

Student and Teacher Opinions on Monitorability of Educational Videos

Fatih Balaman (Corresponding author)

Department of Computer Education and Instructional Technology

Faculty of Education, Mustafa Kemal University, Antakya, Hatay, Turkey

Tel: 90-(326)-245-26-00-5285 E-mail: fatihbalaman2010@gmail.com

Yavuz Bolat

Department of Curriculum and Instruction, Faculty of Education

Mustafa Kemal University, Antakya, Hatay, Turkey

Tel: 90-(326)-245-26-00-5347 E-mail: yavuzbolat06@gmail.com

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Abstract

It was aimed at this research to determine the student and teacher opinions relating to the monitorability of educational videos. The study group includes 202 teachers and 486 high school students who are studying totally 688 people at public school in the province center of Hatay in 2017-2018 academic years. The questionnaire form about the monitorability of education videos that was created by the investigators was used as the data collection tool. The answers for the items such as gender, age group, branch, time of the educational video were analyzed for the teachers. The answers for the items like gender, class, time of the educational video were analyzed for the students. Descriptive analysis technique was used in the analysis of the data. Moreover, percentage (%), frequency (f) values were also utilized. Teacher and students have generally mentioned that the items belong to personal characteristics, duties of video narrator and the specifications of the video are effective on the monitorability of the educational videos. According to another opinion, the time of the video should be between 5 and 10 minutes.

Keywords: Educational video, Monitorability of educational video, Education via video, Video developing

1. Introduction

Video has an effect on several domains such as briefing, entertainment, news, advertisement, publicity and education from the time it has taken place in daily life until today. Video has been increasingly used in learning environments by discovering its educational values. Development adventure of a video has its origins in 1950's when is important for the progress of television and television publishing (Marchionini, 2003; Ozan, 2015). Video and educational video process have started by tv broadcasting audits that are performed by Turkish Radio and Television Association (TRT) for Ankara in 1968.

While educators who use technological tools as a significant assistant and supporter of the education try to create a better learning environment for the students, students take advantage of technology for transferring the information and also permanent learning (Bolat, 2016). The necessity for becoming accessible of computer-aided course materials from the internet has emerged from becoming widespread on the internet (Uğur & Okur, 2016). This circumstance eases educational video to be used in education and training activities. Increasing importance of educational videos has been brought to personal learning areas and mobile devices via electronic environments and internet-based sharing systems. Developing and becoming popular computer technologies have eased the accessibility and quality of the educational videos.

Videos are utilized as a pedagogic tool in education and training environments (Pekdağ, 2010). Educational videos that are used in e-education environments are discussed in two different models as educational video and interactive educational video. The educational video is a type of video that is designed and recorded before; the learner cannot interfere in this sort of videos at the same time. This type of educational videos is monitorable by the learner via television, CD, cassette, computer, smart board, video sharing databases and the mobile devices. Interactive educational videos are a system that creates multimedia by using video and audio factors of TV and computer technologies (Ak, 2014). Moreover, interactive educational videos. Moreover, interactive videos are defined as providing the interaction between human and computer by video images and video broadcasting (Bağış, 2010). There is software such as Zaption, Hapyak, RaptMedia, WireWax, H5P, Snapp App, Captivate that can be used in interactive video production nowadays (Uğur & Okur, 2016). An increment in the number of video sharing site is observed based on these developments; also these sites are used for education (Yıldırım & Özmen, 2011). Benefits of the interactive educational videos are as follows,

- It provides learning that is suitable for the principle by doing and experiencing by activating the student;
- It shortens the time of learning of the learner;
- It enables one-to-one learning;
- It minimizes the education costs;
- It helps motivation to increase;

- It increases the learnability of the subject;
- It enables for repetition and exercises without remaining limited to content topic teaching;
- It gives enough chance to the student for the correct learning;
- It contains parts for evaluating the lessons learned.

White and Nam (2014) find educational video use acceptable for many of the targets of teaching and learning. With reference to them, some of the items that are suitable for video use are as follows,

- Thought development
- Inspiring
- Listening skills
- Estimating
- Discussing
- Interview skills
- Understanding
- Writing
- Information/Explaining
- Storytelling

Using educational video eases the teaching process. Use of technology and technological devices are necessary for easing the teaching. Using educational video is the simplest way of integrating technology into the class. However, some of the teachers stand of using educational video in the class. Therefore, these teachers do not know how the educational video contributes to the class. They also do not know to use and prepare the video (White & Nam, 2014). This situation restricts the video use. Teachers' abilities relating to the video use should be developed. Videos that are frequently used in information and communication technology can also be used as an effective visual material in education and training activities; accordingly, the memorability of the information increases (Yıldırım & Özmen, 2011).

The new media that gives extremely advantageous chances for education has paved the way for becoming media an ideal educational material and environment (Ata & Atik, 2016). Increasing importance of the educational videos has been brought to personal learning areas and mobile devices via electronic environments and internet-based sharing systems. However, the monitorability of videos by the users constitutes a remarkable point. This research aimed to determine the student and teacher opinions relating to the monitorability of the educational videos. There is searched for answers for questions below within the scope of this goal,

(1) What are the demographic attributes of teacher and students participated in the research?

(2) What are the teacher opinions relating to the monitorability of the educational video?

(3) What are the student opinions relating to the monitorability of the educational video?

2. Method

2.1 Research Model

This research was conducted in the form of the descriptive survey model. As is known, the survey models include revealing, explaining and evaluating the process of a situation about any subject. Such studies try to understand the problem by describing the event and also detect the current situation within the scope of the research object (Arıkan, 2013). Descriptive survey model was selected to specify the student and teacher opinions relating to the monitorability of the educational videos.

2.2 Study Group

The study group includes 202 teachers and 486 high school students who are studying totally 688 people at public school in the Hatay province center in 2017-2018 academic years.

2.3 Data Collection Tool

The questionnaire form relating to the monitorability of the educational videos was used as the data collection tool by the investigators. There are demographic variables and articles about the monitorability of the educational videos in the questionnaire form. Demographic information varies by the student and teachers. There are entirely 18 items and 3 themes as 6 items in the theme of personal characteristics of video narrator; 4 items in the theme of the duties of the video narrator; finally, there are 8 items in the theme of the video specification. A literature review was performed, and an item pool was established relating to the monitorability of the educational videos while the survey items were being prepared. Expert opinions were taken from 3 academicians whose profession is educational sciences and computer education to provide the content validity. Some of the items were eliminated in line with the expert opinions; some of them were reorganized.

2.4 Analysis of Data

The answers for the items such as gender, age group, branch, time of the educational video were analyzed for the teachers. The answers for the items like gender, class, time of the educational video were analyzed for the students. Descriptive analysis technique was used in the analysis of the data. Moreover, percentage (%), frequency (f) values were also utilized.

3. Findings

3.1 Findings Related to Teachers' Demographic Variables

The teachers in the study group were 114 males (56.40%), 88 females (43.60%) in terms of gender; 38 teachers (18.8%) aged 20-29 years, 117 teachers (57.9%) aged 30-39, 42 teachers (20.8%) aged 40-49 and 5 teachers (2.5%) over 50 years of age. In addition, when it is evaluated in terms of branches, it can be seen that there are teachers from branches which are: information technologies (119), mathematics (12), physics (1), chemistry (4), biology (1),

culture of religion and knowledge of ethics (5), social sciences (2), physical education (3), English (5), visual arts (4), Turkish (5), science and technology (3), music (4), history (2), classroom teacher (2), philosophy (1) psychological counseling and guidance (2), and the other (27) branches.

There were 31 (16.3%) teachers who think that the time of the educational videos need to be shorter than 5 minutes; 65 teachers (32.2%) think that the time of the educational videos need to be between 5-10 minutes; 38 teachers (18.8%) think that the time of the educational videos need to be between 11-15 minutes; 28 teachers (13.9%) think that the time of the educational videos need to be between 16-30 minutes; finally there are 40 teachers (19.8%) think that the time of the educational videos need to be longer than 30 minutes.

3.2 Findings Related to Demographic Variables of Students

There were 213 male (43.80%) and 273 female (56.2%) high-schoolers in the working group. 234 (48.1%) students study is 9th class; 119 (24.5%) students study in 10th class; 101 (20.8%) students study in 11st class; 32 (6.6%) students study in 12th class.

34 (7%) of the students think that the time of the educational videos should be shorter than 5 minutes; 184 (37.9%) of the students think that the time of the educational videos should be between 5-10 minutes; 149 (30.7%) of the students think that the time of the educational videos should be between 11-15 minutes; 70 (14.4%), of the students, think that the time of the educational videos should be between 16-30 minutes; finally there were 49 (10.1%) students who think that the time of the educational videos should be longer than 30 minutes.

3.3 Teacher Opinions About Monitorability of Educational Videos

The teachers mentioned about effectively watching the educational videos by the students that fluently speaking of video narrators is effective by 89.1%, using a simple language is effective by 85.6%, diction is effective by 83.7%, speaking speed is effective by 81.2%. Teachers are few in the number who think that the sincerity (67.8%) and gestures and facial expressions (67.8%) have less effect on the effectively watching the educational videos. Otherwise, it is understood that the number of teachers who think that the items relating to 'personal characteristics of the narrator' are ineffective is too few.

Table 1. Teacher Opinions relating to the theme of personal characteristics of the video narrator

<i>Personal characteristics of the video narrator in the video</i>	Yes		Partly		No	
	f	%	f	%	f	%
Being used as a simple language by the narrator is effective in watching the whole video.	173	85.6	28	13.9	1	0.5
The diction of the narrator is effective in watching the whole video.	169	83.7	32	15.8	1	0.5
Speaking speed of the narrator is effective in watching the whole video.	164	81.2	37	18.3	1	0.5
Fluently speaking of the narrator is effective in watching the whole video.	180	89.1	20	9.9	2	1
The sincerity of the narrator is effective in watching the whole video.	137	67.8	64	31.7	1	0.5
Gesture and facial expressions of the narrator are effective in watching the whole video.	137	67.8	64	31.7	1	0.5

About watching the educational videos, teachers think that a charismatically start of the narrator for the video is effective by 78.7%; using graphics and animation is effective by 73.8%; mentioning the purpose of the video at the beginning of the video is effective at 71.3%; summarizing the lessons learned is effective by 53%. It is also understood that the number of teachers who think that the items relating to ‘personal characteristics of the narrator’ are ineffective is too few.

Table 2. Teacher opinions relating to the theme called ‘duties of the narrator in the video’

<i>Duties of Narrator in the video</i>	Yes		Partly		No	
	f	%	f	%	f	%
A charismatically start of narrator for the video is effective on watching the whole video.	159	78.7	42	20.8	1	0.5
Being mentioned the purpose of the video by the narrator at the beginning of the video is effective on watching the whole video.	144	71.3	55	27.2	3	1.5
Being summarized the lessons learned by the narrator at the end of the video is effective on watching the whole video.	107	53	93	46	2	1
Using animation and graphics in the video is effective on watching the whole video.	149	73.8	51	25.2	2	1

With reference to the teachers, the effect of voice quality (89.1%), quality of contents (88.1%), image quality (84.2%), currentness of the content (80.2%) is high. Again, according to the teachers, the effect of using intro at the beginning of the video (32.7%), being the title remarkable (55%) is low. It is also understood that the number of teachers who think that the items relating to ‘video specifications’ are ineffective is too few.

Table 3. Teacher opinions relating to the theme called ‘video specifications’

<i>Video Specifications</i>	Yes		Partly		No	
	f	%	f	%	f	%
Video quality (resolution) is effective on watching the whole video.	170	84.2	31	15.3	1	0.5
Brightness of colors (contrast) is effective on watching the whole video.	139	68.8	61	30.2	2	1
Voice quality (sizzle, etc.) is effective in watching the whole video.	180	89.1	20	9.9	2	1
Using intro at the beginning of the video is effective on watching the whole video.	66	32.7	133	65.8	3	1.5
Being the title remarkable is effective on watching the whole video.	111	55	90	44.6	1	0.5
Harmonizing the title and content with each other is effective on watching the whole video.	157	77.7	43	21.3	2	1
Quality of the content is effective in watching the whole video.	178	88.1	23	11.4	1	0.5
Being the content topical is effective on watching the whole video.	162	80.2	37	18.3	3	1.5

3.4 Student Opinions Relating to the Monitorability of Educational Video

As is seen above, students mentioned about the educational videos that fluently speaking of the narrator is effective by 82.1%; diction is effective by 73.7%; using a simple language is effective by 73%; sincerity is effective by 71.2%. Again, with reference to the same students, speaking speed (59.5%) and gestures and facial expressions (59.7%) have less effect on the same issue. Otherwise, the students expressed that gestures and facial expressions (13.6%) of the narrator and speaking speed (8.8%) of the narrator have no effect on the monitorability of the video.

Table 4. Student opinions on the personal characteristics of the narrator in video

<i>Personal Characteristics of the Narrator in the Video</i>	Yes		Partly		No	
	f	%	f	%	f	%
Being used as a simple language by the narrator is effective in watching the whole video.	355	73	105	21.6	26	5.3
The diction of the narrator is effective in watching the whole video.	358	73.7	108	22.2	20	4.1
Speaking speed of the narrator is effective in watching the whole video.	298	59.5	154	31.7	43	8.8
Fluently speaking of the narrator is effective in watching the whole video.	399	82.1	69	14.2	18	3.7
The sincerity of the narrator is effective in watching the whole video.	346	71.2	103	21.2	37	7.6
Gesture and facial expressions of the narrator are effective in watching the whole video.	261	53.7	159	32.7	66	13.6

While the students accept that a charismatically start of narrator for the video is effective at 71% and using animation and graphics in video is effective by 64%; a few numbers of students think that being summarized the lessons learned (12.6%), being mentioned the purpose of the video (9.5%) have no effect on the monitorability of the video.

Table 5. Student opinions relating to the theme called ‘duties of the narrator in the video’

<i>Duties of the narrator in the video</i>	Yes		Partly		No	
	f	%	f	%	f	%
A charismatically start of narrator for the video is effective on watching the whole video.	345	71	99	20.4	42	8.6
Being mentioned the purpose of the video by the narrator at the beginning of the video is effective on watching the whole video.	295	60.7	145	29.8	46	9.5
Being summarized the lessons learned by the narrator at the end of the video is effective on watching the whole video.	270	55.6	155	31.9	61	12.6
Using animation and graphics in the video is effective on watching the whole video.	311	64	133	27.4	42	8.6

According to the expressions of students, while the voice quality (82.7%), video quality

(78.6%), specification of the content (78.4%), harmony of title and content (76.3%) have effect on the monitorability of the educational videos; using intro at the beginning of the video (40.9%), being the title remarkable (55.8%) has less effect on the same issue. Moreover, 122 of the students mentioned that using intro at the beginning of the video (25.1%) has no effect on the monitorability of the educational videos. Finally, 63 of them expressed that being the title remarkable (13%) has no effect on the same issue mentioned.

Tablo 6. Student opinions relating to the theme called ‘video specifications’

<i>Video Specifications</i>	Yes		Partly		No	
	f	%	f	%	f	%
Video quality (resolution) is effective on watching the whole video.	382	78.6	87	17.9	17	3.5
Brightness of colors (contrast) is effective on watching the whole video.	341	70.2	120	24.7	25	5.1
Voice quality (sizzle, etc.) is effective in watching the whole video.	402	82.7	53	10.9	31	6.4
Using intro at the beginning of the video is effective on watching the whole video.	199	40.9	165	34	122	25.1
Being the title remarkable is effective on watching the whole video.	271	55.8	152	31.3	63	13
Harmonizing the title and content with each other is effective on watching the whole video.	371	76.3	89	18.3	26	5.3
Quality of the content is effective in watching the whole video.	381	78.4	86	17.7	19	3.9
Being the content topical is effective on watching the whole video.	335	68.9	104	21.4	47	9.7

4. Discussion and Conclusion

This research aimed to determine the student and teacher opinions relating to the monitorability of the educational videos. Entirely 688 people (202 teachers work in the city center of Hatay Province in the 2017-2018 academic year; 486 high-schooler studies in the same period) participated in the research.

It is found when the research results are analyzed that fluently speaking, using a simple language and the diction of the narrator is found as significant for the great majority of both students and teachers. However, gestures and facial expressions and also the speaking speed of the narrator have no effect on the monitorability of the educational video.

With reference to the teacher and students, the best fit for educational video time should be

between 5-10 minutes. Information, application, visual and interactive evaluation works relating to the targets of the lesson should be submitted in the educational video.

About the theme called 'the duties of the narrator in the video,' the great majority of student and teachers accept that a charismatically start of narrator for the video and using graphics and animation in the video are important. About the theme called 'video specifications,' the general run of teacher and students mentioned that voice quality, quality of contents, video quality are significant for the monitorability. Donkor (2011) conducted a study and pointed out that using video increases the motivation and interest of the student; the video quality also plays a significant role in the same issue.

It remarkable that many of the students accept using intro at the beginning of the video as ineffective. Also the gestures and facial expressions and summarizing the information that will be learned during the video are ineffective for many of the students. With reference to Ozan (2015), as educational video-active pedagogical approaches increases, the need for developing rapid and qualified content. It is possible to say that meeting this need effectively will increase the monitorability of the educational videos.

It is also attention-grabbing that there are a few teachers who think that any of the items are ineffective based on the answers for the items of 3 themes relating to the monitorability of the educational video. According to Kearney and Treagust (2001), students find the educational videos attractive; using videos in education processed increases the satisfaction level. This circumstance refers that educational videos are accepted as successful by the educators inefficient teaching process.

5. Suggestions

Following suggestions are offered about the educational videos and the monitorability of the educational videos:

- Presentation skills of the narrator in the educational video should be organized for the level of the student. It must be remembered that fluently speaking, using a simple language and the diction of the narrator will increase the monitorability of the educational video.
- Another factor that affects the monitorability of the video is the longness of the video in terms of the time. The prominent idea relating to the ideal time is between 5 and 10 minutes. Considering for this time interval will also increase the functionality of the educational video towards the education targets.
- A charismatically start of narrator for the video and using graphics and animation in the video will increase the motivation of watcher and learner. This point should be considered in educational video design.
- There should be given wide coverage to the educational videos and interactive educational videos by considering that teacher and students accept educational videos as a significant education tool.

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