Edinburgh, Scotland: Floris Books.

Educating Through Art: The Steiner School
Approach, by A. Nobel, 1996, Edinburgh, Scotland: Floris Books.

What Is a Waldorf Kindergarten? by S. Oppenheimer, 2007, Great Barrington, MA: Steiner Books.

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