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## Assessing the Attitudes of Pre-Service English Teachers towards the Use of the Internet

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### ABSTRACT

In the effective implementation of the Internet in the language classroom, it is important that language teachers and pre-service teachers have positive attitudes towards using the Internet in teaching English as a foreign language (EFL). This study reveals pre-service English teachers' use and needs of the Internet. 195 third and fourth year students from DEU Buca the Faculty of Education, Department of English Language and Teaching constitute the sample of the study. The instrument used to accomplish the research purposes is *Pre-service Teachers' Attitudes towards the use of and needs for Internet Applications in English Language Teaching* survey questionnaire. The results indicate that most of the pre-service teachers are eager to use Internet applications and they mostly have good opinions about using it. The study also points out that pre-service teachers have some concerns about using the Internet. They also need training in using Internet applications for EFL teaching.

**KEYWORDS:** the Internet use, pre-service English teachers

### ÖZET

İnternet'in etkili bir şekilde yabancı dil sınıfındaki yerini almasında, yabancı dil öğretmenlerinin ve öğretmen adaylarının İngilizcenin yabancı dil olarak öğretiminde İnternet kullanımına karşı olumlu bir tutuma sahip olması önemlidir. Bu çalışma, İngilizce öğretmen adaylarının yabancı dil öğretiminde İnternet kullanımına karşı tutumlarını ve ihtiyaç alanlarını ortaya çıkarmaktadır. DEÜ Buca Eğitim Fak. İngiliz Dili Eğitimi ABD 3. ve 4. sınıfa devam eden 195 öğrenci bu çalışmanın örneklemini oluşturmaktadır. Çalışmada *Pre-service Teachers' Attitudes towards the use of and needs for Internet Applications in English Language Teaching* adlı anket kullanılmıştır. Sonuçlar göstermektedir ki, öğretmen adaylarının çoğu İnternet'ten faydalanma konusunda istekliler ve İnternet kullanımına ilişkin olumlu düşüncelere sahipler. Bu çalışma ayrıca, öğretmen adaylarının İnternet'ten yararlanma konusunda bazı endişelere sahip olduğunu ve İnternet uygulamalarından yararlanmada eğitime gereksinim duyduklarını vurgulamaktadır.

**ANAHTAR KELİMELER:** İnternet kullanımı, İngilizce öğretmen adayları

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## INTRODUCTION

Education is always in need of improvement, no matter how good the teachers and no matter how much money is invested. In 1995, KickStart Initiative, the U.S. Advisory Council on the National Information Infrastructure, pointed out that educational technology has numerous advantages. Firstly, it helps students to learn by doing and it changes students into active and motivated learners. Second, it enables teachers to bring the varied learning styles into the classroom. Third, students become lifelong learners who can access, analyze and synthesize information from a variety of sources (Lasorenko, 1997). Language teachers are also keen on using computer-based technologies to facilitate language learning and they need to be guided to use these technologies in the language classroom (Murray and Mcpherson, 2004). Over the past few years, the Internet has appeared as a striking new technology. Because the use of the Internet is pervasive in numerous fields and domains, without a doubt, it also carries great potential for educational use. It is not an overstatement to say that the Internet has transformed English language teaching (ELT). The significance of the Internet for English language teaching is undoubtedly true and thus it should be an instrument for teachers and learners if it is a means of accessing information (Forsyth, 1998; Linder, 2004). EFL learners mostly have positive attitudes towards the Internet and this contributes highly to foreign language learning after overcoming some possible problems (Aydın, 2007). Yavuz, in his Master Thesis, proposed that the Internet can be safely used in constructing distant post-graduate programs (1998). The various areas of Internet opportunities and features that can be used in ELT enhance the language learning process with a big support for teachers. The key to promoting improved learning with the Web seems to lie in how skillfully the tool is implemented in the teaching and learning environment (Owston, 1997). ELT teachers should embrace the use of the Internet technology combining it with their knowledge of language pedagogy. As Carrier (1997: 300) suggests, “our challenge as ELT teachers is to embrace the technology of the Internet, rapidly tame it with pedagogy, and make it relevant to our language teaching goals, so we can harness its motivational drawing power”. While it must be recognized that the Internet cannot replace the language classroom or the language teacher, it offers a vast amount of information and lends itself to communication possibilities that can greatly enhance the language experience. In a survey which was conducted to 4<sup>th</sup> and 5<sup>th</sup> year students about their use of the Internet at an elementary level, it was revealed that most of the elementary school students could not get the necessary support from their parents and teachers about the use of the Internet (Ersoy and Yaşar, 2003). Since many elementary students have their first contact with the Internet at school, teachers are very influential in giving helpful guidance to the students to use the Internet properly and to get the maximum benefit from it (Odabaşı, Kabakçı and Çoklar, 2007). The more enthusiastic and more knowledgeable language teachers are, the more successfully they can benefit from it in language classrooms. Likewise, Warschauer, Shetzer and Meloni (2000: 11) suggest, “Professional development is the lifeblood of teaching”. However; lack of training and familiarity on part of the teachers can make it difficult to implement the Internet in the language classroom. Most teacher-preparation programs provided by departments of education do not have written, funded, and regularly updated technology plans (Moursund and Bielefeldt, 1999). All pre-service and in-service teachers should get education on both technology use and technology criticism (Moran and Selfe, 1999).

Since the language teacher is an important factor in the implementation of the Internet facilities in the language classroom, their attitudes towards the use of the Internet, their opinions and needs are of crucial importance. The success of student learning with the Internet will rely mostly on the appreciation of the teachers’ attitudes towards the Internet use (Teo, 2008). The Agora Language Marketplace has carried out many researches on the language teachers’ use of the Internet and the findings show that teachers’ use of the Internet increases in parallel with the unbelievable growth in the use of Web (Teeler, 1999). Literature in the field of using technology and the Internet in education reveals that there are many studies evaluating the use and attitudes of pre-service teachers (Luan, Fung, Nawawi and Hong, 2005; Teo, 2008). However; in Turkey, it is seen that there are some studies which investigate the attitudes and opinions of pre-service teachers towards the use of technology and computers (İzgi and Bekçi, 2007; Gündüz, 2007; Öztürk, Okçu and Karamete 2008), but the number of studies investigating pre-service teachers’ attitudes towards the use of the Internet is not so much. Since there is such a gap in the field of English language teaching in our country, studies which dig into this subject are needed. This study seeks to highlight the attitudes of English pre-service teachers towards the use of the internet. Moreover; the basic skills and the educational needs of English pre-service teachers’ are analyzed in the study. It is also examined whether pre-service English teachers’ attitudes differed significantly in their academic status.

## METHOD

### *Sample*

The universe of the study is English pre-service teachers from departments of English Language and Teaching in Educational Faculties. The sample for the population of the study is 195 third and fourth year students from Dokuz Eylül University Buca the Faculty of Education, Department of English Language and Teaching. 29.7 %

(n= 58) of the students attend to third class, 70.3 % (n= 137) of them attend to fourth class. Among the students who participate in the study, 72.3 % (n= 141) are female and 27.7 % (n= 54) are male. As for the Internet connection, 50.8 % (n=99) of the students have internet connection at home, 1.5 % (n=3) at school, 7.7 % (n=15) at the dormitory, 37.4 % (n=73) at cyber cafes, and 2.1 % (n=4) of the students indicate that they do not have any kind of connection.

### Materials

The instrument used to accomplish the research purposes was *Pre-service Teachers' Attitudes towards the use of and needs for Internet Applications in English Language Teaching* survey questionnaire. The questionnaire was used to survey the Internet use of English pre-service teachers. It was also to investigate their needs and opinions of using Internet applications for English Language Teaching. This survey consists of two sub-scales as Internet Attitude Scale and Self-perception of Computing Skills Scale. This survey questionnaire is adapted from the master thesis of Sudsuang Yutdhana and the validity and reliability checks are done by Külleççi (2009).

*Internet attitude scale* includes 7 items. Items in this scale are adapted in order to evaluate English pre-service teachers' opinions towards using Internet applications for teaching English. The increase of the scores obtained from the scale points out that there are positive attitudes towards the use of Internet in the language classroom. The validity and reliability analyses of the scale were done by 96 students. At the end of the exploratory factor analyses it was seen that the scale consists of one factor and this factor explains 39 % of the total variation. During the process of reliability analysis, the cronbach alpha reliability coefficient was calculated as .73. The test- retest reliability coefficient of the scale was found as .92.

*Self-perception of computing skills scale* includes 10 items. In this scale, which consists of two factors, the basic computer skills of the students and their educational needs related to the use of computers are evaluated. Respondents indicated their level of agreement to each item in the scale based on a 3 point likert scale from "very necessary" to "not necessary". The increase of the scores in the scale indicates that basic computer skills of the students and their educational needs related to the use of computers also increase.

The validity and reliability check of the scale is done by 96 students. At the end of the factor analysis it was seen that the scale consisted of two factors and these two factors explained 59 % of the total variation. During the process of reliability check, the cronbach alpha reliability coefficient was calculated as .70. The test- retest reliability coefficient of the scale was found as .96.

In addition to the two scales explained above, the pre-service English teachers were asked the following three open-ended questions revealing their opinions and perceptions in using the Internet in teaching EFL. These questions are as follows: "question 1: What other comments do you have about using the Internet in your teaching?", "question 2: What are your concerns about using the Internet for TEFL?", "question 3: What do you need to learn in order to use the Internet well for your teaching and teaching preparation?"

### Data Analysis

Frequency distribution and pearson correlation analysis were applied to the data regarding the sample. Data analysis benefited from the use of the SPSS 11.0 software packet program. In the following analyses, the criterion  $p < .05$  was used to determine the significant results.

A content analysis was used during the data analysis of the open-ended questions. In making a content analysis, similar data are grouped under some certain concepts or themes and they are organized in an understandable way so that they are interpreted reasonably. (Yıldırım & Şimşek, 2005). The data obtained from the open-ended questions were analyzed by this procedure: the researcher read all of the answers, coded them by the keywords found in the answers, and finally did the frequencies of each category.

## RESULTS

### Results related to the Internet Attitude Scale

English pre-service teachers' responses to the questions in the Internet Attitude Scale and their frequency distributions mean scores and standard deviations are given in Table 1.

**Table 1.** Frequency Distributions, Mean Scores and Standard Deviations Related to Internet Attitude Scale

Item	Strongly agree		Agree		Disagree		Strongly disagree	
	N	%	n	%	N	%	n	%
1. Internet applications can play an important role in the classroom	60	30.8	124	63.6	8	4.1	3	1.5

2. Internet applications can be used in the class to enhance the teaching of important skills	55	28.2	135	69.2	5	2.6	-	-	
3. Internet applications are best used for drill, remediation or reinforcement of facts	31	15.9	135	69.2	27	13.8	2	1	
4. Internet applications are best used in the classroom to promote students' analytical, creative and other high order thinking skills	30	15.4	128	65.6	35	17.9	2	1	
5. Internet applications can be used in the classroom to provide alternative learning approaches for students who are having difficulty in learning	56	28.7	126	64.6	13	6.7	-	-	
6. Using internet applications is an appropriate activity for some students	47	24.1	143	73.3	5	2.6	-	-	
7. Using internet applications can be used in the classroom to make learning more interesting for all students	88	45.1	90	46.2	17	8.7	-	-	
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$\bar{X}$ 25.80									
SS 2.62									

Using the total sample of 195 pre-service English teachers, means and standard deviations were calculated for the Internet Attitude Scale. (See Table 1) The mean score for the summed IAS as 25.80 (SD=2.62), with a potential range of 7 to 28.

As seen in Table 1, a large proportion of the respondents, almost 95 %, thought that the Internet applications can play an important role in the classroom. Similarly; among the respondents, 98 % of them agreed with the statement that Internet applications can be used in the class to enhance the teaching of important skills. Of the respondents, 86 % believed that Internet applications are best used for drill, remediation or reinforcement of facts and again about 80 % of them pointed out that Internet applications are best used in the classroom to promote students' analytical, creative and other high order thinking skills. Almost 95 % of the respondents made positive contributions about using Internet applications in the classroom to provide alternative learning approaches for some students and for the ones who are having difficulty in learning. Among the respondents, 91 % of them displayed a positive attitude to the final statement which states that using internet applications can be used in the classroom to make learning more interesting for all students.

### Results related to Self-perception of Computing Skills

English pre-service teachers' responses to the questions in the Self-perception of Computing Skills Scale and their frequency distributions mean scores and standard deviations are given in Table 2.

**Table 2.** Frequency Distributions, Mean Scores and Standard Deviations Related to SCSS

Item		Very necessary		Necessary		Not Necessary	
		n	%	n	%	N	%
Basic Skills	1. Basic skills of using Internet applications	137	70.2	29	14.9	29	14.9
	2. Basic computer skills	110	56.4	63	32.3	27	13.8
	3. Chatroom	66	33.8	105	53.8	19	9.7
	4. Webboard	11	5.6	59	30.3	125	64.1
Educational needs	5. Creating activities	138	70.8	52	26.7	5	2.5
	6. Creating lesson plans	123	63.1	69	35.4	3	1.5
	7. Gathering information from ESL/EFL websites	140	71.8	52	26.7	3	1.5
		$\bar{X}$ 19.25					
		SS 2.68					

Using the total sample of 195 pre service English teachers, means and standard deviations were calculated for the Self-perception of Computing Skills Scale. (See Table 1) The mean score for the summed SPCSS as 19.25 (SD=2.68), with a potential range of 7 to 21.

As seen in Table 2, more than 80 % of the respondents found it quite necessary to have training on basic skills of using Internet applications, basic computer skills and Chat room. And 36 % of the respondents found it necessary to have training on the use of Web board. As for educational needs, a large proportion of the respondents were in need of a special training on creating activities, lesson plans and gathering information from ESL/EFL websites.

### Relationship between Internet Attitude Scale and Self-perception of Computing Skills Scale

The relationship between the IAS and SPCSS was examined by correlation analysis. The findings are given in Table 3.

**Table 3. Relationship Between Internet Attitudes and Self-perception of Computing Skills**

Variables	1	2	3	4
(1)Internet Attitude Scale	1.000			
(2)Basic skills	.18**	1.000		
(3)Educational needs	.25***	.15*	1.000	
(4) Self perception	.28***	.80***	.71***	1.000

\*p<.05, \*\*p<.01, \*\*\*p<.001

As seen in Table 3, IAS scores were positively correlated with dimensions of SPCSS, namely Basic Skills subscale ( $r=.25$ ,  $p<.001$ ) and educational needs subscale ( $r=.18$ ,  $p<.01$ ). Moreover, IAS scores were positively correlated with SPCSS ( $r=.28$ ,  $p<.001$ ).

### Attitudes towards the use of the Internet and pre-service English teachers' academic status

By using t-test it was examined whether pre-service English teachers' attitudes towards the use of the Internet show any difference depending on the variable of their academic status. The findings are given in Table 4.

**Table 4. Relationship Between Attitudes towards The Use of The Internet and Pre-service English Teachers' Academic Status**

Grade	Groups	N	X	SS	t
	3 <sup>rd</sup>		84	25.38	2.79
4 <sup>th</sup>		111	26.34	2.29	

As seen in Table 4, 4<sup>th</sup> year students' ( $M = 26.34$ ,  $SD = 2.29$ ) attitudes towards the use of the Internet were higher than 3<sup>rd</sup> year students' attitudes ( $M = 25.38$ ,  $SD = 2.79$ ), and 4<sup>th</sup> and 3<sup>rd</sup> year students differed significantly in attitudes towards internet ( $t=2.56$ ,  $p<.05$ ) when a t-test was applied.

### Results related to open-ended questions

As previously mentioned, in order to better understand pre-service English teachers' opinions and perceptions in using the Internet in teaching EFL, the survey included three open-ended questions. The results obtained for these questions are summarized below.

#### Question 1 (What other comments do you have about using the Internet in your teaching?)

Among the pre-service English teachers who participated in this study, 57 % ( $n= 111$ ) of them answered this question. About 26 % of the respondents ( $n=29$ ) stated that internet raises the quality of the lesson in many ways; some others (14 %,  $n= 16$ ) considered the Internet as a medium of fast search minimizing the burden of the teacher. Of the respondents, 55 % ( $n=61$ ) stated that Internet is an interesting, authentic source supported by various visuals. Only 5 % of them ( $n=5$ ) indicated that Internet is a technological tool increasing creativity.

*Question 2* (What are your concerns about using the Internet for TEFL?)

Among the pre-service English teachers who participated in this study, 46 % (n=89) of them answered this question. About 66 % of the respondents (n=59) believed that besides its being useful, it has also some destructive effects upon students. Of the respondents, 21 % (n=19) believed that Internet may lead to some problems related to classroom management. Only 12 % (n=11) of them claimed that language teachers may need training courses.

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*Question 3* (What do you need to learn in order to use the Internet well for your teaching and teaching preparation?)

Among the pre-service English teachers who participated in this study, 61 % (n=119) of them answered this question. There are seven content topics the respondents feel they need to learn. About 18 % of the respondents (n=21) stated that they needed training on teaching programs. Among them, 24 % (n=28) said that they did not know the important websites. About 12 % of the respondents (n=14) said that they needed training on basic computer skills and about 27 % (n=32) of them said that they did not know how to use the Internet. Only 13 % (n=16) of them believed that they have difficulty in creating web-based activities and preparing lesson plans. Only 2 % (n=2) of them said that they needed training on certain search engines. About 5 % (n=6) of the respondents needed to learn how to create a Web site.

## DISCUSSION and CONCLUSION

The aim of this study is to highlight the attitudes of English pre-service teachers' towards the use of the Internet. Moreover; the basic skills and the educational needs of English pre-service teachers' are analyzed in the study. It is also examined whether pre-service English teachers' attitudes differed significantly in their academic status. The result of the study shows that the attitudes of pre-service English teachers towards the use of the Internet are positive and high. Overall, the respondents have positive opinions about using the Internet for their instruction. It is obviously seen that Internet can provide many advantages for their future instruction. The Internet serves as a medium for experiencing and presenting creative works. David Eastment (2001), for instance, who is a freelance teacher, teacher-trainer and consultant in the area of computer-assisted language learning, provides web sites for the language teachers. The aim of his listing page is to provide details of sites which are interesting or useful for language teachers. The Internet can also improve their performance and research skills. Moreover; the Internet allows them to access authentic material, contact other teachers from different parts of the world, follow recent developments in language teaching and get access to resources that satisfy their needs. In addition; as Singhal (1997) points out "one of the most essential pedagogical principles of language teaching is one that emphasizes the study of language in a cultural context". In this sense, the Internet is a good source for giving the culture of the target language, namely English. Also, the use of the Internet in the EFL setting promotes the higher order skills. They evaluate and judge the information they have found to decide what is beneficial to them (Chafe, 1999). From the responses of the pre-service teachers, it is seen that they are all aware of these benefits of the Internet and are eager to use it in their classrooms.

However, a positive attitude towards using technology for instruction cannot ascertain that teachers are able to use or integrate it with their teaching. The results of the study also justify this argument. Pre-service English teachers' basic skills on using the computer and the Internet are not enough. The reason for the pre-service English teachers' not being competent enough in basic computer and Internet skills might be that in educational programs, the improvement of such skills is not taken seriously. When the curriculum of the pre-service English teachers is analyzed, it is seen that only in the second year with 3 credits they have a computer course and in the following years there is no such similar course. It is suggested that pre-service teachers should become competent Web users and they should be instructed on how to take this immense, overwhelming, frustrating, amazing resource and make it into a usable, manageable and productive tool (Lewin, 2001). Besides; pre-service English teachers should take more courses which will enable them to improve their computer competence. They need to have certain strategies and guidelines that would help them to make critical and important decisions. It is always found that technology applications taught in teacher-education coursework are quite old-fashioned and not practical for pre-service teachers to accumulate for their future practices when they become English language teachers. It is significant that a new paradigm of teacher education in technology use is needed. Proper training is a necessity for most of them. The current idea of technology course is still inconsistent with pre-service teachers' needs and expectations. Pre-service English teachers need help from fellow educators who understand instruction, and who also understand how this technology can assist their work efforts.

One of the important findings of the study is that the Internet accessibility among the students is quite low in the school environment. Therefore; the Internet accessibility and the use of the computers should be given more importance at universities.

From the results of the open-ended questions mentioned above, it is interesting that there are four purposes for which pre-service English teachers would like to use the Internet in the language classroom. They believe that the Internet raises the quality of the lesson in many ways and is an interesting, authentic source supported by various visuals. It is a technological tool increasing creativity and also it is a medium of fast search minimizing the burden of the teacher. From their responses, it can be concluded that pre-service teachers show clear preferences towards the use of the Internet. However; pre-service English teachers have some concerns about using the Internet in the language classroom. Most of the respondents claimed that Internet has some destructive effects upon students besides its being useful. Plagiarism, pornography and culturally inappropriate sites can be counted among the serious problems encountered while using the Internet in EFL classrooms (AL-Mekhlafi, 2004). Some of them stated that Internet may lead to some problems related to classroom management and as a last item; the respondents are in the opinion that language teachers may need training courses on the use of computers and especially on the use of the Internet. They need training on teaching programs, basic computer skills, certain search engines and website creation. Some of them do not know the important websites in their field and they have difficulty in creating web-based activities and creating lesson plans.

As the result of the study indicates; there is a positive relation between the attitudes towards the use of the Internet and self-perception of computing skills. In terms of the variable of students' grades, there occurred a difference. This finding shows that students' level of awareness increases in relation to their ages.

Of course, there are some limitations to this study. First, the respondents were selected from one educational faculty, that is, Buca the Faculty of Education. Although the results represent some important and new information, they shall be viewed circumspectly until they are conducted again to reveal the attitudes of other pre-service English teachers attending to different universities. This is of vital importance for the generalization of the results. Second, the data reported here rely solely on self reports. To minimize this limitation, the respondents were reassured complete anonymity to secure confidentiality.

In conclusion, although pre-service English teachers' attitudes towards the use of the Internet are positive, their computer skills are not at an expected level. Therefore; they need more training on using Internet applications for teaching EFL. It is hoped that this study would add up to the building of a ground theory based on raising consciousness of teachers and pre-service teachers to the importance of using the Internet technology in schools.

## REFERENCES

- AL-Mekhlafi, A. (2004). The Internet and EFL Teaching: The Reactions of UAE Secondary School English Language Teachers. *Journal of Language and Learning*, 2(2), 88-113.
- Aydın, S. (2007). Attitudes of EFL Learners Towards the Internet. *The Turkish Online Journal of Educational Technology*, 3(2)
- Carrier, M. (1997). ELT Online: the rise of the Internet. *ELT Journal*. 51(3), 279-309. Oxford University Press
- Chafe, Allison. (1999) Effective use of the Internet in second language education: Benefits, challenges and guidelines for teachers. Retrieved February 18, 2009 from <http://www.cdli.ca/~achafe/Internetinclassroom.html>
- Eastment, D. (2001). Web Sites for the Language Teacher: Teachers. *ELT Journal* 55(2), 214-216.
- Ersoy, A. and Yaşar, Ş. (2003) İlköğretim 4. ve 5.sınıf Öğrencilerinin İnternet Kullanma Durumları. *Türk Eğitim Bilimleri Dergisi*. 1(4).
- Forsyth, I. (1998). *Teaching and Learning Materials and the Internet*. London: Kogan Page Limited.
- Gündüz, Ş. (2007). Öğretmen adaylarının bilgisayar öz yeterlikleri. *16<sup>th</sup> National Congress of Education* (unpublished paper), Tokat: Gaziosmanpaşa University, Faculty of Education.
- İzgi, Ü. and Bekçi, B. (2007). Öğretmen adaylarının eğitim ortamında kullandıkları eğitim teknolojilerine ilişkin yeterlilikleri. *16<sup>th</sup> National Congress of Education* (unpublished paper), Tokat: Gaziosmanpaşa University, Faculty of Education.
- Lasorenko, J. (1997). *Wired for Learning*. USA: Que Corporation.
- Lewin, L. (2001). *Using the Internet to Strengthen Curriculum*. USA: Association for Supervision and Curriculum Development.
- Linder, D. (2004). The Internet in every classroom? Using outside computers. *ELT Journal*. 58(1), 10-17.
- Luan, W.S., Fung, N.S., Nawawi, M. and Hong, T.S. (2005) Experienced and inexperienced Internet users among pre-service teachers: Their use and attitudes toward the Internet. *Educational Technology & Society*. 8(1), 90-103.
- Moran, C. and Selfe, C. L. (1999) Teaching English across the Technology/Wealth Gap. *The English Journal*. 88 (6), 48-55.
- Moursund, D. and Bielefeldt, T. (1999). *Will new teachers be prepared to teach in a digital age? A National Survey on information technology in teacher education*. Santa Monica. Retrieved March 27, 2009, from <http://www.mff.org/pubs/ME154.pdf>
- Murray, D.E. and McPherson, P. (2004). *Using the Web to support language learning*. Sydney: Macquaire University
- Odabaşı, K., Kabakçı, I., and Çoklar, A. (2007) *İnternet, Çocuk ve Aile*. Ankara: Nobel Yayın Dağıtım.
- Owston, Ronald D. (1997) The World Wide Web: A Technology to Enhance Teaching and Learning? *Educational Researcher*. 26(2), 27-33.
- Öztürk, Okçu and Karamete (2008) Determination of preservice teachers' opinions and attitudes towards usage of technological tools Ege University, Faculty of Education, Department of BÖTE, İzmir.

- Singhal, Meena. (1997) The Internet and Foreign Language Education: Benefits and Challenges. *The Internet TESL Journal*. 3(6).
- Teeler, D. and Gray, P. (1999). *How to Use the Internet in ELT*. UK: Longman.
- Teo, T. (2008). Pre-service teachers' attitudes towards computer use: A Singapore survey. *Australasian Journal of Educational Technology*. 24(4), 413-424.
- Warschauer, M., Shetzer, H. and Meloni, C. (2000). *Internet for English Teaching*. Illinois, USA: Pantagraph Printing.
- Yavuz, F. , 1998, 'Internet'in İngiliz Dili Eğitimi Bölümündeki Çevrimiçi Lisansüstü Programlarının Gelişimine Olan Katkısı', Master Thesis, Atatürk University.
- Yıldırım, A. and Şimşek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.
- Yutdhana, S., 2004, 'A Needs Analysis of Thai High School Teachers in Using Internet Applications for Teaching English as a Foreign Language', a published master thesis, Washington State University.