

Examination of Primary and Secondary School Teachers' Aspects Towards Educational Use of Video Sharing Websites¹

Ertuğrul Usta* Handan Atun

Computer Education and Instructional Technology Department, Necmettin Erbakan University, Konya, Turkey

Abstract

Daily use of video has increased by televisions, but lately people have been using video sharing websites most frequently. This extended use of video sharing websites has emerged a new era for education; teachers and learners can use them to enhance learning in education. Hence, the purpose of this study is to examine primary and secondary school teachers' aspects towards educational use of video sharing websites. This research is conducted as a survey model and carried out with the participation of 114 teachers in total, 48 teachers from Taşkent and 66 teachers from Kulu districts of Konya province in Turkey. Quantitative research method has been adopted as the model of this research. Data is obtained by a 19-item questionnaire and analyzed by SPSS (Statistical Package for the Social Sciences) program by using descriptive statistics and basic correlation. Results of this study revealed that teachers have positive attitudes towards using video sharing websites as an educational tool which improves learning.

Keywords: primary-secondary school teachers, video sharing websites, educational video

1. Introduction

Today, as a result of the development in technology, a plenty of materials has been started to be used for educational purposes. The most important aim to create various educational materials is to support persistent knowledge. According to Dale's cone of experience, the permanence of knowledge increases with regards to the amount of senses used in learning process, which resulted in comprehensive learning. Video, as an educational material, provides more effective learning compared to the visual or verbal tools as it is an audio-visual resource (Kumar, 1996). Moreover, people memorize 10% of what they read, %20 of what they hear, %30 of what they see and %50 of what they hear and see according to Dale's cone of experience (Wiman & Mierhenry, 1969). While people have a tendency to memorize videos they watch, they tend to forget the other daily activities they do. Thus, the use of video material is appropriate for teaching-learning process.

It has been observed that the use of television and video in education enhances the effectiveness of the teacher, is addressed to different learning styles, strengthens the comprehension and discussion ability of the learner, reinforces the information given by teacher, enhances the motivation of the learner and improves developing the common knowledge among the students (Corporation for Public Broadcasting, 2004). In addition, the use of video in education allows students to interact with the course content, to develop their own academic engagement, and transfer their learning to long-term memories (Greenberg and Zanetis, 2012).

Recently, the number of video sharing websites (e.g. Youtube) which allow users to share their own videos and to watch videos shared by others among worldwide (Mitra, Agrawal, Yadav, Carlsson, Eager & Mahanti, 2011) has raised with the development of web 2.0 technologies (Snelson, 2008). Today, video sharing sites are frequently used as a part of everyday life (Madden, 2009). Apart from their daily use, video sharing websites (Youtube, Dailymotion, etc.) can be used for educational purposes as well as daily reasons (Yıldırım & Özmen, 2012). In addition, video sharing websites which are developed for only learning aims such as Teachertube and Schooltube are available and also there are websites such as EBA (Education and Information Network) which support sharing learning and teaching supplements including educational videos in Turkey.

The fact that using such websites which broadcasts videos provides plenty of benefits in terms of educational aspects. According to a research, students use video sharing sites to improve their learning, control their learning, and make up for the lessons they miss. Students improve their learning by watching the videos before the class to prepare the lesson, they control their learning by arranging their knowledge and how they will learn, and about 80% of the students make up for the lessons they cannot attend using video sharing sites. They also think that video sharing sites are useful, helpful, and effective, as well as fun, satisfying and motivating. Finally, the use of video sharing sites has proven to have a positive impact on students' academic performance and skills (Kay, 2012).

Dissemination the use of video sharing sites with confirmed educational benefits depends on the teachers. Similarly, it is evaluated that the use of video sharing sites by primary school teachers in Turkey has increased. It has been determined that they use internet to prepare for the courses and to support lectures. In addition, it is observed that the use of various hardware and software has risen (Baydaş, Gedik & Göktaş, 2013).

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Therefore, a research which includes the views of teachers about educational use of video sharing websites is needed. In general, the studies related to this subject cover higher education institutes; there are only a limited number of studies related to primary and secondary schools. As a result, in this paper aimed at the examination of primary and secondary school teachers' aspects towards educational use of video sharing websites is aimed. In this respect, the responses for following research questions are sought:

- (1) What are the aspects of primary-secondary school teachers towards the use of video sharing websites as lecture supplements?
- (2) What are the aspects of primary-secondary school teachers towards the features that a video sharing websites should have as a learning material?
- (3) What are the aspects of primary-secondary school teachers towards the sharing of course content among video sharing websites?
- (4) What are the aspects of primary-secondary school teachers towards sharing information, resources and announcements through the video sharing sites?
- (5) What are the aspects of primary-secondary school teachers towards video sharing sites for formal education systems?
- (6) What are the aspects of primary-secondary school teachers towards the impact of using video-sharing sites as a visual learning environment on learning motivations?
- (7) Is there any significant difference the aspects of primary-secondary school teachers towards educational use of video sharing sites in terms of gender?
- (8) Is there any significant difference the aspects of primary-secondary school teachers towards educational use of video sharing sites in terms of teaching subject?
- (9) Is there any significant difference the aspects of primary-secondary school teachers towards educational use of video sharing sites in terms of professional experience?
- (10) Is there any significant difference the aspects of primary-secondary school teachers towards educational use of video sharing sites in terms of age?

2. Methodology

This study is conducted as a survey model in order to determine primary-secondary school teachers' aspects towards video sharing websites as learning environments.

2.1 Research Sample

The sample of this research consists of primary-secondary school teachers who work in Taşkent and Kulu districts of Konya province in Turkey in 2015-2016 academic years. 114 teachers are contacted as survey participants. The distributions of the participants are given in terms of teaching subjects and genders in Table 1.

Table 1. Descriptive Features of Participants

		Gender		Total
		Female	Male	
Teaching Subject	English	9	4	13
	Information Technologies	3	5	8
	Math	8	3	11
	Music	4	3	7
	Physical Education and Sports	3	3	6
	Primary School	5	5	10
	Religion Culture and Ethics	9	3	12
	Science	9	4	13
	Social Sciences	4	6	10
	Technology and Design	3	3	6
	Turkish	7	4	11
	Visual Arts	5	2	7
Total		69	45	114

Examining Table 1, it can be inferred that 11,4% of the participants are English teachers, 7% of them are Information Technologies teachers, 9,6% of them are Math teachers, 6,1% of them are Music teachers, 5,3% of them are Physical Education and Sports teachers, 8,8% of them are Primary School teachers, 10,5% of them are Religion Culture and Ethics teachers, 11,4% of them are Science teachers, 8,8% of them are Social Sciences teachers, 5,3% of them are Technology and Design teachers, 9,6% of them are Turkish teachers and 6,1% of them are Visual Arts teachers. It can be observed that 60, 5% of participants are female and 39, 5% of them are male.

The fact that whether participants have the Internet connection at home is showed in Table 2.

Table 2. Internet Connection Availability

	N	%
Yes	98	86,0
No	16	14,0
Total	114	100,0

The fact that whether participants have mobile Internet connection is showed in Table 3.

Table 3. Mobile Internet Connection Availability

	N	%
Yes	103	90,4
No	11	9,6
Total	114	100,0

86% of participants' responses were "Yes" for "Do you have Internet connection at home?" question was asked to determine the Internet connection availability at home. 90, 4% of participants' responses were "Yes" for "Do you have mobile Internet connection?" question was asked to determine mobile Internet connection availability. Concerning the Internet connection availabilities, it can be seen that the majority of teacher participants have Internet connection via various technologies. This shows that the participants have enough online connection to use video sharing websites.

2.2 Data Collection Tool

The research was conducted as a survey based on data obtained by a questionnaire. In order to determine primary and secondary teachers' aspects towards video sharing websites the questionnaire developed by Elçiçek and Bahçeci (2015) was used. The original questionnaire consists of 25-item in Likert type. In accordance with the survey, 25th, 22nd, 21st, and 20th items which are unrelated to primary and secondary education are excluded. The other items are adapted for primary and secondary school teachers. The adapted 21-item questionnaire form identifies primary and secondary school teachers' views on using video sharing websites as an audio-visual learning environment, as well as the views on sharing course content and announcements via video sharing websites. In order to determine internal consistency of the adapted questionnaire, test-item analysis was conducted and Cronbach Alpha coefficient is calculated as .875, which means the fact that questionnaire items are reliable to measure similar characteristics.

2.3 Data Analysis

Data obtained by data collection tool were classified with numbers 1 to 5 ("1"; strongly disagree, "2"; disagree, "3"; neutral, "4"; agree, "5"; strongly agree) and were analyzed by SPSS (Statistical Package for the Social Sciences) program. As descriptive analysis, frequency, percentage, arithmetic mean and standard deviation data analysis were used. In order to do a better analysis and comprehension of the data obtained from participants about video sharing websites, the five scale intervals are determined as:

Low: 1.00 – 2.33

Medium: 2.34 – 3.66

High: 3.67 – 5.00

3. Findings

The statistical findings obtained by data collection tool are presented as categorizing the participants' responses in the direction of primary and secondary school teachers' views on video sharing websites as an audio-visual learning environment.

Teachers' views on using video sharing websites as lecture supplements are given in Table 4.

Table 4. Teachers' views on using video sharing websites as lecture supplements

Items	\bar{X}	SD
I suggest my students to use video sharing websites before the lecture as a preparation tool.	3,48	1,242
I help my students in learning subjects which are difficult to comprehend by using video sharing websites.	3,55	,893
I use video sharing websites in order to reinforce the subjects that my students learned.	4,15	,766

Examining Table 4, it can be observed that primary and secondary teachers moderately agree with suggesting video sharing websites as a preparation tool for their students (\bar{x} =3,48). Primary and secondary teachers moderately agree with overcoming learning challenges with video sharing websites (\bar{x} =3,55). Primary and secondary teachers highly agree with using video sharing websites as reinforcements for already learned subjects (\bar{x} =4,15).

Teachers' views on the characteristics which video sharing websites should have as a learning resource are

given in Table 5.

Table 5. Teachers' views on the characteristics of video sharing websites should have as a learning resource

Items	\bar{X}	SD
The course contents in video sharing websites do not supply adequate multimedia support.	3,54	1,023
Video sharing websites do not present adequate visual learning content for my subject.	3,75	,936
Video sharing websites contribute to create rich multimedia environments.	3,85	,894

Examining Table 5, it can be observed that primary and secondary teachers moderately agree with the fact that multimedia support supplied by video sharing websites' course content is sufficient ($\bar{x}=3,54$). Primary and secondary teachers highly agree with the fact that video sharing websites present adequate visual learning content for their subject ($\bar{x}=3,75$). Primary and secondary teachers highly agree with the fact that video sharing websites contribute to create rich multimedia environments ($\bar{x}=3,85$).

Teachers' views on sharing course contents via video sharing websites are given in Table 6.

Table 6. Teachers' views on sharing course contents via video sharing websites

Items	\bar{X}	SD
I think it is beneficial to share course contents via video sharing websites.	4,01	,846
I use video sharing websites as a resource for an application that I have started to learn recently.	3,82	1,001
I do not think it is a good idea to use video sharing websites as course supplements in today's education system.	3,99	,926

Examining Table 6, it can be observed that primary and secondary teachers highly agree with sharing course contents via video sharing websites ($\bar{x}=4,01$). Primary and secondary teachers highly agree with using video sharing websites as a resource for an application that they have started to learn recently ($\bar{x}=3,82$). Primary and secondary teachers highly agree with using video sharing websites as course supplements in today's education system ($\bar{x}=3,99$).

Teachers' views on sharing information, resources and announcements through video sharing websites are given in Table 7.

Table 7. Teachers' views on sharing information, resources and announcements through video sharing websites

Items	\bar{X}	SD
I use video sharing sites to share various information and resources.	3,61	,847
Video sharing sites are inadequate to make announcements about school, class or courses.	3,40	,869
Video sharing sites contribute to sharing the knowledge about courses or other educational activities.	3,88	,718
Video sharing websites contribute to the formation of academic groups within the class in line with common interests and needs.	3,41	,819
Video sharing websites do not contribute to maintain team work.	3,51	,761

Examining Table 7, it can be observed that primary-secondary school teachers moderately agree with using video sharing websites to share various information and resources ($\bar{x}=3,61$), being video sharing sites are inadequate to make announcements about school, class or courses ($\bar{x}=3,40$), the fact that video sharing sites contribute to sharing the knowledge about courses or other educational activities ($\bar{x}=3,41$) and the fact that video sharing websites contribute to maintain team work ($\bar{x}=3,51$). Primary-secondary school teachers highly agree with the fact that video sharing sites contribute to sharing the knowledge about courses or other educational activities ($\bar{x}=3,88$).

Teachers' views on video sharing sites for formal education systems are given in Table 8.

Table 8. Teachers' views on video sharing sites for formal education systems

Items	\bar{X}	SD
Every teacher should have a channel related to his or her own course on a video sharing site.	3,55	1,065
Achievement will be improvement, when the formal education systems at schools are supported by video sharing sites.	3,98	,809
I see the fact that using video sharing sites without any cost by everyone as equality of opportunity in education for our country.	4,09	,964

Examining Table 8, it can be observed that teachers moderately agree with having a channel about their course on a video sharing site ($\bar{x}=3,55$). Teachers highly agree with the fact that student achievement will be improved if formal education systems are supported by video sharing sites ($\bar{x}=3,98$) and seeing usability of video sharing sites without any cost by everyone as equality of opportunity ($\bar{x}=4,09$).

Teachers' views on video sharing sites related to learning motivations are given in Table 9.

Table 9. Teachers' views on video sharing sites related to learning motivations

Items	\bar{X}	SD
Visual content in video sharing sites facilitates learning.	4,09	,878
Video sharing sites improve motivation for lectures.	4,11	1,070

Examining Table 9, it can be observed that teachers highly agree with the fact that visual content in video sharing sites facilitates learning ($\bar{x}=4,09$) and the fact that video sharing sites improve motivation for lectures ($\bar{x}=4,11$).

Independent samples t-test was used to determine whether teachers' views on educational use of video sharing sites differ in terms of gender significantly. The independent t-test results about using video sharing sites in education in terms of gender are given in Table 10.

Table 10. The independent t-test results about using video sharing sites in education in terms of gender

Gender	N	\bar{X}	t	p
Female	69	3,76	-,530	,597
Male	45	3,82		

Examining Table 10, it can be observed that there is no significant difference between female and male teachers' views on educational use of video sharing sites ($p>,05$).

One-way ANOVA was used to determine whether teachers' views on educational use of video sharing sites differ in terms of teaching subject significantly. Teachers' views on educational use of video sharing sites differ in terms of teaching subject are given in Table 11, one-way ANOVA results are given in Table 12.

Table 11. The distribution of teachers' views on educational use of video sharing sites based on teaching subject

Teaching Subject	N	c	SD
Physical Education and Sport	6	3,83	,130
Informational Technologies and Software	8	4,43	,254
Religion Culture and Ethics	12	3,95	,468
Science	13	3,64	,607
Visual Arts	7	3,74	,469
English	13	3,78	,464
Mathematics	11	3,58	,523
Music	7	3,79	,367
Primary School	10	3,62	,572
Social Sciences	10	3,91	,375
Design and Technology	6	3,34	,836
Turkish	11	3,80	,295
Total	114	3,78	,510

Table 12. One –way ANOVA results about using video sharing sites in education in terms of teaching subject.

	Squares Sum	SD	Squares Avg.	F	p
Inter-group	6,062	11	,551	2,398	,011
Intra-group	23,437	102	,230		
Total	29,499	113			

Examining Table 12, it can be observed that One-way ANOVA technique was used to determine whether teachers' views on educational use of video sharing sites in terms of teaching subject. As a result of this analysis, it was detected that there is a significant difference between teachers' views according to the teaching subject variable ($F=2,398$; $p<0,5$). The difference determined by analysis demonstrates that Informational Technology and Software teachers have more positive perceptions about educational use of video sharing sites than other teachers.

“Average Score” variable is determined by calculating the average of the scores teachers gain from each item in the instrument to discover whether a relation available or not between the educational use of video sharing sites and professional experience. Basic correlation analysis method was used to detect the relation between “Average Score” and professional experience. The relevance between teachers' views on educational use of video sharing sites and professional experience is given in Table 13.

Table 13. The correlation analysis of the relevance between teachers' views on educational use of video sharing sites and professional experience

		Average Score	Professional Experience
Average Score	Pearson Correlation	1	-,244**
	p		,009
	N	114	114
Professional Experience	Pearson Correlation	-,244**	1
	p	,009	
	N	114	114

Examining Table 13, it can be observed that there is a significant negative relation between the average score obtained by teachers from the scale and their professional experience ($r=-0,244$; $p<0,01$). According to this result, as teachers' professional experience increases, the average score received from the questionnaire decreases. In other words, teachers' views on educational use of video sharing sites changes negatively over the years.

"Average Score" variable is determined by calculating the average of the scores teachers gain from each item in the instrument to discover whether a relation available or not between the educational use of video sharing sites and age. Basic correlation analysis method was used to detect the relation between "Average Score" and age. The relevance between teachers' views on educational use of video sharing sites and age is given in Table 14.

Table 14. The correlation analysis of the relevance between teachers' views on educational use of video sharing sites and age

		Average Score	Age
Average Score	Pearson Correlation	1	-,145**
	p		,123
	N	114	114
Age	Pearson Correlation	-,154**	1
	p	,123	
	N	114	114

Examining Table 14, it can be observed that there is not a significant relation between the average score obtained by teachers from the scale and their age ($r=-0,145$; $p>0,01$). According to this result, teachers' views on educational use of video sharing sites doesn't change related to age.

4. Conclusion

In the scope of this research, the general trends of primary and secondary teachers in using video sharing websites as teaching-learning materials and their general views are examined in the sample of Taşkent and Kulu districts of Konya province. Examining teacher participants' Internet connection possibilities, it is observed that a great majority of them have Internet connection at home (86%) or in their mobile phones (90, 4%). In addition, every school in Taşkent and Kulu districts of Konya province has Internet connection thanks to Ministry of National Education. This reveals teachers have a large opportunity to use Internet in their daily lives. According to the findings, the majority of teachers think it is appropriate to use video sharing websites as secondary resources for course subjects. Teachers think it is beneficial for students to skim over video sharing websites before the lectures. Moreover, teachers believe that students can complete their learning especially for difficult subjects via video sharing websites and they can use video sharing websites as reinforcements after the lecture. This shows that teachers think that online video platforms contribute to the instruction with their audio-visual content. It can be inferred that teachers are willing to share their course content, they use video sharing sites in their own learning and they see it is beneficial to use video sharing sites as an auxiliary resource in today's education system, considering the participants' views on sharing course contents via video sharing sites. In addition, both teachers and students are using video sharing sites to share knowledge and resources but teachers think that video sharing sites are inadequate to make announcements about the course considering the responses given by teachers about sharing resources and announcement by video sharing sites. The reason for this result may be the fact that leaving responsibilities to the students about following the announcements may cause hindrances in instructional plan or the fact that a majority of students don't have internet connection in Taşkent and Kulu. Teachers believe that video sharing sites can empower students' cooperative team work and every teacher should have a video sharing channel in a video sharing site. Additionally, video sharing sites are free which makes these sites a great resource pool for educational use. Teachers believe that video-sharing sites increase motivation and facilitate learning. In addition, opinions about the educational use of video sharing sites did not differentiate significantly in terms of gender. According to this result, the opinions of male and female teachers about the educational use of video sharing sites are similar. On the contrary, when the opinions of the teachers and teaching subjects were examined, it was seen that there was a significant difference. Examining

differentiation, it has been seen that Informational Technologies teachers have superiority to other teachers. This may have been due to computer literacy of Informational Technologies teachers. While the views of the teachers differed significantly according to the professional experience, there is no significant difference was found in terms of age. Professional experience is negatively affecting teachers' use of video sharing sites for educational purposes. This may be due to the fact that experienced teachers are traditionally trained and they are unfriendly with innovative educational approaches. Being wide range of age in this research may cause to the results related to professional experience are not parallel with the results related to age.

In this study, it is declared that the general attitude of teachers towards the educational use of video sharing sites is positive. Similar to this research in a study related to how students use video sharing sites, Vajoczki et al. (2010) have determined that a majority of students use video sharing sites before the examinations to comprehend the parts that they couldn't learn and to make a lesson overview. Accordingly, students think that using video sharing sites for classes is useful, they comprehend the subject easier when videos are used in the class and they recall easily what they have learned. Similarly, in a study conducted by Tam (2011) it has been declared that video sharing sites assist individual learning of students and students use these sites to support their face-to-face learning. Another similar study revealed that video sharing sites improve academic achievement scores (Boster *et al.* 2006). The educational use of video sharing sites develops students' teamwork and technology literacy from the 21st century skills (Alpay & Gulati, 2010). On the contrary, another study has demonstrated that a wide range of students see face-to-face instruction as adequate while they think using video sharing sites in education is not required and a part of students are not aware of educational videos (Chester *et al.* 2011). In addition, the attendance of students who use educational video sharing sites has decreased. Although online videos diminish student attendance, they improve students' learning and academic performances (Traphagan, Kucsera & Kishi, 2010). Therefore, it is important to be used video sharing sites by primary and secondary school teachers to facilitate their teaching, as well as to contribute to the learning of students and to improve themselves professionally. It is expected that this study will open up new horizons for teachers to teach new generation students in a way that they want to learn. It is suggested to conduct a broader survey in a wider context in order to generalize this research because the universe of this research is Taşkent and Kulu districts of Konya province. It is also scientifically useful to study with teachers who have different age, professional experience and teaching subjects in future studies and to determine whether teachers' perceptions vary according to these variables. It is also seen as beneficial for society to determine the influence of digital literacy on teachers the educational use of new technological tools.

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