# WEB 2.0 TOOLS IN LANGUAGE TEACHING: WHAT DO STUDENT TEACHERS THINK?

Assoc. Prof. Dr.Paşa Tevfik CEPHE
Gazi University, Gazi Faculty of Education
Foreign Languages Teaching Department
Ankara, TURKEY

Dr. Cem BALÇIKANLI
Gazi University, Gazi Faculty of Education
Foreign Languages Teaching Department
Ankara, TURKEY

## ABSTRACT

The aim of this study was to explore ELT (English Language Teaching) student teachers' perspectives on the use of web 2.0 technologies in language learning contexts. In order to do so, 139 student teachers from a state university in Turkey were given training on web technologies along with their practical usages. Three months after this training, a questionnaire adapted from previous instruments was administered to participating student teachers. Moreover, the follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire. Both the questionnaire and the interview results revealed that student teachers seemed to have positive feelings about the use of web technologies despite some challenges such as lack of technological devices encountered.

**Key words:** Web 2.0 Technologies, ELT Student Teachers, Language Learning.

## INTRODUCTION

Globalization has always been the subject of profound debate and concern in a number of circles (Tollefson, 1991; Pennycook, 1995; Tsui & Tollefson, 2007; Yim, 2007). In his influential book, Friedman (2005) analyzes globalization, primarily in the early 21st century and defines ten flatteners that he recognizes as leveling the global playing field. One of the most important flatteners, he claims, is "the steroids" which include wireless, voice over Internet, and file sharing. Furthermore, personal digital devices like mobile phones, iPods, personal digital assistants, instant messaging, and voice over Internet Protocol can be classified, according to Friedman (2005) as the new technologies that cause the world to be flattened each day. Tsui and Tollefson (2007) maintain that "globalization is effected by two inseparable mediation tools: technology and English to respond to the rapid changes brought about by globalization" (p.1). In other words, technology and English are two pioneering aspects of the current age that bring about societal and political changes.

New technologies and services are among recent developments that foster participation in formal and informal networks, giving individuals and groups access to global communities (Jewitt, 2005; Gura & Percy, 2005). Application of these technologies is, obviously, manipulating different dimensions of people's lives, such as the way they think, communicate, learn and teach (Hewson & Hughes, 2005; Johnson, 2007). In a sharp contrast with Web 1.0 applications including browsing and searching on the net and reading an operation, Web 2.0 technologies allow users to construct, that is, to write to the web. This shift from a tool of passive reference to one of collaboration to active exciting opportunities for individuals in a variety of ways has been commented in various levels thus far (Thomas, 2009). In order to accommodate this shift, many adults struggle with the use of new technologies in their own lives. Because once the world has been flattened and the new forms of

collaboration made available to more and more people, the winners will be those who learn the habits, processes and skills of digital age most quickly. As far as education is concerned, Web 2.0 technologies seem to have profound potentials in education due to their open nature, ease of use and support for effective collaboration and communication (Kayler & Weller, 2007; Moura, 2007; D'Souza, 2007). It is a fact that today's students, as Prensky (2001) calls "digital natives", employ technology differently and learn differently from their parents and teachers. Digital natives are technology savy, and confident in the positive value of technology. They believe in the importance of technology as "an essential and preferred component of every aspect of their lives (US Department, 2004, p. 9). In order to teach these digital natives properly, it is mandatory that teachers themselves be aware and proficient users of technology.

In recent years, teacher technology preparation has been given more importance as "the single most important step toward integrating technology into education". A lot of studies carried out on teachers' perceptions about the use of technology indicate that most teachers are somewhat aware of the importance of using technology in their classrooms to address 21st century students, but this awareness is not reflected in practice (Lei, 2009). There is a lot of evidence that the majority of teachers do not use technology when they teach with the exceptions of using PowerPoint presentations and email exchanges (Bullock 2004; Kiridis, Drossos & Tsakiridou 2006; Lim 2007; Tezci 2009; Yalın, Karadeniz & Şahin 2007; Yıldırım 2007; Goktas, Yıldırım, & Yıldırım (2008). Then, teacher education programmes are obliged to provide pre-service teachers with recent innovations that occupy key roles in education. This way it is expected that teacher trainees are likely to utilize technologies in their own future classrooms to cater for the increasing needs of 21st century kids. Otherwise, there would be unfilled gaps between teachers and learners.

### Turkish Education and Technology: A LINK TO ENGLISH LANGUAGE LEARNING

In recent years, Turkish education has undergone various changes in line with the economic and social developments in the country. As an inevitable consequence of the alterations made in 1997 when The Turkish Ministry of National Education (MoNE) decided to integrate primary and secondary education into a single stream, the duration of the primary education was extended from 5 to 8 years. One major change in this aspect was that the subject "English" was included in the fourth grade. Thus, English became a compulsory school subject in October 1997, and started to be taught to young learners in Grade 4 and 5. The stated objectives of the MoNE curriculum are primarily based on recent innovations in language learning, namely language awareness, reflection, motivation, learning strategies, autonomy, and use of games and so on. According to Kırkgöz (2007), "the 1997 curriculum stands as a landmark in Turkish history because, for the first time, it introduced the concept of the communicative approach in ELT" (p. 221).

There were influential attempts to better teacher education programs in Turkey. Obviously, the world was changing at a breathtaking pace and teacher education had to do its part to keep up with this fast-changing world. Upgrading the curriculum of education faculties to better the quality in the programs offered by them and more importantly to meet the needs of the 21st century opened up other revolutionary acts in Turkish higher education. Along those lines, education faculties increased the number of methodology courses and extended the teaching practice time in primary and secondary schools (Kırkgöz, 2005). In 2005, the new curriculum for English (4 and 5th grades) was constructed in accordance with innovative approaches such as communicative language teaching, constructivism, and learner autonomy and like. This curriculum was developed by a team of teacher educators working in a state university in Turkey. When the objectives of the curriculum are examined, one can easily recognize that the use of technologies in language education is mostly emphasized so as to meet the demands of the twenty-first century. Likewise, in line with this new curriculum, the textbooks called "Time for English 4 and 5" were written by the same educators in 2005. By taking into account the basic principles of the CEFR (Common European Framework of References), the teacher educators wrote the English textbooks. The textbooks aimed at guiding language learners to make use of web technologies such as multimedia labs that allow language learners to employ for their own language learning

purposes and like. That is to say, the new curriculum as well as the textbooks seems to be leading to a new approach for 21st century kids.

There have been studies investigating how teachers and teacher educators from all disciplines perceive the use of web technologies in learning environments in Turkey. For instance, using a survey design about teacher educators' perceptions about ICT (information and communication technologies) integration into teacher education programs, Göktaş, Yıldırım and Yıldırım (2009) found out that 111 teacher educators expressed positive opinions concerning the integration of ICT into teacher education programs. Gök and Erdoğan (2010) analyzed the perceptions of the students in the Department of Primary Education, Hacettepe University about technology through metaphor analysis. Employing a mixed method including quantitative and qualitative techniques, the researchers concluded that pre-service teachers developed one hundred metaphors on technology during the study and these metaphors led them to become competent users of technology for educational purposes. Gülbahar (2008) investigated the level of usage of preservice teachers' and instructors' utilization of ICT. Using data from a a private university gathered through questionnaires, the study indicated that teacher education programs fail to provide appropriate instructional technologies and computer facilities for both in and out of class activities. Preservice teachers, though, are in favor of using technology in and out-of-class activities. This positive attitude is an important indicator of willingness and first step in effective integration. As for language learning contexts, Yaratan and Kural (2010) investigated the current state of instructional technology use in English language classes at middle schools in North Cyprus. With the participation of 80 middle school English language teachers, the research revealed that although teachers are mostly positive about technology use in language classes, instructional implementation is below the desired rates due to some restrictions mainly lack of technological means and of time. This finding is particularly critical because it is evident that what they believe and what they actually do is not the same. In other words, a mismatch between their perceptions and practices exists within the system. It is highly suggested that English language teaching be supplemented through web technologies mainly because language learning is more than a classroom experience. Language-learning experiences occur outside the classroom informally in a way. Language learners, then, should be capable of taking responsibility for their own learning, which can be considered to be the most essential aspect of lifelong learning. This can mostly be achieved through the use of web technologies. In order to make use of web technologies at the service of language learning, both language teachers and learners should be aware of limitless opportunities such technologies offer. In relation to pre-service language teachers, this becomes more significant because studies simply indicate that teachers' beliefs evolve mostly during their initial teacher training (Peacock, 2001; Borg, 2009, 2011; Wong, 2010). Külekçi (2009) investigated the attitudes of pre-service English teachers towards the use of the Internet. She administered "Pre-service Teachers' Attitudes towards the use of and needs for Internet Applications" questionnaire to 195 third and fourth year students from an ELT program in Turkey. The findings reveal that most student teachers are eager to use Internet applications and hold positive beliefs about the use of the Internet. In a similar vein, Usluel, Mazman and Arikan (2009) investigated ELT student teachers' awareness of collaborative web 2.0 tools. Focusing specifically on wikis, blogs and podcasts in language learning, the study concluded that prospective teachers are not mostly aware of web 2.0 tools that can be used in language learning. However, it became clear that pre-service language teachers need training in using Internet applications for language learning/teaching purposes. There is still a need to investigate student teachers' perspectives of the use of Web 2.0 technologies. This study highlights pre-service English language teachers' perspectives on the use of Web 2.0 technologies with a specific focus on the integration of technology into language learning.

## METHODOLOGY

The main purpose of this study was to explore what ELT student teachers' beliefs were about the use of Web 2.0 tools for language learning/teaching purposes. To answer this research question, there were some actions taken before the study. 139 student teachers from an ELT Program (English Language Teaching) in Turkey received a three-week-instruction on web technologies. This includes topics related to the use of technology, and the integration of Web 2.0 technologies into pre-service language teacher education as part of the regular classroom curriculum in the Materials Evaluation and Adaptation Class. 4$^{th}$ grade student teachers were trained about web technologies and the possible application of these technologies. The instructor introduced several interactive web applications such as Second Life, Livemocha, Voicethread, Ted, Kerpoof and Storybird. The student teachers explored the interactive web sites to take a closer look into how these sites can be employed in language learning/teaching. Next, the student teachers were asked to prepare an activity using any kind of Web technologies both in and outside the classroom. Finally, they were expected to display the activities they designed and to share them with their classmates. Three months later, the questionnaire consisting of 20 statements concerning the potential of Web 2.0 tools for language teaching/learning was administered to participating student teachers to investigate their perspectives on web 2.0 technologies in language learning. The questionnaire was adapted from previous instruments used by authors in studies regarding the educational use of Web 2.0 technologies (Coutinho, 2006; Coutinho & Bottentuit Junior, 2007; Coutinho & Bottentuit Junior, 2008a; Coutinho & Bottentuir Junior, 2008b). The questionnaire was in the format of a five-point likert scale of agreement (1= Strongly disagree; 2=Disagree; 3=Neutral 4=Agree, 5=Strongly agree). While the quantitative data were gathered via the questionnaire concerned, the qualitative data were collected through follow up interviews. All descriptive statistics (the percentages of responses) and the results of the statistical analysis were generated using SPSS 15 for Windows. The follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire.

## FINDINGS AND DISCUSSION

Table 1: Descriptive Statistics (Student teachers' perspectives on web technologies in language learning)

|  | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| cooperative/collaborative work | 3,00 | 5,00 | 4,4820 | ,54311 |
| use of technology to learn and to communicate | 3,00 | 5,00 | 4,5683 | ,53906 |
| students participation | 3,00 | 5,00 | 4,5252 | ,54282 |
| emergence of new ideas | 3,00 | 5,00 | 4,5180 | ,59408 |
| students' motivation to learn | 2,00 | 5,00 | 4,5540 | ,56687 |
| knowledge sharing | 3,00 | 5,00 | 4,6403 | ,49647 |
| technology capabilities | 3,00 | 5,00 | 4,4676 | ,60556 |
| excellent strategy | 3,00 | 5,00 | 4,7698 | ,45551 |
| teacher's professional repertoire | 3,00 | 5,00 | 4,4748 | ,59382 |
| not suitable for cooperative/collaborative work. | 1,00 | 5,00 | 1,7626 | ,83911 |

| | | | |
|---|---|---|---|
| collaborative knowledge construction. | 3,00 | 5,00 | 4,4245 | ,53809 |
| emergence of learner-centered instructional models | 3,00 | 5,00 | 4,4101 | ,58747 |
| peer communication. | 2,00 | 5,00 | 4,3022 | ,70869 |
| my future classroom with my students. | 3,00 | 5,00 | 4,5108 | ,54330 |
| not the potential of Web 2. 0 tools in education | 1,00 | 5,00 | 1,5468 | ,66183 |
| isolate students from one another. | 1,00 | 4,00 | 2,2878 | ,82747 |
| new technologies. | 1,00 | 5,00 | 4,3525 | ,70055 |
| help my teaching in the future | 1,00 | 5,00 | 4,5827 | ,60072 |
| help me teach better. | 3,00 | 5,00 | 4,6547 | ,49214 |
| help my students learn better | 3,00 | 5,00 | 4,5899 | ,50809 |
| N= 139 | | | |

Overall findings of the research reveal that overwhelming majority of the student teachers seem to hold positive attitudes towards the possible use of Web 2.0 technologies in language learning/teaching contexts. As is easily discerned from table 1, the most striking issues namely facilitating cooperative/collaborative work, providing learning opportunities via learner-centred modes outside the class, increasing student participation, enhancing motivation, sharing knowledge, developing awareness of digital literacy, helping student teachers teach better in the future and expanding their professional repertoire stand out in our study. Our findings confirm that participating student teachers believe that the use of Web 2.0 technologies at the service of language learning/teaching support the applications of trends in language learning/teaching such as informal learning, social constructivism, learner involvement and cooperative learning. One of the most effective learning theories today, coperative learning can be described as "a set of processes which help people interact together in order to accomplish a specific goal or develop an end product which is usually content specific" (Panitz, 1996, p. 2). As an inevitable consequence of the shift from teacher-centered instruction to learner-centered instruction, teachers tend to share the authority with their own learners. This obviously fosters the development of collaboration and cooperation between learners and the teacher. In this connection, the use of web technologies at the service of education allows learners to access any kind of information, ideas, documents, and experiences regardless of the border and the time. This, without a doubt, triggers collaborative learning among learners (Frederick, Lillie, Gordon, Watt, & Carter, 1999). The second-generation net tools like blogs, wikis, podcasts, RSS (Really Simple Syndication) and social networking sites have a great contribution to collaborative learning environments where learners co-work on different kinds of projects (Selwyn, 2007). The concept of informal learning is all that is learned throughout life in day-to-day processes at home, work and leisure (Mason & Rennie, 2007). Employing two main categories namely intentionality and consciousness, Schugurensky (2000, p. 2) offers three various forms of informal learning, namely self-directed learning, incidental learning, and socialization. Once the characteristics of informal learning are considered, it is evident that Web 2.0 technologies create great opportunities for learners to experience this kind of learning. New technologies facilitate the design of online communication and information exchanges to empower the learners and create an enriched social learning landscape (Bartlett-Bragg, 2006). Language learners are reported to mostly spend most of their time online doing a lot of language learning tasks outside the classroom. Student teachers also report that Web 2.0 tools can increase students' involvement in the learning

process. As Dam (1995) argues that, involving learners in the decisions concerning the course content and giving them a share of responsibility for planning and conducting teaching –learning activities may lead to better learning. In other words, through the use of web 2.0 technologies, students are given opportunities to exercise learner autonomy by taking responsibility for their own learning in planning, monitoring and evaluating their own learning activities online. It is more than a fact that getting engaged in web 2.0 activities triggers learners' awareness of digital literacy. The student teachers are of the opinion that the use of Web 2.0 technologies in language learning/teaching settings helps their future students develop their awareness of computer and digital literacy. It is highly believed that sharing knowledge through web 2.0 technologies enhances students' motivation to learn a language as most students today take their times online doing a variety of things. In other words, what students do outside the classroom during their daily lives appear in the classroom during the instruction, which is an inevitable aspect of effective learning processes. It is critical that the activities carried out online outside the classroom be reflected in classroom environments. This obviously helps to develop students' motivation to study a foreign language because the activities done to study a language are much alike what they do outside the class in their daily lives. Felix (2002, p. 3) alleges that "learners are active constructors of knowledge who bring their own needs, strategies and styles to learning, and that skills and knowledge are best acquired within realistic contexts and authentic settings, where students are engaged in experiential learning tasks". It is the student teachers' belief that the use of web 2.0 technologies provides an effective environment where language learners construct their own learning process through social interaction. Vygotsky (1978) put a very emphasis on the social interaction at the center of effective learning process. Thus, web 2.0 technologies can offer learners a good context for social interaction to emerge in a non-threatening way. Web 2.0 technologies, according to student teachers, expand teachers' professional repertoire. This finding is important mainly because language teachers bring a variety of interesting classroom activities to their teaching contexts. It is quite often that learners will be more motivated to learn as long as learning environments are meaningful and interesting for them (Csikszentmihalyi, 1987, 1990).

Wan and Gut (2011) indicate that the 21st century teachers need to be prepared for the 21st century kids, who are themselves competent users of Web 2.0 technologies. In our findings, the student teachers mention that there is a new demand for them to be able to put new skills into their own teaching repertoire. To put it more clearly, they should adjust their teaching competencies in order to keep up with the changing landscapes of the current technological innovations. Another important finding concerning teacher competencies, the student teachers assert that using web 2.0 technologies will help them teach better and prepare their future students for the 21st century more properly. Similarly, Jenset (2011) concludes that student teachers are positive toward using technology, in order for them to keep their positive attitudes; they need to actually use web technologies in their own learning contexts. According to Li and Ni's research (2011), Chinese EFL student teachers hold positive attitudes toward the value of technology for teaching and learning but their use of technology is mostly based on instructional delivery and similar things. Yusuf (2011) alleges that student teachers seemed to have positive attitudes towards the use of ICT and they are competent in the use of few basic tools.

## INTERVIEW RESULTS

As mentioned earlier, the qualitative data were collected through follow up interviews. The follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire. The interview questions were formulated through language learners' and teachers' experiences in an online environment. In the first place, 6 questions were formulated from the questionnaires and they were sent to two experts on language learning with technologies. These six questions were piloted with 15 student teachers that represent the subjects of the study. It turned out that 3 out of them were understandable enough for student teachers to answer. In response to the question 'What do you think about the use of web technologies in language learning?' student teachers had the following views.

…We should definitely use web technologies because students are technologically more advanced (than we are).

…. Authenticity. We do not have the opportunities to speak with native speakers. Technologies make it possible.

…. Fun, it is actually enjoyable because it is not like traditional teaching in a way.

… For instance, playing computer games. When you play computer games, you really enjoy it. If you use them for learning purposes, it is much better.

'How can you make use of web 2.0 technologies in language learning?' the following extracts from the student teachers' interviews captured some of the significant responses to this question.

… Web 2.0 technologies should be used when we give homework. They can increase students' attention when they do their homework.

…. Web technologies are used to make the class more interesting. I suppose in the class.

…. Web technologies should be integrated into language learning. Both inside and outside the classroom activities.

In relation to the question "Is it possible to use Web technologies in your future teaching?, the student teachers have the opinions below.

…I think we need to integrate web technologies into language learning. I'd love to do so in the future.

…It depends on where I will be teaching. If it is a village, no way.

…I will do my best to use web technologies to make my teaching more interesting for my students. However, I do not know as yet.

… It is more a question of what kind of facilities my future school will have. I do not think I will be able to use them.

In light of the interview data, one can easily argue that student teachers regarded the use of web technologies in language learning/teaching and their classroom applications as favorable by continuing with modern approaches. To illustrate, they seem to have a very-well constructed notion of web technologies with strong positive beliefs and moderate interests. Authentic language, real-life-like experiences, enjoyable language learning are some of the advantages of web technologies student teachers mentioned during the interview. It seems that student teachers are of the opinion that web technologies offer greater opportunities than anything else in terms of aforementioned dimensions in a way. Despite strong beliefs that web technologies should be integrated into language learning/teaching contexts, the picture is rather gloomy for some participating student teachers. They strongly believe that there will not be easy access to web technologies in their future classrooms due to lack of technological equipment. No matter how much eager they would be, it looks like that there are likely to be some cases that inhibit the use of web 2.0 technologies for language learning/teaching purposes.

## CONCLUSION

This study set out to investigate the perceptions of ELT student teachers on the use of Web 2.0 technologies at the service of language learning/teaching. The questionnaire results indicate that most participants find the use of web 2.0 technologies essential for the effectiveness of language learning. They mostly focus on several aspects of learning such as involvement, motivation, and 21st century skills. However, student teachers report some drawbacks they are likely to encounter when they start their teaching such as lack of technological devices.

On the whole, student teachers seemed to feel that web technologies should be employed in language classrooms due to following reasons. First, they offer authentic language. In other words, web technologies allow individuals to be exposed to authentic language, which is much too difficult in EFL contexts. Second, web technologies are fascinating in that they capture learners' attention. It is more than a fact that learning is more meaningful if learning environments are interesting enough to attract learners' attention. Third, learners in a

way are involved in their learning processes as web technologies offer great opportunities for constructivist instruction. Fourth, it is a must to address 21$^{st}$ century learners with developing technologies simply because they are far more different than their parents and teachers in the realm of digital literacy. Student teachers' beliefs on web technologies are very important components of their future teaching practices. This is in line with the assumption that if ESL teachers have to use technology effectively with their own students, they must use it for learning when they are already students (Kamhi-Stein, 2000). Therefore, teacher educators play a salient role in student teachers' experience with web technologies by offering more opportunities for greater motivation, negotiation and decision-making.

In light of the findings gathered, certain important steps should be taken to encourage ELT future teachers to make use of web technologies both for their future professional development and their classroom teaching. First, it is mandatory that technology be integrated into pre-service language teacher education as technology and English are meditation tools. What this means is that each instructor should seek ways for this integration related to their fields. Second, each student teacher is encouraged to create a website where they are expected to upload every kind of language teaching materials. This way they are likely to be mostly exposed to digital literacy.

Despite the positive attitudes towards web technologies at the service of language learning/teaching, one dilemma still remains unexplored: Will these student teachers later keep believing in the importance of web technologies despite the drawbacks they are likely to encounter? Or will they find themselves in a position where they address digital natives least effectively through traditional teaching methods? There should be an investigation of (possible) mismatch between theory and practice in terms of language teachers' attitudes and practices of web technologies.

**BIODATA AND CONTACT ADDRESSES OF AUTHORS**

Paşa Tevfik CEPHE is a member of the teaching staff in the Deparment of English Language teaching at Gazi University. He received his PhD from the same university. He is particulary interested in teacher training and development and teaching language skills. He has presented papers at several conferences and has published in EFL Journals.

Assoc. Prof. Dr.Paşa Tevfik CEPHE
Gazi University, Gazi Faculty of Education,
Foreign Languages Teaching Department,
English Language Teaching Program,
Teknikokullar/Beşevler Ankara, TURKEY
Phone: +90 312 202 84 46
Fax: +90 312 222 70 37
pcephe@gazi.edu.tr

Cem BALÇIKANLI works as a lecturer in the Department of English Language Teaching at Gazi University. His research interest include learner /teacher autonomy, web technologies in language learning/teaching and teaching Turkish as a foreign language. He has presented papers at several conferences and has published in EFL Journals.

Dr. Cem BALÇIKANLI
Gazi University, Gazi Faculty of Education,
Foreign Languages Teaching Department,
English Language Teaching Program
Teknikokullar/Beşevler Ankara, TURKEY
Phone: +90 312 202 84 55
Fax:+9 0 312 222 70 37
balcikanli@gmail.com

**REFERENCES**

Bartlett-Bragg, A. (2006). *Reflections on Pedagogy: Understanding the adult learners' experience of Weblogs*, Conference proceedings BlogTalk. Vienna.

Borg, S. (2009). English language teachers' conceptions of research. *Applied Linguistics, 30*(3), 355-388.

Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System,* 39(3).

Bullock, D. (2004). Moving from theory to practice: An examination of the factors that preservice teachers encounter as they attempt to gain experience teaching with technology during field placement experiences. *Journal of Technology and Teacher Education* 12 (2), 211–37.

Coutinho, C. P. (2006). Utilização de blogues na formação inicial de professores: um estudo exploratório. In Panizo et al (Eds.) *Proceedings of the 8th International Symposium on Computers in Education*, 2, 157164.

Coutinho, C. P & Bottentuit Junior, J. B. (2007). Collaborative Learning Using Wiki: A Pilot Study With Master Students In Educational Technology In Portugal. In C. Montgomerie & J. Seale (Eds.). *Proceedings of World Conference on Educational Multimédia, Hypermedia e Telecommunications (ED-MEDIA)*. pp. 1786– 1791. Vancouver, Canadá.

Coutinho, C. P. ; Bottentuit Junior, J. B. (2008a). Web 2.0 in Portuguese Academic Community: An ExploratorySurvey. In K. McFerrin, R. Weber, R. Carslen & A. Willis (Eds), *Proceedings of the 19th International Conference of the Society for Information Technology & Teacher Education*, (SITE 2008), pp.1992-1999.

Coutinho, C. P.; Bottentuit Junior, J. B. (2008b). Portuguese Postgraduate Teachers´ Opinions About Using Social Bookmarking: a descriptive study In a Master Course in Educational Technology. In K. McFerrin, R. Weber, R. Carslen & A. Willis (Eds), *Proceedings of the 19th International Conference of the Society for Information Technology & Teacher Education,* pp.3307-3.

Csikszentmihalyi, M. (1987). The flow experience. In M. Eliade (Ed.). *The Encyclopaedia of  Religion.* (pp. 361-363). New York: Macmillan.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Perennial.

Dam, L. (1995). *Learner Autonomy 3: From Theory to Classroom Practice*. Dublin: Authentik.

D'Souza, Q. (2007). *100 Web 2.0 Ideas for Educators.* Retrieved from http://www.TeachingHacks.com, 25 October 2011.

Felix, U. (2002). The web as a vehicle for constructivist approaches in language teaching. *ReCALL*.14 (1), 2-15.

Frederick, K.A., Lillie, M., Gordon P.L., Watt L.D., & Carter, R. (1999). *Electronic Collaboration: A practical guide for educators*. Retrieved from http://www.alliance.brown.edu/pubs/collab/elec-collab.pdf  21 October 2010.

Friedman, L. T. (2005). *The World is Flat: The Globalized World in The Twenty-First Century.* New York: Penguin Books.

Gök, B. & Erdoğan, T. (2010). Investigatıon of Pre-Service Teachers' Perceptions About Concept of Technology Through Metaphor Analysis. *TOJET: The Turkish Online Journal of Educational Technology*, 9 (2), 145-160.

Göktaş, Y., Yıldırım, Z., & Yıldırım, S. (2008). A Review of ICT related courses in preservice teacher education programs. *Asia Pacific Education Review, 9*(2), 168-179.

Göktaş, Y., Yıldırım, Z. & Yıldırım, S. (2009). Investigation of K-12 Teachers' ICT Competencies and the Contributing Factors in Acquiring these Competencies. *The New Educational Review, 17*(1), 276-294.

Gülbahar, Y. (2008). ICT Usage in Higher Education: A Case Study on Preservice Teachers and Instructors. *The Turkish Online Journal of Educational Technology*. 7(1). 32-27.

Gura, M., & Percy, B. (2005). *Recapturing technology for education: Keeping tomorrow in today's classrooms*, Lanham, Maryland: ScarecrowEducation.

Hewson, L., & Hughes, C. (2005). Social processes and pedagogy in online learning. *AACE Journal, 13* (2), 99-125.

Jenset, G. B. (2011). Student attitudes toward teaching English with Technology. *Seminar.net - International journal of media, technology and lifelong learning*,  7 (2), 59-68.

Jewitt, C. (2005). *Technology, Literacy, Learning: A Multimodal Approach*. Routledge London.

Johnson, H. (2007). *Dialogue and the construction of knowledge in E-learning: Exploring students' perceptions of their learning while using blackboard asynchronous discussion board*, Retrieved from http://www.eurodl.org/materials/contrib/2007/Henry_Johnson.htm, 21 October 2010.

Kamhi-Stein, L. D. (2000). Looking to the future of TESOL teacher education: Web-based bulletin board discussions in a methods course. *TESOL Quarterly, 34*, 423-455.

Kayler, M. & Weller, K. (2007). Pedagogy, self-assessment, and online discussion groups. *Educational Technology and Society, 10* (1), 136–147.

Kırkgöz, Y. (2005). English Language Teaching in Turkey: Challenges Towards the 21st Century, *Teaching English to the World History, Curriculum and Practice,* ed. G. Braine, pp. 159-169, Lawrence Erlbaum, London.

Kırkgöz, Y. (2007). Language Planning and Implementation in Turkish Primary Schools, *Current Issues in Language Planning*, 8, 2, 174-191.

Kiridis, A., V. Drossos, & H. Tsakiridou (2006). Teachers facing information and communication technology (ICT): The case of Greece. *Journal of Technology and Teacher Education* 14 (1), 75–96.

Külekçi, G. (2009). Assessing the Attitudes of Pre-Service English Teachers towards the Use of the Internet. *Journal of Kirsehir Education Faculty*. 10 (3), 153-160.

Lei, J.(2009). Digital Natives as Preservice Teachers: What Technology Preparation Is Needed? *Journal of Computing in Teacher Education,* 25 (3), 87-97.

Li, G. & Ni, X. (2011). Primary EFL Teachers' Technology Use in China: Patterns and Perceptions. *RELC Journal,* 42(1) 69–85.

Lim, C.P. (2007). Effective integration of ICT in Singapore schools: Pedagogical and policy implications. *Educational Technology Research and Development* 55 (1), 83–116.

Mason, R., & Rennie, F. (2007). Using web 2. 0 for learning in the community. *The Internet and Higher Education*, 10(3), 196-203.

Moura, A. (2007). A Web 2.0 na aula de língua materna: relato de uma experiência. In António B. Alves (org.) *Actas do Encontro Internacional "Discurso, Metodologia e Tecnologia*. Miranda do Douro: CEAMM, pp. 9-24.

Panitz, T. (1996). *Collaborative versus cooperative learning- A comparison of the two concepts which will help us understand the underlying nature of interactive learning*. Retrieved from http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.html, 29 October 2009.

Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: a longitudinal study. *System,* 29, 177-195.

Pennycook, A. (1995). English in the world/The world in English. In J. Tollefson (Ed.), *Power and inequality in language education* (pp. 34-58). Cambridge, UK: Cambridge University Press.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-4.

Schugurensky, D. (2000). *The Forms of Informal Learning: Towards a Conceptualization of the Field*. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf,15 October, 2011.

Selwyn, N. (2007). *Web 2. 0 applications as alternative environments for informal learning – A critical review*. OECD-KERIS Expert Meeting. Alternative Learning Environments in Practice. Retrieved from http://www.oecd.org/dataoecd/32/3/39458556.pdf, 10 October 2011.

Tezci, E. (2009). Teachers' effect on ICT use in education: The Turkey sample. *Procedia Social and Behavioral Sciences,* 1, 1285–94.

Thomas, M. (2009). Handbook of Research on Web 2.0 and Second Language Learning. Hershey, PA., New York & London: IGI Reference.

Tollefson, W. J. (1991). *Planning language, planning inequality: Language policy in the community.* London, UK: Longman.

Tsui, A. B. M., & Tollefson, J. W. (2007). *Language policy, culture, and identity in Asian contexts.* Mahwah, NJ: Lawrence.

U. S. Department of Education. (2004). *The National Educational Technology Plan. Toward a new golden age in American education: How the Internet, the law and today's students are revolutionizing expectations*. Washington DC.

Usluel, Y. K., Mazman, S. G., & Arikan, A. (2009). Prospective teachers' awareness of collaborative web 2.0 tools. *The IADIS International Conference WWW/Internet 2009*.

Vygotsky, L. S. (1978). *Mind and society*. Cambridge, MA: Harvard University Press.

Wan, G.,& Gut, D. (Eds.). (2011). *Bringing schools into the 21$^{st}$ century.* New York: Springer.

Wong, M. S. L. (2010). Beliefs about language learning: A study of Malaysian pre-service teachers. *RELC Journal, 41*, 123-136.

Yalın, H.I., Karadeniz, Ş. & Şahin, S. (2007). Barriers to information and communication technologies integration into elementary schools in Turkey. *Journal of Applied Sciences* 7 (24), 4036–9.

Yaratan, H. & Kural, C. (2010). Middle School English Language Teachers' Perceptions of Instructional Technology Implementation in North Cyprus. *TOJET: The Turkish Online Journal of Educational Technology*, 9 (2), 161-174.

Yıldırım, S. (2007). Current utilization of ICT in Turkish basic education schools: A review of teacher's ICT use and barriers to integration. *International Journal of Instructional Media* 34, (2), 171–86.

Yusuf, O. M. (2011). Student-Teachers' Competence and Attitude towards Information and Communication Technology: A Case Study in a Nigerian University. *Contemporary Educational Technology*, 2(1), 18-36.