

Comparison of Gender Learning Effectiveness Through Video Clips Among Business Students

Dominic Wong¹

¹ Tunku Abdul Rahman University College (TARUC) * wonght@tarc.edu.my

ABSTRACT

Learning is important for students to build their foundation of knowledge that they can utilise in their future careers. Learning through videos is considered effective tools for many students, the topic was well reviewed by many researchers. This paper is also going to explore the learning effectiveness of video in teaching business related topics and will also include suggestions to improve teaching using video clips. Some studies have indicated the trait differences between male and female students in e-learning. The researcher will explore perceptions of video learning effectiveness between male and female students.

Keywords: Video Learning, Effectiveness, Business Students, Gender

1. INTRODUCTION

Learning is important for students to build a foundation of knowledge they can utilize in their future careers. Learning via videos is considered an effective tool for many students, as the topic was well reviewed by many researchers. Kay (2012) discovered that videos were indeed good for improving students' learning ability. Apart from Kay, other studies had also revealed that videos were good for supporting students in learning (Ljubojevic, Vaskovic, Stankovic & Vaskovic, 2014; Hsin & Cigas, 2013).

The purpose of this paper is to explore the learning effectiveness of using videos in teaching business related topics. A comparison is also done to observe the difference in perceptions of learning effectiveness between male and female students.

2. LITERATURE REVIEW

2.1 Video Learning

Based on the study by Ljubojevic et al. (2014), students performed better when videos were included in the mid-session of the lecture. López, Ferrando and Fabregat-Sanjuan (2016) also found out that students found the videos and clips to be the most useful and efficient teaching tool to improve learning. Brecht (2012) found out that videos and clips designed to support tutoring had a significant result. In addition, Geri (2012) indicated about 94% of the students might improve their understanding of the learning materials via watching videos.

Besides, video lectures seemed to be a good tool to enhance distance learning, as Geri (2012) found out that students who failed would still continue their studies after an introduction to video materials. In another study, Copley (2007) mentioned that video lectures might reduce loneliness and increase the attention span of the distance learners.

Besides, the inclusion of videos in learning was also beneficial in tests or examinations (Beheshti, Taspolat, Kaya & Sapanca, 2018). Ljubojevic et al. (2014) conducted a research based on the inclusion of videos and clips into lectures and impacts on students' test results. It seemed that it did affect the results in a positive way. In another setting by Hsin and Cigas (2013), they also found out that more students passed the course after having videos as part of the course. In another study, students responded that the summary videos produced were useful for their exam revisions (Whatley & Ahmad, 2007). An encouraging result was found by Brecht & Ogilby (2008), failed grades were reduced by 72% after the learning videos were available.

Kay (2012) did a thorough research on learning effectiveness through videos. She found out that video-based learning did bring benefits in understanding, motivation in learning, improving study habits and better grades. In another research by Zhang, Zhou, Brigss and Nunamaker (2006), they found out that videos do play a role in the satisfaction level of learners towards e-learning. In a nutshell, the inclusion of videos and clips in learning have positive learning outcomes.

Brame, the assistant director of Center for Teaching in Vanderbilt University (2016) stipulated that in order to create effective video-based learning, she listed out a few suggestions to improve video-based learning. These were her suggestions;

- 1. Displaying key information (signaling).
- 2. Segmenting the video clip into smaller pieces (segmenting)
- 3. Elimination of extraneous information (weeding)
- 4. Matching the process of both audio and visual channel to convey information (matching modality)
- 5. Making materials that are relevant for a particular class.

In addition, Bell and Bull (2010) also mentioned that teachers needed to actively participate in controlling the video session such as pausing, asking questions, replaying key segments and assessing understanding. If teachers were not around to control the video and clips, the students' understanding of the videos might be hampered (Bell & Bull, 2010).

In a nutshell, as the few studies indicated above have already identified the effectiveness of learning via video, the rest of this paper is going to explore the learning effectiveness of videos in teaching business related topics and will also include suggestions to improve teaching using videos and clips.

2.2 Gender And E-Learning

Video is an important aspect in e-learning, the difference of gender traits in e-learning may be used to gauge the differences in video effectiveness between male and female. In terms of gender studies, Kramarae (2001) found out that there were more married female learners who preferred e-learning due to its flexibility that allowed them to juggle family, studies and work commitments. In addition to the preference of female students towards online learning, there were also studies that confirmed that female students had different motivational factors than male students.

In other gender studies in online participation and preference, various studies established that more females are keen on e-learning and a significant higher number of females are enrolled in e-learning programmes (Willging & Jonhson, 2004; Qureshi, Morton & Antosz, 2002; Halsne and Gatta, 2002; Evans & Haase 2001). Sullivan (2001) found that there were significant differences between the way male and female students in the strengths and weaknesses of the online environment related to topics in flexibility, face-to-face interaction, shy and quiet students, self-discipline, and self-motivation.

Female students were found to be more confident and academically inclined when using online as a learning platform. They preferred more care in tutoring and they had different interaction styles compared with male students and ultimately performed better than male students (Yukselturk & Bulut, 2009; Price, 2006). In Malaysia, it was concluded that more female learners were keen in e-learning compared to male students (Mahmod et al., 2005). Therefore, this leads to the research objective as above, will the female students display different perceptions in video learning effectiveness?

3. RESEARCH METHODS

The researcher is conducting this research via questionnaire. In particular, Google Form will be used as the main tool in soliciting answers from students. Students can answer anytime and anywhere as Google Form can be accessed in any Internet browser such as Chrome and Safari via mobile devices or desktop computers. However, for this paper, the researcher is only focusing on learning effectiveness. Questions are focused on learning effectiveness and videos can explain a concept easily, to make it easier for students to understand and that video learning is more interesting.

Respondents are different groups of business students in university or colleges, and may come from diverse business streams such as accounting, business management, entrepreneurship, human resource, marketing etc. The researcher is currently utilising video clips in most lectures (i.e. once or twice per lecture), video clips are usually played in the middle of the lecture sessions or when certain concepts need to be explained. Hence, this paper served as an explorative research to gauge basic effectiveness of video learning based on utilising videos in teaching and therefore the sample is still small but the researcher intends to collect more than 100 responses from students. Respondents are solicited from the university that the researcher is currently working i.e. Tunku Abdul University College.

For the current paper, the researcher is going to analyse the learning effectiveness of video learning using descriptive statistics such as mean and percentage. The researcher is further categorising the learning effectiveness based on different gender, in this aspect, the researcher is using T-Test analysis to check the significant difference between male and female students (Sekaran & Bougie. 2016).

4. RESULTS AND DISCUSSION

4.1 Demographics Analysis

Based on the Google Form's response page, the researcher collected 221 responses from students. Refer to Table 1, respondents are mostly female with 56.6% (n=125) and 43.4% are male (n=96). Most respondents are young adults below 31 years old in which the percentage of students below 26 years old is 97.3%. One hundred and ninety-four (87.78%) respondents are currently studying bachelor's degrees and while only 27 (12.22%) are studying postgraduate degrees.

	Details	Number	%
Gender	Male	96	43.4
	Female	125	56.6
	Total	221	100
Age Groups	18-20	63	28.5
	21-25	152	68.8

Table 1: Demographics of Respondents

	26-50	6	2.7
	Total	221	100
Degree Level	Bachelor	194	87.78
	Postgraduate	27	12.22
	Total	221	100

4.2 Overall Learning Effectiveness Analysis

Table 2: Video Learning Effectiveness

Variable	Stro	ngly	Disa	gree	Mod	lerate	Agre	е	Stro	ngly	Std.	Mean
	Disagree (1)		(2)		(3)		(4)		Agree (5)		Dev	
	No.	%	No.	%	No	%	No.	%	No	%		
Explain A Topic/Concept	1	0.5	8	3.6	48	21.7	106	48	58	26.2	0.82	3.96
Understand The Topic/Concept	1	0.5	6	2.7	52	23.5	112	50.7	50	22.6	0.78	3.92
Makes The Topic/Concept More Interesting	1	0.5	5	2.3	49	22.2	88	39.8	78	35.3	0.84	4.07
Enhances/Enrich es The Topic That The Lecturer Taught	0	0.00	7	3.2	46	20.8	108	48.9	60	27.1	0.78	4.00
Think About Related Issues Of The Topic That The Lecturer Taught	1	0.5	6	2.7	53	24	108	48.9	53	24	0.79	3.93

From Table 2, video clips seemed good enough to explain topics/concepts to students, and a vast majority of students (i.e. 74.2%, n=164) agree on this matter with a mean score of 3.96. Similarly, video clips are great in helping the students to understand the topic/concept, and again the mean score is near to 4 (mean=3.92) and 73.3% of students agree that video clips enhance their understanding. Learning via videos also makes the topic more interesting and students like this, about 75% of students agree on this with a mean score about 4.1 (mean=4.07). While the second highest mean score is that video clips enrich the topic that the lecturer is teaching, its mean is at 4.0 level with 76% of students agreeing on this matter. Last but not least, students think positively that videos and clips can enable students to reflect more on relevant topics that the lecturer taught with a mean score of 3.93 and again about 73% of students agree on this benefit.

From the above analysis, in overall, the result is consistent with the study of López, Ferrando and Fabregat-Sanjuan (2016), students here also feel videos clips are the most useful and efficient teaching tool to improve learning. In addition, Geri (2012) indicated about 94% of the students might improve their understanding of the learning materials via watching videos while in this study, 74% of students agree on the same statement. From the previous study, Kay (2012) found out that video-based learning did bring benefits in understanding and motivation in learning, so the video clips in improving understanding is proven again here. Moreover, video clips making the concept more interesting is mostly agreed by students and therefore it seems this also links to the finding that video clips improves motivation in Kay's study.

Variables	Male	Female	P value
Explain A Topic/Concept	3.99	3.94	0.63
Understand The Topic/Concept	3.93	3.92	0.95
Makes The Topic/Concept More	4.05	4.09	0.75
Interesting			
Enhances/Enriches The Topic That	3.98	4.02	0.73
The Lecturer Taught			
Think About Related Issues Of The	3.91	3.95	0.67
Topic That The Lecturer Taught			

4.3 Comparison of Gender Analysis

Table 3: Comparison of Video Learning Effectiveness

None of the variables shows the difference between the male and female students since all p values are above 0.05. Both groups agree on the effectiveness of learning through video and clips, and all variables are near to 4 which is at the agreed level.

5. CONCLUSION

All in all, it's clear that students perceive the benefits of learning through video clips especially in understanding and enriches the teaching topic and even makes the topic more interesting. The overall finding is definitely consistent with previous research by López, Ferrando and Fabregat-Sanjuan (2016), Kay (2012), Ljubojevic et al. (2014) as well as Hsin & Cigas (2013) that using videos in teaching does improve students' learning capability.

A simple comparison between male and female students' perceptions towards the learning effectiveness and improvements is also conducted in which they are indifferent in all variables. However, in many other gender studies in online participation and preference, various previous studies established that more females are keen on e-learning and a significant higher number of females are enrolled in e-learning programmes (Willging & Jonhson, 2004; Qureshi, Morton & Antosz, 2002; Halsne and Gatta , 2002; Evans & Haase 2001). Perhaps, video clip is just a subset of e-learning and therefore male and female students do not have indifference in this learning tool.

However, this research did not include performance as a dependent variable for measuring video learning effectiveness. Perhaps this can be used in the future for measuring video learning effectiveness. And the sample size can be further increased to give a more thorough view of learning effectiveness through video clips. Besides, other comparison studies such as comparison between degree programmes or age groups may be conducted to measure and compare the learning effectiveness of video learning among groups.

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CITATION AND REFERENCES

- Beheshti, M., Taspolat, A., Kaya, S.O. & Sapanca, F. H. (2018). Characteristics of instructional videos. World Journal on Educational Technology: Current Issues, 10(1), 061-069.
 Retrieved from https://files.eric.ed.gov/fulltext/EJ1170366.pdf
- Bell, L., & Bull, G. (2010). Digital video and teaching. Contemporary Issues in Technology and Teacher Education, 10(1), 1-6. Retrieved from https://citejournal.org/wpcontent/uploads/2016/04/v10i1editorial1.pdf
- Brame, C.J. (2016). Effective educational videos: Principles and Guidelines for Maximizing Student Learning from Video Content. *CBE-Life Sciences Education*, 15(4), 1-6. https://doi.org/ 10.1187/cbe.16-03-0125
- Brecht, H. D., & Ogilby, S. M. (2008). Enabling a comprehensive teaching strategy: Video lectures. Journal of Information Technology Education: Innovations in Practice, 7(2008), 71–86.
 Retrieved from http://www.jite.org/documents/Vol7/JITEV7IIP071-086Brecht371.pdf
- Brecht, H.D. (2012). Learning from Online Video Lectures. Journal of Information Technology Education: Innovations in Practice, 11(2012). 227-250. Retrieved from http://www.jite.informingscience.org/documents/Vol11/JITEv11IIPp227-250Brecht1091.pdf
- Copley, J. (2007). Audio and video podcasts of lectures for campus-based students: Production and evaluation of student use. *Innovations in Education and Teaching International*, 44(4), 387–399. https://doi.org/10.1080/14703290701602805
- Evans, J.R., and Haase, I.M. (2001). Online business education in the twenty-first century: an analysis of potential target markets', *Internet Research: Networking Applications and Policy*, *11*(3), pp. 246-260. Retrieved from https://eric.ed.gov/?id=EJ631324
- Geri, N. (2012). The resonance factor: Probing the impact of video on student retention in distance learning. *Interdisciplinary Journal of E-Learning and Learning Objects*, 8 (2012), 1–13. Retrieved from http://www.ijello.org/Volume8/IJELLOv8p001-013Geri0794.pdf
- Halsne, A.M. & Gatta, L.A. (2002). Online versus Traditional-delivered Instruction: A Descriptive Study of Learner Characteristics in a Community College Setting. *Online Journal of Distance Learning Administration, 5*(1). Retrieved from https://www.learntechlib.org/p/92518/
- Hsin, W. J., & Cigas, J. (2013). Short videos improve student learning in online education. *Journal of Computing Sciences in Colleges, 28*(5), 253-259. Retrieved from http://kauppinen.net/tomi/learning-in-the-era-of-online-videos-camera-ready.pdf

- Kay, R.H. (2012). Exploring the use of videopodcasts in education: A comprehensive review of the literature. *Computers in Human Behavior*, 28(2012), 820-831. Retrieved from https://www.lth.se/fileadmin/cee/Documents/Kay_2012_Podcasts.pdf
- Kramarae, C. (2001). The third women learning online. Washington, DC: American Association of University Women Education Foundation. Retrieved from https://eric.ed.gov/?id=ED461348
- V., S., (2014). Ljubojevic, M., Vaskovic, Stankovic, & Vaskovic, I. Using Supplementary Video in Multimedia Instruction as a Teaching Tool to Increase Efficiency of Learning and Quality of Experience. International Review of Research in Open and Distance Learning, 15(3), 276-291. Retrieved from https://files.eric.ed.gov/fulltext/EJ1033049.pdf
- Mahmod, R., Dahlan, N., Ramayah, T., Karia, N. & Asaari, M.H.A.H. (2005). Attitudinal Belief on Adoption of E-MBA Program in Malaysia. *Turkish Online Journal of Distance Education*, 6(2), 115-124. Retrieved from https://dergipark.org.tr/en/download/article-file/156479
- López, S.D.F., Ferrando, F., & Fabregat-Sanjuan, A. (2016). Learning/training video clips: an efficient tool for improving learning outcomes in Mechanical Engineering. *International Journal of Educational Technology in Higher Education*, 13(6), 1-13. https://doi.org/10.1186/s41239-016-0011-4
- Price, L. (2006). Gender differences and similarities in online courses: challenging stereotypical views of women. *Journal of Computer Assisted Learning*, *22*, 349–359. https://doi.org/10.1111/j.1365-2729.2006.00181.x
- Qureshi, E., Morton, L.L & Antosz, E. (2002). An Interesting Profile-University Students who take
Distance Education Courses show weaker motivation than on-campus. Online Journal of
Distance Learning Administration, 5(4). Retrieved from
http://www.westga.edu/%7Edistance/ojdla/winter54/Qureshi54.htm
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. West Sussex, United Kingdom: John Wiley & Sons.
- Sullivan, P. (2001). Gender differences and the online classroom: male and female college students evaluate their experiences. *Community College Journal of Research and Practice, 25*, 805-818. https://doi.org/10.1080/106689201753235930
- Whatley, J., & Ahmad, A. (2007). Using video to record summary lectures to aid students' revision. *Interdisciplinary Journal of E-Learning and Learning Objects*, *3*(2007), 185-196. Retrieved from http://www.ijklo.org/Volume3/IJKL0v3p185-196Whatley367.pdf

- Willging, P.A., & Johnson, S.D. (2004). Factors that influence students' decision to drop out of online courses, *Journal of Asynchronous Learning Networks*, 8(4), 105-118. http://dx.doi.org/10.24059/olj.v13i3.1659
- Yukselturk, E., & Bulut, S. (2009). Gender Differences in Self-Regulated Online Learning Environment. *Educational Technology & Society*, 12 (3), 12–22. Retrieved from https://www.learntechlib.org/p/75438/
- Zhang, D., Zhou, L., Briggs, R.O., & Nunamaker, J.F. (2006). Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness. *Information & Management*, 43(1), 15-27. https://doi.org/10.1016/j.im.2005.01.004