

## Primary School Teachers' Perceptions of Digital Storytelling in the Home-Based Learning During the Pandemic

Yee Bee Choo, Faridah Mohd Sopah, Salbihana Samsudin, Halif Md. Saleh and Vijayan Periasamy

Institute of Teacher Education Tun Hussein Onn Campus

\*beechoo.yee@iptho.edu.my

### ABSTRACT

*The 2019 Coronavirus (Covid-19) pandemic has resulted in the closure of all schools in Malaysia and forced all teachers to conduct Home-based Learning (HBL) for their students. This resulted in a change of teacher practice in terms of pedagogy as they need to implement online teaching in the pandemic era. Storytelling is a teaching method commonly practiced by the teachers in the classroom and now teachers have to resort to digital storytelling due to the pandemic. This pilot study aimed to find out the teachers' perceptions towards the use of digital storytelling in conducting HBL during the pandemic. This study utilised a survey on the demography, teachers' experience in using digital storytelling, the common methods and the challenges in digital storytelling among a group of primary school teachers. The sample involved 38 teachers from two primary schools in the state of Johor and the instrument was a questionnaire distributed through Google Form. The data were analysed descriptively and the findings showed that the overall level of teachers' experience of using digital storytelling was low ( $m = 2.24$ ) and the three challenges that were faced the most by the teachers were internet problem, lack of technological skills and the need to finish the school syllabus. This study suggests teacher readiness as one of the important elements in helping teachers and students adapt to the new learning environment during the pandemic. The implications are the planning and implementation of university and teacher education programmes and courses or training that focus on pedagogy and skills in the use of digital storytelling for prospective teachers and school teachers.*

**Keywords:** Digital storytelling, home-based learning, teacher perceptions, primary school, the pandemic

### 1. INTRODUCTION

The sudden outbreak of Covid-19 has affected and changed the teaching practice among the teachers. In schools, the mode of learning has changed from face-to-face in the classroom to home-based learning through digital platforms. Students learn from home without meeting their teachers in the physical classroom to continue learning even though their schools were closed. Since then, home-based learning (HBL) has received tremendous attention worldwide due to the COVID-19 pandemic in 2020 (Wen, Gwendoline, & Lau, 2021). Thus, the purpose of this study was to identify the teachers' perceptions toward the use of digital storytelling in conducting HBL.

## 2. LITERATURE REVIEW

HBL is not new; it includes home-schooling where parents are primarily responsible for their child's education and distance education (Harding, 2011). Originally, HBL is the practice of parents or guardians taking responsibility for the education of their school-age children outside of the conventional school system (Conradie, 2016). The wide use of Information and Computer Technologies (ICT) and the influence of the pandemic give new meaning to HBL, which refers to the practice that takes place when the teacher and students are in separate locations but learning occurs with ICT tools (Wen et al., 2021). Currently, the teachers and students need to adopt the new normal and the online learning mode for HBL continues to go on for all subjects in schools.

The new normal has resulted a changed situations and environments for the learning mode from traditional face-to-face (FTF) in the classroom to online learning through digital platforms. Online learning can be divided into two types namely synchronous and asynchronous learning (Shoepe, et al., 2020). Synchronous distance learning refers to a learning activity that students and instructors are engaging in learning at the same time. In such environment, the teacher often uses audio and/or video teleconferencing, virtual classrooms, and instant messaging (Ruiz, Mintzer, & Leipzig, 2006). In synchronous learning, teachers and students are in a virtual place at the same time. It is similar to face-to-face classes that allow teachers and students to participate and learn in real time and engage in live discussions. An example of face-to-face synchronous learning is when teachers and students use web conferencing tools such as Google Meet or Zoom. It creates a virtual classroom that allows students to ask questions and teachers to answer them instantly. However, this face-to-face synchronous learning requires a strong and stable internet network. Otherwise, students will be dropped from the virtual classroom and unable to follow the class fully. Therefore, it is a disadvantage of synchronous learning. Synchronous learning can also be implemented non face-to-face where teachers and students participate at the same time without meeting. For example, by following a regular and consistent schedule, teachers work together with students to guide them in completing assignments or tasks in the Google Classroom.

In contrast, asynchronous learning is online or distance education that does not happen in real time, and the teacher applies email and online discussion boards to conduct interaction (Ruiz, Mintzer, & Leipzig, 2006). Teachers are not together with students and students complete assignments or tasks on their own at any time. It uses resources such as email, online discussion boards, Wikipedia, and blogs. It uses Information Management System (Learning Management System) such as Blackboard, Moodle, Schoology, Google Classroom to send information and course notes, instructional videos and articles for students to read. It also supports online interaction, which allows teachers and students to organise discussions through forums, send and reply to messages, and upload and access resources that facilitate information sharing. This asynchronous learning is sometimes complemented by synchronous learning, including text and voice chats, phone conversations, video conferencing, and even meetings in virtual spaces like Google Meet. Overall, asynchronous learning provides advantages such as convenience, flexibility, more interaction and continuing personal and professional life responsibilities.

While the majority of teachers are willing to implement online learning mode by using resources and materials available on the Internet, they face various challenges especially the internet connectivity and students' difficulty to understand the content of the subject (Chung, Subramaniam & Dass, 2020). There are also teachers who lack the knowledge and skills in conducting online learning though the integration of salient new technologies is one of the underlying pedagogical principles in the Malaysian primary school syllabus (Ministry of Education, 2013). The pandemic has now put much emphasis on incorporating digital tools in teaching and learning strategies in HBL.

Since the pandemic, the need to migrate from traditional classrooms to online systems was urgent, and the shift required digital tools and resources to support teaching (Careaga-Butter, Badill, & Fuentes-Henrique, 2021). Storytelling is a teaching method commonly practiced by the teachers in the classroom and now teachers have

to resort to digital storytelling due to the pandemic. Digital storytelling incorporates arts, which includes literature and children's literature, by utilising technological tools in the teaching and learning of English. According to McLellan (2006), digital storytelling is "the art and craft of exploring different media and software applications to communicate stories in new and powerful ways using digital media" (p. 66). It is believed that this strategy will help students to learn English while increasing their motivation in learning the language.

Digital storytelling derives its power through weaving together images, music, narrative and voice in order to give deep dimension and vivid colour to characters, situations and insights (Dalim et al., 2019). Digital storytelling in educational setting is a process of creating short stories which allows students and educators to boost up their skills such as information gathering and problem-solving skills (Robin, 2008). During the pandemic, teachers use different methods of digital storytelling. Some teachers tell the stories verbally through Google Meet. They might do so with the aid of a story book and PowerPoint presentation. There are also some teachers who record their voice and send the audio to the students while others found a video in MP4 and on YouTube that they share the video and YouTube link to their students. Some teachers have even gone to the extent to create their own videos using Tik Tok, YouTube and other social media platforms.

In using digital storytelling among primary school students in the local setting, the potentials identified were positive for this strategy. Yee, et al. (2017) found that it enhanced student learning through increased understanding, active participation and increased motivation. Dalim and her colleagues (2019) had conducted a survey on a group of 150 pre-service teachers and found that they had moderately experienced the use of digital storytelling in their learning and they responded positively towards the use of it in the classroom. However, there is a lack of local studies in using the digital storytelling strategy among primary school teachers. Therefore, this study was conducted with the formulation of the following research questions:

1. What are the common methods of digital storytelling used by the teachers in HBL during the pandemic?
2. What are the challenges faced by the teachers in using digital storytelling in HBL during the pandemic?

### **3. METHODOLOGY**

The pilot study employed a survey research design which was mainly quantitative in nature. According to Creswell (2014), a survey is used to determine individual opinions about policy issues and this study investigates the teachers' views and opinions regarding the use of digital storytelling in the HBL during the pandemic. A total of 38 teachers were involved as purposive sampling. They were from two primary schools located in the state of Johor.

#### **3.1 INSTRUMENTATION**

A questionnaire was used as an instrument for this study and the items were formulated in three parts. The first part requested demographic information from the respondents about their gender, age level, and teaching experiences at school. The second part consisted ten items examining the teachers' common methods of digital storytelling in four-Likert scales "Never", "Seldom", "Sometimes", and "Always". The third part consisted of nine items on the challenges they faced in implementing HBL. They could also write other challenges if they had found others that were not listed in the questionnaire.

After constructing the questionnaire, the content validity was checked after consultation with two experts who were experienced in teaching technology. The questionnaire was formulated in a Google Form and administered through an online link to the respondents. They were requested to answer the online questionnaire. After the researchers received the online responses through Google Form, the results of the questionnaires were downloaded as Excel spreadsheet. The data collected were analysed based on the frequency and percentages of the items. The software used for data calculation is the Statistical Package for Social Science (SPSS) software.

#### 4. RESULTS AND DISCUSSIONS

The findings of this study are divided into three parts: (1) demographic profile of the teachers; (2) teachers' use of the methods of digital storytelling, and (3) the challenges they face in implementing HBL.

##### 4.1 Demographic Profile

There were 38 teachers who responded to the online questionnaire. Table 1 indicates the general demographic data of the teachers.

Table 1: Demography of the Respondents

Demography	Category	Frequency	Percentage (%)
Gender	Male	13	34.2
	Female	25	65.8
Age	Less than 25 years old	0	0
	26-30	3	7.9
	31-35	3	7.9
	36-45	13	34.2
	46-50	8	21.1
	51-55	7	18.4
	More than 55 years old	4	10.5
Teaching Experience	Less than 5 years	2	5.2
	6-10 years	5	13.2
	11-15 years	8	21.1
	16-20 years	7	18.4
	More than 20 years	16	42.1

Table 1 shows that there were 38 respondents involved in this study. The majority were female teachers (65.8%) compared to male teachers (34.2%). Most of them were from the middle age group of 36-40 years old (34.2%), followed by 46-50 years old (21.1%). This shows that the majority of the teachers were senior teachers and there was no young teachers who were younger than 26 years old. There were 42.1% of teachers who have more than 20 years of teaching experiences, followed by 11-15 years (21.1%) and 16-20 years (18.4%). This indicates that most of the teachers are experienced teachers who had taught in the school for more than 10 years.

##### 4.2 Teachers' Overall Use of Digital Storytelling

The survey questionnaire was formed in four-Likert scales of 1 (Never), 2 (Seldom), 3 (Sometimes), and 4 (Always). Table 2 shows the mean score of the teachers use of digital storytelling.

Table 2: Teachers' Use of Digital Storytelling

Methods of Digital Storytelling	Mean
1. Verbal Storytelling in Google Meet	2.58
2. Verbal storytelling using storybook in Google Meet	2.16
3. Verbal storytelling using PowerPoint presentation in Google Meet	2.11
4. Using self-created video on own YouTube channel	1.92

5. Using others' videos on YouTube	2.76
6. Use self-created video in MP4	1.63
7. Use others' video in MP4	2.29
8. Use own voice recording	2.39
9. Use others' voice recording	2.24
10. Use others' PowerPoint slides	2.32
<b>OVERALL MEAN</b>	<b>2.24</b>

Based on the results in Table 2, the overall mean for teachers to use digital storytelling in the classroom was low at 2.24 as it was closed to 2 which was "seldom". The most common method was using others' videos on YouTube (mean = 2.76) and verbal storytelling in Google Meet (mean = 2.58) while the least common methods was using self-created video on YouTube (mean = 1.92) and using self-created video in MP4 (1.63).

### 4.3 Teachers' Common Methods of Digital Storytelling

Table 3 presents the results of the teachers' common methods of digital storytelling in the survey scale ranged from "Never", "Seldom", "Sometimes" and "Always" in frequency and percentages.

Table 3: Teachers' Common Methods of Digital Storytelling

Methods of Digital Storytelling	Never		Seldom		Sometimes		Always	
	n=38	%	n=38	%	n=38	%	n=38	%
1. Verbal Storytelling in Google Meet	7	18.4	6	15.8	21	55.3	4	10.5
2. Verbal storytelling using storybook in Google Meet	12	31.6	11	28.9	12	31.6	3	7.9
3. Verbal storytelling using PowerPoint presentation in Google Meet	12	31.6	11	28.9	14	36.8	1	2.6
4. Using self-created video on own YouTube channel	20	52.6	5	13.2	9	23.7	4	10.5
5. Using others' videos on YouTube	6	15.8	6	15.8	17	44.7	9	23.7
6. Use self-created video in MP4	25	65.8	4	10.5	7	18.4	2	5.3
7. Use others' video in MP4	10	26.3	12	31.6	11	28.9	5	13.2

8. Use own voice recording	12	31.6	6	15.8	13	34.2	7	18.4
9. Use others' voice recording	10	26.3	13	34.2	11	28.9	4	10.5
10. Use others' PowerPoint slides	12	31.6	8	21.1	12	31.6	6	15.8

Table 2 shows the results of the teachers' use on the ten methods of digital storytelling. In comparing the methods, they used for digital storytelling, it was found that the majority of them (52.6%) had never used self-created video on own YouTube channel. 34.2% had seldom used others' voice recording, 55.3% had sometimes used verbal storytelling in Google Meet, and 23.7% had used others' videos on YouTube.

#### 4.4 Challenges During the Implementation of HBL

The teachers also responded on the challenges they faced during the implementation of HBL and Table 4 shows the results in mean score according to the Likert Scale 1 (Strongly disagree, 2 (Disagree), 3 (Somehow agree), 4 (Agree), and 5 (Strongly agree).

Table 4: Challenges on the Use of Digital Storytelling

Challenges of the Use of Digital Storytelling	Mean
1. Time constraint	3.55
2. Internet connection	4.11
3. Lack of skills in using digital storytelling	3.47
4. Lack of technological skills	3.70
5. Lack of confidence	3.31
6. Lack of resources	3.36
7. The need to finish the syllabus	3.68
8. Lack of exposure to digital storytelling	3.66
9. Digital storytelling is not suitable for the subject taught	3.34

Based on Table 4, most teachers somehow agreed that they faced the nine challenges in the questionnaire. They faced the most challenges in internet connection (mean = 4.11), followed by lack of technological skills (mean = 3.70), and the need to finish the syllabus (mean = 3.68).

As a face-to-face digital synchronous learning tool and the Ministry of Education had sponsored all teachers with Google account, Google Meet was the only digital tool used by teachers to meet their students virtually at the same time. However, unstable internet problem has often hampered HBL especially in rural areas. There are some remote areas that do not have internet connection at all while the internet coverage at some areas was not strong that the students left Google Meet and then re-entered a few times during HBL. So, student attendance in Google Meet was unsatisfactory because it required a stable internet connection.

To avoid internet problems, the teachers used non face-to-face synchronous learning more than face-to-face. Yet, the teachers also faced other challenges such as student participation, financial problems of family who do not have enough gadgets for all children and insufficient internet data. Low socio-economic background results

in students not having or not having enough cell phones if there are other siblings in the family who also need to do HBL. Thus, the lack of student participation was mainly due to internet and family financial problems.

In the findings by Mansor et al. (2021), the in-service teachers' level of readiness was at a high level during the implementation of HBL. However, the teachers' use of digital storytelling in this study was low, which shows a contradicting result to Mansor, et al.'s study. This might be due to the age level of most of the teachers involved in this study that was in 36-50 years old. Teachers at this age were not born in a digital age and were not exposed much to the use of technology during their university studies. Thus, they were less in practicing digital storytelling especially in creating self-made videos for HBL. However, these teachers suggested in the Google Form to attend a course or workshop about it in future. Though they lack the knowledge and skills in using digital storytelling, they showed their readiness to accept the change to online teaching practice.

Undeniably, not all the teachers are ready for change from face-to-face context to online contexts in a short time and some are not ready in pedagogy and emotional competence in order to conduct online teaching and learning (Careaga-Butter, Badilla & Fuentes-Henríquez, 2021). Sheingold and Hadley (1990) found that the teachers' initial perception technology integration which is difficult, time consuming and resource intensive endeavor and cause more trouble had significantly been improved after they had their own experiences with digital storytelling. Therefore, this study proposes the wide use of digital storytelling as an essential teaching and learning strategy in the HBL during the pandemic.

## **5 CONCLUSION**

The teaching profession is a noble occupation and very important in the process of human capital building. This Covid-19 pandemic has prompted teachers to resort to online teaching practices in the HBL. HBL is not only about bringing the classroom into homes but also an alternative teaching and learning approach with the access to learning materials and interaction. Despite the challenges in implementing HBL, teachers are encouraged to adopt the changed learning mode for HBL in the new normal. This study focuses on the use of digital storytelling and the findings show that the level of teachers' use was low while the most common method they preferred was verbal storytelling in online platform. The implications are the planning and implementation of teaching programmes and courses or training by the MOE, teacher education institutes and universities that focus on pedagogy and skills in the use of digital storytelling for pre-service and in-service teachers.

The study was conducted only in two primary schools and involved a limited number of respondents. With this, the next suggestion is that this study can be further extended to other educational institutions and universities and a bigger sample in order to be able to do the identification of specific patterns of teaching practice as a whole. In this way, we are able to identify consistent patterns in online teaching practice in designing programmes and courses from time to time.

## **ACKNOWLEDGEMENTS**

The research is funded by Institute of Teacher Education Malaysia under *Dana Inisiatif Aktiviti Kesarjanaan Institut Pendidikan Guru (DIKIPG)* 2021.

## **REFERENCES**

- Careaga-Butter, M., Badilla Q., & Fuentes-Henríquez, C. (2021). Critical and prospective analysis of online education in pandemic and post-pandemic contexts: Digital tools and resources to support teaching in synchronous and asynchronous learning modalities. *Aloma*, 38(2), p. 23-31.
- Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online learning readiness among university students in

- Malaysia amidst COVID-19, *Asian Journal of University Education*, 16(2), 46–58. Retrieved from <https://eric.ed.gov/?id=EJ1267359>
- Conradie, S. M. (2016). *Home-based learning support groups in Western Australia: an interpretivist study* (Doctoral dissertation, the University of Western Australia, Perth, Australia). Retrieved from <https://research-repository.uwa.edu.au/en/publications/home-based-learning-support-groups-in-western-australia-an-interp>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Dalim, S.F., Muhamad Azliza, N.Z., Ibrahim, N., Zulkipli, Z.A., & Mohd Yusof, M.M. (2019). Digital storylling for 21<sup>st</sup> century learning: A study on pre-service teachers' perception. *Asian Journal of University Education*, 15(3), 226-234.
- Harding, T. J. A. (2011). *A study of parents' conceptions of their roles as home educators of their children* (Doctoral dissertation, Queensland University of Technology, Queensland, Australia). Retrieved from <https://eprints.qut.edu.au/40931/>.
- Mansor, A.N.; Zabarani, N.H.; Jamaludin, K.A.; Mohd Nor, M.Y.; Alias, B.S.; Mansor, A.Z. Home-Based Learning (HBL) Teacher Readiness Scale: Instrument Development and Demographic Analysis. *Sustainability* 2021, 13, 22-28. <https://doi.org/10.3390/su13042228>
- McLellan, H. (2006). Digital storytelling in higher education. *Journal of Computing in Higher Education*, 19(1), 65-79.
- Robin, B. R. (2008). Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom. *Theory into Practice*, 47, 220-228. <http://dx.doi.org/10.1080/00405840802153916>
- Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical education. *Academic Medicine*, 81(3), 207–212. doi:10.1097/00001888-200603000-00002
- Sheingold, K., & Hadley, M. (1990). *Accomplished teachers: Integrating computers into classroom practice*. Center for Technology in Education, Bank Street College.
- Shoepe, T. C., McManus, J. F., August, S. E., Mattos, N. L., Vollucci, T. C., & Sparks, P. R. (2020). Instructor Prompts and Student Engagement in Synchronous Online Nutrition Classes. *American Journal of Distance Education*, 1-17. <https://doi.org/10.1080/08923647.2020.1726166>
- Wen, Y., Gwendoline, C.L.Q., & Lau, S.Y. (2021). ICT-Supported Home-based learning in K-12: a Systematic review of research and implementation. *TechTrends*, 65, 371–378. <https://doi.org/10.1007/s11528-020-00570-9>
- Yee, B. C., Abdullah, T., & Mohd Naw, A. (2017). Using digital stories to promote students' learning and understanding of poems in secondary school. *Sains Humanika*, 9 (4-2), 59–64. <https://doi.org/10.11113/sh.v9n4-2.1360>