

The Effects of Using Educational Videos in Online Learning: A Case Study for Basic Computer Science Subject

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Abstract: This study was conducted to examine the effect of the use of educational videos in online learning which can attract students and help students understand the topic of learning more effectively. A quantitative design with a survey method was used in this study. The respondents of the study consisted of 43 teachers of Basic Computer Science subjects in the state of Perak who were selected by random sampling. A questionnaire form instrument was used to collect data based on a five-point Likert Scale. Data were analyzed by descriptive analysis where the mean amount was determined based on a predetermined level. The results show that the use of educational videos can help students understand the topics of learning effectively with an average mean value = of 4.40. In addition, educational videos also help attract students to learning topics with an average mean value = of 4.30. The implications of this study indicate that the use of educational videos in online learning is proven to have a positive impact on students.

Keywords: Educational Videos, Online Learning, Teaching and Learning Tools.



1. Introduction

Education is particularly important field and has always been a priority for the government to ensure that Malaysia has people who are smart and capable in all aspects. Internet and computer equipment are the main tools to ensure online learning to be effective. Therefore, following the COVID-19 pandemic, the government through ministries and related agencies has worked with key communications service providers to develop a comprehensive digital infrastructure plan to meet the new needs of the People. This action plan, known as the National Digital Network (JENDELA), will be the platform for improving the country's digital communications under the 12th Malaysia Plan (2021–2025). Online learning is a common method of learning nowadays. It is in line with the rapid development of digital technology worldwide. The development of the digital technology world is gaining widespread attention due to its potential and able to make changes in various fields including the field of education [1].

Modern technology and video mediated training provide an uncomplicated way of understanding and internalizing students. The history of video mediated education reveals a shift from traditional teaching and learning methods in contemporary education. Teachers can make teaching more practical than theoretical by video-mediated instruction [2].

This study was conducted randomly on secondary school teachers in Perak. The randomly selected teachers were among those who taught Basic Computer Science (BCS) subjects. The Secondary School Standard Curriculum (SSSM) is implemented from 2017 in stages starting with Form One. Through SSSM, one of the new subjects introduced is Basic Computer Science (BCS) which is taught to students at the lower secondary level. BCS is a continuation of the subject of Information and Communication Technology (ICT) which has been introduced to students in primary schools and replaces the Information and Communication Technology Literacy (ICTL) secondary school program which has been implemented since 2007 [3]. BCS subjects are taught to secondary school students from Form One to Form Three. The objectives of SSSM BCS is to enable students to achieve the following objectives; (1) Organize, analyze and present data or ideas logically and systematically; (2) Use, detect and correct errors in algorithms and programs using logical thinking and computational thinking; (3) Solve complex problems through computational thinking using computer-based solutions; (4) Apply computer knowledge and skills ethically, prudently and responsibly [4].

The media used by teachers today has changed dramatically in tandem with the advancement of education. Many studies are currently being conducted to develop learning media, one of which is video media. Video is an example of audio-visual media, which refers to learning materials that may be seen with the eyes and heard with the ears. Video is a powerful learning medium that can be used in large groups, individually, or in groups [5]. Video can explain something that is abstract to seem real [6] and video also has sound in the form of music, explanatory illustrations, and sounds taken from real conditions [7]. The Edgar Dale theory and the Brunner theory are two hypotheses that explain the effectiveness of video media. First, there's Edgar Dale and his Dale's Cone of Experience theory. In a cone of experience, the theory describes the level of pupil knowledge. Video is in the middle of Edgar Dale's cone of experience because it falls within the "Television" category. This implies that video media is superior to both picture and audio media. Second, according to Brunner's theory, learning modes can be classified into three levels: direct experience (enactive), pictorial/image experience (iconic), and abstract experience (symbolic) [8].

Therefore, in this study, the researcher has made a survey on the impact of the use of educational videos in online learning. This study only involved teachers where they were able to feel a positive change to their students i.e., their students' enjoyment and students' understanding through achievement through assessment implemented during online learning was conducted. The use of primary media material, namely educational videos, is a measure of the extent to which it has a positive impact. Most teachers use these media materials as a tool to convey information to students, especially during online learning sessions. There are many video sharing platforms that are easily available through internet access such as YouTube, Eduwebtv, Cikgootube and many more.

2. Literature Review

2.1. Education in Malaysia

Education is a critical area of a country. In Malaysia, the field of education is under the responsibility of the Ministry of Education Malaysia. Meanwhile, higher education is under the Ministry of Higher Education (MOHE). In compliance with the rules of the Act related to higher education, the Ministry

of Higher Education (MOHE) was founded again officially following the Federal Cabinet reshuffle on 9th March 2020 (Monday) in a special press conference by the Prime Minister. MOHE plays a critical role in setting up a higher education ecosystem that includes the best public universities, private higher educational institutions, polytechnics, and community colleges. These institutions are critical components of the national education ecosystem, generating top-tier thinkers, scholars, masters, skilled, and semi-skilled workers in their respective positions [9]. The government will always ensure that every policy or system implemented is properly structured so that the teaching and learning process in schools is effective. They also ensure that the education system in Malaysia is always relevant in keeping with the world's technology. It is to ensure that students do not miss knowledge no matter where they are. To ensure best teaching and learning processes, various online learning methods have been adopted, including Google Classroom, WhatsApp, Telegram, and Learning Management System (LMS), but its use is still lacking especially for rural students. Teachers are constantly diversifying their teaching methods so that they can be effectively delivered especially when it comes to online learning. Therefore, this study will investigate how the use of video in online learning can give impact to students.

2.2. Online Learning

Online learning is one of the most popular learning methods today. It is in line with the Industrial Revolution 4.0 (IR4.0) where the field of learning is no exception to its impact. It is a fast and time-saving method, but its impact on students remains a major issue for discussion. The cost of setting up the system, teaching the students how to use it and how to download information, and answering student questions about software issues is the use of an online tool. The system also allows teachers to significantly reduce the amount of time spent grading all the students' homework assignments, monitor their learning status, and the teaching strategies adapt accordingly (Magalhães, Ferreira, Cunha, and Rosário, 2020) [10].

Online learning is a learning model that develops skills alongside information and communication technology development. Many factors may influence online learning success, such as the level of trust in teachers, the level of student activity, and the level of interaction between teachers and students [11].

The approaches to diversify e-learning content are worth researching, as they can promote a more engaging e-learning environment [12]. Magalhaes et al have mentioned that the students should gradually accept and adapt to this online learning method in line with current technological advances [10]. Technological advances are apparent in the classroom today. Indeed, there is a rapid increase in the use of computers, web-based tools, and even digital teaching and learning games. However, Jayathirtha, Fields, Kafai & Chipps, (2020) [13] mentioned that online- centered teaching has restricted resources for shared concentration and improvisation of students. As for that, they are suggested to plan and design for integration of all the physical things, such as asking the student to be a creator and build a block or something to represent their work.

There are various platforms that teachers can use today to conduct online learning, such as Google Classroom, Whatsapp application, Telegram, Moodle, Padlet, and more. Google Classroom is one of the applications selected by the Ministry of Education to replace Frog VLE since 1st of July 2019 [14]. It is available free of charge when installing the google search engine on a computer or other electronic device. Google Classroom is a part of Google Apps for Education's (GAFE) online suite productivity applications for Online Learning teachers and students. Google Classroom is a new tool that was introduced in 2014 in Google Apps for Education. This classroom helps teachers to easily build and arrange tasks, and to receive input effectively, and conveniently interact with their students [15]. Google's classroom architecture allows instructional simplification and saves time. Google Classroom can be combined with other programs in Google, including papers, images, and tablets [11]. Effectively, it has been used to upload tasks, classroom management, and contact with students. However, overall use is restricted to these features only, although Google Classroom has plenty to give apart from these simple features [16].

In addition, there is another platform that can also be used for free, a Padlet. Padlet is an online bulletin board application that we can use to display information for any topic. Most educators have taken over the years to Padlet, a free digital bulletin board where teachers and students can post notes, photos, videos, and links to online tools. The tool was available for free, and as many Padlets as users wished could be created. Jusoh et al. [17] mentioned in their study that uses of video in Padlets

classroom technologies can overcome frustration and even having fun and increasing their comprehension of the learning provided as Padlet is a Web 2.0 program that can be used for learning purposes to collaborate and interact.

2.3. Self-Learning for Online Learning

When we talk about online learning, it is closely related to self-learning. There is a difference between studying in the classroom and studying online. Self-learning is defined as students individually conducting their business as it requires high self-motivation for the student to explore and find their own solution to their learning. In businesses, colleges, and educational institutions, Learning Management Systems (LMSs) which is one of the online learning systems, such as Google Classroom and Moodle, have been widely used. They deliver a few teaching and learning benefits. It is a self-regulated process in which learners can freely select the materials of the course and control their learning pace and pathways [18].

Nobaew (2020) [19] found students choose a content design as the first critical factor affecting their self-learning (87.5 %). Then, students chose the media according to various requirements for their learning and use specific outlets for self-study. For several reasons, for example, students prefer blended data and motion graphics media by certain requirements because it is simple to view, easy to understand, containing beautiful graphics and presenting them in clear content, vivid diagrams and easy to read, and many specifics of the content.

Besides, Chen et al., (2020) [20] mentioned in their research that the theoretical courses before laboratory classes and the proportion of self-learning online are gradually that which require self-discipline. Furthermore, the adopted micro videos were chosen from the students as the most useful online self-learning content. In addition, students take responsibility for their own teaching, this strengthens their self-discipline, self-control and self-learning skills and their comprehension of the idea of thresholds to reach higher levels.

2.4. Video-Based Learning

For online learning, the use of video-based learning (VBL) materials is growing worldwide. According to Giannakos et al., 2016 [21], VBL is defined as the learning process of getting knowledge, skills and skills through the systemic support of video resources. The study showed that the students viewed videos of the course more linearly and checked for them more often. In addition, they have found a popular playback, particularly when a prominent issue or theory is clarified or changes to the screen are made. Based on their observation, researchers have suggested that learners often need to replay tutorial videos and hence the use of markers to help them understand. The benefit of VBL was recognized in a variety of contexts due to the ability to extend lifelong education opportunities for all socioeconomic levels and at the same time reduce time constraints by removing geographical boundaries. The conceptual model about the VBL adoption in online learning says that teachers and instructional designers who use videos in their learning process will develop their classification methodologies by drawing on novel approaches before developing and delivering online learning videos [21].

Chen and Wu (2015) [20] examined how three separate video materials (voice-over delivery, picture-in-picture, and lecture recording in class) varies by the cognitive differences and learning styles of the students. The researchers examined the students with visual and verbal styles in terms of sustained-attention, cognitive load, emotion, and learning output. They concluded that, while visual and verbal learners performed in all three forms of video equally, the students' continuing attention and cognitive load values were greater in the video generated using the voice-over presentation process. Most teachers like to use video as a teaching tool because it is easy to find and the way it is presented is also interesting compared to text, pictures, or voice only.

Teaching aids is a tool that helps teachers communicate in the classroom. In line with the rapid development of information technology, the use of teaching aids has diversified according to the latest learning channels. A teaching aid that can be applied in online learning is a video as a medium of knowledge. The video presentation is the information was presented via visual animations. Also, it has a narrator's voice, which verbally explains the animations through the entire video. Sometimes the subtitle is also included. In addition, students can pause or restart the video anytime they prefer. The video version contains visualized images and animation to explain the nature of the learning as well as acoustic detail [22]. Therefore, using video as a teaching tool can have some positive effects on

students. Wilhelm-Chapin & Koszalka, (2020) [23] found that students seldom reviewed the video and tended to refer to the video transcript for content analysis given.

2.5. Video Resources

Most teachers are more likely to choose online teaching videos to save time and indirectly train their students to increase their knowledge in that way. In the study of Bates, Phalen & Moran, (2016) [24], focused on mostly teachers who are looking for videos related to learning that involve practice where it requires physical training as well as demonstrations. As such, they have suggested that video-based learning providers produce more such videos.

Therefore, Bielski & Trzcinski, (2018) [25] have conducted a study aimed at a radically different research methodology that helps social media developers both to forecast the success of the content and to consider the effect on potential visibility of their title or video footage.

2.6. The Effects of the Use of Educational Videos

There are few effects of the use of educational videos, namely:

1) Attract Student Attention

In the learning experiment, students who watched the video were 25%–30% more successful than students in the live groups. The students who viewed videos online gained more than the students who viewed the live demos and had a high degree of satisfaction. The results show that, if live demonstrations are not available, videos can provide students with an equally valuable learning experience. Even if live demonstrations are open, it may be helpful to complement them with online presentations [26]. In their research, Li and Tsai (2017) [18], students from Taiwan, 59 third-year computer science graduates, found that students in the classroom lectures and video presentations are long and more regular than other learning resources that are shared tasks and posts when they looked at the educational material about their work. In addition, students often watched educational videos and their viewing time varied widely. While Chen and Wu (2015) [20] mentioned that the cognitive burden of visualizers was significantly higher when students saw voice over-types of verbalizers in their research. Students must use high cognitive ability to imagine what is being said while conveying information verbally.

However, according to Hu, Zhang, Gao & Wang [27] in their experimental result found the number of activities in video viewing occurred the video decreases at any minute with the rise in playtime on the video. The largest number appears within 60 s while the remaining stable from 60 to 300 s and rapidly decreases after 300 s, which is the same as the number of video searches. Nevertheless, the number of video pauses and video speed changes begin to decrease after 60 s; in particular, the video speed change is fastest and after 60 s almost zero. The findings will help the course instructors plan a fair video length to assign more focus to the students and the video watching drop rate.

Hasan et al., [1] study focuses on quantitative methods, in which data have been taken in an ongoing system, namely data from the student information system, learning management system, and mobile applications which were analyzed using eight different classification algorithms to make a prediction. The algorithm they have used to make the prediction on video learning in online interaction is CN2 Rule Inducer, Random Forest, Log. Reg., Tree, kNN, Naïve Bayes, Neural Network, and SVM. In the study, they emphasized on the use of technology that is video-based learning to see the effectiveness in virtual classroom learning. They use video-based analytic and data mining techniques for that purpose. From the algorithm they used, it was found that Random Forest produces more correct predictions based on student achievement after the end of the semester.

2) Help to Understand the Topic Content

Ismail M.E. et al. [28] have focused on quantitative methods to analyze data as opposed to using qualitative methods and according to his study to 30 respondents from Industrial, Machining students found that the video animation produced fulfills the study objective which shows the animation of video design can increase student understanding. They are concentrated on exploring the use of multimedia elements for animated video throughout six areas, including text, audio, animation, graphics, visualization, and imagination. They emphasized that the development of video animations enhanced student imagination and

visualization, further enhancing students' understanding of the topic. In addition, using this animation video, students can more easily and effectively master the learning contents. Most respondents showed they are extremely comfortable with items given and video animations shown can aid respondents in the learning process. However, this suggests that respondent's consent to the content in the video animation that includes the contents of the subjects and that they take them into established knowledge.

Meanwhile, Wan Jusoh, Abd Ghani, Mohd Noor, Awang & Sulaiman [17] results in their study found that the mean score of 3.93 shows that the approach of learning and teaching through the integration of learning and video usage and Padlet technology can help students focus, understand and feel more comfortable. In addition, their research mentioned the use of video clips helps to understand the topic well. Students also find that video clips have attracted their interest in learning the subject. Repetitive use of video clips gives the subject more appeal and is more effective. Besides, Wilhelm-Chapin & Koszalka [23] mentioned in online learning using video tutorial students will be able to understand the content thoroughly and be able to further develop their perspective on the knowledge to be conveyed

3) Student Achievement Improved

Student achievement in the subject has always been the focus of teachers. It is proof that students really master the topic when exposed to proper video presentations. Hasan et al., [29] who have used the CN2 Rule Inducer as a convenient tool for interpreting non-expert user data in data mining, have found that high chance, 92% if you have the student on campus and played the video at least three times or more on Moodle, a student will pass the modules. While if a student is taking activities outside the Moodle campus, plays the video more than once, and stops the video 3 times or more, with a likelihood of 94%, he has a high chance of passing the semester test.

3. Methodology

3.1. Number of Samples

The sample in this study involved 43 Respondents, through a simple random sampling method. Of the 43 respondents, 24 of them were male and 19 were female. While 15 respondents are in the age range of 41-50 years, 13 respondents in the age range of 31-40 years, 12 respondents in the age range of 21-30, and the rest are respondents in the age range of 51-55. In addition, the number of respondents with teaching experience in Basic Computer Science (BCS) subject from 5-10 years is 17, 15 respondents with 3-4 years of experience, 8 respondents with 1-2 years' experience, and less than a year is 3 respondents.

3.2. Research Instrument

This study was conducted based on a questionnaire instrument using survey method. This research instrument is based on the objectives and research questions that use the questionnaire method through a survey form. In constructing this questionnaire instrument, the Likert Scale is commonly used in the questionnaire form and has an answer level. The Likert Scale used has five levels of answers, namely strongly agree (score is 5), agree, not sure, disagree and strongly disagree (score is 0).

Table 1 shows the division of questionnaire questions in the survey form.

The questionnaire was divided into four sections. Part A is about the background and demographics of the respondents which contains seven questions. Part B focuses on the learning aspect, where the researcher will study the use of video that can attract students to the topic of learning. While in Part C, the researcher will also study the relevant aspects of learning. However, researchers will examine the use of video can help students understand a learning topic. Finally, part D is a type of open-ended question that allows respondents to give their own views on the use of video in online learning and one question regarding the method of conducting assessment also uses the Likert Scale. The questions posed were to take reference from the literature review of this study.

Table 1. Questionnaire Contents

Section	Purpose	Construct	Item Number	Number of Items
A	Identify the respondent's background and experience	Demographic	1	1
			2	1
			3	1
			4	1
			5	1
			6	1
			7	1
B	to examine the video can help attract students to the subject	Attract Student	8	12
C	to examine the video can help students to understand topic	Video content Video effects	9	11
D	Assessment Open Question	Learning Aspects	10	4
			11	1

3.3. Validity and Reliability

For this study, a pilot study was conducted on 5 randomly selected respondents. The 5 respondents were teachers who taught various subjects and were not included in the 43 respondents of the actual study conducted. Feedback from respondents was obtained using the interview method. The findings of the pilot study found that 5 respondents gave good feedback, especially in terms of language comprehension. The sentence structure and grammar give a clear meaning related to what is to be conveyed. In addition, the respondents' feedback recorded the appropriateness of the questions used to answer the research questions.

3.4. Data Collection Procedures

A total of 43 respondents voluntarily participated in this study. This respondent is a teacher of Basic Computer Science (BSC) in Perak. After the questionnaire instrument was completed and validated, the questionnaire was distributed to the respondents through Jotform. Respondents received a link from the researcher that led to the questionnaire form page. Respondents were asked to provide feedback through a distributed questionnaire instrument. Respondent data was collected on Jotform and was available for analysis. Data obtained from respondents are confidential and used for this study only.

3.5. Data Analysis

Once the data are collected, the data will then be analyzed using descriptive statistical analysis. Data will be presented in tabular form containing the total average mean for each construct and level. In the level column, the researcher classifies the total mean through three levels namely high, medium or low for each construct. The interpretation of this mean level is according to the determination in table 3.3 when 3.68 to 5.00 is classified as the highest level followed by the medium level for the mean range of 2.34 to 3.67 and the low level for the mean range of 2.33 and below [30] (Mohd Majid Konting, 2004).

Table 3. Level Classification by Mean

Mean	Level
3.68 – 5.00	High
2.34 – 3.67	Average
< 2.33	Low

4. Finding and Discussion

4.1. Demographic Information

This demographic information is important to know the background of the respondents who gave the feedback. The data collection for this study was aimed to look at the background of the respondents

related to gender, age, experience teaching BCS subjects, experience using educational videos, Information and Communication Technology (ICT) needs, video platform sharing, and video resources obtained.

The data collected are as follows:

- 1) Distribution of Respondents Based on Gender
This study involved 43 respondents consisting of 55.8% (24 people) male respondents and a total of 19 people or 44.2% were female respondents as shown in table 4.1.
- 2) Distribution of Respondents Based on Age
Based on the data obtained from the respondents through the questionnaire instrument, the majority of respondents who participated were aged 41-50 years which is 34.9% (n = 15) followed by teachers aged 31-40 years by 30.2% (n = 13), teachers aged 21- 30 years with 27.9% (n=12) and 51-55 years and above 7.0% (n = 3) respectively as shown in table 4.2.
- 3) Experience Teaching Basic Computer Science (BCS) Subjects
Next, the questionnaire question also asks the background of the respondents 'experience teaching this subject. Based on table 4.3, the majority of respondents have teaching experience for 5-10 years which is 39.5% (n = 17) and followed by respondents with 3-4 years' experience which is 34.9% (n = 15). Then, 18.6% (n = 8) respondents who have experience for 1-2 and finally respondents with 7% (n = 3) who had less than a year experience.
- 4) Experience Using Educational Videos as Media Material
Here is how long the experience of teachers using educational videos as media material during online learning. Table 4.4 shows that the majority of teachers have 3 - 4 years' experience which is 39.5% (n = 17). Then, followed by teachers with 5-10 years of experience of 34.9% (n = 15), 1-2 years of experience of 18.6% (n = 8) and less than a year of experience of 7% (n = 3). Finally, have no teachers with above 11 years' experience using video as media material.
- 5) Information and Communication Technology (ICT) Requirements
Next, this question asks the ICT skills and equipment requirements needed by teachers and students during online learning. From Table 4.5, it can be seen that the lowest percentage is complete ICT equipment which is 14% (n = 6), followed by good ICT knowledge by teachers and students with 46.5% (n = 20), basic ICT equipment which is the internet and computers 93% (n = 40) and finally 8% the good internet access by 97.7% (n=42).
- 6) Video Sharing Platform
The items in this section are related to video-sharing platforms teachers use during online learning sessions. Table 4.6 shows, the majority of teachers stated to have used Google Meet by 100% (n = 43), followed by Telegram by 83.7% (n = 36), Whatsapp 69.8% (n=30), Google Classroom by 60.5% (n=26), Zoom and YouTube by 53.5% (n=23), Microsoft Team by 18.6% (n=8) and lastly Tik Tok by 4.7% (n=2).
- 7) Video Resources
On this item, the researcher surveyed with respect to video sources that teachers had used. From table 4.7, the majority of teachers prefer to select the video on YouTube and share videos from other friends with a percentage of 100% (n=43) for each item. Next, the teachers select videos from sources provided by MOE by 48.8% (n=21). Lastly, teachers prefer to create their own videos 30.2% (n=13).

4.2. Information Related to the use of Educational Videos in Online Learning - Help Attract Students to the Topic of Learning

The item in this section B is related to information about the use of educational videos can help attract students to the topic of learning. In this section, there is a construct that are studied, namely attract student during online learning.

Referring to Table 4, the data collected shows that through the display of educational videos in constructs to attract students, students are more interested in learning because the students can 'pause' and replay the video at any time (mean = 4.67).

Table 4. Educational Video in Attract Student Construct

Item	Attract Student	Mean	Level
Q1	Students are more interested in learning because of the clear content description of the learning topic.	4.09	High
Q2	Students have more fun to learn because they can see for themselves the demonstrations they want to show in the topic of the lesson.	4.60	High
Q3	Students are more interested in the topics studied because in the video there are elements of sound and moving visuals.	4.58	High
Q4	Activities during learning become more interesting because there are different methods of presenting information to students.	4.12	High
Q5	Students respond well during learning sessions	3.93	High
Q6	Students can 'pause' and replay the video at any time	4.67	High
Q7	Can stimulate students' minds during induction sets	4.30	High
Q8	Save time and cost	4.63	High
Q9	Students are more interested in carrying out activities during learning sessions	4.19	High
Q10	Interesting video content proper to the learning topic	4.26	High
Q11	Video content is not boring	4.26	High
Q12	Video duration not more than 10 minutes	4.02	High
TOTAL		4.30	High

4.3. Information Related to the use of Educational Videos in Online Learning - Help Students to Understand the Topic of Learning

The item in this section C is related to information about the use of educational videos can help students to understand the topic of learning. In this section, there is a construct that are studied, namely help students understand during online learning.

Table 4. Educational Video in Attract Student Construct

Item	Attract Student	Mean	Level
Q1	Students find it easier to answer a given question by watching the video	4.14	High
Q2	Students easily recall the lesson when the question session is conducted	4.21	High
Q3	Students are increasingly showing an increase in knowledge through the way they answer the questions given	4.00	High
Q4	Students are easier to understand because they see the demonstration shown in the video	4.44	High
Q5	Students are easy to make notes when asked	3.95	High
Q6	Students can understand the content of learning better	4.30	High
Q7	Make it easy for students to review on their own by looking back at videos that have been shown in online classes.	4.63	High
Q8	Easy to obtain and the best way to demonstrate	4.58	High
Q9	Videos should use easy -to -understand language	4.79	High
Q10	The description to be conveyed in the video must be clear	4.65	High
Q11	The adjustable use of language in the video should be appropriate to the student's ability to comprehend	4.72	High
TOTAL		4.40	High

It can be seen from Table 5, through the educational video display in the construct to help students understand, students will easily recall the lesson when the video uses the easy-to-understand language (mean = 4.79).

4.4. Average Amount for Each Construct

According to Table 6, the total mean for each construct recorded a high mean value. The data collected showed that educational videos can help students understand the topic of learning more effectively during online learning sessions (mean = 4.40). Besides, the educational video also helps attract students to learning topics for which this construct obtained a mean = of 4.30.

Table 6. Average Amount for Each Construct

Item	Construct	Mean	Level
1	Attract Student	4.30	High
2	Help Student Understand	4.40	High

4.5. Students Assessment

According to Table 7, the majority of teachers chose the quiz as an assessment item for students to evaluate the use of educational video media materials during online learning (mean = 4.51). Followed by assignments (mean=4.26), observation (mean=4.07), and feedback (mean=4.00).

Table 7. Students Assessment

Item	Students Assessment	Mean	Level
1	Observation	4.07	High
2	Feedback	4.00	High
3	Quiz	4.51	High
4	Assignment	4.26	High
	Total	4.21	High

5. Conclusion

The study was conducted on a total of 43 teachers who teach Basic Computer Science subjects in Perak. Based on the survey study that conducted, it was found that teachers stated that the use of educational videos helps to attract students' interest and help students understand the topic of learning in online learning.

In addition, video is also considered fun and does not make students feel bored in learning, thereby increasing student interest in learning. This makes video media an effective medium used in online learning, especially for secondary school students who need a lot of motivational support from outside.

In conclusion, the positive effects obtained because of the use of educational videos prove that video is a helpful media material to be used as an online learning medium. Therefore, this study can benefit current teachers to teach the new generation of students in line with 21st-century learning in Malaysia. The use of technology in education will make students skilled in the field of information technology for them to compete to face the challenges of the world of technology in the future.

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