

## **WebQuests as a Constructivist Tool in the EFL Teaching Methodology Class in a University in Macedonia**

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**Abstract.** Government leaders, educators and the general public in most countries in the world, especially those less economically developed, believe that combining English language proficiency with skills in information technology will facilitate success in life (Warschauer, 2000, as cited in Fang & Warschauer, 2004) and provide the potential for that country's population to connect to the rest of the world. Based on this belief, the education systems of many non-English speaking countries, among which the Republic of Macedonia, emphasize English language learning and development of technology skills in the schools from the earliest age. The term technology, as used in this study, refers specifically to the usage of computers and the Internet. However, although the Macedonian government has invested in equipping all schools with computers, the teachers are not using the computers as part of their teaching. This ongoing case study investigates whether introducing WebQuests as part of the Teacher Training curriculum at the university level can facilitate the integration of English language teaching and technology while simultaneously promoting a more student centered, constructivist approach to teaching. The author will present only the literature review on which she draws on for the current study and the methodology she used. At this point, findings of the study will not be presented as the study has not been completed, yet.

**Keywords:** WebQuests, EFL, teacher training, constructivism, technology.

### **1. Introduction**

While education in Macedonia has recently seen the promotion of a shift toward a more student centered teaching paradigm, the struggle to fully implement this change still remains. Although teachers in Macedonia state that they practice student-centered teaching and arrange students in groups and pairs; it appears that most class activities and materials are still teacher-controlled. Teachers use government-mandated textbooks in primary and secondary schools, and books chosen by instructors at the university level. Students are expected to memorize information transferred to them from the teachers. Unfortunately, by the time most students graduate, the information they have learned has been lost since there is little application of the knowledge presented in class. In addition to this, there is an apparent gap between the ideas that the Macedonian government is promoting for a change leading to greater integration of technology in the schools and the preparation of the teachers for the implementation of that change.

While currently there are computers provided in both primary and secondary schools, the main concern of the teachers is that not only have they not been appropriately trained in the use of the new technology, they have received no training in how to implement it in their teaching. This statement is supported by a pilot study conducted by the current researcher (Zlatkovska, 2008), in which two university professors, who taught an EFL teaching methodology class in Macedonia, were interviewed. Findings from that study indicated that the student teachers in the class observe some demonstration of the use of technology in teaching such as tape recorders, videos, printed materials from the Internet, and some trial software programs. No training is given to these student teachers however on how to incorporate technology, specifically computers and the Internet, in their teaching practice as a tool to engage their future students in independent, student-centered learning. Also, rather

than receiving instruction in how to move toward more student-centered learning, these pre-service teachers learn to follow the examples of their own teachers and remain in control of the class. There is additional resistance to this paradigm shift by the teachers who are comfortable as lecturers, exercising their power as “knowledge givers.” According to Kaufman (2004) teachers across disciplines are resistant to change due to the “prior educational experience that contributes to teachers’ beliefs about teaching and learning” (310).

According to Strommen and Lincoln (1992, as cited in Matushevich, 1995), as a result of the lack of training in using technology in teacher training programs, student-teachers resemble their previous teachers rather than the new generations of students who are highly skilled in using technology. These authors assert that as a result, estrangement between the schools on the one hand, and the society that pushes for change on the other hand, will occur.

With the introduction of technology in Macedonian society, more teachers use various resources and handouts from the Internet to supplement their teaching. However, it is still only the teacher who demonstrates whereas the students are not required to utilize the technology neither as learners nor as part of their classes in their teacher training programs. It is the current researcher’s assumption, based on her own lived experience as a student in that educational system, that the instructors in the teacher training programs in Macedonia provide lectures to the pre-service teachers about the characteristics of social constructivism without enacting the practice themselves. The current researcher views social constructivism and usage of technological tools such as WebQuests as a way to familiarize students and promote principles of social-constructivism in teaching thus initiating a more student-centered classroom. While any technology tool can be used to demonstrate incorporation of technology in teaching, the current researcher chose WebQuests due to the possibility they provide to blend with the constructivist principles of learning.

A knowledge of the current situation in Macedonia, where computers are being installed in schools across the country and English is taught as a foreign language from first grade, in conjunction with an understanding of the popularity that WebQuests enjoy among practitioners, lead to the creation of the current study.

The purpose of this study is to investigate whether introducing WebQuests as part of the Teacher Training curriculum can facilitate the integration of English language teaching and technology while simultaneously promoting a more student centered, constructivist approach to teaching. The current researcher will observe whether there is any change in the approach to teaching when a technology tool such as WebQuest is implemented by EFL teaching methodology instructors teaching to future teachers of English as well as the plausibility for those prospective EFL teachers to use the tool as part of their future employment.

The current researcher will present the literature review and the methodology that has been used to conduct the study. Since the current study is still ongoing, no findings will be presented at this stage.

## **2. Literature review**

The current study mainly draws on Brown and Warschauer’s (2006) recommendations in research they conducted with pre-service teachers. They found that students in a teacher training program were not sufficiently exposed to technology integration as part of their teacher preparation program but that they demonstrated a positive attitude toward using technology while teaching. These authors saw a need for university instructors to “upgrade” their technology skills to a level that would allow incorporation of the new technologies in their teaching in order to develop higher order thinking skills in their students. This finding

matched with results from previous research studies (Kluever, Hoffman, Green, and Swearingen, 1994, as cited in Brown and Warschauer, 2006, Albirini, 2004). According to Kulik (2003, as cited in Brown and Warschauer, 2006), “the use of technology to promote higher-order learning can only occur when classroom teachers are trained to embrace new technologies and blend them intelligently into their curricula” (601). In their study, Brown and Warschauer (2006) recommend incorporating learning about technology integration in teaching in the teaching methods courses and the placement of teacher candidates with technologically proficient mentors to further develop this skill during their teaching practicum.

The introduction of technology in the teaching methods class is noteworthy especially if we consider the impact that computers and the Internet have on the new generations of students entering the education system. According to Oblinger (2003), the “Millennial generation”, generally defined as students born after 1982, differs from previous generations in specific characteristics. These “new” students “gravitate toward group activity and are fascinated by new technologies” (Oblinger, 2003:38). They are actively engaged on the Internet playing videogames and chatting, actions which do not coincide with the traditional lecture style practiced by older generations of teachers in most classrooms. The new generations’ learning styles lean toward teamwork, experiential activities, multitasking, and the use of technology (Oblinger, 2003). For these young learners, technology is a natural part of their everyday environment (Matusevich, 1995). The younger the students, the more likely they are to have the higher exposure to technology and use of the Internet, which creates greater disparity between the students’ learning styles and the teachers’ knowledge of and ability to use technology.

In 1987, Reigeluth warned educators that the rapid spread of technology and continuous societal change would eventually make the current educational system outdated, especially from children’s perspective. According to Naisbitt (1982, as cited in Reigeluth, 1987), the new society will require a person who possesses the ability to analyze, solve problems, evaluate, think critically, and take initiative and responsibility for his or her learning and decision making. Current teachers and teacher educators need to consider this when preparing to teach the newest generations of students. It is teachers’ responsibility to combine technology and content in a way that stimulates the kind of development that prepares students for the future in which they will be living.

As Lewandowska-Tomaszczyk, Osborne, and Shulte (2001) have noted, in the 1980s, most of the computer programs in use supported the traditional, more frontal method of teaching and most CALL programs instead of being interactive, were closed systems which followed the drill and practice pattern. However, since the 1990s there has been a shift in the educational paradigm. In this new paradigm, the focus is more on the learner, learner autonomy, lifelong learning, and using computer technology and Internet resources. In educational settings there is a push for a shift from teacher/institutional-centered to learner-centered classrooms and a “move away from the old, classical paradigm of inflexible course content and frontal classroom teaching” (32). This shift in thinking aligns with the principles of constructivism which, according to Matusevich (1995), is supported by the use of modern computer technology.

Bonk and Cunnigham (1997) have explained that technological changes have significantly restructured the way people live, learn, and communicate. Students come to school already having had significant experiences with self-directed learning, a fact which has encouraged a shift toward social constructivism in learning theory. This theoretical stance focuses on the importance of culture and social context for learning. In sum, as described by Bonk and Cunnigham (1997), social constructivists promote: 1) learning environments that reflect real-world, authentic problems that will allow students to solve these as they develop their interests

and knowledge; 2) building on previous knowledge and not only individual but also common, group interests and experiences in activities that are both process and product oriented; 3) using activities that promote dialogue, interaction, justification and elaboration of one's stand through discussion and questions, meaning and knowledge negotiation, and collaboration; 4) using technology to facilitate the generation of ideas and knowledge building; and 5) assessment embedded in real-world tasks and problems focusing on collaboration, group processing and sharing of findings, but also continual and less formal. These are all features that are readily available when using computer technology and the Internet. Constructivism also rejects rote learning and the notion of transmission of knowledge from instructor to student, and emphasizes the learners' participation in constructing their own knowledge by building on existing knowledge and experiences (Heibert, 1991). The characteristics of social constructivism are naturally consonant with the new generation of students learning styles.

"Computer, video, and wireless technologies have provided optimal media for the application of constructivist principles to learning and teaching..." (Perkins, Schwartz, West and Wiske, 1995, Bransford, Brown and Cocking, 2000, Beatty, 2003, all as cited in Kaufman, 2004:306). Educators worldwide have begun to recognize the impact of social constructivism for learning in a technological environment "because the potential for collaboration and negotiation embedded within it provides the learner with the opportunity to obtain alternative perspectives on issues and offer personal insights; in effect, to engage in meaning making and knowledge negotiation" (Duffy and Cunningham, 1996, as cited in Bonk and Cunningham, 1997:33). In order to introduce constructivism and technology in schools, Kaufman (2004) recommended promoting the connection between technology and constructivism in teacher preparation programs. While she does admit that changes happen gradually and there are many factors that will influence the development of this connection, if the right opportunities are provided to the students, especially through course work, there is room for developing and implementing constructivism in language education courses.

Although computers have been used for language teaching since 1960's it is since the 1990, with the emergence of CALL, that teachers have become more concerned with constructivist use of technology (Lee, 2000). Lately, there has been an increased interest in web-based activities for language learning due to the abundant amount of information sources offered on the Web.

## **2.1 What are WebQuests?**

According to March (2008), Bernie Dodge had an idea about incorporating the WorldWide Web into the classroom and he coined the term "WebQuest" for the activity he designed. Dodge (1997) defined WebQuests as "an inquiry-oriented activity in which some or all of the information that the learners interact with comes from resources on the Internet, optionally supplemented with videoconferencing" (1).

Educators believed that the original definition failed to capture the meaning and theoretical underpinnings of the WebQuest concept. Therefore, Tom March (2008), a co-creator of WebQuests, reconceptualized and expanded the definition of WebQuest as follows:

A WebQuest is a scaffolded learning structure that uses links to essential resources on the World Wide Web and an authentic task to motivate students' investigation of a central, open-ended question, development of individual expertise and participation in a final group process that attempts to transform newly acquired information into a more sophisticated understanding. The best WebQuests do this in a way that inspires students to see richer thematic relationships, facilitate a contribution to the real world of learning and reflect on their own metacognitive processes (seventh paragraph).

According to March (2008), a good WebQuest prompts the learner to apply higher order thinking skills (analysis, synthesis and evaluation). Thus, the activities in WebQuests should engage students in a real life problem which is divided among group members with each assigned a manageable task, and should direct them toward achieving the set learning objectives. Learners apply pre-existing knowledge to construct new knowledge individually or as part of a group. March recommends that the task in a WebQuest be set in the form of a question or a problem, ongoing contradiction or debate, or encouraging research. In other words, the task should be set in a way that would ask the learners to apply previous knowledge and go beyond fact memorization. In addition, the task should be constructed in such a way as to motivate learners by being authentic and relevant to their real-life needs. The teacher's role is one of a facilitator, exercising his or her presence as much as it is needed by the students. Scaffolding and cooperative learning are the most important components. It is clear that the principles that guide the creation of WebQuests reflect constructivist philosophy (Johnson and Zufall, 2004).

Dodge (1997) distinguished between two levels of WebQuests: short term, designed to be completed in one to three class periods, and long term, designed to take between a week and a month to complete. Each WebQuest generally contains six parts:

- Introduction - builds on learner's previous knowledge and experience. In this section the instructor provides background information and can explicitly mention specific new concepts or principles to prepare the learner for the lesson. According to Teclehaimanot and Lamb (2004), this part should be interesting, motivating, relevant and timely to provide an incentive for learning.
- Task - is a scaled down doable variation of a real-life situation. This focuses on what the learners will do and what they are expected to create as a final product once they finish all of the activities. "The task requires synthesis of multiple sources of information, and/or taking a position, and/or going beyond the data given and making a generalization or product." (Johnson and Zufall, 2004:1)
- Information sources - points to information from the WWW, this information needs to be specific and carefully selected by the instructor. Information sources can include web documents, experts available via e-mail or real-time conferences, searchable databases on the net as well as books and other documents available to the learners in hard copies.
- Process - includes "detailed activity description, step-by-step instructions, timelines and checklists. Resources such as assignments, questions, links to website resources and descriptions of requirements" (Teclehaimanot and Lamb, 2004:6). It is in this section that the instructor needs to provide most of the scaffolding for learners to accomplish the tasks successfully.
- Guidance or also called "learning advice" - is where the instructor provides additional advice presented through "description of how information or notes should be organized, guiding questions or directions to follow" (Teclehaimanot and Lamb, 2004:7), by giving the students templates, timelines, concept maps, and other information.
- Conclusion - brings closure and summary of what has been. According to Teclehaimanot and Lamb (2004), it can also encourage students to go beyond what they have learned.
- Evaluation - describes the evaluation criteria needed to meet performance standards. Usually, there are explicit directions that will tell the learner how he

or she will demonstrate the knowledge gained. Typically the instructor creates a rubric to evaluate the final product and learners will have access to this from the very beginning.

## 2.2 WebQuests and Constructivism

Among the many technological tools available, WebQuests emerge as an example of a powerful means for supporting the principles of constructivism (Matusevich, 1995, Dodge, 1997, Vidoni & Maddux, 2003, Godwin-Jones, 2004, March, 2008) in language teaching.

According to March (2008), WebQuests are “a way to integrate a number of sound learning strategies”, among which he mentions constructivism, “while also making substantial educational use of the Web” (2).

WebQuests tend to be student-centered with teachers scaffolding the students through the learning process. In other words, they “foster cooperative learning through guided discovery” (Godwin-Jones, 2004:10). WebQuests are usually “group activities with an end goal of creating a document that collects, summarizes and synthesizes the information gathered” (Godwin-Jones, 2004:9, Vidoni and Maddux, 2002). They provide the opportunity for students to engage in “constructivist activities resulting in shared learning experiences and new knowledge based on inquiry-oriented language use and Web research skills” (Godwin-Jones, 2004: 9). A WebQuest can be developed around an authentic topic relevant for students’ everyday life.

There are a number of articles describing the successful implementation of WebQuests in a particular classroom or program (Vidoni & Maddux, 2003, MacGregor & Lou, 2006, Ikpeze & Boyd, 2007, Manning & Carpenter, 2008). However, these articles primarily describe personal accounts of successful usage of WebQuests or are recommendations regarding the “greatness” of WebQuests and suggestions of ways to use them in teaching.

Very few articles are available that discuss the implementation of WebQuests in teaching EFL (Koenraad, 2002, Prapinwong, 2008) and only a few that discuss the usage of WebQuests in training pre-service teachers (Johnson & Zufall, 2004, Manning & Carpenter, 2008). However, hardly any studies promote introduction of WebQuests as a constructivist way of teaching EFL. Much remains to be researched to document the integration of WebQuests in teaching EFL and promoting constructivist learning principles.

## 2.3 WebQuests and language learning

One recent study that dealt specifically with the integration of WebQuests in the learning of English as a foreign language (EFL) is Prapinwong’s 2008 study which explored the use of WebQuests in an EFL classroom in Thailand. She worked with an instructor who implemented two WebQuests in an EFL college-level reading class over a two month period of time. The results from Prapinwong’s study showed that the learners made a statistically significant gain in the vocabulary tests after the WebQuests. Overall, the students engaged more and were motivated due to the interaction with the Internet and the WebQuests as a tool, but they expressed feeling overwhelmed with the complexity of the resources presented. The current researcher took the findings of Prapinwong’s study in consideration when conducting her study. These findings should be considered when using WebQuests with EFL students.

The students also stated that WebQuests are more fun and engaging and that they preferred this to the traditional lecture based teaching. The teacher expressed both a positive attitude regarding the use of WebQuests but also concerns regarding the constraints imposed by the

school mandated curriculum and assessment. The teacher expressed that she would have felt more confident had she been more familiar with WebQuests and could have made a better transition from a lecture-centered to a student-centered classroom where her role was more of a facilitator. In sum, Prapinwong found that “the use of WebQuests does not create a magic tool for effective language learning in every context” (164).

While participants did express positive attitudes and were very optimistic, Prapinwong recommends further research of the students’ observed behavior while engaged in the WebQuest tasks. Additionally, she recommends careful examination of the Internet resources offered and using a small number of Web sites that are simpler in nature in order to help students adjust to this kind of technological tool. Also, the teacher should not assume that the learners are technologically savvy and should offer guidance and support in the process. Moreover, the teacher should be well trained and embrace the constructivist methodological principles that are supported by the usage of this tool. However, Prapinwong does not promote complete abandonment of direct teaching principles in classes where WebQuests are utilized. Prapinwong’s study is exploratory in nature and her findings cannot be generalized due to the small number of participants. Further research on the use of WebQuests in the area of EFL is needed in order to gain more concrete results and to promote the usage of this tool in the teaching and learning of languages.

Another project related to WebQuests and teaching languages is the Dutch project “TalenQuest” (Koenraad, 2002). “TalenQuest”, “talen” meaning language in Dutch, was initially created with the key objective of customizing the WebQuest concept for foreign language learning and teaching. Koenraad (2002) claimed, based on some of his previous research, that “the language teaching community is still relatively unfamiliar” with the concept of WebQuests and there are not many WebQuests for English as a second or foreign language or for other languages. In spite of this, he saw the efficacy of using WebQuests in the field of language education. “The goal of the Talenquest project is to replace the fossilized content of textbooks with real-world, dynamic content designed for use at a variety of skill levels” (Koenraad, 2002, as cited in Godwin-Jones, 2004:10).

### **3. Methodology**

An exploratory case study was undertaken to investigate the implementation of an Internet-based constructivist technological tool, the WebQuest, in an EFL teacher training methods class. The study is ongoing and some parts have already been completed. Currently, the study is in its final stage of data collection. The current researcher worked with three EFL teaching methodology faculty members at a private university in Macedonia to expand their understanding of social constructivism as a learning approach and at the same time help these instructors find a curricular space for technology in their teaching through the incorporation of a WebQuest as a tool that demonstrates the features of social-constructivism. One of these instructors participated in the pilot study conducted by the researcher. The current study builds on that initial effort by examining the actual incorporation of WebQuests in the teaching methodology courses taught by the three faculty members.

The exploratory approach will allow for examination of an issue that has not been investigated previously in Macedonian higher education. Since little is known about using WebQuests in EFL education in general, the exploratory approach seemed to be the best fit for this study.

#### **4. Research questions**

This study is exploratory in nature with the goal of examining the following research questions:

1. How do teacher educators view the differences in language teaching before and after implementing the WebQuest as a tool in the EFL teaching methods course?
2. What are some resources that the EFL teaching methods class instructors employ on their own during implementation of the WebQuest in teaching?
3. How did the EFL methods class instructors perceive their experience with the WebQuest as an instructional tool and what is their understanding of the tool once implemented in their class?
4. What are the thoughts and experiences of the students participating in the EFL teaching methods class as part of this study with regard to the WebQuest tool?

#### **5. Participants and site**

The study is being conducted at a large private urban university in Macedonia in early 2010. The research focused on training the EFL teaching methods instructors in using a WebQuest as a way to blend teaching English and technology at the same time expanding their understanding of social constructivism as a new paradigm in teaching through the usage of this constructivist tool. In addition it intended to demonstrate the use of WebQuests to the students in the EFL methodology class as a tool they could use as part of their future profession.

##### **5.1 Research procedure, data collection and data analysis**

Following Carspecken's (1996) recommendation for qualitative research, this study will follow the five-stage design but focus primarily on the first three stages. The first stage involves compiling a primary record that is built through observations and intensive note-taking, audio-, and, if possible, video recording. During the second stage known as "preliminary reconstructive analysis", the researcher will begin to analyze the primary data that has been collected. The third stage is dialogical data generation which is developing interview protocols and conducting interviews with the participants. The data collected with the interviews may challenge the data gathered via the observation process. In stage four, the researcher examines the relationships that may potentially exist among the site and other sites such as cultural products or societal norms. Finally, the last stage focuses on using system relations to explain findings. Stages one and three are focused on data collection and stages two, four, and five involve the data analysis process. According to Carspecken, these stages are overlapping and recursive rather than sequential.

Some parts of the current study have already been completed whereas others are still in progress or will be completed in near future. To begin, the researcher conducted pre-implementation of WebQuests interviews with the instructors in order to obtain information about their current approach to teaching and their understanding of social-constructivism. Next, the researcher observed two classes taught by these instructors and audio and video recorded the classes to the extent that this was possible. In those cases where videos had been recorded, they were used to develop post-class discussion with the instructors about the approach to teaching as well as to introduce the idea of social-constructivism along with the usage of WebQuests. Parallel to the observations, the researcher set meeting times during

which she introduced the WebQuest tool to the three teachers individually and guided them through the process of creating a WebQuest that they can use in their class with their students as a way to demonstrate social-constructivist principles. Constructivist methodology was discussed in order to make the connection between the constructivist theory and WebQuests.

The researcher and the instructors met three times in order for the researcher to train the teachers and help them develop a lesson plan that incorporated social-constructivist principles as described in the previous section through the use of WebQuests as a methodology for teaching English and a way to integrate technology in teaching. The researcher only offered guidance so that the instructors could take ownership of the project and feel confident with using the technology. The instructors will implement the WebQuest with only one of their groups even though they have several groups so that they can have a better control of the activity they will prepare. During and post reflection interviews of the implementation of the WebQuest will be conducted which will explore the challenges, advantages, and disadvantages the teachers see as well as any strategies they would use for future implementation. Additionally, conversation about the instructors' perceptions of social-constructivism before and after implementing the WebQuests will take place. Instructors have also been asked to write a journal in which they reflect about their experience throughout the entire process. Finally, the researcher will conduct focus group interviews with students who will participate to obtain their opinions regarding the implementation of WebQuest. The students' interviews will focus on the advantages and disadvantages they perceive with using WebQuest, whether WebQuests helped them understand social-constructivism, and whether they see this tool as something they would potentially use in their classroom in the future. The feedback from the students will be compared to the feedback obtained from the instructors. At this point, the during and post implementation interviews with the instructors and the student interviews have not been completed, yet.

The researcher audio/video recorded all interviews that have occurred until now in addition to taking thick field notes, as recommended by Carspecken (1996). The semi-structured interviews took maximum 90 minutes with the instructors and will take up to 60 minutes with the students. The researcher will follow the same methodology for the additional interviews that will take place in the near future.

All interviews and observations will be transcribed and coded. In order to ensure validity and trustworthiness of the study, besides using multiple recording devices, the researcher will be using peer-debriefing to check for possible biases. Also, member checks on the record will be conducted to ensure accurate interpretation of the teachers' experiences.

The research process is still ongoing. The next step is for the professors to implement in their classrooms the WebQuests that they created. Once the last feedback regarding the usage of WebQuests is obtained from the instructors as well as the students, I will proceed to complete the analysis of the data and finish the write-up of the findings from this study.

## **6. Conclusion**

WebQuests may prove to be a positive first step toward incorporating technology in instruction and at the same time reflecting the principles of constructivism, a theory that the current researcher strongly believes should be promoted in the education system in Macedonia as an alternative to the current more frontal approach to teaching. While constructivism is not prescriptive and represents a learning theory, the principles that represent the theory can still serve as a guide for instructors to refocus their teaching and change their current dominant roles in the classroom. The current researcher believes that WebQuests can help instructors better understand the social-constructivist theory and find a curricular space for incorporating

technology as part of their teaching. Perhaps the use of WebQuests can open the door for incorporating other technology tools in teaching while accommodating the needs of new generations of students who are currently or will come into classrooms. It is possible that using WebQuest as a constructivist internet based tool will also help meet the school modernization and technology incorporation push currently underway by the Macedonian government as part of an attempt to reach the modernization standards set by the most developed countries in the world.

More research is needed as to how WebQuests can promote social-constructivism in teaching. The first step, as recommended by a few researchers (Kaufman, 2004, Brown & Warschauer, 2006), is implementing WebQuests to promote the constructivist approach in the teaching methods class and examine how the instructors of this classes and the pre-service teachers receive and respond to this innovation. The teachers who will implement this innovation should be the focus of the study because their beliefs and feelings about the innovation will affect the attitudes of their students toward the implementation of constructivist teaching through the use of WebQuests as a technological tool. At the same time, the research should consider the context in which the WebQuests will be incorporated as well as the larger classroom and societal factors that will influence the acceptance and promotion of the constructivist approach through the use of WebQuests as a technological tool in the EFL classroom. Hopefully, this study will help to clarify some of these issues.

The current researcher hopes that this study will contribute to bridging the gap between teaching and using technology by incorporating specific technology training blended with the constructivist principles in the methods class in the EFL teacher training program in Macedonia.

In addition, it is hoped that this study and initiation of the integration of this type of technology will provoke some change in the more traditional teaching paradigm that is still in place and move teachers' thinking toward a more constructivist model. Finally, I hope that the findings of the study can contribute to the nascent but growing body of research that deals with the implementation of an Internet – based constructivist tool such as WebQuests in the EFL teacher training context.

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