

TEACHERS' VIEWS ON THE POTENTIAL USE OF ONLINE IN-SERVICE EDUCATION AND TRAINING ACTIVITIES

Ph.D. Candidate, Res. Assist. Mehmet KOKOC

Ph.D. Candidate, Res. Assist. Ayşenur OZLU

Ph.D., Assist. Prof. Dr. Atilla CIMER

Ph.D., Assoc. Prof. Dr. Hasan KARAL

Karadeniz Technical University Fatih Faculty of Education,
Sogutlu Trabzon, TURKEY

ABSTRACT

This study examined teacher's views on the potential use of online in-service education and training (INSET) activities. The study used a qualitative approach. A total of 13 in-service teachers from primary school, vocational school, science and art center, high school in Trabzon (on the Black Sea coast of Turkey) participated in the study. To determine opinions of participants about the potential use of online INSET activities, a online conference was held to determine teachers' views. The participants who had experienced traditional and face to face INSET courses discussed their INSET experiences and thoughts about online INSET activities. These views were transcribed and then analyzed using content analysis. The main conclusions are: with online INSET activities, especially time and place dependency can be overcome, and accommodation and transportation issues can be resolved. Teachers feel that online INSET activities can promote effective use of resources.

Keywords: Distance learning, Online professional development, In-Service education and training, Professional development of teachers.

INTRODUCTION

Technological, economic and social changes and globalization lead to changes and innovations in a wide selection of fields. These changes may have a range of positive or negative effects on societies, institutions and organizations. Educational systems and components are also affected by the changes of globalization and reform initiatives (Morewood, Ankrum & Bean, 2010; Rizvi & Lingard, 2000). Education systems and components should redesign themselves and plan reform initiatives to be more effective and stronger against the ongoing changes which are required by developments. In this context, one important area for innovation is the revising of the professional development activities carried out for educators and teachers within the education system.

Professional development of teachers is one of the primary elements in the process of educational change (Villegas-Reimers, 2003) and educational improvement (Hawley & Valli, 1999; Vo & Nyugen, 2010). Professional development of teachers is a major focus of systemic reform initiatives (Corcoran, 1995; Corcoran, Shields, & Zucker, 1998; Garet, Porter, Desimone, Birman & Yoon, 2001). Successful teacher professional development is necessary for the best student outcomes (Vo-Nyugen, 2010), improving existing teacher quality (Goldschmidt & Phelps, 2010) and successful school development (Day, 1999).

Teachers have a primary role (Morewood, Morewood, Ankrum & Bean, 2010) and a significant effect on student achievement (Rockoff, 2004; Morewood & Bean, 2009) and student learning and performance (Darling-Hammond, 2000; Carpenter, Fennema, Peterson & Carey, 1988; Villegas-Reimers, 2003; Hill, Rowan, & Ball, 2005; Goldhaber & Anthony, 2007; Kukla-Acevedo, 2009). In addition, teacher professional development is important to building a culture within schools (Cochran-Smith & Lytle, 2001) and educational reform (Futrell, Holmes, Christie & Cushman, 1995).

Some researchers categorize the implementation and activities of teacher professional development in terms of different models and types (Sparks & Loucks-Horsley, 1989; Villegas-Reimers, 2003). One of these different models, "in-service education and training (INSET)", is defined as 'organized to meet objectives such as introducing new curricula, altering teachers' beliefs and instructional and assessment practices, changing school organization and culture, and enhancing relationships between school and community' (Breit, Dede, Ketelhult, McCloskey & Whitehouse, 2005, p. 4). INSET courses are carried out in many different ways in different countries. In recent years, some innovative techniques have been used as distance education tools and online environments to provide more effective teacher professional development. Traditional face-to-face professional development (Ginsburg, Gray & Levin, 2004) has some limitations, including being expensive and impractical to deliver in a face-to-face environment (Russell, Carey, Kleiman & Venable, 2009), lacking capacity to change teachers' instructional practices in meaningful ways (Clarke & Hollingsworth, 2002; Guskey, 1986, as cited Frey, 2009), not providing opportunity for practice, follow-up and reflection (World Bank, 2005), being irrelevant, ineffective and fractured and not giving teachers what they actually need to teach students (Corcoran, 1995; Wilson & Berne, 1999, as cited Marrero, Woodruff, Schuster & Riccio, 2010). In comparison with traditional face-to-face professional development, online professional development has many advantages. These include providing time and place flexibility for teachers, easier communication and interaction between teachers in different schools (Russell, Carey, Kleiman & Venable, 2009), enabling teachers to access PD courses at their convenience from where they live (Dede, Ketelhut, Whitehouse, Breit & McCloskey, 2009; Owston, Wideman, Murphy & Lupshenyuk, 2008), providing self-paced programs (Olsen, 2010) and eliminating barriers faced by teachers who want to develop themselves. Online professional development techniques have therefore become more common for in-service education and training of teachers. There are several studies within the literature about the various models of online teacher professional development activities, including those that use online forums (Prestridge, 2010), critical friend group technique (Vo & Nyugen, 2010), project-based approach (Frey, 2009), online synchronous discussion (Chen, Chen & Tsai, 2009) and blended learning approach (Owston, Wideman, Murphy & Lupshenyuk, 2008).

In Turkey, professional development activities for teachers (included INSET courses) organized by the Ministry of National Education (MoNE) have been established and conducted in each province by National Education Directorates working with the Department of INSET (Bayrakçı, 2009). INSET activities are carried out through the seven INSET institutions, which provide accommodation for participants in different regions in Turkey. The number of teachers participating in these INSET activities is limited by transportation and accommodation problems. According to Bayrakçı (2009), there is no use of interactive multimedia tools in the current training activities and no feedback available to participants. The activities depend upon listening rather than doing. Therefore, in recent years, the Ministry of National Education has tended to conduct distance education and online professional development activities programs for teacher education. In 2004, a project called "Microsoft Collaboration in Education" was agreed between Microsoft and the Ministry of National Education.

The project, which was implemented in 2005, uses distance learning to develop teachers' computer knowledge and aims to improve gain basic computer skills and computer and Internet literacy among teachers. Another project, called 'Web-Based In-Service Training Programs On Electrical-Electronics And Information - Communication Technologies For Technical Teachers (WITPET) was organized by a partnership included the MoNE, Sakarya University, Süleyman Demirel University, Sakarya Young Businessmen Association, Varna Technical University, Budapest Polytechnic and the University of Sussex, to provide efficient in-service training to vocational / technical school teachers. The project, which has now been completed, designed and implemented internet-based training and activities for teachers. In 2008, a protocol was agreed between the MoNE and the Open Education Faculty of Anadolu University, to develop a distance education project called 'the certification-based distance INSET program. The project aimed to develop participants' (teacher, inspector or manager) knowledge and skills through a series of e-certificate programs. The project continues to provide an online learning environment. Despite all of these projects conducted by the MoNE, many teachers in Turkey never meet colleagues from other regions or participate in online professional development activities. Therefore, online professional development is still a new term for most teachers in Turkey.

This study includes a online conference experience, conducted among teachers. While the teachers were explaining their views on the use of online professional development and INSET via distance education, they experienced an online learning environment as a online conference. This study may therefore contribute to the relevant literature. The purposes of the study are:

- to show teachers' views on online professional development, INSET via distance education and distance learning;
- to determine whether or not online professional development and INSET activities contribute to teachers;
- to determine problems of traditional INSET activities.

A online conference was held firstly in order to introduce the online environment to teachers and let them experience this environment. In this conference, conventional PD and then applicability of online PD were generally discussed. Therefore, the investigation tried to determine teachers' inclination towards online PD courses.

The Importance of the Study

For the purpose of initiating, applying and developing online PD studies in Turkey, it is considerably important to know the attitudes and ideas of potential candidates (teachers) about online education. The success of a reform or an innovation movement primarily depends on its being adopted, accepted and willingly applied by the people who are meant to benefit (Çimer, 2004). For this reason, it will be a very suitable step to determine the primary thoughts, attitudes and experiences of teachers about "online INSET" or "online PD", which is quite new in Turkey. Determination of this view-attitude via not conventional face-to-face questionnaire or interview method but distance education in the "online environment" will be an innovation for the participants and give them information about the online INSET application. Therefore, even if it is a short experience, the participants will give their answers by feeling, experiencing and applying more than ever rather than based on an imaginary, estimated idea about "online INSET." The importance and value of the study are because of the more realistic data it contains.

Introducing a brand new technological development that will be applied via a pilot application in which the participants are present will make important contributions for the success of the innovation.

If face-to-face, conventional interviews were carried out with the participants rather than "online interviewing," they would answer the questions without having any idea or experience about online INSET. On that condition, the reliability of the answers is open to discussion because the participant teachers would be forced to talk about a case, event or experience about which they have no idea or experience. Therefore, it is considered that the data collection strategy used in this study will make important contributions to the related literature, development of "online PD", "online INSET" or "distance education" in Turkey.

METHODOLOGY

Research Design

The decision on the methodological choice of a research study is made based on the question of 'what do I need to know and why?' (Bell, 1999, p.101). The study used a qualitative approach, based on a survey research model. The main reasons underlying this decision was that it is modelled on the social sciences with an emphasis on the elicitation of subjects' perspectives, processes and contextual detail (Bryman, 2001) and qualitative data are rich with words (Maykut & Morehouse, 1994; Cohen & Manion, 2000). The researchers decided to use survey as the research methodology to collect data on the question topic from a small sample of the population in a short period of time (Robson, 1997). Cohen and Manion (2000) state that data collection in a survey study involves one or more of the following data gathering techniques: "structured or semi-structured interviews, self-completion or postal questionnaires, standardized test of attainment or performance and attitude test."(p.83). Therefore, this study adopted survey design with an online group interview to obtain data. The study aimed to determine teachers' views of online INSET activities. In light of these views, the study attempted to form a general outline to assess whether or not these activities can be carried out with online environments in Turkey. In order to achieve this objective, a online conference was implemented in the study.

Context

This study was conducted entirely within an online environment. After the participants were determined, they were asked to log into a specific online conference environment at a certain time and date. According to Anderson (1996), virtual (online) conferences use media and support participant interaction from different geographic locations. They are usually conducted during a defined period of time. Virtual (online) conferences can be conducted synchronously, with all participants interacting at the same time, or asynchronously, with interaction supported 24 hours a day. There is a further format that combines asynchronous and synchronous activities. The present study was carried out synchronously. According to Abramson (2007), virtual (online) conferences allow participants to meet through their computers.

Adobe Connect online conference software was used to conduct the conference. This online environment allows text, audio and visual participation, and has a range of additional features such as file-sharing, whiteboard, poll and quiz functions, which increase interactivity. In the online conference, a session manager was determined, who directed the participants, gave them right to speak thus managed the flow of the conference. The participants attended to the conference mostly from their own houses. Essential information about connecting to the environment was given to the participants before the conference by e-mail.

Data Collection Tools

The conference was conducted as a group interview. "Group interviews are often quicker than individual interviews and hence are timesaving.

The group interview can also bring together people with varied opinions, or as representatives of different collectivities." (Cohen, Manion & Morrison, 2007, p. 373) According to Watts & Ebbutt (1987), group interviews have advantages because they allow discussions, permitting a wide range of responses to be collected. Group interviews are useful when used with a group of people who have been working together for some time or for a common purpose. In this study, the participants have common characteristics of working within the same organization (the Ministry of National Education) and having a common purpose.

The group interview in this study was distinguished from standard group interviews because it was carried out completely within an online environment. According to the definition by Griffiths (2010), it can therefore be described as an online interview. Griffiths (2010) mentioned that online interviews can be carried out synchronously (via an instant messenger system) or asynchronously (via email). In this study, as mentioned above, the researchers carried out a synchronous online conference so that the online interviewing process during the conference was also synchronous. Beside to the online group interview, individual semi-structured interviews were conducted with participants.

Performing of the Online Conference

In the beginning of the online conference session manager introduced the online conference environment and software and gave some information about online INSET activities in the world and the purpose of current conference. After the introduction the manager let the participants speak and asked them some questions thus an active engagement environment was created. The participants talked about the current INSET activities in Turkey and gave some examples based on their own experiences.

The participants were asked questions about traditional and online INSET courses during the conference. They were asked about "what they think about current traditional courses and what they think about online INSET courses", "their experiences about INSET courses", "the possibility of online training, considering circumstances in Turkey", "positive and negative sides of online training; advantages and disadvantages of online INSET courses", "possible barriers to online INSET courses in Turkey", "current situation of INSET courses in Turkey" and "INSET conditions in other countries".

After the conference ended, the individual semi-structured interviews were conducted with the participants. In this manner the researchers tried to obtain more detailed data about the current conference, applicability of online INSET activities and the problems related to current INSET activities in Turkey. These interviews were conducted as verbal and written way.

Participants

In this study, the technique of purposeful sampling (Coyne, 1997) was used to select the participants. According to Morse (1991, p.129), "when obtaining a purposeful (or theoretical) sample, the researcher selects a participant according to the needs of the study". In addition, "purposeful sampling focuses on selecting information-rich cases whose study will illuminate the questions under study" (Patton, 2002, p.230). Therefore, the technique of purposeful sampling was chosen by the researchers. The 13 participants in the online conference are consisted of teachers and all participants had previously received training via traditional INSET courses. All participants were volunteers. E-mail was used to contact and communicate with the participants before the online conference. All of the participants have basic computer skills.

Two of the 13 participants are academics who were formerly teachers. The remaining 11 participants are teachers with previous experience of attending traditional (face to face) INSET courses. These participants have common characteristics of working within the same organization (the Ministry of National Education). Demographic characteristics of these 13 participants are shown in Table: 1.

Table: 1
Demographic Characteristics of Participants

Current Workplace	Participants	Year of Practice	Location
Vocational School	P1	4	Istanbul, Turkey
	P2	2	Erzincan, Turkey
	P3	8	Diyarbakır, Turkey
	P4	4	Erzincan, Turkey
	P5	4	Erzincan, Turkey
	P6	4	Antalya, Turkey
Primary School	P7	2	Samsun, Turkey
	P8	7	Izmir, Turkey
	P9	5	Gaziantep, Turkey
	P10	7	Giresun, Turkey
	P11	1	Tokat, Turkey
Science-Art Center	P12	7	Trabzon, Turkey
High School	P13	14	Adiyaman, Turkey

Data Analysis

Data obtained from the study was analyzed using the content analysis approach. Content analysis can be defined as "an overall approach, a method, and an analytic strategy" that "entails the systematic examination of forms of communication to objectively document patterns" (Marshall & Rossman, 1995, p.85). Trace (2001, p.1) stated "In using content analysis as a method, the objective is to get at aspects of meaning by examining the data qualitatively. In effect, the method is used to examine how authors or respondents view and understand certain issues".

The data were analyzed to determine teacher views on online INSET activities. The researchers conducted the post-interview data analysis part together. First, the online conference records were transcribed to text. After transcribing, the data of the study were read several times. The data were eliminated using "data reduction", which "generally consists of coding data in preparation for analysis"(Cohen, Manion & Morrison, 2007, p.347).

First-level coding was to determine the most frequently used keywords and statements. "First-level coding is a device for summarizing segments of data" (Miles & Huberman, 1994, p.69). Next, the themes of the study were determined. The researchers used pattern coding as a way of grouping the summarized segments into themes (Miles & Huberman, 1994). According to Miles & Huberman (1994), pattern coding reduces large amounts of data into a smaller number of analytic units. After determining the themes, the researchers started to analyze them, forming categories and matrices. Finally, the study data were interpreted based on those matrices and categories, further supported by reference to findings within the literature.

Validity and Reliability of the Research Data

In qualitative research, validity means objective researcher observation (Yildirim & Simsek, 2008).

In order to ensure validity, the researchers used direct quotations of participants' views within the summary text. Ideas were supported by these quotations. The researchers also showed the study data to the participants before data analysis and obtained their approval for member-check (Janesick, 2003). Member checking is "procedure that involves asking participants in a qualitative study to check the accuracy of the research report" (Fraenkel & Wallen, 2008, p.663).

The researchers used several methods to ensure the reliability (Fraenkel & Wallen, 2008), credibility and dependability of the study. At of the first all steps of the study were expressed in a detailed way. Process, situation and research method were explained clearly. Also, the raw data was read by the researchers four times to reduce any potential misunderstandings. The researchers asked most of participants in the study to review the accuracy of the research report (Fraenkel & Wallen, 2008).

Ethics

The researchers paid attention to principles of ethical research (Fraenkel & Wallen, 2008) during the study process. In this context, researchers paid importance to participant's willingness and volunteering to participate, and all participants were volunteers. Participants' approval was obtained before data analysis and they were shown the raw data after transcription. Recordings of the online conference were watched by the participants prior to transcription. The researchers paid particular attention to confidentiality (Miles & Huberman, 1994). Participants were assured that their identity and personal data would remain anonymous. During the planning stage of the study, the researchers paid attention to the choice of appropriate methods of analysis. The relevant literature was reviewed and checked. The researchers tried to work in a systematic way.

Before the data collection process, the participants were kindly invited to participate in an online interviewing. They were explained the data collection procedure and confidentiality issues as this were very important for them and the researchers. As nowadays internet sometimes causes in problems for people because you do not know to whom you are talking on the internet. Even, people can misuse what you told to them on the internet. Private details of people can easily be stolen on the internet. Besides, as teachers are civil servants in Turkey, they always show reluctance to talk about their profession, school etc. in formal settings. They are afraid of being punished by their administrators sometimes.

Therefore, confidentiality and trust are very important in conducting research especially with teachers in Turkey. For this purpose, the teachers' permission were asked at the beginning of the research and strict confidentiality was guaranteed by the researchers. Online records both visual and audio were not shared with anybody else, except among the researchers. Before the data analysis procedure, the transcripts were sent to the participants and asked whether they agreed with them.

RESULTS and DISCUSSION

Reported Problems Related To Current INSET Courses

This section examines participants' views on the difficulties of attending INSET courses. This category has three themes. The first theme represents time-place issues, the second represents transportation-accommodation problems, and the last concerns administrator attitudes. Five main problems emerged from these themes, which are shown in Table: 2.

Table: 2
Reported problems related to current Inset courses

Problems	N	% of Participants
Time Inappropriateness.	5	35
Place Inappropriateness.	2	14
Transportation Problems.	4	29
Administrators reject INSET course demands.	1	7
Resistance to adopting online training due to financial implications for current trainers.	2	14

As shown in Table: 2, five participants indicated the importance of time inappropriateness, two participants indicated importance of place, four emphasized transportation problems and two participants raised the issue of reduced income for training staff resulting from a shift to online training methods.

The results for the first and second themes are consistent with the relevant literature. The participants raised issues based on their experiences. Most participants referred to their own INSET experiences and gave examples. The literature includes statements that are consistent with those experiences. For example, according to Cüre (2007), traditional education depends on time and place. For this reason it requires a certain time and place. This traditional group learning environment allows the training to be carried out with a limited number of teachers. Offering teachers online INSET activities can increase the effectiveness of teacher training. Consistent with the findings of Cüre, a study by Uçar (2005) also indicated some current problems in implementing INSET in Turkey, including that current INSET buildings are not suitable for needs, insufficient facilities for INSET courses and insufficient accommodation and refectory facilities.

In terms of time problems there are many similar statements within the relevant literature. According to Yıldırım (2007), online training sessions / professional development classes given to the teachers requires much less time of teachers and interferes with other teaching and classroom duties. One of the participant views is described next:

"I am working in a village. INSET courses were carried out during working hours. Because of this, my lessons were impeded, and there were additional transportation issues...[P7]"

In addition to the first and second themes, a number of comments were made about administrator attitudes. According to Mulenburg and Berge (2001, p.16), one of the barriers to online DL activities is Administrative Structure:

"Managing distance-learning programs through the existing administrative structure can be problematic. Partnerships among different units within an organization or among different organizations require agreements on fiscal issues such as costs, tuition and fees, and distribution of revenue, as well as scheduling and issuance of credits."

The results indicate that time, place, accommodation and transportation issues are the most significant challenges in existing INSET courses. Most of the participants shared these views and there are many results in the literature that are consistent with those views.

The teachers determined main problems in traditional professional development programs as unattractive and less familiar topics, being forced to participate in PD programs, courses given by academicians who do not have any school experience, and the absence of practical knowledge. Baran and Çağiltay (2006, p.11) indicated that *“the teachers emphasized the most important advantage of the online learning module as time and setting flexibility. That is, teachers focused on the universal advantages of e-learning. They have some reservations about whether or not teachers in different locations around the country can access and use computers. The teachers also mentioned some positive contributions of online learning to Turkish teachers. Online PD may help teachers who have location problem, make it easier to access the materials, save time and be more comfortable and convenient for teachers.”* A study by Akkoyunlu and Orhan (1999) also mentioned transportation and accommodation problems. According to their findings, factors such as excessive numbers of teachers, geographic conditions of Turkey, lack of time, the difficulty of leaving the family in order to attend a training program in another city and the financial costs make it necessary to consider different approaches in INSET. According to Yılmaz and Düğenci (2010), online DL is an educational model that can eliminate geographic, physical, economic or social difficulties that prevent individuals from using their educational rights. It makes education time-place independent and personalized, provides equal opportunities as well making education accessible to more people and making it more economic. Uçar (2005) reported that the problems associated with INSET include a lack of support for INSET courses among senior managers and that staff can not spare time to attend INSET courses.

Most of the participants motioned the difficulties in attending INSET courses located in other places. They placed most emphasis on transportation and accommodation problems. In addition, some of the participants also mentioned time inappropriateness and place problems. For example:

“These courses cause a lot of problems for the participants who are attending from villages or counties...[P4]”
“Through online PD, we can be trained without leaving home or work...[P5]”

The Efficiency of Inset Courses

This discusses participants’ views about the efficiency of INSET. This category has three themes. The first theme represents maximizing the benefits gained from expert knowledge and in an effective way; the second theme represents the number of course participants; the last theme is about the way in which INSET courses are perceived. Four main ideas emerged from these themes, as shown in Table: 3.

Table: 3
The Efficiency of INSET Courses

The views of participants related to the first theme are consistent with those reported Ideas	N	% of Participants
Fewer experts can train more people with online PD.	1	7
More people can be trained simultaneously with online PD.	1	7
Many people attend these courses; the courses are not functional.	2	14
INSET courses are perceived as holidays; they are not effective.	4	28

The views of participants related to the first theme are consistent with those reported in the literature. For example, Delil (2005) mentioned benefiting from experts. In the present study, participants particularly emphasized the idea that "more teachers can be trained with fewer experts". That idea is also considered as "effective using of sources".

According to the literature, the most common issues related to INSET in Turkey is that there are a lot of teachers who required training and the facilities are inadequate. The courses are very crowded, which makes them non-functional. Participants in the present study complained about that issue. As mentioned previously, Uçar (2005) indicated that some of the current INSET problems in Turkey include INSET buildings that are not suitable for needs, a lack of facilities for INSET courses, and insufficient accommodation and refectory facilities of INSET.

The results showed that some issues are related to the large number of participants. This should be highlighted as an important issue, because the participants repeated this view several times. Besides, this is a common issue, which can also be seen the in relevant literature. Some studies mentioned expert knowledge. In order to benefit from expert knowledge efficiently, online PD is more useful. In terms of benefiting effectively from expert knowledge, it is clear that it is not possible to host the training programs in everywhere location; the resulting centralization of training courses causes attendance issues to these programs and this creates opportunity inequalities.

Theme three illustrates another issue about INSET – that teachers in Turkey perceive INSET courses as a holiday. INSET institutes tried to educate teachers in INSET centers at certain times, which are generally in two or three week courses during summer (Saban, 2000). These courses are generally hosted in touristic places and facilities in order to ensure attendance to these courses.

This perception issue causes efficiency problems. Cüre (2007, p.7) refers to this issue: "the facilities founded for training activities became social facilities for holidays" and Uçar (2005, p.130) mentioned it as "activities are located in touristic places and participants want to attend the courses for holiday". Ucar (2005, p.68) reported the same issue: "One of the INSET problems is that INSET courses are perceived as holiday or social activities." The participants shared same idea with the relevant literature:

"INSET courses are perceived as holiday activities, so participants can't benefit from these courses...[P13]"

"It isn't clear whether INSET courses are for holiday or training. In order to make teachers attend these courses, amusing environments are arranged...[P3]"

Akkoyunlu and Orhan (1999) referred to the high number of course participants. According to their findings, the high numbers of teachers make it necessary to consider different approaches in INSET. Some of the participants in the current study referred to the number of course attendees:

"INSET courses are very crowded so they are not functional. We can read the slides which are shown to us in the courses...[P8]"

One of the study participants explained his idea about the number of potential trainees:

"A teacher can attend INSET courses one or two times in a year but with Distance Learning these numbers increase...[P6]"

The Roles of Online Activities in INSET

This section reports on participants' views on the roles of online activities in INSET. This category has two themes. The first theme represents positive views about online activities and the second theme demonstrates negative views. Five main ideas emerged from these themes, shown in Table: 4.

Table: 4.
The Roles of online activities in INSET

Views	N	% of Participants
More efficient use of resources.	7	50
Practical training can be carried out with online activities.	3	21
Communication is much easier than in a classroom environment.	2	14
People with disabilities can be included in the system.	2	14
The available online systems can not be used for practice	7	50

As shown in Table: 4, two participants stated that communication is much easier within a online learning environment. Seven participants indicated that online activities can not be used to learn practical skills. In contrast, 3 other participants stated that practical context can be carried out in an online way. Two participants pointed out benefits of online activities for people with disabilities. The first view in this category is one of the most commonly repeated views, and 7 of the participants shared same idea. It can be said that effective use of resources is one of the most important benefits of online techniques. The participants particularly emphasized potential financial savings, and the same issue is emphasized in the literature:

In Turkey, a lot of time, energy and financial resources are required to train all of the teachers. In addition, the continuity of education required continuity of the sources. Therefore, the government has to think about the ways of using those sources effectively (Akpinar, Bal & Simsek, 2005).

Some of the participants emphasized that the practical context of a subject can not be taught using online activities but most participants indicated the opposite, stating that, with different devices, the necessary practical knowledge can be taught. Half of the participants justified that practical knowledge can not be taught. This view is one of the most commonly repeated views in the current study, and is an issue that is not found in the literature. It can be said that some, but not all, types of practical knowledge can be taught by using online techniques. It is possible to teach a range of practical skills using various devices such as graphics tablets.

It is interesting that some of the participants stated that it is easier to communicate with others in an online environment. Some participants reported that there are communication issues in traditional classrooms. They emphasized that nobody listens to each other, people all talk at once and it is crowded. It can be said that, in some cases, communication is easier in online environments; because one person talks at one time, everyone can hear him/her.

In these systems, the session manager guides the discussion, and so it is essential to get permission to talk from the session manager. If the session manager does not let anyone talk, a trainee is not able to talk.

In the relevant literature, views about online and traditional classroom communication are inconsistent with our results. According to Muilenburg and Berge (2001, p.17) one of the barriers to online DL is social interaction and program quality: *"Participants in distance learning courses can feel isolated due to lack of person-to-person contact. But some people are uncomfortable with the use of student centered and collaborative learning activities, because they change the traditional social structure of the classroom. There are concerns about the quality of distance learning courses, programs, and student learning."*

According to Yılmaz and Düğenci (2010) making education independent from time and place, results in a more economical system. They indicated some of the fundamental factors that differentiate online and traditional training as reduced financial costs, providing equal opportunities, independence from time and place and personalization. According to Yıldırım (2007), online activities eliminate transportation and accommodation costs, resulting in significant financial advantages and therefore making educational opportunities accessible to everyone who wants to learn. In addition to improved opportunity, inequality issues can be partially solved.

Similarly to reports in the literature, most of the participants in the present study emphasized the effective use of resources. They particularly pointed out costs reduction:

"Online PD activities are more rational in terms of transportation and time saving...[P7]"

"Online PD activities are useful in terms of costs reduction...[P4]"

"With online PD activities, time and effort are saved...[P11]"

Some of the participants also mentioned the potential benefits for people with disabilities. For example:

"For example I injured my leg yesterday and if this conference has not been hosted in a online environment, I would not be able to attend this. For this reason, online activities are very important and, again, it is important because handicapped people can be included within the system...[P11]"

Online techniques increase accessibility to educational facilities and may allow students with disabilities to be more easily incorporated into training sessions alongside their able-bodied peers. Consistent with that theme, some studies in the literature emphasized the same issue. According to Çetiner, Gencil and Erten (1999), online training activities or DL is the only option for meeting the needs of debilitated, handicapped and imprisoned people.

"People who can not attend INSET courses can be trained online. The ease of involving handicapped people in online training systems make it very important...[P10]"

Many participants emphasized that online techniques are not useful for practical context. They indicated that online techniques can be used much more easily to convey theoretical knowledge.

"Contexts which requires practice and handicraft can not be carried out online...[P4]"
"Theoretical knowledge which does not require practice can be carried out in online environments. The types of education in Vocational Schools have a more hands-on focus than the other schools, so online activities are not useful for these schools...[P1]"

Some of the participants shared opposing ideas about using practical knowledge with online techniques:

"Online techniques can be challenging within a practical context, but it doesn't consist only of speaking, there are many activities like screen sharing and file sharing. Practical activities can be carried out in these ways...[P11]"

The participants also emphasized that communication within a online environment is much easier than in a traditional classroom. Their ideas are described next:

"This environment is better than forums. Because, for example, right now I have the permission to talk and the rest of the participants are listening to me, after that I will listen to them...[P3]"

"This is better than a classroom environment. People don't talk all together...[P7]"

CONCLUSIONS and RECOMMENDATIONS

In reporting on the study, we mainly tried to present teachers' views about internet-based INSET courses. The general issues that emerged are:

- The teachers determined that the main problems in traditional INSET programs as time-place inappropriateness, transportation-accommodation problems, large number of participants, perceiving INSET courses as holidays, administrator rejection of INSET, resistance to implementing INSET due to resulting effect on incomes among course-providers.
- The teachers indicated some positive online PD properties as: efficient technological background, the opportunity to train more people, using resources effectively, easier communication, including people with disabilities in the system, time and place flexibility. The only negative property was difficulty of using online techniques when learning practical skills. Exactly the opposite, there was a positive property: which is opportunity of using online techniques with practical knowledge.

The participants mostly mentioned their own experiences. They especially emphasized the existing problems that they encountered in traditional INSET courses. Most of them complained about the high number of INSET participants. In these courses, there is often an excessive number of participants, which it makes difficult to understand, to communicate and benefit from these courses. The participants indicated that online INSET courses can solve these problems.

One of the other issues emphasized is time and place flexibility. Almost all participants had experiences about time and place of INSET courses. They indicated that the timing is not suitable for teachers. In addition, it is difficult for participants who live in other places to attend these courses. There are also some transportation and accommodation issues. Participants stated that online INSET courses can provide solutions to these issues. One of the views is that INSET courses are perceived as holidays. If these courses are hosted online, participants may have a more professional perception of these courses. Of the respondents' positive views of online learning, the most commonly perceived benefit was more efficient use of resources. Participants thought that with online INSET activities, financial and time costs are reduced, fewer experts are able to train more people in less time. Participants stated that online INSET courses are the way to use the available resources effectively.

On the other hand, half of the participants said that online techniques can not be used effectively to disseminate practical knowledge. They said that online activities are suitable for a theoretical context, not practical. However, some participants indicated that, with some specialist equipment, this problem can be overcome.

This study includes a online conference experience among teachers and reports on teachers' views of online and traditional professional development; in-service training activities and distance learning; and problems in traditional in-service training. Teachers related their experiences and shared their ideas while they were experiencing an online communication environment. This gave teachers a better understanding of such environments, as they could see for themselves the advantages and disadvantages of an online environment. Participants evaluated these systems in the light of this living. A review of the literature found no previous studies in this field that used a similar methodology, where a collaborative online environment was actually used as the interface for the data-collection methodology. This novel use of an online system to examine perceptions of both online and traditional learning environments contributes to the relevant literature in this field.

It can be suggested that this study should be repeated with a larger sample group. In terms of making the findings generalizable to a wider range of learning-related issues, the study format could be repeated with teachers from other countries.

Based on the results of the study, it can be said that it is necessary to conduct INSET courses online in Turkey. In order to ensure effectiveness, the number of course participants must be reduced and the physical facilities must be improved.

In addition, it is also necessary to address the perception issues among teachers, and online INSET courses should be used to solve this problem.

If the current form of classroom-based training continues, there is a need to provide appropriate accommodation and transport opportunities for course attendees based in other locations.

Courses should also be hosted at times that are convenient for teachers. This arrangement should be cooperative and should involve consultation with teachers.

BIODATA and CONTACT ADDRESSES of AUTHORS



Mehmet KOKOÇ was born in Antalya, Turkey, in 1986. He graduated from Ege University, Faculty of Education, Department of Computer Education and Instructional Technology (CEIT) in 2009. The same year, he began his graduate studies in the CEIT program, Institute of Natural Sciences, Hacettepe University. Now, he is a research assistant at the Distance Education Application and Research Center, in Karadeniz Technical University, Turkey. He is a master student at the same university. Among his interested research topics are technological pedagogical content knowledge, distance education and

social networks.

Research Assistant Mehmet KOKOÇ
Karadeniz Technical University
Distance Education Application and Research Center
Trabzon, Söğütü, 61335, TURKIYE
Phone:(0462) 3777123
Email: mkokoc@ktu.edu.tr



Aysenur OZLU was born in Izmir, Turkey in 1988. She graduated from Karadeniz Technical University, Fatih Faculty of Education, Department of Computer and Instructional Technology in 2009. She has been working as a research assistant in the Distance Education Application and Research Center, Karadeniz Technical University, Trabzon, Turkey, since 2009. She is a master student at the same university. Her research interests are social media, distance education and e-learning and distance education.

Research Assistant Aysenur ÖZLÜ
Karadeniz Technical University
Distance Education Application and Research Center
Trabzon, Söğütlü, 61335, TURKIYE
Phone:(0462) 3777125
Email: aozlu@ktu.edu.tr



Atilla CIMER is deputy dean of Fatih Faculty of Education, Karadeniz Technical University. In 2000, he received his M.A. from Nottingham University, Science Teacher Education and School Improvement, United Kingdom. In 2004, he received his Ph.D. in Biology Education, Nottingham University, School of Education, United Kingdom. He has been working at Department of Science and Mathematics for Secondary Education, Fatih Faculty of Education, Karadeniz Technical University.

Assist. Prof. Dr. Atilla CIMER
Karadeniz Technical University, Fatih Faculty of Education,
Department of Science and Mathematics for Secondary Education
Trabzon, Söğütlü, 61335, TURKIYE
Phone:(0462) 3777007
Email: acimer@ktu.edu.tr



Hasan KARAL was born in Trabzon, Turkey, in 1969. He graduated from Karadeniz Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering in 1990. In 1993, he received his M.S and in 2000 he received his Ph.D. from Karadeniz Technical University, Graduate School of Natural & Applied Sciences, Department of Electrical and Electronics Engineering. He is chair Karadeniz Technical University, Fatih Faculty of Education, Department of Computer and Instructional Technology. He is also manager Karadeniz Technical University Distance Education Application and Research Center.

Assoc. Prof. Dr. Hasan KARAL
Karadeniz Technical University, Fatih Faculty of Education,
Department of Computer Education and Instructional Technologies
Trabzon, Söğütlü, 61335, TURKIYE
Phone:(0462) 3777187
Email: hasankaral@ktu.edu.tr

REFERENCES

- Abramson, G. (2007). From the Desk of the Executive Editor: Big, Small, and Virtual Conferences. *Journal of Instruction Delivery Systems*, 21(1), 3-5.
- Akkoyunlu, B., & Orhan, F. (1999). Uzaktan Eğitim Yaklaşımında Temel Eğitim I. Kademe Öğretmenleri'nin Video Destekli Hizmetiçi Eğitimi. *Hacettepe Eğitim Fakültesi Dergisi-Journal of Hacettepe University Faculty of Education*, 16-17, 134 – 141.
- Akpınar, Y., Bal, V. & Simsek, H. (2005). E-Portfolyolarla Öğrenme Ortamı Geliştirme ve Destekleme Platformu. *The Turkish Online Journal of Educational Technology - TOJET*, 4(4), 125-129.
- Anderson, T. (1996) The Virtual Conference: Extending Professional Education in Cyberspace. *International Journal of Educational Telecommunications*, 2(2/3), 121-135.
- Baran, B., & Çağıltay, K. (2006). Teachers' Experiences in Online Professional Development Environment. *Turkish Online Journal of Distance Education-TOJDE*, 7(4), 110 -123.
- Bayrakçı, M. (2009). In-Service Teacher Training in Japan and Turkey: A Comparative Analysis of Institutions and Practices. *Australian Journal of Teacher Education*, 34(1), 10-22.
- Bell, J. (1999). *Doing Your Research Project* (3rd ed.). Buckingham: Open University Press.
- Bryman, A. (2001). *Social Research Methods*. Oxford: Oxford University Press.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş., & Demirel, F. (2010). *Bilimsel araştırma yöntemleri* (4th ed.). Ankara: Pegem Publications.
- Carpenter, T. P., Fennema, E., Peterson, P. L., & Carey, D. A. (1988). Teachers' pedagogical content knowledge of students' problem solving in elementary arithmetic. *Journal for Research in Mathematics Education*, 19, 385–401.
- Chen, Y., Chen, N., & Tsai, C. (2009). The Use of Online Synchronous Discussion for Web-Based Professional Development for Teachers. *Computers & Education*, 53(4), 1155-1166.
- Cochran-Smith, M., & Lytle, S.L. (2001). Beyond certainty: Taking an inquiry stance on practice. In A. Lieberman & L. Miller (Eds.). *Teachers caught in the action: Professional development that matters* (pp. 45-58). New York: Teachers College Press.
- Cohen, L., & Manion, L. (2000). *Research Methods in Education*. New York: Routledge.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education* (6th ed.). London: Routledge Falmer.
- Corcoran, T. B. (1995). *Transforming professional development for teachers: A guide for state policymakers*. Washington, DC: National Governors' Association.

Corcoran, T. B., Shields, P. M., & Zucker, A. A. (1998). *Evaluation of NSF's stateside systemic initiatives (SSI) Program: The SSIs and professional development for teachers*. Menlo Park, CA: SRI International.

Coyne, I.T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling: Merging or clear boundaries? *Journal of Advanced Nursing*, 26, 623-630.
Cüre, F. (2007). Evaluation Of Web-Based Distance Computer Training Programme Applying By Ministry Of National Education. Unpublished Master Thesis, Marmara University.

Çetiner, M., Gencil, H.Ç., & Erten, Y.M. (1999). *İnternete Dayalı Uzaktan Eğitim ve Çoklu Ortam Uygulamaları*. Paper presented at the 1999 Conference on Internet in Turkey, Ankara. Retrieved 29.05.2010 from, <http://inet-tr.org.tr/inetconf5/tammetin/gencil-egit.doc>.

Çimer, A. (2004). *A study of Turkish Biology Teachers' and Students' Views of Effective Teaching in Schools and Teacher Education*. EdD Thesis, The University of Nottingham School of Education, Nottingham, U.K.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. Education Policy Analysis Archives, 8(1). Retrieved 06.07.2010 from, <http://epaa.asu.edu/epaa/v8n1>.

Day, C. (1999). *Developing Teachers: Challenges Of Lifelong Learning*. London: Falmer.

Delil, Y. (2005). Yönetici asistanları ve büro çalışanlarının hizmet içi eğitimleri için WEB tabanlı uzaktan eğitim programı önerisi. [Proposal of a WEB based in-service training program for executive assistants and office staff]. Unpublished Master Thesis, Gazi University.

Erturgut, R. (2007). İnternet Temelli Uzaktan Eğitimin Örgütsel, Sosyal, Pedagojik ve Teknolojik Bileşenleri. [*Organizational, Social, Pedagogic Components of the Internet Basic Distance Education*]. *Bilişim Teknolojileri Dergisi-International Journal of Informatics*, 2(1), 79-85.

Fraenkel, J. R., & Wallen, N. E. (2008). *How to design and evaluate research in education* (7th ed.). New York: McGraw-Hill.

Frey, T. (2009). An Analysis of Online Professional Development and Outcomes for Students with Disabilities. *Teacher Education and Special Education*, 32(1), 83-96.

Futrell, M. H., Holmes, D. H., Christie, J. L., & Cushman, E. J. (1995). *Linking education reform and teacher professional development: the efforts of nine school districts*, occasional paper series (Washington, DC, Center for Policy Studies, Graduate School of Education and Human Development, George Washington University).

Garet, S., Porter, A., Desimone, L., Birman, B. & Yoon, K. (2001). What Makes Professional Development Effective? Results From a National Sample of Teachers. *American Educational Research Journal*, 38, 915-945.

Ginsburg, A., Gray, T., Levin, D., & American Institutes for Research, W. (2004). Online Professional Development for Mathematics Teachers: A Strategic Analysis. *American Institutes for Research*, Retrieved from ERIC database.

- Goldhaber, D. (2002). The mystery of good teaching: Surveying the evidence on student achievement and teachers' characteristics. *Education Next*, 2(1), 50–55.
- Goldhaber, D. D., & Anthony, E. A. (2007). Can teacher quality be effectively assessed?. *The Review of Economics and Statistics*, 89(1), 134–150.
- Goldschmidt, P., & Phelps, G. (2010). Does Teacher Professional Development Affect Content and Pedagogical Knowledge: How Much and for How Long?. *Economics of Education Review*, 29(3), 432-439.
- Griffiths, M. (2010). The Use of Online Methodologies in Data Collection for Gambling and Gaming Addictions. *International Journal of Mental Health and Addiction*, 8(1), 8-20.
- Hawley, W., & Valli, L. (1999). The essentials for effective professional development: A new consensus. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 127-150). San Francisco: Jossey-Bass.
- Hill, H., Rowan, B., & Ball, D. (2005). Effects of Teachers' Mathematical Knowledge for Teaching on Student Achievement. *American Educational Research Journal*, 42(2), 371-406.
- Janesick, V.J. (2003). The choreography of qualitative research design: minuets, improvisations, and crystallization. In Denzin, N.K., & Lincoln, Y.S. (2003). *Strategies of qualitative inquiry* (2nd ed.). London:Sage.
- Kukla-Acevedo, S. (2009). Do teacher characteristics matter? New results on the effects of teacher preparation on student achievement. *Economics of Education Review*, 28(1), 49–57.
- Marrero, M., Woodruff, K., Schuster, G., & Riccio, J. (2010). Live, Online Short-Courses: A Case Study of Innovative Teacher Professional Development. *International Review of Research in Open and Distance Learning*, 11(1), 81-95.
- Marshall, C., & Rossman, G. B. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Maykut, P., & Morehouse, R. (1994). *Beginning Qualitative Research: A Philosophic and Practical Guide*. London: The Falmer Press.
- Miles, M. B., & Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Beverley Hills: Sage.
- Mosenthal, J., Lipson, M., Torncello, S., Russ, B., & Mekkelsen, J. (2004). Contexts and practices of six schools successful in obtaining reading achievement. *Elementary School Journal*, 104(5), 343-367.
- Morewood, A.L., & Bean, R. M. (2009). Teachers' perceptions of professional development activities in a case study school. In E. Ealk-Ross, S. Szabo, M. B. Sampson, & M. Foote, (Eds) *Literacy Issues During Changing Times: A Call to Action*, (pp-248-263). Commercer, TX: College Reading Association.

Morewood, A.L., Ankrum, J.W., & Bean, R. M. (2010). Teachers' Perceptions Of The Influence Of Professional Development On Their Knowledge Of Content, Pedagogy, And Curriculum. *College Reading Association Yearbook, 31*, 201-219.

Morse, J. M. (1991). Strategies for sampling. In J. Morse (Eds.), *Qualitative nursing research: A contemporary dialogue* (Rev. Ed.). (pp. 127-145). Newbury Park, CA: Sage.

Muilenburg, L., & Berge, Z. L. (2001). Barriers to distance education: A factor-analytic study. *American Journal of Distance Education, 15*(2), 7-22.

Olsen, H. (2010). Online Early Childhood Professional Development: Selected Experiences. *Exchange: The Early Childhood Leaders' Magazine Since 1978, (191)*, 84-86.

Owston R.D., Wideman H., Murphy J., & Lupshenyuk D. (2008) Blended teacher professional development: A synthesis of three program evaluations. *Internet and Higher Education, 11*, 201–210.

Patton, M. Q. (2002). *Qualitative research & evaluation methods (3rd ed.)*. Thousand Oaks, CA: Sage Publications.

Prestridge, S. (2010). ICT professional development for teachers in online forums: Analysing the role of discussion. *Teaching and Teacher Education, 26*(2), 252–258.

Rizvi, F., & Lingard, B. (2000). Globalization and education: complexities and contingencies. *Educational Theory, 50*, 4.

Robson, C. (1997). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. Oxford: Blackwell.

Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review, 94*(2), 247–252.

Russell, M., Carey, R., Kleiman, G., & Venable, J. (2009). Face-to-Face and Online Professional Development for Mathematics Teachers: A Comparative Study. *Journal of Asynchronous Learning Networks, 13*(2), 71-87.

Saban, A. (2000). Hizmetiçi Eğitimde Yeni Yaklaşımlar. *MEB Yayınlar Dairesi Başkanlığı, 145*, 3-8. Retrieved 12.07.2010 from, <http://yayim.meb.gov.tr/dergiler/145/saban.htm>

Sparks, D., & Loucks-Horsley, S. (1989). Five Models of Staff Development for Teachers. *Journal of Staff Development, 10*(4), 40-57.

Uçar, R. (2005). İlköğretim okullarında görev yapan yönetici ve öğretmenlerin MEB hizmet içi eğitim uygulamalarına ilişkin görüşleri. [*On Opinions of primary schools administrators and teachers about in service training programs (the case of van)*]. Unpublished Master Thesis, Yüzüncü Yıl University.

Trace, C. (2001). *Applying content analysis to case study data: A preliminary report*. Retrieved 02.06.2010 from, <http://www.inter pares.org/documents/inter pares ApplyingContentAnalysis.pdf>

Watts, M., & Ebbutt, D. (1987), "More than the sum of the parts: research methods in group interviewing". *British Educational Research Journal*, 13(1), p 32.

Whitehouse, P., Breit, L., McCloskey, E., Ketelhut, D. J., & Dede, C. (2006). An Overview of Current Findings From Empirical Research on Online Teacher Professional Development. In C. Dede (Ed.), *Online Professional Development for Teachers: Emerging Models and Methods* (pp. 13-30). Cambridge, Ma: Harvard Education Press.

World Bank (2006). *Turkey—education sector study: sustainable pathways to an effective, equitable, and efficient education system for preschool through secondary school education*. Report No. 32450-TU. Retrieved 28.06.2010 from, http://siteresources.worldbank.org/INTTURKEY/Resources/361616-1142415001082/ESS_Main_Report_V1.pdf.

Villegas-Reimers, E. (2003). *Teacher professional development: an international review of the literature* (Paris, International Institute for Educational Planning). Retrieved 19.08.2010 from, <http://unesdoc.unesco.org/images/0013/001330/133010e.pdf>.

Vo, L., & Nguyen, H. (2010). Critical Friends Group for EFL Teacher Professional Development. *ELT Journal*, 64(2), 205-213.

Yıldırım, F. (2007). Öğretmenlerin hizmetiçi eğitimine yönelik uzaktan eğitim platformu tasarımı. [Distance learning platform design for in-service education of teachers]. Unpublished Master Thesis, Sakarya University.

Yıldırım, A., & Şimşek, H. (2008). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* [Qualitative Research Methods in Social Sciences] (6th ed.). Ankara: Seçkin Publishing.

Yılmaz, H., & Düğenci, M. (2010). *Hizmet İçi Eğitime Farklı Bir Yaklaşım: E-Hizmet İçi Eğitim*. Akademik Bilişim. Paper presented at the 2010 Conference on "Akademik Bilişim", Ankara. Retrieved 03.06.2010 from, <http://ab.org.tr/ab10/sunum/92.pdf>