Online Teaching using Video-Based Technology in Teaching Health Education due to Malaysian Movement Control Order

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Abstract

Video-based teaching is one of the teaching methods or technology widely used in different fields. This method helped effectively in the process of teaching and learning (Simin Ghavifekr & Wan Athirah Wan Rosdy, 2015[1]. The aim of the article mainly focused on the importance of video-based technology in teaching Health Education due to the Malaysian movement control order for year five students. A self-made video about the topics in Health Education was constructed, and it was uploaded in Google drive. The link of the video was shared with year five students via google mail. The videos were made in Windows Live Movie Maker, which allows frame-by-frame playback of the video. The materials used in this research are the laptop and the video making software. The instrument used is a questionnaire to identify the importance of video-based technology in teaching Health Education. Analysis towards the data of this study was done using 'SPSS' version 22. Research findings show that the students are more interested in video-based teaching, and the students felt video-based teaching is more effective than face-to-face teaching. In conclusion, results proved that video-based teaching is very imperative and essential for year five students in learning Health Education subject. Not that only, data obtained from the questionnaire show that 95.5 percent of students felt learning Health Education using video-based technology is more effective.

Keywords: Video-based teaching, Health education, Malaysian movement control order

1. Introduction

Technology integration nowadays has gone through innovations and transformed our societies that have totally changed the way people think, work, and live (Grabe, 2007)[2]. As part of this, schools and other educational institutions which are supposed to prepare students to live in "a knowledge society" need to consider ICT integration in their curriculum (Ghavifekr, Afshari & Amla Salleh, 2012)[3]. This is where the desire to capitalize on the new generation's appetite for multimedia presentations is increasing. In such a scenario, adopting video-based technology as a method in teaching would be motivating for teachers to teach elective subjects like Health Education.

Video is one of the audio-visual media used to describe an object that moves together with sound naturally in an appropriate frequency. Video capabilities depict live images the sound provides in its' charm. Videos can give information, expose the process, explain complex concepts, teach skills, shorten or extend time, and influence attitudes, as mentioned by A.Arsyad (2011)[4].

Moreover, due to Covid-19, the Malaysian government has implemented a movement control order (MCO) to everyone. This has led to the shut down of all the schools in Malaysia. However, teachers are required to finish their syllabus. Hence, this video-based teaching technology is highly recommended as the most appropriate method to resolve the issue.

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Video-based teaching is one of the many teaching aids that would offer teachers, lecturers, and curriculum developers to inculcate interest and attention among their students. Many studies and researches have claimed that the use of video-based teaching enables swift learning among students. It is motivating for them to accelerate their performance.

2. Research Method

This study uses a quantitative descriptive method. The data collection used research instruments analyzed quantitatively (statistically) to test the objective. Quantitative research assesses the nature of the conditions as noted by Sugiyono

(2016)[5]. It involves the utilization and analysis of numerical data using specific statistical techniques

As a whole, there are 540 students enrolled in Bedong Malay school located in Kedah. As stated by Chua (2006)[6], sampling is related to the process of choosing the number of samples than the population made by research respondents. Sampling techniques are not random, but sampling used in this study focused on Year 5 students from the stated school. According to Yamane (1967)[7], the sample size determined the schedule, 94 pupils elected with $\pm 7\%$ error to become the research samples.

The research instrument used in this research is a questionnaire that has three parts. It is to gain data regarding the importance and effectiveness of video-based technology in teaching Health Education due to the Malaysian Movement Control Order. This questionnaire is divided into three parts, namely Part A containing information of the respondent and Part B on the importance and effectiveness of video-based technology in teaching Health Education. The data is analyzed with percentages, and Part C was to be analyzed with mean and *SD* using the Likert Scale.

3. Result

The results were obtained from 94 Year, Five students. However, these 94 respondents were considered adequate to represent the population of this study as it covers all the population in the Bedong Malay school. The analysis of this study is a quantitative data from the feedback given by 94 respondents and managed to get the result about the importance and effectiveness of videobased technology in teaching Health Education due to Malaysian movement control order.

Demography of the Respondents

All the respondents selected for this research are from Year Five, aged 11 years old. The total number of respondents is 94. The research consists of 54 boys and 40 girls.

Table 3.1. Importance and effectiveness of video-based technology in teaching Health Education

Question	Yes	No	Percentage of acceptance
I feel studying Health Education through video technology during this movement control order is essential.	88	6	93.6%
I find that learning Health Education using video is more interactive.	86	8	91.4%
I find the process of learning Health Education through	87	7	92.5%

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video is more time-saving.			
I enjoy learning Health Education from video during the	89	5	94.7%
movement control period.			
I find learning Health Education from the video is more	90	4	95.7%
effective.			
I prefer to study Health Education through video rather	87	7	92.5%
than the traditional method of learning.			
I feel that completing the syllabus of Health Education	89	5	94.7%
during this movement control order by using video			
technology is possible.			
I feel the role of a teacher can be substituted by using	85	9	90.4%
video technology in teaching Health Education.			
I feel students can focus on learning Health Education	87	7	92.6%
using video to enhance their understanding of the			
subject.			
I feel the video-based teaching method encourages and	84	10	89.4%
motivates the students to learn Health Education.			

Table 3.1 shows Part B of the questionnaire on the importance and effectiveness of video-based technology in teaching Health Education in terms of percentage. There are ten questions in that section related to the topic of the research.

Table 3.2. Importance and effectiveness of video-based technology in teaching Health Education

Question	Mean	SD	Interpretation
I feel studying Health Education through video technology	4.68	.748	Very High
during this movement control order is essential.			
I find that learning Health Education using video is more	4.57	.657	Very High
interactive.			
I find the process of learning Health Education through	4.62	.704	Very High
video is more time-saving.			
I enjoy learning Health Education from video during the	4.73	.677	Very High
movement control period.			
I find learning Health Education from the video is more	4.78	.698	Very High
effective.			
I prefer to study Health Education through video rather than	4.52	.733	Very High
the traditional method of learning.			
I feel that completing the syllabus of Health Education	4.64	.620	Very High
during this movement control order by using video			
technology is possible.			
I feel the role of a teacher can be substituted by using video	4.58	.747	Very High
technology in teaching Health Education.			
I feel students can focus on learning Health Education using	4.74	.654	Very High
video to enhance their understanding of the subject.			
I feel the video-based teaching method encourages and	4.42	.718	Very High
motivates the students to learn Health Education.			

Table 3.2 shows Part C of the questionnaire on the importance and effectiveness of video-based technology in teaching Health Education in terms of mean, Standard Deviation according to Likert Scale. It is categorized into five scales being 1 (strongly do not agree), 2 (do not agree), 3 (slightly agree), 4 (agree), and 5 (strongly agree). The mean score guide was adapted from Jainabee and Jamil (2009)[8], whereby the statistical data indicates very low (1.00-1.80), low (1.81-2.60), medium (2.61-3.40), high (3.41-4.20) and very high (4.21-5.00). The same ten questions that were used in Part B were used in Part C too.

4. Discussion

This study was conducted to determine the importance and effectiveness of video-based technology in teaching Health Education during the movement control order. As explained in the research methodology, data obtained through a three-part questionnaire. Part A questionnaire was categorized as respondent demographics, Section B and Section C. Section B data was analyzed by a percentage while Section C data by means and standard deviations.

93.6 percent of students agree that the first question of 'I feel it is necessary to research health education through video technology during this movement control order' indicates that students accept that studying health education is vital to regulating movement, which is best achieved through video. The questionnaire was significantly higher (mean = 4.68, SD = .748, n = .94).

Furthermore, 91.4 percent of students indicated agreement with 'I find that learning Health Education using video is more interactive.' Therefore, students point out that teaching health education through video is interactive, and it has a very high mean of 5 students (mean = 4.57, SD = .657, n = 94). Findings from Yusof, A. A., Adnan, A. H. M., Mustafa Kamal, N. N., Mohd Kamal, M. A., & Ahmad, M. K. (2019) [9] is also in line with the result of this study. The study regarding the popularity of video-based learning (VBL) has spiraled upwards in the last few years. Although some might argue that video-based learning is merely a form of informal learning, it is quickly becoming the most sought-after teaching and learning tool across the corporate and academic learning division. Based on empirical data collected from our students, video-based learning is truly an enlightening method in changing the academic sphere from our vantage points. This proves that video-based teaching is more interactive and can lead to more openended teaching situations.

For the T find the process of learning Health Education through video is more time saving, the finding from the questionnaire has indicated 92.5 percent with the mean, which is also high (min = 4.62, SD .704, n = 94). The results show that teaching through video technology is more time-saving than face-to-face teaching. In addition to the questions of 'I enjoy learning Health Education from video during the movement control period' has received 94.7 percent acceptance. It was also significantly higher (mean = 4.73, SD .677, n = 94). This statement explains that 5-year-olds are excited to learn the subject of health education through video technology at such a critical time.

Then would be the next to the question that reads as 'I find learning Health Education from the video is more effective' with a 95.7 percentage acceptance with high mean values (mean = 4.78, SD .698, n = 94). These high percentages and mean indicate that teaching health education through the use of video technology is very effective for Year Five students. The findings of this study are also in line with the findings of Mohd Jasmy et al., 2015 [10] with 65 Form Four respondents consisting of three different stream classes from SMK Datuk Bendahara. The majority of the respondents said the effect was more likely to be in the use of ICT, but there was a tiny percentage of the difference between the use of ICT and the printed materials. This displays that these students are interested in the use of ICT in teaching and proven to be effective in students' learning.

Subsequently, 92.5 percent of students agree with the question 'I prefer to study Health Education through video rather than the traditional method of learning.' This question also has a high mean (min = 4.52, SD .733, n = 94). This result illustrates that students are more likely to enjoy health education through video methods compared to the traditional method of using the textbook. The findings from Che Suriani Binti Kiflee & Fariza Khalid (2018)[11], are also in

parallel with the findings of this study. The study examined the effectiveness of the use of multimedia methods in teaching and learning for smart students. The sample of this study consisted of 80 intelligent students. Data collection was conducted using a set of questionnaires that included various items on the use of multimedia in teaching and learning. Collected data were analyzed using descriptive statistics, t-tests, and Pearson Correlation. The findings show that perceptions, frequency, and effectiveness of multimedia use in learning are high. This shows that smart students are more inclined to learn through multimedia methods than the traditional method.

As with the question, 'I feel that completing the syllabus of Health Education during movement control order by using video technology is possible with a mean acceptance rate of 94.7, and the questionnaire also has very high min = 4.64, SD .620, n = 94. This shows students agree that completing the health education syllabus at the time of this movement control order was practically implemented through the use of video technology. The next question, 'I feel the role of a teacher can be substituted by using video technology in teaching Health Education,' resulted in a high acceptance rate of 90.4 with high mindfulness too (min = 4.58, SD .747, n = 94). Students agree that the role of teachers in the classroom can be replaced by the use of video to teach Health Education. Whereas for the question 'I feel students can focus on learning Health Education using video to enhance their understanding on the subject' marked the percentage of student acceptance with 92.6 percent with a high mean (min = 4.74, SD .654, n = 94). These results prove that students imbibed and were very focused on learning health education through the use of video.

The final question, 'I feel video-based teaching method encourages and motivates students to learn Health Education,' has gained 89.4 percent acceptance and high mean values (min = 4.42, SD .718, n = 94). This demonstrates the use of the video method to be encouraging and motivate students to study health education. Findings from Maha Abdullah Al-Dabbagh, Amjad Jameel Abdullah, Hamda Ayed Al Ruwail, Fatma Ahmed Al Shamrani (2020) [12], enabled the impact of educational videos as a tool to enhance information shared with students regarding recent trends in the fashion of advertising is also in line with the findings of this study. This made researchers design an educational video to assess the effects of modern art trends on fashion advertising as well as enabling students to comprehend the information in minutes. The research followed the semi-experimental approach through an e-questionnaire to measure the effectiveness of this developed approach. The results showed that there are statistically significant differences in favor of the post-test. The researchers recommended applying this proposed method to doctoral students and motivate them for self-learning by using different educational aids such as video. This proves that using video-based teaching can encourage and motivate students to learn Health Education effectively.

5. Conclusion

The usage of this video technology as a method in teaching the subject of Health Education during movement control order is considered a very vital process to ensure students do not miss out on the subject. Precisely, this video-based teaching is also useful for fifth-year students to study Health Education. The teaching method saves time and makes teaching and learning more flexible. Students even master the syllabus through this method. Besides, students can also analyze and assess the teacher teaching through the use of video (Yuliani Nurani, Niken Pratiwi & Nila Kusumaningtyas, 2020) [13]. Researchers can, therefore, conclude that video-based teaching for Health Education subjects is well-matched to situations where students and teachers are unable to meet face-to-face.

6. Suggestions

Although there are many teaching methods available for significant subjects, most teachers still prefer to use traditional methods for minor subjects such as Health education. Researchers can, therefore, diversify the use of multimedia in teaching health education, and such studies can be developed for all students used during the holidays when students and teachers can meet virtually.

This is simply because the multimedia method is primarily flexible and permits students to learn any subject at any time.

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