

**TEACHERS' EXPECTATIONS FROM AN EDUCATIONAL PORTAL:
IDENTIFYING CONTRIBUTING FACTORS**

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ABSTRACT

TEACHERS' EXPECTATIONS FROM AN EDUCATIONAL PORTAL: IDENTIFYING CONTRIBUTING FACTORS

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This study explores the in-service teachers' expectations from an educational portal which is being developed by the Ministry of National Education.

This is a descriptive survey study that examined the factors which contribute to teachers' expectations from an educational portal. Data were obtained from 130 teachers (37 primary and 90 secondary school teachers) in Eskisehir province. Sampling was convenience thus the findings of this study could only be generalized to teachers who work at the central province of Eskisehir.

According to the results of data analysis portal expectations of teachers were so high, attitudes towards computers were positive. However, teachers Internet literacy levels were low. There was a positive relation between teachers' attitudes towards computers portal expectations.

Keywords: Portal Expectations, Internet competency of teachers, teachers' attitudes towards computers, in-service teacher

ÖZ

ÖĞRETMENLERİN BİR EĞİTİM PORTALINDAN BEKLENTİLERİ: BEKLENTİLERİNİ ETKİLEYEN FAKTÖRLER

Öztürk, Serap

Yüksek Lisans, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü

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Bu araştırma Milli eğitim Bakanlığınca hazırlanılan eğitim portalından öğretmenlerin beklentileri ortaya konulmaktadır.

Araştırma betimsel incele yoluyla gerçekleştirilmiştir. Araştırmada, öğretmenlerin beklentilerini etkileyen faktörler araştırılmıştır. Araştırma verileri Eskişehir ilinde görev yapmakta olan 130 öğretmenden (37 ilköğretim, 90 lise) toplanmıştır. Örneklem rastgale seçilmiş olduğundan, bu araştırmanın sonuçları sadece Eskişehir ili için genellenebilir.

Araştırmada toplana verilerin analizi sonucuna göre öğretmenlerin eğitim portalından beklentileri yüksek ve bilgisayara karşı tutumları pozitifdir. Bununla

beraber, öğretmenlerin İnternet bilgi seviyeleri düşüktür. Öğretmenlerin bilgisayara karşı tutumları ve eğitim portalından beklentileri arasında pozitif bir ilişki vardır.

Anahtar Kelimeler: eğitim portalı beklentisi, İnternet bilgi seviyesi, bilgisayara karşı tutum, öğretmen

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CHAPTER 1

INTRODUCTION

1.1. What is portal?

“It is a gateway to web access or it as a hub from which users can locate all the Web content that they commonly need.”(Strauss, 2000) It gives services to its users such as resources, news, chat rooms, e-mail services, forums, discussion groups, search engines, databases. Portal users of the can make changes in the services as they wish. As there is a personal configuration of the web site, portal is user-centered.

Portals are defined by a few key characteristics. According to definitions, they are hot sites on the Internet that provide search engines or robotic Web crawlers. They categorize information into directors so that their users are protected from vast information confusion. It assists a user to search for a particular item and to filter the searching items easily (Butch, 2002).

Portal definitions from literature and Internet;

“ ...an entrance or doorway...You could think of a portal as a starting place for people to begin their cyber journey” (Dominick, Sherman, & Messere, 2000, p. 132).

“...a personalized collection of information, content, and services” (Pickett & Hamre, 2002, p. 37).

"Portal technology provides a central online tool to access and exchange internal information, as well as link to external information, vendors and resources according to the needs, mission and choice of the institution."(Norman, 2003)

“...an online service that provides a personalized, single point of access (single sign-on) to resources that support the end-user in one or more tasks (resource discovery, learning, research, etc.) The resources made available via a portal are typically brought together from more than one source”

(http://www.usask.ca/web_project/uwebd/portals_faq.html)

“A number of large access providers offer portals to the Web for their own users. Most portals have adopted the Yahoo style of content categories with a text-intensive, faster loading page that visitors will find easy to use and to return to. Companies with portal sites have attracted much stock market investor interest because

portals are viewed as able to command large audiences and numbers of advertising viewers.”

(<http://www.fiu.edu/~fcarra01/definition.html#top>)

“Portals are super-station doors to the Web that have been created from information indexes and search engines or by a dedicated web master. They provide a large variety of integrated resources, tools and services through a single location.”

(www.bhsu.edu/education/edfaculty/lturner/Web%20Portals.htm - 85k)

“Typical services offered by portal sites include a directory of Web sites, a facility to search for other sites, news, weather information, e-mail, stock quotes, phone and map information, and sometimes a community forum. Excite is among the first portals to offer users the ability to create a site that is personalized for individual interests.”

(http://searchebusiness.techtarget.com/sDefinition/0,,sid19_gci212810,00.html)

In presentation about portal descriptions portals, broad approach to the concept is cleared in the minds. Therefore, as clarified above by experts, a

portal can contain any service available via the Internet. It is not limited to the Worldwide Web, as it can be expanded to include e-mail services, chat rooms, and other Internet applications not dependent on the Web (Butch, 2002). The ideal portal is the one that gives you the tools needed to do your job (Barlas, 2005). However, keep the idea in mind the idea that a portal seeks to be a starting point for web users.

Portals history started out with the Internet Service Providers like AOL. They gave some kind of search content to help your way find around, so you would use them as a sort of gateway to the Internet so they were sort of early portals. After that search engines like Yahoo, Alta Vista and Excite figured out that people did not really know how to use them exclusively and wanted loyal users to give users all kind of information that was useful to them. Then they turn to big horizontal malls for information on the Web. This type of portals called horizontal portals. People can personalize horizontal portals in some degree. Vertical portals are customized by the system. Person is recognized and different view is given accordingly. Portals are different from homepages at the point of customization. Portals know who you are. Personalization also makes differ from home pages. Nowadays, Intranet portals which are inside a company give particular people information they need. Commercial portals tend not to do customization. They are trying to cover all the things than someone can be interested in. Users chose the interested channels in the portal and personalize it. (Strauss, 2000)

In this research, portals are considered to have function Internet entry point, content and workplace integration. It is a hub for community which gets people of similar interest and needs in connection.

As we have noted, an online portal stand for a resource gateway in general manner. Portal has been designed in such a way that it selectively filters and organizes useful, relevant information. Thus a portal allows users to easily navigate towards areas of interest, as opposed to having to surf the Internet in a random and less focused manner. In this way, portals encourage effectiveness and efficiency in Internet use. Then, a carefully considered educational portal should allow for the aggregation of relevant educational features and facilities. “This is needed if we are to work towards reversing current trends for the development of Information and Communication Technologies (ICT) to entrench or widen the gap between developed and developing countries”. Large quantities of content are expected to be available through education portal. (Butch, 2002)

1.2. Scene from Turkey

Turkey has 70 million population and 30% of the population is younger than 15 years old. Turkey has recognized the need to raise the educational qualification of the population. Turkey also recognizes that the most urgent priority is to promise that all children have a basic education. (from World Bank site) In August 1997, Parliament approved a new Basic Education Law

which extends the duration of compulsory schooling from five years to eight years and provides for improved quality and relevance of basic education.

Ministry of National Education has been implemented series of project for supporting and developing basic education programs in Turkey. The project covers extend basic education, improve basic education quality, support in-service training in information, and communications technology (ICT) to teachers to improve basic computer skills, and assist in utilizing ICT to improve instruction (World Bank, 2002).

At the second phase of the World Bank projects of MONE will extend ICT classrooms to another 3,000 schools and aid to develop and implement a strategy for utilizing ICT for educational purposes. Especially, technical assistance will be supply to aid the development of an education portal and to edit modalities for ICT teacher training including e-learning (World Bank, 2002).

The first phase of the project provides training to students and in-service training for teachers and formators in ICT use and applications, aimed at computer literacy only. The second phase of the project will look at the Internet as an alternative way of individualized learning, delivering both curricula and extra-curricula content, and allowing for interaction through e-mail between teachers and students and among students. A key feature of this approach will

be to develop a Web-based portal as an online entry point to a comprehensive array of information (World Bank, 2002).

The portal will contain educational content such as lesson plans, online interactive curriculum content, and an archive of past examinations and a wide range of e-learning content. It will provide a range of communication services to teachers and students to allow them to share information and to discuss topics of interest in a secure and supportive environment. The portal will also contain materials of relevance to adult learners (World Bank, 2002).

A key component of MONE's in-service strategy will be the development of an e-learning portal. This portal will contain both pedagogical content and e-learning training materials. The online training materials will include a range of courses for master trainers, school based trainers, teachers and students, which can be completed in their own time, either in school or at home. The portal will also facilitate the exchange of additional training materials, such as Power Point presentations and training notes among trainers, and providing them with an effective communication platform for sharing ideas and resources as well (World Bank, 2002).

As mentioned above, in the report of World Bank, some of the in-service teachers were taken computer literacy courses and they made computer literated. After that time, it is required that candidates who apply to be MONE

teacher have taken computer literacy certification. To enhance that feature, MONE and teacher training faculties made commitment to give computer literacy courses during teacher education (Celik, 2004).

By the date 31 September 2004, all the schools have ADL Internet connection. In-service training is provided of teachers and administrators. (Celik, 2004)

To provide life long learning, effective learning and reaching more people, an educational portal is being developed by MONE. In the portal people can administrate their own learning process. Educational software and reliable content is being prepared for the need of teachers, students and parents. Portal will be collaboration environment for teachers, students and parents. People can take distance education as a part of portal services. (Celik, 2004)

1.3. Scene from World

Fundación Chile (<http://www.fundacionchile.cl/>) develops the educational portal and offers e-learning courses to teachers as well as offering other research initiatives related to school management. Each school that enters the Enlaces program is entitled to a two-year on-site training program for 20 teachers, followed by an annual program of seminars and a permanent offer of a variety of activities, including participation in international collaborative projects, professional learning circles, and educational competitions, many of which are promoted via the Educational Portal: <http://www.educarchile.cl/>.The

Irish ICT in education initiative provides advice and support through its institutional portal (see: <http://www.ncte.ie/ICTAdviceSupport/>). (Lucio, Ernesto, Pedro, 2004).

Teachers do not have much time, and many of them do not have the motivation to navigate on the Internet in search for meaningful educational content. They prefer to look for advice. To meet this need, Enlaces has joined another institution (“Fundación Chile” <http://www.fundacionchile.cl/>) to develop an educational portal (<http://www.educarchile.cl/>) (Ernesto, Lucio Pedro, 2004).

The Department of Education in Saskatchewan Canada offers the Evergreen Curriculum Online so teachers can access subject-specific information, collaborate, and exchange views with others in the same subject area. Namibia has also created a deep bank of resources related to ICTs in education on its National Institute for Educational Development website. It can be noticed, many portals have established communities of practice where teachers can ask colleagues questions about difficult to teach areas of the curriculum (Worldbank, 2005).

Many countries begin in the construction of Internet “Educational Portals” to answer their need. You can visit to example of educational portals from different countries:

Argentina: <http://www.educ.ar/educar/index.jsp>

Chile: <http://www.educarchile.cl/>

European Schoolnet: <http://www.eun.org/>

Ireland: <http://www.scoilnet.ie/>

Spain: Generalitat Catalunya: <http://www.edu365.com/>

European Schoolnet: <http://www.eun.org>

1.4. The purpose of the Study

For the ICT integration, MONE develops policy by the financial support of World Bank. Both technical and pedagogical parts of integration of ICT are considered. Broad band Internet connection of school, teacher in service trainings, ICT rooms for all schools, collaboration with universities to educate computer littered teachers are the some parts of the projects. All those projects` main target is educated young population of Turkey in exclusive way (Celik, 2004).

As a part of ICT policy, an educational portal is being prepared to cultivate an environment to national education community. It will be a hub of the community.

Researcher thought to conduct this research to show the factors of portal expectations of teachers. Results of the research give clues to developer of the portal about teachers` expectation points and portals` coverage. Because

developing an educational portal is long time period and it needs so much income, if teachers' expectations are considered, while the portal starts services, targets of MONE are obtainable for the aspects of in-service teachers' part.

1.4. Research Questions

What are the factors that effect portal expectations of primary and secondary school teachers?

What are the descriptive characteristics associated with the scales: (a) Internet competency level, (b) attitudes of teachers towards computers, and (c) portal expectations of teachers.

Is there a difference between primary and secondary school teachers` Internet competency level and portal expectations?

Is there a difference between primary and secondary school teachers` attitude towards computers and portal expectations?

Is there a difference between primary and secondary school teachers Internet competency level and attitudes towards computers?

Is there a difference between teachers` portal expectation and following demographics: (a) gender, (b) age, (c) number of years in teaching, (d) computer at school, (e) Internet at school, (f) computer at home, (g) Internet at home?

Is there a relation between portal expectations and Internet competency level?

Is there a relation between portal expectations and attitudes towards computer?

1.5. Definition of Terms

Community: A group of people who interact regularly. They build relationships that enable them to learn from each other. Besides they have same identity in shared domain. (Wenger, 2002)

Communities of practice: “Communities of practice are groups of people who share concerns or a passion for something they do and learn how to do it better as they interact regularly.” (Wenger, 2002)

Educational Portal: Portals which consider both pedagogical and technical applications. It gives reliable content, sharing practices e-learning, and distance education opportunities to users. They can share their products, knowledge and practices with others and create new ones.

Information and Communication Technology: “ICT in education is recently perceived as not only a tool to be used for enhancing teaching and learning but may be a change paradigm in the classroom or in the educational system. Over the years, in education ICT has progressed from its early emphasis on the use of instructional media and instruments of communication technology to its current concentration on the systematic approach to solving instructional problems and restructuring whole education system based on the driving forces for change characterized by the communication society. Besides their instructional value as

medium, ICT obviously adds significance and cultural value to school tasks.”

(Aufenanger, Dumond, Kynigos, Potolea & Yildirim 2003, p, 3)

In-service Teacher: Teacher who graduated from an department of education of a university and teaching in his/her educated subject area.

Portal: It is function Internet entry point, content and workplace integration. It is a hub for community which gets people of similar interest and needs in connection.

CHAPTER 2

LITERATURE REVIEW

This chapter is organized according to

- I. Educational portals
 - Digital Content
 - Communities of Practice
 - Professional Development
- II. Teachers attitudes towards computers
- III. Internet competency of teachers

2.1. Educational Portals

It becomes important to consider carefully potential applications for ICT in supporting schooling. A primary opportunity lies in the creation of an effective online educational `portal`. (Butch, 2002)

A portal serves as the central access point for collaboration, enabling the sharing of best practices and establishing a set of standards that will provide nations and academic institutions with universal access to services, curriculum and training. (Santa, 2004) Portal technology is used to build collaboration communities of practice among teachers (Weidner, 2003).

Portal will be a key delivery mechanism for the services. Most importantly, the portal will serve as a catalyst for driving the dialog and

networking among community of peers who are in-service teachers, pre-service teachers, students, policy makers, curriculum specialists, educational researchers, people who deal with education. (Butch, 2002)

Portals complicate who has access to what info and why, which may lead to questions as to who is a member of the community (Katz, 2002, p.12).

Traditional educational institutions need to do two things. First, they need to devise mechanisms that will enable their courses to be embedded in the offerings of a vertical portal. And second, they need to study the mechanics of vertical portals to best understand how learning could even fit into such a context. It is not clear that they should actually build portals (Butch, 2002).

An educational portal aims to assist the continuing education of students of all ages as well as the professional development of teachers so they can develop more flexible teaching methods and strategies (from Educational Portal of the Americas).

Establishment of an educational portal for access to resources that are linked to the curriculum would help teachers to access one spot with examined and trusted information that they can use in their classes. A national educational portal would also provide teachers with a “safe” space to access vetted content (World Bank, 2005).

Other strengths of Internet technologies are their capacity to support a range of communication strategies, especially easy asynchronous communication between educator and learner and between learners. This brings important educational advantage, particularly as it opens significant new

opportunities for learners to engage with educators, hence supporting changing roles for educators (Butch, 2002).

A managed combination of content and communication facilities in an education portal can lead to an enhancement in the levels and effects of information and resource sharing (Butch, 2002).

In recent days, portals gain popularity between teachers in Turkey. Most of those were created by teachers for needs. “Ogretmenler”, “ogretmenin pusulasi”, “ogretmenler sitesi” are some of them. These sites are not professional. Besides these sites, there are some sites which are developed by organizations.

As mentioned above, portals have three important functions besides being gateway. These are:

- Digital content which is reliable and relevant with curriculum.
- Teachers who use the communication services of portal create collaboration and sharing environment between their colleagues thus portal is the place of communities of practice.
- Professional development of teachers

2.1.1 Digital Content

It is declared in Technology in Schools: Education, ICT and the Knowledge Society (2004) report, effective use of digital content in portal environments, some points should be noticed:

1) Providing good software does not guarantee its use. This is a rather obvious observation that teachers do not prefer more technical or sounds like technical software. In the Chilean experience, it has been often the case that teachers prefer rather simple software but close to their subject teaching requirements, their teaching methods and their level of self-confidence with ICT.

2) Digital content is barely used if it is not related to the curriculum. Most teachers will give software and web-based content a try if they perceive it is material directly related to the curriculum, and preferably if it is “officially” approved as such. To this end, the national curriculum includes many software and web references for each subject matter and age level.

3) There, teachers, students, parents and researchers can gain access and appreciate examples of lesson plans, curricular content, teaching and learning aids, on-line advice, research papers and participate in discussion forums related to all levels of education. Many teachers value simple and straightforward material they can access in one click and that is ready to be used in the next lesson, without needing to invent new activities, reflect on the purpose, or figure out relevance to the curriculum.

4) Using digital content during training sessions with peers who have already used it in the classroom is a more convincing strategy for teachers than theoretical discussions about the benefits of a particular type of content. It is generally regarded in Enlaces that this new scenario of fine-tuning its content distribution policy is mainly possible due to the previous efforts made by the Ministry in providing a base level of content, portal and teacher training. (Ernesto, Lucio Pedro, 2004)

“Given the necessity to provide Internet content that would be relevant to teachers and students, “The European SchoolNet is an international partnership of 23 European Ministries of Education developing learning for schools, teachers and pupils across Europe. It provides insights into the use of ICT in Europe for policy-makers and education professionals. This goal is achieved through communication and information exchange at all levels of school education using innovative technologies, and by acting as a gateway to national and regional school networks. Teachers find resources, news, practice examples, collaboration opportunities at eSchoolnet the educational portal for schools in Europe”. (from SchoolNet site).

Portal can also be an incomparable place to create and manage knowledge.

Nowadays, big organizations examine the ways of create high-quality knowledge and continuous and efficient innovations. According to Nonaka who is the important researcher of knowledge management, there are two dimensions of knowledge creation. First one is explicit knowledge can be arranged systematically and it is conveyable in formal languages. The other is tacid which has a personal quality plant in action, involves content in resides in a comprehensive organize of human mind and body. As Micheal Polanyi (1967) wrote in Tacid Dimension “we can know more than we tell.” He called “tacid knowledge” to pre-logical stage of knowledge.

According to Nonaka`s knowledge creation model there is a dynamic interaction between two dimensions of knowledge, tacid and explicit. He defines four models externalization, combination, internalization and socialization. Nonaka says that individuals have tacit knowledge, by collaborating each others that create organizational knowledge. (Nonaka, 1994)

And also, Nonaka (1994) says, to share experience and create common perspective, use communities of practices since evolving in community of practice more flexible and interpenetrative. These communities represent a key dimension to socialization. After socialization, creation process occurs with trust. Members develop shared implicit perspective. They construct knowledge by engaging in dialogues. In dialogues they share images and merge perspective.

2.1.2 Communities of Practice

Wenger theory brings a different perspective to knowing and learning. He develops social theory of learning and he called “communities of practice”. Many institutions and people, from different context, are interested in that theory. His theory is not alternative of the other learning theories but he emphasizes social learning. He says that learning can be the reason for community gathering or an incidental outcome of members` interaction. (Wenger, 1998)

Ettienne Wenger (1998) used “community of practice” term firstly as groups of people together who accumulate and share their collective learning.

The phrase of “community of practice” is invented newly; however, phenomena mean it refers to is old. Wenger define the term: “communities of practice are groups of people who share concerns or a passion for something they do and learn how to do it better as they interact better.”

Not every community is called community of practice. Community of practice has some distinct characteristics. Wenger says that learning means engagement and he assert that identity is fundamental for the community of practice. Identity means much more “belonging or shared interest”. “A person’s identity is his engagement in the world”, Wenger says. A person makes

commitment with his identity in a domain. Sharing interests and knowledge, helps to each other. They settle up a connection between each other for leaning. Only a website is not considered as community of practice or people doing same jobs make community of practice unless they interact and learn each others. They interact and share collected resources, interests and activities. Indeed they share practices. (Wenger, 2002)

Three fundamental elements of communities of practice as theorized by Wenger (2002) are domain of knowledge, community of people and shared practice. “*Domain* creates a common ground and a sense of common identity”. Community is just a group of friends if the members do not have commitment to the domain. The combination of domain, community and practice enables communities of practice to manage the knowledge. Domain is a guide for members about asking questions and organizing their knowledge. It assists them to classify what share and how to recognize between unimportant idea and “one with real promise”. Domain is made up of key matters or problems that members usually experience so that it is not abstract. In well defined domain communities, members commit to take responsibility for bringing the best knowledge and skills that can be found.

Community is the second fundamental element of the communities of practice. To cultivate community, people in it have to interact regularly. Interaction must be continuous. In time, members will have a relation based on

trust and respect. Over time, they create their common history and identity. To bring members together in community of practice is enough common ground for ongoing mutual engagement and good dose of variety makes for “richer learning, more interesting relationship and increased creativity.” Communities can have different size but important point is direct interaction. For big communities, subgroups can be divided as geographic location differences or topics. Participation of members in community is voluntary and it has to be encouraged. Trust is the critical point of communities. Members feel safe to speak and ask questions (Wenger, 2002)

Practice is the final fundamental element of the communities of practice. Members of communities practice share ideas, experiences, stories, tools and problems and solving techniques of them. Practice takes inside not just explicit knowledge but also tacid knowledge. It includes the books, articles, knowledge basis, web sites and other archive. It also embodies perspective on ideas, a thinking style, and a certain way of behaving. It takes a period of time and interaction. Community is fastened by practices. Every community has own way to share practices. Documentation is also important to practices. Cultivating communities of practice requires all three elements. (Wenger, 2002)

Wenger (2002) defines the knowing, “it is not personal experience but it occurs by exchanging and contribution of community.” Then communities of practice produce knowledge.

“Communities of practice are groups of people who share concerns or a passion for something they do and learn how to do it better as they interact regularly.” In these types of groups, they trust each other and share their vision so that they connect each other. It is easy to cultivate technical infrastructure but it is not so easy to bring out of teachers to cultivate communities of practice. Subjects and situations should be considered if to take interest of teachers while the structure is settled. (Wenger, 2002)

Schlager and Fusco (2002) work on teachers` communities of practices. They have studies on teachers` tacit knowledge transforms to explicit knowledge. According to them, if you interchange the knowledge to practice, you have to take to support of its practitioners. From that point, communities of practice give opportunity to teachers involve in their own professional development process. Teachers can easily reach explicit knowledge during university education and after university. However, tacit knowledge of teachers is almost in their mind. Because, they don not share tacit knowledge, they can not go further from their own boundaries. Teachers` community of practice can play very critic role in a positive way. To design these environment educational technologist should analyze, target group, process and organizational differences. Pedagogy, content should be considered in details. Otherwise system will be far away from usefulness and can not meet the needs. (Schlager , Fusco, 2002)

In communities of practice groups, teachers can decide the best time and place to reach virtual environment and observe other teachers` activities on new educational programs. Teachers can visit virtual classes of other teachers. Additionally, teachers, scientists and other educators can share their knowledge about constructivist educational program and solve application problems. Ideas, experiences and activities are shared and discussed so that synthesis can be done. Further on, lesson plans, sources and other materials are allowed to reach for all users on teacher networks. Those environments give opportunity to the teacher to create his own professional environment. Finally, teachers who use such virtual environments develop their technology and Internet skills. Teachers claimed that they had benefit emotionally and intellectually. They are able to apply workshop experiences in classrooms. Teachers are positive about Internet based professional development programs that give opportunity to teachers who have geographical insulation, economical insufficiency and time restriction. With such platforms, in long time of period, knowledge accumulation is formed (Lieberman, 1996; Yang, Liu, 2004).

Learning communities are important component of school reforms. Communities give opportunity to educators to discuss and work on current problems, while exposing them to new ideas from peers in other schools and districts. In the education world, there are big problems that have no universal answers. Teachers, members of community of practice, engage in a common exertion to educate themselves so that they can better educate their students. In

the communities, teachers have legitimized chance to search for innovative solutions. Organized work in the community give user a chance to be more than just an observer. Virtual environment has the flexibility to organize activity first, and then develop the structures to support those activities. Its flexible structure provides developmental approach of adult learning. (Lieberman, 1996)

Teachers have the opportunity of not just read and write something but do something by collaborating other teachers or researcher in communities of practice. More active and realistic scenarios can be created and practiced as a result of such interaction (Aufenanger, Dumond, Kynigos, Potolea & Yildirim, 2003).

For professional development in online environment, rich content, flexibility and personal format should be given to teachers. Besides, applications should be devised by considering possibility of exploration of knowledge, practicing in the content area, lifelong learning perspective and skills. (King, 2002)

To reach success in online communities, e-learning systems and pedagogy should be considered. Participants in the community should be encouraged. Discussions should be facilitated to avoid isolation, promote community and ensure equality. (Rovai, 2001)

2.1.3 Professional Development

Professional development is a process of learning how to put knowledge into practice through engagement in practice within a community of practitioners. It is related with a socio-organizational system that requires communication and working together with several stakeholder groups to pledge access to professional development opportunities for all teachers, continuity and cohesion of professional development pedagogy across providers, capacity to support accepted adoption and practice, sharing of knowledge and professional norms of practice, and formation of consistent policies (Barab, Kling ve Gray, 2002).

Professional development programs were developed and implemented by outside providers. Informal teacher networks at both the local and national levels have consistently found that professional development programs are disconnected from practice, fragmented, and misaligned. Many programs are far away from key pedagogical, content, and structural characteristics of effective professional development that are needed by the teachers they serve. Few professional development providers have the resources to address all stages of career development or the capacity to provide support on an ongoing basis. There is little coordination among providers or continuity across stages of the career development ladder, creating gaps and redundancies that hamper teachers' ability to assess and satisfy their ongoing professional development

needs. Obstacles to professional development have also been documented within schools themselves. Local values and norms of practice have proved formidable barriers to effective professional development. For example, a common challenge is the reluctance of teachers to engage in inquiry or dialogue that critiques the practice of their peers. Research has cited the importance and difficulty of building trusting and respectful relationships across school departments and career development levels. Teachers also find it difficult to reflect on their own practice, perhaps because teachers' classroom practice is closely tied to their identity as a person, because teachers lack certain professional dispositions, or because teaching has largely developed a culture of privacy.

There are barriers on fulfilling effective professional development. Researches show that teachers have difficulty to reflect their in-service trainings to practices. Classroom activities are done in closed place and included teachers` identity. Teachers usually do not want to share their activities. Sharing classroom works and applications can be formidable for teachers during professional development processes (Barab, Kling ve Gray, 2002).

Since teaching is so difficult activity which involves changes and developments in the world, teachers have to make professional development in their whole life. Teaching is on going activity. Teachers need help of experts

and scientists. For that reasons, social-organizational environment should be designed. Professional development of teachers is not independent from class environment since gained knowledge is used there. Teachers` knowledge peculiar to class environment is not in terms of abstract principles (Marx, Blumenfeld, Krajcik, & Soloway, 1998).

After consideration of the best practice of teacher education programs and emerging from discussion from literature, some essential elements may be seen. First important point is that education program should offer accurate, current, influential and important content. Second, dialog and discussions should be arranged between participants of the program for in-depth understanding of content meaning, application and implication. Third, environment of the program should give opportunity to teachers for asking question and sharing responses. Besides, environment should support confidence, trust and insight. Fort, technology usage in the program should not discourage learners. Fifth, teachers are able to collaborate among teachers easily. Sixth, program assignments are available to apply in classrooms and academic research (King, 2002).

As technology for professional development broadens, educational technologist should consider about the needs of teachers as learners. There are three types of scaffolds. First one is functional scaffolds that hide the cognitive complexities of the task, making the simplest level of functionally available to

the beginner learner, but allowing learners to access advanced features as their capacity grows. Second, guidance scaffolds that help learners navigate and understand the technology itself by guiding them through the process. Third, metacognitive scaffolds that help the learner in the metacognitive elements of planning, monitoring and evaluating their thinking as they learn. It is important that sufficient attention is given to scaffolding teacher learning. This is particularly important when web materials are specific to an innovation. Because innovations always require teachers to engage learners in different ways and to design instruction differently than in the past, materials are needed to help teachers learn to understand the innovation and translate it into teaching and learning activities for their context (Marx, Blumenfeld, Krajcik, & Soloway, 1998).

Education is life long process and it covers changes and developments. Teachers are main actors of education. They need chance life long learning so that they feel capable for students needs. This means that they need professional development. Governments must support teachers' life-long professional development with a long term political programs (Aufenanger, Dumond, Kynigos, Potolea & Yildirim, 2003). On the other hand, teachers in Turkey, have very little chance after university education. Moreover, in-service training programs are not so efficient and the programs usually just cover institutional abstract knowledge. Few teachers may attend these courses. During training programs, teachers are far away from classrooms. The training programs are

organized in some periods of the year, usually in semester holidays. Abstract, institutional knowledge are usually given to teachers in short periods.

However, teachers` knowledge can not be thought away from classroom. Knowledge about teaching and practices can not be learned independently from the situation in which it will be used. Teachers can not apply predefined prescriptions. They need to plan and teach in order to adapt innovations to their unique situations, preceding possible problems and planning strategies to deal with them. If the knowledge arranged by researcher or experts, teachers not easily be described as a set of abstract principles (Marx, Blumenfeld, Krajcik, & Soloway, 1998).

Training Committee prepared new educational programs and Ministry of National Education has reform projects. These reforms can be successful, if teachers trust the sufficiency and efficiency of projects since they are the primary practitioners of the reforms. New education programs propose that students reach knowledge by questioning and investigating so that students have active mind. Concepts are taught by activities in new education programs. Learning stages, interest and student learning styles are considered by teachers while teaching the subjects. (MONE web site)

How educational programs are prepared functional, teachers have critical and important role to practice. It is so important that teachers should

understand the philosophical background of the programs and reflect the philosophy to the classroom applications. At that point, giving appropriate in-service training to teachers is important and necessary. On the other hand, new approaches are not easily used by teachers. Activity based learning environments are so difficult. Teachers` professional development should be sufficient to cultivate such environments. Professional developments have direct relation with school reforms. Reforms fully realized with teachers` support (Barab, Kling ve Gray, 2002).

Indeed, lesson plan examples are not also enough to get changes. Teachers need to inspect their beliefs about subject matter, student learning and instruction in the light of new methods and practices. In the world, many countries made educational program reforms and they have supported teachers about contents. However, reform applications in the classroom are not sufficient. Basis of the problems are, first, teachers do not have enough knowledge about reforms. Second, they can not make reflection from institutional knowledge to applications. Third, teachers` traditional beliefs are endemic and strong. (Marx, Blumenfeld, Krajcik, & Soloway, 1998).

Technology usage in school covers lots of variables and one of them is teachers` in-service education about how to use technology (Collins, 1990).

2.2. Attitudes of Teachers towards Computers

There are lots of researches on teachers` attitudes toard computers usage in education.

Teachers` attitudes have critical effect on effectiveness of technology. There is significant relation between teachers` attitudes and technology usage.

In Ali Cinar MS thesis teachers internet competency levels were examined but in results were evaluate total computer competency levels. The research has shown that there was a positive significant correlation between teachers` computer competency levels and attitudes towards computers (Cinar, 2002). Besides, teachers` ages, total teaching years and genders make difference on their attitudes and computers competency levels.

Most of the teachers have positive attitudes towards using computer during teaching-learning process and they think use of computer technology has beneficial effect on teaching learning process. It is mentioned that, some teachers have anxiety about using computers in classrooms since they did no take enough training. Teachers do not resist using technology in schools. Thus, Turkey has advantage of teachers` acceptance of using technology in schools. (Cagiltay, Cagiltay, Cakiroglu, Cakiroglu, 2001)

There were differences in the attitudes of the pre-service and in-service teachers as they entered the classes. Pre-service teachers were influenced more positively than were in-service teachers.

Syrian school teachers had positive attitudes toward ICT in education. The teachers also reported low levels of computer competence, access, and training. Significant positive correlations existed between teachers' attitudes toward ICT and computer attributes, cultural perceptions, computer competence, computer access, and computer training. (Albirini, 2004)

The effective attitudes and actions employed by teachers ultimately can make a positive difference on the lives of their students (Gourneau, 2005).

2.3. Internet and Teachers

Information technology skills enable teachers to initiate, sustain and extend life long learning. Teachers must have enough technology skills for their professional development and equip their students with information literacy skills. Teachers should have basic technology skills which were defined by ISTE (International Society for Technology education, 2000). Teachers should be technology literate to guide students to technology use, to arrange environments for students to equip with them with information literacy skills, collaborate with their colleagues in order to share their experience through Internet.

Internet connections in most of the schools in Turkey have set by the Internet Projects of MONE (from MONE website). Success of the project is based on teachers` use of Internet skills in teaching-learning process (Akkoyunlu,Yilmaz, 2005).

According to Akkoyunlu`s research on Internet literacy of prospective teachers, their information literacy level is medium, 33% of prospective teachers use internet every day, while their literacy level increase as their internet usage frequency increase, most of them use internet to find information for home works, projects and processional development and communications (Akkoyunlu, Yilmaz, 2005).

Turkish Statistical Instuition conducted a research to present Information technology usage of Turkish people in July, 2005. Internet usage of people in Turkey is % 13.93 in April-July 2005. According to research, nearly 600.000 people started to use computer and 500.000 people started to Internet. 57% of people prefer to connect Internet by dial-up connection and %19.27 prefers to connect Internet by ADSL.

Turkish Informatics Conference in 2004, METU mention that both in-service and pre-service teachers education process should be consider and informatics usage and competency education should be adapted the process.

According to ALA report, teachers must have Information literacy and teacher education programs must be redesigned to include training about information literacy (ALA, 1989)

Teachers must be supported by in-service trainings about technology usage. Besides, Internet must be used for continuing of support. (Cagiltay, Cagiltay, Cakiroglu, Cakiroglu, 2001)

According to Ozer research results showed that computer and Internet use has not occurred effectively in Turkish secondary schools. Computers were first introduced to Turkish schools in 1984; unfortunately the current situation of computer and Internet use in science education is not at the earlier projected point in time. The use of computer and Internet technologies in Turkish secondary schools is still at its early stages; although science teachers' participation in technology-related professional development program is higher than other subject teachers. Teachers' computer knowledge was low and they did not know how to integrate computers into education. Research shown that there was a significant relationship between computer attitude (computer liking, usefulness, and confidence) and computer and Internet use (Ozer, 2004).

According to survey research in Sheffield, UK, nearly 85% of teachers obtained their Internet skills informally. The ways of their learning such as self-taught, learned from friends/colleagues, etc. Although, they did not take training course, most of the teachers were confident of their ability to use the Internet, with the most confident users being young teachers of technical subjects. However, especially woman teachers' common perception was students are more competent users of the Internet than are teachers. Older teachers feel under pressure to use the Internet than their younger colleagues. Only about a third of teachers agreed with the statement I often use the Internet

with classes. “There was strong support, however, for the suggestion that the Internet is a valuable source of learning and teaching materials.” (Madden, Ford, Miller, Levy, 2005)

The availability of Internet connections in K-12 classrooms is increasing, yet the use of such resources continues to be low. Teachers who discussed how to use web resources during computer-mediated communications would have higher attitudes toward the use of web resources in their classrooms than teachers who did not. The results of this research, as described in an adoption of innovations framework, demonstrated that teachers who participated in discussions had significantly higher attitude scores toward the use of web resources thus were more likely to adopt such innovations. Powerful new technologies exist that can enhance instruction and learning, yet these new world wide web technologies are not being widely used by K- 12 (Koszalka, 2001).

Teachers are the main actors of using computers in teaching-learning process. Moreover they directly shape the success or failure of using computers in education (Collins, 1990).

It is determined that teachers have positive attitudes towards using Internet for collaboration, digital content and professional development.

Teachers require continuous support with each step they take if they are to achieve their goals for meaningful integration of technology. (Lipscomb, Doppen, 2005) Internet services give that opportunity to teachers.

CHAPTER 3

METHOD

3.1. Introduction

This research is a descriptive study in which the in-service teachers` expectations about the portal are brought up and configured related factors with teachers` expectations.

The research design and procedures used in this study are presented in this chapter. First section of this chapter describes research subject and sample, second section describes instruments of the research, third part collection data and finally forth part describes the analyses of data.

The purpose of research defines the factors that affect portal expectations of primary and secondary school teachers. Based on this main purpose, these sub-points were examined:

- What are the descriptive characteristics associated with the scales: (a) Internet competency level, (b) attitudes of teachers towards computers, and (c) portal expectations of teachers.

- Is there a difference between primary and secondary school teachers` Internet competency level and portal expectations?
- Is there a difference between primary and secondary school teachers` attitude towards computers and portal expectations?
- Is there a difference between primary and secondary school teachers Internet competency level and attitudes towards computers?
- Is there a difference between teachers` portal expectation and following demographics: (a) gender, (b) age, (c) number of years in teaching, (d) computer at school, (e) Internet at school, (f) computer at home, (g) Internet at home?
- Is there a relation between portal expectations and Internet competency level?
- Is there a relation between portal expectations and attitudes towards computer?

3.2. Participants of the Study

Convenient sampling model was preferred by the researcher. As Fraenkel and Wallen (2003) informed that a researcher should use convenience sampling method if unachievable to select either a random systematic or nonrandom sample.

Therefore sample was selected from primary and high schools teachers in Eskisehir. I had to mention that, sample was selected by conveniently and then it was clustered. In the sample there were teachers from primary schools and teachers from secondary

schools. While choosing sample, three different primary schools were chosen according to different characteristics. First primary school was project schools of Ministry of Education. Second primary school was rural part of the city and the last one is from high social-economical level part of the city. Moreover, secondary schools had also different characteristics. First one of the high schools was vocational high school. Second was Anatolia high school and third was normal high school.

Data was collected 6 different schools` teachers who work at primary, secondary, Anatolia and vocational schools. Totally, 484 in-service teachers were practicing in these schools.

Questionnaires were delivered to teachers. 130 of 484 participant answered questionnaire and gave them back.

In Table 3.1, description of the sample was given. 76 of 130 of participants (58%) are male, 52 of them (40%) are female. Moreover 2 of the participants declined to answer the question about gender. 37 of the participant were practicing in a primary school and 90 of them practicing in secondary school. Of the responses, 115 (%88.5) reported that there were computer for their use. %68.5 of the teachers declared that there was Internet connection at school and %60 of them reported that there was Internet connection at home. Of the 32 who did not own a computer at home, 97 of them reported that own a home computer.

Table 3.1. - Description of Sample

Variables	N	%		
Gender				
Male	76	58		
Female	52	40		
School Type				
Primary	37	28.5		
Secondary School	90	69.2		
Computer at School				
Yes	115	88.5		
No	12	9.2		
Internet at School				
Yes	89	68.5		
No	37	28.5		
Computer at Home				
Yes	97	74.6		
No	32	24.6		
Internet at Home				
Yes	78	60		
No	51	39.2		
<hr/>				
	Minimum	Maximum	M	SD
Age	23	55	37.4	8.6
No. of Years in 1 Teaching	30		13.8	7.9

3.3. Instruments

In this study quantitative data were gathered. The data was collected through questionnaire (Likert type scale).

The Likert type scale questionnaire has 3 parts which are Internet competency part, Attitudes of Teachers towards Computers part and Portal Expectations of Teachers part.

Reliability refers to the ability of a questionnaire to measure accurately. Internet competency and computer attitudes parts have reliability level 0.96 and 0.83. Portal expectations parts` reliability level was 0.98. These reliability values are acceptable according to DeVellis.(1991).

Table 3.2. – Reliabilities and Distributions of Questions According to Subject Areas

d	Part No	Subject	# of items	α values
Competency	1	Internet Competency	11	0,96
Attitudes	2	Attitudes toward Computers	23	0,83
Portal	3	Expectation from Portal	35	0,98

Instruments Internet competency and attitudes towards computers were taken from Cinar`s research (2002). Portal expectations of teachers parts` instrument were developed by the researcher for this research.

The Likert type scale questionnaire has 3 parts. For part1, the scale consists of not familiar, partly familiar, partly competent and competent options. For part 2, the scale has strongly disagree, disagree, agree and strongly agree options. The last part portal expectations consists of strongly disagree, disagree, no opinion, agree and strongly agree. The range of the scale for parts 1 and 2 is from 1 to 4; for part 3 this range is from 1 to 5.

3.3.1. Educational Portal Expectations Instrument

For the portal expectations part, during the literature period of the study, researcher did not confront any instruments which evaluate teacher` expectations from an educational portal. Therefore “expectations of teachers from an educational portal instrument” was decided to develop, implement and evaluate by the researcher.

At that point, it is needed to talk about researcher background. She has been practicing as an in-service computer teacher for 5 years in different schools. Besides, she has worked as content editors of teachers` parts of www.egitim.com from the starting point of the development process of the portal in 2000. It was the time, when portal term started to use in Turkey. During the development process of teachers` part

of the egitim.com, she made informal speeches with in-service teachers, teachers who were at their first year in teaching practices, administrators, inspectors and students. Moreover, she deeply reviewed portals from Turkey both developed by organizations or no-organization and from world for deciding the content of the portal.

Besides the knowledge of background of herself, she made literature review about educational portals applications for teachers. She reviewed best practices and successful network applications (Butch, 2002; Ernesto, Lucio Pedro, 2004 & (Aufenanger, Dumond, Kynigos, Potolea & Yildirim, 2003). She considered the similar cases, and then main topics of expectations of teachers for the instrument were decided:

- Teachers` plans which were daily plans, unit plans and yearly plans and class activities
- Professional development of teachers
- On-line trainings and certifications programs
- Collaboration with colleagues both teachers from their school and other schools
- Collaboration with education specialist
- Online library which included reliable and related content with curriculums: questions bank, e-journals, digital visual documents
- Communication and collaboration ways: e-mail, chat, e-mail groups, discussion groups, news groups

According to these sub titles, instruments items were prepared. She arranged firstly an instrument which had 45 items with the supervision of Soner YILDIRIM. Then, instrument checked out for the content validity by three experts and 45 items decreased to 35 items. Besides, a Turkish teacher revised items in case of Turkish grammatical problems of the instrument.

For the scale part, Likert type scale was chosen since it is bipolar adjective checklist. The respondents indicates their selection on five scale selection through strongly disagree to strongly agree.

3.4. Procedure

Before administrating the questionnaire to whole group, an official permission was taken.

Subsequent the permission, researcher went to the each school and made conversation of the school minister about the research and purpose of the research. After talked with ministers and some teachers, it was realized that, some of the teachers had no idea about what an educational portal. Before distributing questionnaires to teachers, researcher realized that she had to inform teachers what an educational portal.

To give information, researcher conducted seminars to teachers in each school about what portal was and showed educational portal examples. She informed teachers about what kind of services an educational portal gave to their users.

Seminars outline was:

- What is portal?
- What is educational portal?
- Show portals from world
- Show portals from Turkey.

Portals that were shown to teachers:

- Argentina: <http://www.educ.ar/educar/index.jsp>
- Chile: <http://www.educarchile.cl/>
- European Schoolnet: <http://www.eun.org/>
- Ireland: <http://www.scoilnet.ie/>
- Spain: Generalitat Catalunya: <http://www.edu365.com/>
- European Schoolnet: <http://www.eun.org>
- Educational Portal of the Americas:
<http://www.educoas.org/Portal/?culture=en>

Portals from Turkey :

- <http://www.ogretmenlersitesi.com>
- <http://www.egitim.com/egitimciler/index.asp>
- <http://www.tebesir.com>

3.5. Analysis of Data

Data which were gathered in this research analyzed by using SPSS and MS Excel.

The demographic information obtained, teachers Internet competency was analyzed by using frequency distribution. Based on this information, an insight to the data was provided.

Based on the data the following statistical analyses were performed: reliability, independent t-test, correlation.

3.6. Assumptions

1. All respondents gave accurate responses to the instruments used in this study.
2. Data was collected, recorded and analyzed accurately.

3.7. Limitations

1. Validity of this study is limited to the reliability of the instruments used in this study.
2. This study is limited to a sample of in-service teachers in Eskisehir where the study conducted.
3. Researcher did not conduct a pilot study for the teachers' portal expectation scale part of the questionnaire.

4. Problems of honesty and time constraints of the teachers may be some other limitations of the study.
5. This study is limited to participants who volunteered to participate in the research.
6. Generalization of the results to the entire Turkish in-service teachers is limited since participants of the study were only from province of Eskisehir.

CHAPTER 4

RESULTS

The results of statistical analyses are presented in this chapter. In the first Table 4.1, description of the sample is given. 76 of 130 of participants (58%) are male, 52 of them (40%) are female. Moreover 2 of the participants declined to answer the question about gender. 37 of the participant were practicing in a primary school and 90 of them practicing in secondary school. Of the responses, 115 (%88.5) reported that there were computer for their use. %68.5 of the teachers declared that there was Internet connection at school and %60 of them reported that there was Internet connection at home. Of the 32 who did not own a computer at home, 97 of them reported that own a home computer.

Reliably level of each test is given in Table 4.2. Each research question is associated with results and short explanation. Internet competency and computer attitudes parts have reliability level 0.96 and 0.83. Portal expectations parts` reliability level was 0.98. These reliability values are acceptable according to DeVellis.(1991).

Table 3.1. - Description of Sample

Variables	N	%		
Gender				
Male	76	58		
Female	52	40		
School Type				
Primary	37	28.5		
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Computer at Home				
Yes	97	74.6		
No	32	24.6		
Internet at Home				
Yes	78	60		
No	51	39.2		
	Minimum	Maximum	M	SD
Age	23	55	37.4	8.6
No. of Years in 1 Teaching		30	13.8	7.9

Table 3.2 – Reliabilities and Distributions of Questions According to Subject Areas

d	Part No	Subject	# of items	α values
Competency				
Internet	1	Internet Competency	11	0,96
Attitudes	2	Attitudes toward Computers	23	0,83
Portal	3	Expectation from Portal	35	0,98

Question 1: What are the descriptive characteristics associated with the scales: (a) Internet competency level, (b) attitudes of teachers towards computers, and (c) portal expectations of teachers?

4.1. Internet Competency Level of Teachers

Means and standard deviation of the scales are presented in table 3. For the entire scale the highest mean score ($M=2.84$) was for Item 7, and the lowest mean score ($M = 2.20$) was for Item 10. Item 7 is “how to make Internet connection” and “change browser options”. The highest deviation ($SD =1.24$) was in Item 6.

Table 4.1 - Summary Statistics of Items in Internet Competency

Item	M	SD
7. İnternet erişiminin nasıl yapıldığı	2.84	1.174
3. İnternet'ten dosya yükleme ve açma	2.76	1.203
1. E-posta gönderme ve alma.	2.67	1.179
9. Sık kullanılanların oluşturulması ve bunların kullanılması.	2.66	1.206
8. Tartışma siteleri, arama motorları ve benzeri İnternet araçlarının kullanımı	2.57	1.234
2. E-posta ile dosya gönderme ve alma	2.56	1.217
5. İnternet üzerinde canlı-etkileşimli görsel veya işitsel iletişim araçlarını kullanma.	2.38	1.205
6. Bir İnternet Servis Sağlayıcının (ISP) seçimi.	2.33	1.243
4. Dosya ekleme veya FTP (Dosya Transfer Protokolü) yoluyla dosya transfer etme.	2.26	1.214
11. Dosya birleştirme, dosya transfer etme, tablo oluşturma veya düzeltme gibi ileri düzey kelime işlemci fonksiyonlarını kullanabilme.	2.25	1.152
10. Tarayıcı seçeneklerini değiştirebilme	2.2	1.185

4.2. Attitudes towards Computers

For the entire scale the highest mean score ($M=3.46$) was for Item 22, and the lowest mean score ($M=1.82$) was for Item 9. Item 22 is “computer usage skills are important for teachers” and Item 9 is “computers disturb me”. Other low mean scores for items 3, and item 7, are also negative items.

Only item 13 standard deviation is higher than 1.00 ($SD = 1.026$). Teachers` attitudes towards computers items standard deviations show there is not so big deviation between teachers` scores.

Table 4.2. Summary Statistics of Items in Attitudes towards Computers

Item	M	SD
22. Bilgisayar becerileri öğretmenler için önemlidir	3.46	0.647
21. Bilgisayar becerileri öğrenciler için önemlidir	3.43	0.631
20. Sınıflarda bilgisayar kullanımı faydalı ve harcanan gayrete değerlidir	3.42	0.604
23. Bilgisayarın nasıl kullanıldığı benim için önemlidir	3.4	0.627
16. Teknolojiyle çalışmayı seviyorum.	3.34	0.642
12. Teknolojiyle değişik öğrenme metotlarına daha iyi yönelebilirim	3.29	0.628
15. Teknoloji ile, öğrencilerin ihtiyaçlarına daha iyi yönelebilirim.	3.29	0.614
14. Teknoloji yoluyla, bireysel dönüt sağlayabiliyorum.	3.1	0.73
11. Teknoloji benim daha fazla öğrenciye ulaşmamı sağlıyor.	3.07	0.8
18. Okul dışı etkinliklerde de bilgisayar kullanıyorum	3.07	0.745
19. Diğer alanlardaki teknolojik becerilerimi öğretime de uyguluyorum.	2.99	0.797
6. Bilgisayarla çalışmak beni oldukça heyecanlandırır.	2.93	0.801
4. Bilgisayar kullanımı konusunda kendime güvenirim	2.91	0.762
17. Bilgisayarı öğretimde kullanmayı kendi kendime öğrendim	2.59	0.838
1. Yeni bilgisayar uygulamalarını öğrenmek bana zor gelir	2.5	0.994
2. Bilgisayar kullanımı konusunda kendime güvenirim	2.45	0.871
5. Yeni bilgisayar uygulamalarını öğrenmek bana zor gelir.	2.18	0.899
13. Bilgisayarların etkin öğretme araçları olduğuna inanmıyorum.	2.13	1.026
10. Bilgisayarla çalışırken kafam karışıyor	2.08	0.879
8. Bilgisayar laboratuvarında kendimi rahat hissetmiyorum.	2.05	0.876
7. Diğerleri bilgisayarlardan konuşurken kendimi kötü hissederim.	1.98	0.772
3. Bilgisayarla çalışacak bir yapıya sahip değilim	1.89	0.9
9. Bilgisayar beni rahatsız ediyor	1.82	0.809

4.3. Portal Expectations

For the entire scale the highest mean score ($M=4.51$) was for Item 23, and the lowest mean score ($M=3.99$) was for Item 1. Item 23 is “rich content from MONE’s site” and Item 1 is “want to share lesson plans with others”. It can be seen that, except Item 1, all the other items mean score over 4.00. Moreover all items standard deviation is lower than 1.00. The highest standard deviation item is the item 1. It deviated more than other items.

Table 4.3. Summary of statistics of Items in Teachers Portal Expectations

Item	M	SD
23. MEB'in sitesinden etkinliklerde kullanmak için görsel materyallere ulaşmak isterim, (grafik, video, resim, afiş vb.)	4.51	0.653
25. MEB'in sitesinde bulunan bir elektronik kütüphaneyi kullanmak beni memnun eder.	4.5	0.628
22. Yeni çıkan mevzuatlara ilişkin haberleri, uygulama örneklerini MEB'in sitesinden ulaşmak isterim.	4.48	0.616
24. MEB'in sitesinden eğitim ile ilgili elektronik dergilere ulaşmak isterim.	4.47	0.615
26. Kişisel ve mesleki hizmet bilgilerimin saklandığı veri bankasını kullanmak isterim	4.47	0.666
7. Başarıyla uygulanmış etkinlikler benim ilgimi daha çok çeker.	4.43	0.65
13. Eğitim içerikli, tez, makale, araştırma raporu gibi yayınlara MEB'in web sitesinden ulaşmak mesleki gelişimimi destekler.	4.43	0.662
21. MEB'in web sitesinden mevzuatlara ulaşmak isterim.	4.43	0.625
10. MEB'in Web sitesinden mesleki gelişimi destekleyici konularda hazırlanmış yazıları takip etmek isterim.	4.38	0.629
31. MEB'in yaptığı önemli duyurulan e-posta olarak almak	4.38	0.654

isterim.		
14. Eğitim alanında uzman olan kişilerle yapılmış röportajları MEB'in sitesinde okumak isterim.	4.35	0.661
16. Verdiğim derslerle ilgili soru bankalarına MEB'in web sitesinden ulaşmak beni memnun eder.	4.35	0.699
19. Okulların merkezi sınavlardaki başarıları durumlarını MEB'in web sitesinde görmek isterim.	4.35	0.721
12. Seminer, panel, sempozyum gibi eğitimsel faaliyetlerin listesini MEB'in web sitesinden takip etmek isterim.	4.31	0.696
17. MEB'in web sitesinden değerlendirme teknikleri hakkında yapılmış çalışmalara ve açıklamalara ulaşmak beni memnun eder.	4.31	0.651
27. MEB'in bana bir e-posta adresi vermesini isterim.	4.31	0.718
11. Yeni öğretim metotları konusunda diğer meslektaşlarımla web ortamında fikir alışverişinde bulunmak isterim.	4.28	0.734
35. Merak ettiğim konularda bilgi almak için bir haber grubuna üye olmak isterim.	4.25	0.776
6. Web sitesinde bulduğum etkinlikleri sınıfımda uygulamak isterim.	4.24	0.753
9. Hizmetiçi seminerlerin bazılarını MEB'in web sitesinden verilmesini isterim..	4.24	0.84
18. Hazırladığım soruları diğer meslektaşlarımla MEB'in web sitesinde paylaşmak isterim	4.23	0.728
4. Web sitesinde yer alan planları incelemek ve kullanmak isterim.	4.22	0.776
30. Okul içi haberleri e-posta olarak almak isterim.	4.21	0.773
8. Aktiviteleri uygulama sürecimi diğer meslektaşlarımla Web sitesinde paylaşmak isterim.	4.2	0.746
15. Web sitesinden üzerinden verilen sertifika programlarına katılmak isterim.	4.17	0.767
29. Okulumdaki Öğretmenlerin kullandığı bir e-posta grubuna üye olmak isterim.	4.17	0.76
34. Farklı okullardan öğretmenlerle fikir alışverişinde bulunabileceğim bir tartışma grubuna üye olmak isterim.	4.17	0.852
33. Öğrencilerime bazı haberleri ulaştırmak için onlara e-posta	4.16	0.852

göndermek isterim.		
20. Öğrencilerimin hazırladığı projeleri web sitesinde yayınlamak isterim.	4.13	0.69
28. Meslektaşlarımla MEB'in sitesinde sohbet etmek isterim.	4.13	0.903
5. Hazırladığım sınıf etkinliklerini meslektaşlarımla web ortamında paylaşmak isterim.	4.07	0.847
32. Öğrencilerimden e-posta almak ve onlara e-posta yollamak isterim	4.06	0.883
3. Hazırladığım yıllık planlarını MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.	4.05	0.881
2. Hazırladığım ünite planlarını MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.	4.02	0.871
1. Hazırladığım günlük planları MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.	3.99	0.913

Question 2: Is there a difference between primary and secondary school teachers` Internet competency level and portal expectations?

Table 4.4 shows; total internet scores, N(37, 90) for the groups, M(27.68, 27.22) and SD(11.80, 10.67). Group statistics of portal total scores, N (37, 90), M(147.32,149.73) and SD(18.39, 20.07). From table 6, $t(125) = 0.23$, $p = 0.83$ for Internet total scores and, $t(125) = 0.63$, $p = 0.95$ for portal expectations total score. There is no difference between primary and secondary school teachers` Internet competency level and portal expectations.

Table 4.4. Group Statistics of Total Internet scores and Portal Total Scores of Primary and Secondary School Teachers

	School Type	N	Mean	Std. Deviation	Std. Error Mean
Internet Total Scores	primary	37	27.68	11.795	1.939
	secondary	90	27.22	10.673	1.125
Portal Total Scores	primary	37	147.32	18.388	3.023
	secondary	90	149.73	20.066	2.115

Table 4.5. Independent Samples Test of Total Internet scores and Portal Total Scores of Primary and Secondary School Teachers

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Internet Total Scores	Equal variances assumed	1.447	.231	.211	125	.833	.45
Portal Total Scores	Equal variances assumed	.003	.953	-.629	125	.530	-2.41

Question 3: Is there a difference between primary and secondary school teachers` attitude towards computers and portal expectations?

Table 4.6 shows; attitude towards computer total score, N(36, 86) for the groups, M(67.22, 68.50) and SD(7.53, 8.98). Group statistics of portal total scores, N(37, 90), M(147.32,149.73) and SD(18.39, 20.07). From table 8, $t(120) = 0.75$, $p = 0.46$ for attitudes towards computer total scores and, $t(125) = 0.63$, $p = 0.53$ for portal expectations. There is no difference between primary and secondary school teachers` attitudes towards computers and portal expectations.

Table 4.6. Group Statistics of Attitude towards Computer Total Score and Portal Total Scores of Primary and Secondary School Teachers

	School Type	N	Mean	Std. Deviation	Std. Error Mean
Attitude towards Computer Total Score	primary	36	67.22	7.529	1.255
	secondary	86	68.50	8.975	.968
Portal Total Scores	primary	37	147.32	18.388	3.023
	secondary	90	149.73	20.066	2.115

Table 4.7. Independent Samples Test of Attitude towards Computer and Portal Total Scores of Primary and Secondary School Teachers

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Attitude towards Computer Total Score	Equal variances assumed	.877	.351	-.750	120	.455	-1.28
Portal Total Scores	Equal variances assumed	.003	.953	-.629	125	.530	-2.41

Question 4: Is there a difference between primary and secondary school teachers Internet competency level and attitudes towards computers?

Table 4.8 shows; attitude towards computer total score, N(36, 86) for the groups, M(67.22, 68.50) and SD(7.53, 8.98). Group statistics of Internet competency total scores, N(37, 90), M(M(27.68, 27.22) and SD(11.80, 10.67). From Table 10, $t(120) = 0.75$, $p = 0.46$ for attitudes towards computer total scores and, $t(125) = 0.21$, $p = 0.83$ for Internet competency level scores. There is no difference between primary and secondary school teachers' attitudes towards computers and Internet competency.

Table 4.8. Group Statistics of Attitude towards Computer Total Score and Internet Total Scores of Primary and Secondary School Teachers

	School Type	N	Mean	Std. Deviation	Std. Error Mean
Attitude towards Computer Total Score	primary	36	67.22	7.529	1.255
	secondary	86	68.50	8.975	.968
Internet Total Scores	primary	37	27.68	11.795	1.939
	secondary	90	27.22	10.673	1.125

Table 4.9. Independent Samples Test of Attitude towards Computer and Internet Total Scores of Primary and Secondary School Teachers

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Attitude towards Computer Total Score	Equal variances assumed	.877	.351	-.750	120	.455	-1.28
Internet Total Scores	Equal variances assumed	1.447	.231	.211	125	.833	.45

Question 5: Is there a relation between portal expectations and Internet competency level?

There is poor correlation ($r = 0.29$) between internet competency total scores and portal expectations total scores

4.10. Correlation Table of Internet total score and Portal expectations Total Score

		Internet Total Score	Portal Total Score
Internet Total Score	Pearson Correlation	1	.286(**)
	Sig. (2-tailed)	.	.001
	N	130	130

** Correlation is significant at the 0.01 level (2-tailed).

Question 7: Is there a relation between portal expectations and attitudes towards computer?

There is a correlation ($r = 0.584$) between portal expectation total scores and attitudes towards computers total scores of teachers.

4.11. Correlation Table of Attitude total score and Portal expectations Total Score

		Attitude Total	
		Score	Portal Total Score
Attitude Total Score	Pearson Correlation	1	.584(**)
	Sig. (2-tailed)	.	.000
	N	125	125

** Correlation is significant at the 0.01 level (2-tailed).

CHAPTER 5

CONCLUSIONS

Information and communication technologies are so important to make higher quality of education since MONE has been developing so many projects and one of them is educational portal. Teachers' expectations and factors effect on expectations give opinions to developer of the portal since developing an educational portal takes so much time, effort and income. Teachers are the main actors of education. Thus their expectations from educational portal should be considered in the time of cultivating process.

5.1. Major Findings and Discussions

Data were obtained 130 teachers (37 primary and 90 secondary school teachers) in Eskisehir province. Sampling was nonrandomized thus the findings of this study could only be generalized to teachers who work at the central province of Eskisehir.

Question 1: What are the descriptive characteristics associated with the scales: (a) Internet competency level, (b) attitudes of teachers towards computers, and (c) portal expectations of teachers.

Because that question includes a significant body of data itself, question one will be discussed comprehensively in the sequence of Internet Competency Scale, Attitude towards Computers Scale and Portal Expectations Scale.

5.1.1 Internet Competency

This study found that Internet Competency had highest mean score ($M=2.84$) was for Item 7, and the lowest mean score ($M = 2.20$) was for Item 10. Item 7 is “how to make Internet connection” and “change browser options”. The range for the scale was 1 to 4. “1”, was not familiar, “2” was familiar, “3” was little known, “4”, was known. There was no item of which mean score over 3. Thus, teachers` level of Internet knowledge was low.

Ministry of Education (2004) declared that most of the teachers have enrolled in-service trainings to be computer littered but the training program curriculum did not cover Internet competency subject. However, according to mean score results, teachers` Internet competency levels were low. This result was compatible with Ozer (2004) research. Technology skills of teachers should have defined by ISTE (2000). Students` information technology education can be provided with teachers who have enough technology skills for their professional development At that point, it can be said that, teachers need in-service training to be competent to use Internet. As ALA mentioned (1989) teachers training program should be reorganized as information technology skills embedded.

The ICT project of MONE which contains development and support educational portal (World Bank, 2002) can be successful as long as teachers have enough Internet competencies (Akkoyunlu, 2005).

5.1.2 Attitudes towards Computers

For the entire scale the highest mean score (M=3.46) was for Item 22, and the lowest mean score (M=1.82) was for Item 9. Item 22 is “computer usage skills are important for teachers” and Item 9 is “computers disturb me”. Other low mean scores for items 3, and item 7, are also negative statement items. Teachers’ total scores are usually over 3 but some of them low. That low scores items which were 3, 5, 7, 8, 9, 10 and 13 included negative attitude expressions. These items have the lowest mean score. Thus teachers did not agree the negative statements about attitude towards to computers. For overall, teachers have positive attitudes towards to computers; although their Internet competency levels were low (Cagiltay, Cagiltay, Cakiroglu, Cakiroglu, 2001; Albirini, 2004)

The results have shown that, teachers have positive attitudes towards computers. When the highest mean score items 20, 21, 22, and 23 considered, teachers accepted to use computer during teaching process and they thought spending time for computers usage was meaningful. However, Askar and Usluel` study (2002) most teachers had hesitations about using computers as an instructional tool but teachers used computers for their personal works.

Only item 13 standard deviation is higher than 1.00 (SD = 1.026). Teachers' attitudes towards computers items standard deviations show there is not so big deviation between teachers' scores.

5.1.3 Portal Expectations

For the entire scale the highest mean score (M=4.51) was for Item 23, and the lowest mean score (M=3.99) was for Item 1. Item 23 is "reach visual resources from MONE's site" and Item 1 is "want to share lesson plans with others". It can be seen that, except Item 1, all the other items mean score over 4. Portal scores were determined 1 to 5. 5 is the highest expectation level. For over all, teachers' expectation level from portal is so high. Lowest items first three were about sharing lesson plans. Teachers might have hesitations about sharing their plans where everyone can examine.

Teachers find it difficult to reflect it on their own practice, perhaps because teachers' classroom practice is closely tied to their identity as a person, because teachers lack of certain professional dispositions, or because teaching has largely developed a culture of privacy. (Barab, Duffy, 2000)

Teachers are excited about using databases, reliable content, and electronic journals with the items 22, 23, 24, 25 and 26. This result had symmetry with literature findings. Teachers usually have not so much time to reach the reliable content in the Internet. (Lucio, Ernesto, Pedro, 2004).

Moreover, it is preferable for teachers to find out rich accurate and reliable content from national educational web site. However, if digital content not related

with the curriculum, teachers don't use it. Many teachers value simple and straightforward material they can access in one click and that is ready to be used in the next lesson, without needing to invent new activities, reflect on the purpose, or figure out relevance to the curriculum.

Another important finding for policymakers is that teachers are less positive about technology when they doubt the quality of information that they can access. Beyond the veracity of information, educators want to know that they are getting access to the best and highest quality content. Establishment of an educational portal for access to resources that are linked to the curriculum would help teachers to access one spot with examined and trusted information that they can use in their classes. (Worldbank, 2005)

Although, mean scores of Internet competencies ($2.0 < M < 3.0$) of teachers, portal expectations (M over 4.0 except first item). Teachers' Internet competency level is between little familiar and little known, their expectations levels is so high, their mean score shown that they agree to use educational portal services however for effective usage of portal services teachers must have some default skill about Internet.

Question 2: Is there a difference between primary and secondary school teachers' Internet competency level and portal expectations?

From the statistical results of the research, $t(125) = 0.23, p = 0.83$ for Internet total scores and, $t(125) = 0.63, p = 0.95$ for portal expectations total score. There is no difference between primary and secondary school teachers' Internet competency level and portal expectations.

It is expected that primary school teacher's scores are different since MONE firstly set the primary schools ICT environment and these school teachers' Internet competency level is not different then the secondary school teachers.

Question 3: Is there a difference between primary and secondary school teachers' attitude towards computers and portal expectations?

Statistical results shown that $t(120) = 0.75, p = 0.46$ for attitudes towards computer total scores and, $t(125) = 0.63, p = 0.53$ for portal expectations. There was no difference between primary and secondary school teachers' attitudes towards computers and portal expectations.

It is expected like question two, there is difference between secondary and primary school teachers since ICT environments of primary and secondary school are different since finished projects of MONE. There was no difference.

Question 4: Is there a difference between primary and secondary school teachers Internet competency level and attitudes towards computers?

Statistical results shown that $t(120) = 0.75, p = 0.46$ for attitudes towards computer total scores and, $t(125) = 0.21, p = 0.83$ for Internet competency level sores. There was no difference between groups.

Question 5: Is there a relation between portal expectations and Internet competency level?

There is poor correlation ($r = 0.29$) between internet competency total scores and portal expectations total scores. Whatever teachers' competency level of Internet, their portal expectations are so high. It might for that reason; r value for correlation is low.

Question 7: Is there a relation between portal expectations and attitudes towards computer?

There is correlation ($r = 0.468$) between portal expectation total scores and attitudes towards computers total scores of teachers. Teachers' attitude towards computer is so high similar as portal expectations.

5.2 Recommendations for Researchers

Based on findings and discussions, the following recommendations are offered for practitioners:

1. Teachers' internet competency level must be improved to use the portal services effectively by teachers.
2. Because teachers expectations level so high about portal and its services, teachers should not be disappointed.
3. Teachers' attitudes towards computers and portal expectations are related. Because policymakers want teachers use educational portal effectively and continually, they must compose training programs for both pre-service teachers and in-service teachers to develop positive attitudes towards computers.

4. In the portal expectation scale, services listed which can be covered by the national educational portal. Results shown that, teachers agreed about the services. Therefore policymakers must consider during developing process.
5. As declared in the literature, teachers directly shape the success or failure of using computers in education (Collins, 1990). For the success of educational portal, main users` trainings needs have to be considered.

5.3 Recommendations for Future Research

1. In that study, convenient sample is used. To have general idea about portal expectations of teachers in Turkey, broad study can be conducted with randomize sample.
2. This study can be conducted to explore pre-service teachers` expectations from educational portal.
3. Teachers` expectations about portal had relation with their attitudes towards computers according to this research. To better understanding factors that effect teachers` expectations, this study can be conducted by using qualitative research methods.
4. In future studies, researchers can conduct researches to show the changes of teachers` expectations after educational portal totally starts its services.

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APPENDIX

QUESTIONARE

Değerli meslektaşım,

Bu ölçek, Milli Eğitim Bakanlığınca hazırlanması planlanan **eğitim içerikli büyük bir web sitesi** hakkında sizlerin beklentilerini, bilgisayar hakkında tutum ve görüşlerinizi ve İnternet kullanım düzeylerinizi belirlemeyi amaçlayan araştırmaya baz olacak verileri toplamak için hazırlanmıştır.

Bu ölçeğe vereceğiniz cevaplar tamamıyla bilimsel amaçlar için kullanılacak ve başka hiçbir kurum veya kuruluşa verilmeyecektir.

Bu ölçek dört bölümden oluşmaktadır. Birinci bölüm, araştırma için gerekli olan kişisel bilgilerinizi içermektedir. İkinci bölüm, İnternet kullanım düzeyinizle ilgilidir. Üçüncü bölüm, bilgisayar kullanımını konusundaki görüşlerinizi belirtmeniz içindir. Son bölümde MEB'in hazırlatacağı eğitim içerikli web sitesi hakkındaki beklentilerinizi belirtmeniz istenmektedir.

Ölçeği cevaplayarak araştırmaya yaptığınız katkıdan dolayı teşekkür ederim.

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I. BÖLÜM: KİŞİSEL BİLGİLER

- Görev yaptığınız okul:
- Branşınız:
- Cinsiyetiniz: Bayan () Bay ()
- Yaşınız:
- Mezun olduğunuz okul ve bölüm:
- Hizmet Süreniz (Yıl olarak kıdeminiz):
- Mezun olduğunuz alan dışında verdiğiniz dersler:
- Çalıştığınız okulda ihtiyaç duyduğunuzda kullanabileceğiniz bilgisayar var mı?:
- Cevabınız evet ise, Internet erişimi var mı?
- Evinizde ihtiyaç duyduğunuzda kullanabileceğiniz bilgisayarınız var mı?
- Cevabınız evet ise, Internet erişimi var mı?

Bundan önce bilgisayar ile ilgili ders/eğitim aldınız mı? Aldıysanız, eğitimin içeriğini tanımlayınız:

II. BÖLÜM: İNTERNET

Burada, İnternet Servis Sağlayıcıları ve arama motorları kullanmak suretiyle WWW üzerinde araştırma yapma veya metinler, görsel, görsel-işitsel, senkronize ya da asenkronize yollarla diğer bilgisayarlarla iletişim kurmanızı sağlayan programları kullanma yeterliği söz konusudur.

YÖNERGE: Aşağıdaki soruları "aşına değilim", "biraz aşınayım", "biraz biliyorum" veya

"biliyorum" kolonlarına (X) işareti koymak suretiyle cevaplayınız.

	Aşına Değlim	Biraz Aşınayım	Biraz Biliyorum	Biliyorum
1. E-posta gönderme ve alma.				
2. E-posta ile dosya gönderme ve alma				
3. İnternet'ten dosya yükleme ve açma.				
4. Dosya ekleme veya FTP (Dosya Transfer Protokolü) yoluyla dosya				
5. İnternet üzerinde canlı-etkileşimli görsel veya işitsel iletişim araçlarını				
6. Bir İnternet Servis Sağlayıcının (ISP) seçimi.				
7. İnternet erişiminin nasıl yapıldığı.				
8. Tartışma siteleri, arama motorları ve benzeri İnternet araçlarının kullanımı.				
9. Sık kullanılanların oluşturulması ve bunların kullanılması.				
10. Tarayıcı seçeneklerini değiştirebilme.				
11. Dosya birleştirme, dosya transfer etme, tablo oluşturma veya düzeltme gibi ileri düzey kelime işlemci fonksiyonlarını kullanabilme.				

III.BÖLÜM: BİLGİSAYAR HAKKINDA TUTUM VE GÖRÜŞLER

YÖNERGE: Aşağıdaki soruları "kesinlikle katılmıyorum", "katılmıyorum", "katılıyorum" veya "kesinlikle katılıyorum" kolonlarına (X) işareti koymak suretiyle cevaplayınız.

	KESİNLİKLE KATILMIYORUM	KATILMIYORUM	KATILYORUM	KESİNLİKLE KATILYORUM
1) Bilgisayarda yeni bir sorunla uğraşmak beni rahatsız eder.				
2) Bilgisayarlarla ilgili konularda ileri düzeyde çalışmalar yapabiliyim.				
3) Bilgisayarla çalışacak bir yapıya sahip değilim				
4) Bilgisayar kullanımını konusunda kendime güvenirim.				
5) Yeni bilgisayar uygulamalarını öğrenmek bana zor gelir.				
6) Bilgisayarla çalışmak beni oldukça heyecanlandırır.				
7, Diğerleri bilgisayarlardan konuşurken kendimi kötü hissedirim.				
8) Bilgisayar laboratuvarında kendimi rahat hissetmiyorum.				
9) Bilgisayar beni rahatsız ediyor.				
10) Bilgisayarla çalışırken kafam karışıyor.				
11) Teknoloji benim daha fazla öğrenciye ulaşmamı sağlıyor.				
12) Teknolojiyle değişik öğrenme metotlarına daha iyi yönelebilirim.				
13) Bilgisayarların etkin öğretme araçları olduğuna inanmıyorum.				
14) Teknoloji yoluyla, bireysel dönüt sağlayabiliyorum.				
15) Teknoloji ile, öğrencilerin ihtiyaçlarına daha iyi yönelebilirim.				
16) Teknolojiyle çalışmayı seviyorum.				
17) Bilgisayarı öğretimde kullanmayı kendi kendime öğrendim.				

18) Okul dıřı etkinliklerde de bilgisayar kullanıyorum.				
19) Diđer alanlardaki teknolojik becerilerimi öğretime de uyguluyorum.				
20) Sınıflarda bilgisayar kullanımı faydalı ve harcanan gayrete deđerdir.				
21) Bilgisayar becerileri öğrenciler için önemlidir.				
22) Bilgisayar becerileri öğretmenler için önemlidir.				
23) Bilgisayarın nasıl kullanıldığı benim için önemlidir.				

IV.BÖLÜM: ÖĞRETMENLERE YÖNELİK PORTAL İÇİN BEKLENTİ TUTUM ÖLÇEĞİ

YÖNERGE: Aşağıdaki soruları "**kesinlikle katılmıyorum**", "**katılmıyorum**", "**karasızım**", "**katılıyorum**" veya "**kesinlikle katılıyorum**" kolonlarına (X) işareti koymak suretiyle cevaplayınız.

	KESİNLİKLE KATILMIYORUM	KATILMIYORUM	KARASIZIM	KATILYORUM	KESİNLİKLE KATILYORUM
1) Hazırladığım günlük planları MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.					
2) Hazırladığım ünite planlarını MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.					
3) Hazırladığım yıllık planlarını MEB'in web sitesinde diğer meslektaşlarımla paylaşmak isterim.					
4) Web sitesinde yer alan planları incelemek ve kullanmak isterim.					
5) Hazırladığım sınıf etkinliklerini meslektaşlarımla web ortamında paylaşmak isterim.					
6) Web sitesinde bulduğum etkinlikleri sınıfımda uygulamak isterim.					
7) Başarıyla uygulanmış etkinlikler benim ilgimi daha çok çeker.					
8) Aktiviteleri uygulama sürecimi diğer meslektaşlarımla Web sitesinde paylaşmak isterim.					
9) Hizmetiçi seminerlerin bazılarını MEB'in web sitesinden verilmesini isterim.					

10) MEB'in Web sitesinden mesleki gelişimi destekleyici konularda hazırlanmış yazıları takip etmek isterim.					
11) Yeni öğretim metotları konusunda diğer meslektaşlarımla web ortamında fikir alışverişinde bulunmak isterim.					
12) Seminer, panel, sempozyum gibi eğitimsel faaliyetlerin listesini MEB'in web sitesinden takip etmek isterim					
13) Eğitim içerikli, tez, makale, araştırma raporu gibi yayınlara MEB'in web sitesinden ulaşmak mesleki gelişimimi destekler.					
14) Eğitim alanında uzman olan kişilerle yapılmış röportajları MEB'in sitesinde okumak isterim					
15) Web sitesinden üzerinden verilen <u>sertifika programlarına katılmak</u> isterim.					
16) Verdiğim derslerle ilgili soru bankalarına MEB'in web sitesinden ulaşmak beni memnun eder.					
17) MEB'in web sitesinden değerlendirme teknikleri hakkında yapılmış çalışmalara ve açıklamalara ulaşmak beni memnun eder					
18) Hazırladığım soruları diğer meslektaşlarımla MEB'in web sitesinde paylaşmak isterim.					
19) Okulların merkezi sınavlardaki başarıları durumlarını MEB'in web sitesinde görmek isterim.					
20) Öğrencilerimin hazırladığı projeleri web sitesinde yayınlamak isterim.					
21) MEB'in web sitesinden mevzuatlara ulaşmak isterim.					
22) Yeni çıkan mevzuatlara ilişkin haberleri, uygulama örneklerini MEB'in sitesinden ulaşmak isterim.					

23) MEB'in sitesinden etkinliklerde kullanmak için görsel materyallere ulaşmak isterim, (grafik, video, resim, afiş vb.)					
24) MEB'in sitesinden eğitim ile ilgili elektronik dergilere ulaşmak isterim.					
25) MEB'in sitesinde bulunan bir elektronik kütüphaneyi kullanmak beni memnun eder.					
26) Kişisel ve mesleki hizmet bilgilerimin saklandığı veri bankasını kullanmak isterim.					
27) MEB'in bana bir e-posta adresi vermesini isterim.					
28) Meslektaşlarımla MEB'in sitesinde sohbet etmek isterim					
29) Okulumdaki Öğretmenlerin kullandığı bir e-posta grubuna üye olmak isterim.					
30) Okul içi haberleri e-posta olarak almak isterim.					
31) MEB'in yaptığı önemli duyurulan e-posta olarak almak isterim					
32) Öğrencilerimden e-posta almak ve onlara e-posta yollamak isterim.					
33) Öğrencilerime bazı haberleri ulaştırmak için onlara e-posta göndermek isterim.					
34)Farklı okullardan öğretmenlerle fikir alışverişinde bulunabileceğim bir tartışma grubuna üye olmak isterim					
35) Merak ettiğim konularda bilgi almak için bir haber grubuna üye olmak isterim.					

Teşekkürler.