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Investigating the primary school teachers' perspectives on the use of education platforms in teaching

Lütfi ÜREDİ[1], Sait AKBAŞLI[2] and Hakan ULUM[3]*

[1]Faculty of Education, Mersin University, Mersin, Turkey.
[2]Faculty of Education, Hacettepe University, Ankara, Turkey.
[3]Çamalan Şehit Burhan Yıldırım Primary School, Mersin, Turkey.

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Technology plays an important role in educational activities in Turkey. This is largely because of the Faith Project, which was recently introduced into the country. The Fatih Project is a project of Turkish government which seeks to integrate computer technology into the country's public education system. Education Informatics Network is one of the sub projects of the Faith Project which makes many free websites available for teachers' use. Furthermore, Ministry of Turkish National Education has included primary schools in the project and as a result, the usage of education platforms at primary schools is available now. Considering all the mentioned points, the purpose of this study was to find out classroom teachers' opinions in employing the education platforms in teaching. The participants of this study consist of teachers working in the city of Mersin, Turkey. The data were gathered from 116 primary school teachers working in the first, second, third and fourth grades, by using a semi-structured interview with 7 open-ended questions. The data were analyzed based on a descriptive research design. Besides, a qualitative approach was employed based on the answers given in the interview. The data and their frequencies are presented in tables. As a result of the data obtained from the study, it has been concluded that class teachers think education platforms are useful, the usage frequency of education platforms varies relative to different factors; and education platforms are used in an attempt to provide effective and permanent learning. Moreover, it was also stated in the study that teachers are not competent in using these education platform and they lack the required background knowledge. Consequently, several suggestions have been made to eliminate the mentioned inadequacies.

Key words: Education platforms, primary school teacher, technology, the Fatih Project.

INTRODUCTION

Knowledge is dynamic and it develops constantly, and the place of technology cannot be ignored. Technological developments enable knowledge to improve in a fast and more reliable way. In the field of education, knowledge is like a raw material that is refined by technological developments and ignoring this development gives way

*Corresponding author. E-mail: hakanulum@gmail.com.

to failure. Teachers should follow technological developments closely and they should be equipped with technological skills. Besides, teachers should use computers, which are the most important tools of technology.

In a world where science and technology advances rapidly, knowledge should not be transferred or memorized through traditional education methods. Based on the aforementioned point, education programs should be changed; and rather than training individuals by memorization, the aim of teaching should be to educate students who are, autonomous, creative, thinking critically and scientifically (Yavuz and Coşkun, 2008). In an educational setting, various factors are considered to administer the use of information technology. For instance, the teachers are considered to administer it (Sert et al., 2012). According to Xenos (2004), in the computer-based lessons, various training materials are given to students through web sites in which the traditional role of teachers loses its importance. On the other hand, teachers can focus on counseling, figuring out potential difficulties and taking appropriate precautions while students choose from the various offered educational materials. By doing this, teachers will gain their significance (Odabaşı, 2002). Informational technology use is progressing rapidly in Turkey like it is throughout the world. The use of computer has been widespread in the Turkey since the 1990s. As a result, it is important that individuals acquire relevant knowledge on technology use (Yılmaz et al., 2015). The Faith Project in education aims to use tools of information technologies within the lessons effectively in such a way that it refers to more sensory organs to provide equality in education as well as to improve the required technology at schools (faith projesi.meb.gov.tr, 2015). The components of the Fatih Project can be examined in five main sections which are: equipment software, e-content, using the information technologies and in-service education of the teachers. As the Ministry of Turkish National Education has included primary schools in the Faith Project, using Education Informatics Networks platform during both indoor and outdoor activities has become inevitable for primary school teachers.

Education Informatics Network designed by Directorate General is an innovative and educative social platform which uses information technology to provide safe, appropriate and analyzed e-contents for the use in the classroom. Education Informatics Network which was designed particularly for teachers and students and all the education partners provides the following features:

1. Offering different, rich and educational contents,
2. Providing information on culture which will be used in education, thereby popularizing it,
3. Meeting the required content,
4. Exchanging information on social network,
5. Contributing to lessons through its rich and growing archive,
6. Availability of dynamic information,
7. Involving the students to use different learning strategies (linguistic, visual, mathematical, interpersonal, auditory, etc.),
8. By bringing all teachers together on the common ground, initiating them to direct education in cooperation,
9. Being a social education platform which has been designed to use education not as a purpose but as a tool (fatihprojesi.meb.gov.tr, 2015).

As the Faith Project, which refers to the *Movement of Enhancing Opportunities and Improving Technology*, has been initiated at high schools and primary schools, it is required that teachers' level of competency of computer use should be assessed (Yılmaz et al., 2015), since a teacher should possess appropriate knowledge of computer use for an effective teaching. If the teacher lacks this knowledge and does not know how and what to teach, the aim of the computer based instruction will not be achieved. For this reason, it is necessary for teachers to improve their professional skills of using the required technology effectively before going into the classroom.

A primary school teacher plans suitable activities for the classroom, guides students in these activities, makes evaluations and takes a close interest in the challenges of each student while carrying out these activities (Oğuzkan, 1974). Primary school teachers not only teach students how to read and write but also help them in physical, mental, emotional and social development (Gültekin, 2000). In addition to having the required professional knowledge, primary school teachers should be versatile enough to possess knowledge of the use of computers and other technological equipment, and to use internet during lessons (Smith and Handaker, 2000). The role of teachers is to be a bridge between students and their web-supported lessons. The main duties of a teacher are following the needs and abilities of the students and providing guidance to the students in order to make good choices for them (Xenos, 2004).

Furthermore, the availability of teaching elementary school students by means of web should be taken into consideration with especially referring to technology. This is why certain principles like the appropriateness of the material for the students' level and the curriculum have to be considered (Alkan and Kurt, 2000). Web-supported education which will be used to boost classic education will be included in students' indoor and outdoor activities (Harris, 1999). However, out of the classroom, surfing on the net should be closely monitored.

Purpose

The aim of this study is to investigate the perspectives of primary school teachers on the use of education platforms in teaching. With this in mind, the answers to

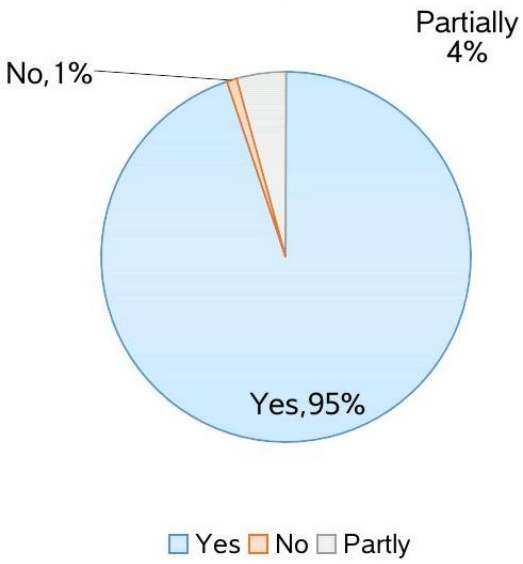

Figure 1. Rate of teachers' finding the educational platforms useful.

the following research questions have been put forward:
What are the perceptions of the primary school teachers on the use of education platforms in teaching?
More specifically:
1. What are the perceptions of primary school teachers on the efficiency of education platforms?
2. What are the perceptions of primary school teachers on the kind of activities education platforms used?
3. What are the perceptions of primary school teachers on the reasons why they prefer education platforms?
4. How often do the primary school teachers use education platforms?
5. Does the use frequency of education platforms differ according to gender and experience factors?
6. What are the perceptions of primary school teachers on which education platforms are often used?
7. What are the perceptions of primary school teachers about which lessons education platforms are preferred?
8. What are the perceptions of primary school teachers about the effects of education platforms on students' attitudes towards the lesson?
9. What are the perceptions of primary school teachers on the advantages of using education platforms?

METHODS

Qualitative research design was used in this study. It is an approach which tries to understand social facts and how these facts refer to environment based on perspectives and principles (Yıldırım and Şimşek, 2013). Qualitative methods should be used to reveal the perceptions of the individuals and to understand the external world from their points of view.

Qualitative methods are necessary to understand why individuals behave in such a particular way and how they make sense of this behaviour (Yıldırım, 1999). Bogdan and Biklen (1997) defined interview as a tool most frequently used in qualitative studies, which effectively reveals the points of views, experiences, feelings and opinions of the participants (Yıldırım and Şimşek, 2013). In-depth interviews are used highly for collecting data on the perspectives and experiences of people, especially when sensitive topics are being discovered (Mack et al., 2005). Here in this study, a semi-structured interview designed by the authors was used to explore the perspectives of the participants; the semi-structured interview guide supplies a clear set of instructions for interviewers and can provide reliable, comparable qualitative data (Louise-Barriball and While, 1994). Besides, in this study, the literature review was formed and the data relevant to education platforms were collected. The aim of this work is to find out the opinions of the primary school teachers about using education platforms in teaching.

Participants

This study was carried out with primary school teachers working in Mersin, Turkey. As it is clearly understood from Table 1. One hundred and sixteen (116) primary school teachers participated in the study, seventy-five (75) of whom were female while forty-one (41) were male. Besides, Figure 1 states the frequency of teachers who find educational platforms useful.

From the data, 110 (94%) of the participants found education platforms useful, 1 primary school teacher (1%) found it not useful, and 5 teachers (5%) stated that It is partially useful. One can understand from Figure 4 that in terms of years of experience, sixteen (16) of the teachers worked for 0-5 years; forty-eight (48) of them worked for 6-10 years; 25 worked for 11-15 years; 17 worked for 16-20 years; and 10 of the teachers worked for over 20 years. Regarding the graders, 32 of the teachers teach the 1st graders; 37 of the teachers teach the 2nd graders; 2 of the teachers teach the 3rd grader; and the remaining 25 of the teachers teach the 4th grader. The data of the participants is shown in the following table.

Instruments

The data in this study were collected through a semi-structured open ended question form designed by the researchers. The question form consists of two parts. The first part contains questions about personal data, while in the second section there are 7 questions. To ensure the validity of the form, an expert's opinion was sought and a pre-practice form was issued out to some teachers. The teachers who participated in the pre-practice were not involved in the study later on. While preparing the semi-structured question form, the views and suggestions of the members of the Department of Primary Education at Mersin University, primary school teachers, and Faculty of Educational Science members were consulted. In qualitative research design, semi-structured open ended question forms are usually given to individuals to obtain data, so 116 individuals who participated in this research were interviewed individually; the interviews were recorded and translated into texts for the question form.

Procedure and data analysis

Based on a descriptive analysis method, the acquired data were summarized and interpreted according to the questions used in the interview (Yıldırım and Şimşek, 2013). In this research, the practices and opinions of the teachers were analyzed in accordance with the purpose of the research.

Successively, the data in this study were coded, divided into themes and categorized going through the literature with the help of experts, then they were described clearly and systematically. After descriptions, explanations, interpretations and cause-effect relations, conclusions were arrived at. The data were tabulated and

Table 1. Participants.

		(f)	%	Total	
				(f)	%
Gender	Female	75	64.7		
	Male	41	35.3		
Experience	0-5 years	16	13.8		
	6-10 years	48	41.4		
	11-15 years	25	21.6		
	16-20 years	17	14.7	116	100
	20 above years	10	8.6		
Grade	1st grade	32	27.6		
	2nd grade	37	31.9		
	3rd grade	22	19.0		
	4th grade	25	21.6		

Table 2. Efficiency of education platforms.

Items	(f)
It embodies learning process by enriching it through visual and aural aspects.	37
It is accessible and it is a useful facilitator.	20
Others…	20
It increases the interaction between the students and the teacher.	16
It makes learning effective.	9
It compensate for the insufficiencies of the textbooks.	7
It makes learning fun and attractive.	6
It is useful for reinforcement and review.	4

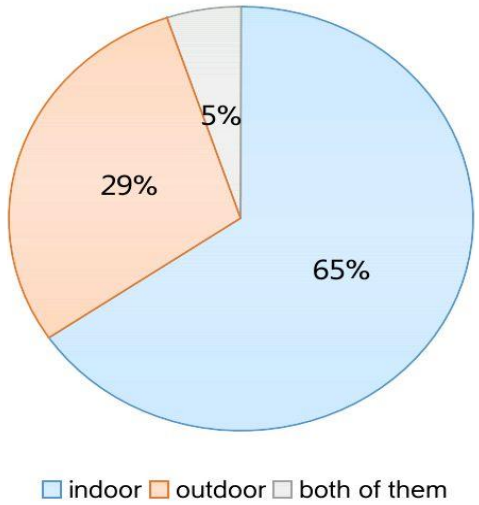

Figure 2. The kind of activities education platforms used.

the frequency of occurrence were digitized and presented in tables in order to clarify the subject more. The digitized data increases reliability as well as being more understandable (Yıldırım and Şimşek, 2013). While digitizing and tabulating the data, Microsoft Office 2016 program was used. Teachers who find education platforms useful gave the following reasons in Table 2.

According to Table 2, the most frequent item is “It embodies learning process by enriching it through visual and aural aspects”. (f:37), followed by ‘’It is accessible and a useful facilitator.’’ (f:20). Thus, it can be interpreted that the primary school teachers use education platforms in education because they provide effective and permanent learning facilities and support learning activities. While 76 respondents out of 116 primary school teachers said that they use education platforms in indoor activities, 34 of them stated that they use the platforms in outdoor activities and 6 respondents stated that they use the platforms in both indoor and outdoor activities (Figure 2). Teachers who do not use the platforms in outdoor activities explained that their reason is that the students do not have access to the platform outside school.

Table 3 shows why teachers prefer to use education platforms. According to the table, the most frequent reason is that ‘’Education platforms are appropriate for the students level and they are understandable.’’ (f:23); followed by ‘’They have rich content.’’ (f:17). The opinions shown on this table can be interpreted as primary school teachers prefer education platforms depending on their appropriateness for the level of the students, and as they are designed in rich content. The frequencies of teachers’ using education platforms are seen in Table 4. According to the table, the highest times for platform use (in weekly periods) are ‘’5-6 h’’ (f:24), ‘’3-4 h’’ (f:23) and ‘’1-2 h‘’ (f:19). Based on these durations, it can be concluded that teachers use education platforms for an average of one-two hours per day.

Table 3. The reasons why teachers prefer education platforms.

Items	(f)
They are understandable and appropriate for the level of the students	23
They have rich content	17
They are attractive and enjoyable	9
They are easy to use	7
They are free	5

Table 4. The use frequency of education platforms.

Weekly average	(f)
Never	7
1-2 h	19
3-4 h	23
5-6 h	24
7-8 h	14
9-10 h	13
10 h and above	6

Table 5. Education platforms used often.

Items	(f)
Morpakampüs	75
Eğitimhane	21
Education Informatics Network	14
Vitamin	14
Okulistik	11
Other	10
Sınıföğretmeniyizbiz	3

Regarding the weekly use of education platforms according to the gender factor, with 4.25 h a week, female primary school teachers show less time of use as compared to the male primary school teachers who spend 5.45 h of usage.

When the averages of the total weekly time use of education platforms were taken based on the professional experiences, primary school teachers who have 0-10 years of experience outnumber those who have experience of 10 years and above. Looking at this figure, it may be concluded that the more the professional experience of the primary school teachers, the lesser technological proficiency they have. It can thus be concluded that the time spent using education platforms reduces in time.

According to Table 5, the most frequently used education platforms are in the following order: ‘’Morpakampüs.’’ (f:75), ‘’Eğitimhane.’’ (f:21) and ‘’Education Informatics Network.’’ (f:14). The frequencies shown in the table also indicates the order of preference.

Table 6 shows the lessons in which education platforms are used and the frequencies of use in these lessons. According to the table, the lessons in which education platforms are mostly used are: ‘’Maths.’’(f:68), ’’Turkish.’’(f:54) and ’’Lifescience.’’(f:48). The data in the table show that primary school teachers get better efficacy when they use education platforms while teaching the lessons like Maths, Turkish and Lifescience as compared to other lessons.

Table 6. The lessons education platforms used.

Items	(f)
Maths	68
Turkish	54
Life science	48
Science and Technology	26
All lessons	22
Others	12
Social Studies	11
English	6

In Table 7, the effects of using education platforms in the lessons on the students’ attitudes are that education platforms affect their approaches positively and increase attendance in the lesson. On the other hand, 5 of the primary school teachers stated that using education platforms too much had both positive and negative effects. One (1) teacher expressed no opinion on this issue.

Table 8 shows the advantages of using education platforms in teaching. The most mentioned advantage is that ’’They embody abstract concepts.’’(f:27), followed by ’’They catch students’ interest and attention.’’(f:27), and then ’’They provide effective and permanent learning.’’(f:26). The order of these advantages can be summarized as: when education platforms are used in lesson by teachers, they catch the attention of the students more, the students are more involved in the learning, and they provide effective and permanent learning.

RESULTS AND DISCUSSION

The aim of this study was to investigate the opinions of the primary school teachers on the use of education platforms in teaching. The views and opinions of the teachers were revealed through a semi-structured interview. Nearly all the teachers who participated in the study stated that they are trying to use education platforms in teaching. However, the teachers think that the physical background of education platforms is inadequate. At primary schools, teachers use education platforms in education activities as long as the opportunities are sufficient. In the study conducted by Çağıltay et al. (2001), it was revealed that one of the reasons for the teachers’ lack of interest in the use of

Table 7. The effects of education platforms on students' attitudes towards lessons.

Items	(f)
There were positive, remarkable, interesting, enjoyable, and lesson attendance enhancing effects	110
Negative and positive effects are both avaible (when used more than needed)	5

Table 8. The advantages of using education platforms.

Items	(f)
1. They embody abstract terms.	27
2. They catch students' interest and attention.	27
3. They provide effective and more permanent learning.	26
4. They save time and resource.	23
5. They are effective tools for repetition and reinforcement.	16
6. They provide rich content.	13
7. They are easily accessible.	6
8. They increase the interaction between students and teachers.	5
9. They offer innovations.	5
10. They compensate for the insufficiencies of the textbooks.	4

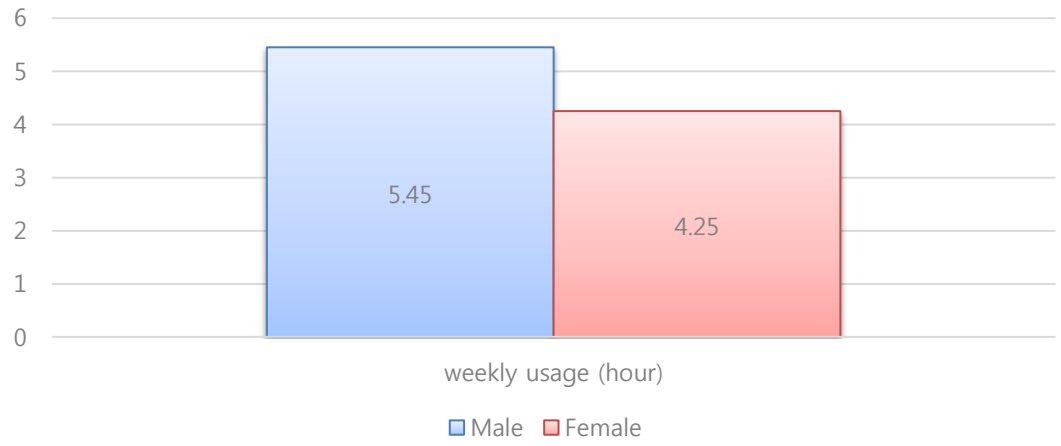

Figure 3. The use frequency of education platforms according to gender factor.

computer technology is that computers are not readily available. Besides, the study of Granger et al. (2002) is parallel to the conclusions of our study. It was concluded that one of the factors affecting technology integration into education is the shortage of materials in schools (Rice and Valdivia, 1991; Branch et al., 1999; Granger et al., 2002; Jochems, Koper; Van Merrienboer, 2004).

Furthermore, according to the results of the study, women use the education platforms more than men. It can also be concluded that as the experience of profession increases, the time for using education platforms decreases. Teachers who have 0-10 years of experience use online education platforms more frequently. In her study, Akkoyunlu (2002) revealed that teachers who had 0 to 15 years of experience used the internet more frequently. This result shows similar consequences as compared to the present results as well.

For the primary school teachers participated in the study, using visually and auditory enriched education platforms makes education process more enjoyable and provides productivity for both students and teachers. Education activities taking place through this way embody abstract concepts and make process of giving data easier. The primary school teachers revealed that education platforms are the biggest aids for effective

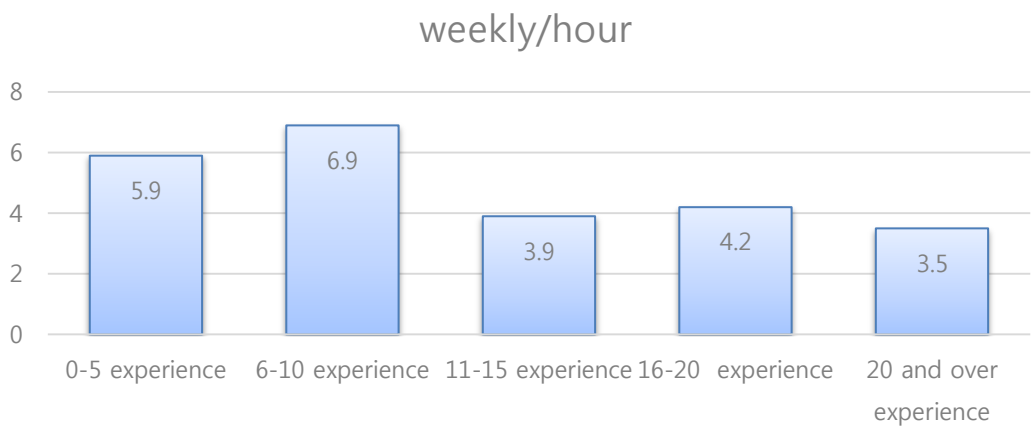

Figure 4. The Use frequency of education platforms according to experience factor.

teaching and for using teaching time efficiently. That's to say, the primary school teachers that participated in the study find education platforms useful and they believe that these platforms have positive impacts on them. Besides, the reasons why they prefer education platforms are their being free, easily accessible and suitable for the students' level, as well as having rich content. In the research conducted by Çağıltay et al. (2001), they found out advantages of using computers in education. In the research done by Odabaşı et al. (2002), it was also found out that web-assisted education offered a rich educational environment to the primary school students in terms of stimulus and embodying abstract concepts. These mentioned results overlap with this research results again.

The study results show that teachers use education platforms and this provides benefit in teaching and learning processes. This result is also emphasized in other research studies conducted. These studies have shown that the interaction in web-based environments plays key role in success (Moore and Kearsley, 1996; Palloff and Pratt, 2001; Odabaşı et al., 2002). A new era has started through these applications. All over the world, views and innovations spread faster now as compared to those in the past (Gülbahar et al., 2010).

It was also concluded that the primary school teachers that participated in the study use education platforms mostly in Turkish, Lifescience and Science and Technology lessons, while according to the study of Akkoyunlu (2002), maths is the leading lesson.

According to research results, primary school teachers mostly use such education platforms as Morpakampüs, which is followed by Eğitimhane. Teachers have declared the reasons why they prefer education platforms as these platforms firstly have rich content, as well as being for the level of the students, and are easily accessible and free.

The primary school teachers that participated in this study declared many advantages of education platforms. These advantages are that they embody abstract concepts, they catch students' interest and attention and provide effective and permanent learning, they save time and source, as well as being effective tools for repetition and reinforcement, and provide rich content.

Suggestions

1. Pre-service teachers should perform model practices with education platforms during their university education.
2. Teachers should have in-service trainings to learn how to use education platforms.
3. In schools, infrastructural and equipmental problems which prevent the usage of education problems should be abolished.
4. The opportunities to access education platforms in outdoor activities for the students should be provided with the collaboration of the school and the family.
5. To increase the variety of education platforms, governmental projects should be put into practice, and more platforms should be incorporated as an extension of Education Informatics Network.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

Akkoyunlu B (2002). Öğretmenlerin internet kullanımı ve bu konudaki öğretmen görüşleri. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi 22(22):1-8.
Alkan C, Kurt M (2000). Özel Öğretim Yöntemleri. Ankara: Anı Yayıncılık.
Bogdan RC, Biklen SK (1997). Qualitative research for education. Boston: Allyn & Bacon.
Branch RM, Kim D, Koenecke L (1999). Evaluating online educational materials for use in instruction. ERIC Clearinghouse.
Çağıltay K, Çakıroğlu J, Çağıltay N, Çakıroğlu E (2001). Öğretimde bilgisayar kullanımına ilişkin öğretmen görüşleri. Hacettepe

Üniversitesi Eğitim Fakültesi Dergisi, 21(21).
Granger CA, Morbey ML, Lotherington H, Owston RD, Wideman HH (2002). Factors contributing to teachers' successful implementation of IT. J. Comput. Assisted Learn. 18(4):480-488.
Gülbahar Y, Kalelioğlu F, Madran O (2010). Sosyal ağların eğitim amaçlı kullanımı. XV. Türkiye'de İnternet Konferansı, 2-4.
Gültekin M (2000). İlköğretim Birinci Basamakta Kimi Derslerin Öğretiminde Dal Öğretmenlerinden Yararlanma, Anadolu Üniversitesi Eğitim Fakültesi Dergisi 10(2):105-125.
Harris D (1999). Creating a Complete Learning Environment. Editor: Deanie French, Charles Hale, Charles.
Jochems W, Koper R, Van Merrienboer J (Eds.). (2004). Integrated e-learning: Implications for pedagogy, technology and organization. Routledge.
Louise Barriball K, While A (1994). Collecting Data using a semi-structured interview: a discussion paper. J. Adv. Nurs. 19(2):328-335.
Mack N, Woodsong C, MacQueen KM, Guest G, Namey E (2005). Qualitative research methods: a data collectors field guide.
Moore MG, Kearsley G (1996). Distance education: A systems view. USA: Wadsworth Publishing Company.
Odabaşı F, Çoklar AN, Kıyıcı M, Akdoğan EP (2002). İlköğretim birinci kademede web üzerinden ders işlenebilirliği. Turkish Online.
Oğuzkan F (1974). Eğitim Terimleri Sözlüğü. Ankara: Türk Dil Kurumu Yayınları.
Palloff RM, Pratt K (2001). Lessons from the cyberspace classroom: The realities of online teaching. USA: Jossey-Bass Inc.
Rice M, Valdivia L (1991). A simple guide for design, use, and evaluation of educational materials. Health Educ. Behav. 18(1):79-85.
Sert G, Kurtoğlu M, Akıncı A, Seferoğlu SS (2012). Öğretmenlerin teknoloji kullanma durumlarını inceleyen araştırmalara bir bakış: Bir içerik analizi çalışması. Akademik Bilişim, 1(3):1-8.
Smith D, Hardaker G (2000). E-learning innovation through the implementation of an internet supported learning environment. Educ. Technol. Soc. 3(3):422-432.
Xenos M (2004). Prediction and assessment of student behaviour in open and distance education in computer using Bayesian networks, Comput. Educ. 43(2).
Yavuz S, Coşkun EA (2008). Sınıf öğretmenliği öğrencilerinin eğitimde teknoloji kullanımına ilişkin tutum ve düşünceleri. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi 34(34).
Yıldırım A (1999). Nitel araştırma yöntemlerinin temel özellikleri ve eğitim araştırmalarındaki yeri ve önemi. Eğitim ve Bilim, 23(112):7-17.
Yıldırım A, Şimşek H (2013). Sosyal Bilimlerde Nitel Araştırma Yöntemleri (9. Baskı). Ankara: Seçkin Yayıncılık.
Yılmaz M, Üredi L, Akbaşlı S (2015). Sınıf öğretmeni adaylarının bilgisayar yeterlilik düzeylerinin ve eğitimde teknoloji kullanımına yönelik algılarının belirlenmesi, Int. J. Humanities Educ. 1(1):105-121.