THE EFFECTS OF WEBQUESTS IN TEACHING READING ON READING ABILITY OF STUDENTS AT A UNIVERSITY IN THE MEKONG DELTA REGION

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ABSTRACT

The purpose of the study was to evaluate to what extent WebQuests-based teaching affects the reading ability of non-English major students. It was hypothesized that the participants' reading ability would be enhanced through the implementation of WebQuests in teaching reading in the classroom. There were 40 non-English major freshmen at Tay Do University attending this experimental study with one group design. The instruments used in the study were reading pretest, reading posttest and the questionnaire on students' perceptions in WebQuests-based teaching of English reading. After the reading pretest, participants received WebQuests-based reading course in classroom in ten weeks. During the program, participants were asked to complete their tasks in groups by accessing to the WebQuests available designed by the teacher. At the end of the study, participants took the posttest and completed the questionnaire. The data from tests and questionnaire were statistically analyzed by SPSS English version 16.0 package. The results suggested that WebQuests-based teaching of reading needs to be considered in order to help students in developing their reading ability.

Keyword: *Students, WebQuests, reading, university*

1. INTRODUCTION

1.1 Background of the study

The current globalization of economy and the continuing increase in international communication in various fields have resulted in greater demand for English as a foreign language (EFL). Among all the four skills integrated in English curriculum, reading skill tends to be the priority in the English curricula at universities throughout the country because the lack of the environment for communication in English. Reading authentic materials is of great importance for those who have the desire for further study and for their future careers as it is one of the best ways to improve their English as well as understand and use the information in up-to-date sources in their respective fields of study. To develop reading skill, one of the most useful resources is the Internet, with a large amount of varied and easily accessible authentic materials. One of the main reasons for using authentic materials in the classroom is that the controlled language learning environment, the learner will encounter the real world and the real language. The role of the teacher is not to delude the language learner but to prepare him necessary skills so as to understand how the language is actually used. There is no denying that the scene of education is changing briskly and significantly. Educators are trying to keep up with new developments which results in the change.

The advent of the Internet and the World Wide Web (WWW) has affected every aspect of education and transformed the way we teach and students learn. The field of second/ foreign language teaching and learning is no exception. Even though functions of the Internet in relation to language learning can be defined and classified in various ways, the Internet serves mainly as a publishing, communication, and informational tool (Cunningham, 2000; Lee, 2000a). In its information-providing function, the Internet is utilized as a virtual library in which students can search for and receive information. Web resources pertinent to various purposes and topics can offer potential teaching materials, thus serving as a valuable pedagogical tool in a language classroom. In fact, the most frequent classroom use of the Internet is searching for Web resources to gather information (Grabe & Grabe, 2001).

Nowadays, in the era of information, EFL teachers use computers and the Internet more and more frequently to facilitate teaching and enhance the learning experience. The Internet is blooming into a huge source of information which can be freely and easily accessed by both students and teachers. Charupan, Soranastaporn, and Suwattananand (2001) believed that technology can be used to facilitate classroom instruction. The Internet is a learning tool that fits well in a content-based English syllabus. Among the benefits of Internet use in the second and foreign language classroom, the most important are: Increased motivation and participation by students (Warschauer, 1996); more opportunities to interact with the target language and content area because students spend more time on task (Kasper, 2000); greater integration of reading and writing skills and opportunities to practice them in meaningful contexts; the possibility to implement a pedagogy based on problem solving and critical thinking (Warschauer, 1999); more self-paced autonomous learning that is learner-controlled rather than teacher-controlled (Mark, 1995).

Furthermore, the Internet provides the resources necessary to carry out authentic projects and analysis, and thus develops the communicative competence of EFL students. Such resources allow teachers to design simulation activities and role-playing using authentic material. Kimball (1997) pointed out that "Internet-generated materials can be flexibly arrayed to engage students with topics and cognitive tasks relevant to students' "professional futures". Furthermore, the Internet-based activities can take advantage of integrated teaching approaches. Collaborative and cooperative learning occurs when computer-assisted language learning (CALL) is used in language teaching and learning, (McCabe, 1998). Learners use websites on the Internet to perform cooperative tasks with their peers to complete work assigned by the instructor. It is the learning and teaching on the Internet that enables the learner-centered approach (Kumari, 1998). Alexander and Elena (2005, p. 129) also claimed that "The Internet helps to make English lessons more rewarding and encourages opening the new way to bring about creativity and enthusiasm for learning". Another reason for the study was Krashen"s Input Hypothesis and Frank Smith"s slogan "learn to read by reading", from which extensive reading approach was developed and has been widely applauded.

WebQuests use resources from the Internet for inquiry-based instructional activities. Bernie Dodge, a Web Quest pioneer, describes a WebQuest as "an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis and evaluation."

When it comes to using the Internet, there is a concern that if students have free access to the Internet, they may stray and access inappropriate material. However,

WebQuests can effectively address these concerns. WebQuests offer organized resource links for students, and this reduces the chance that students will access inappropriate material (Vidoni & Maddux, 2002). WebQuests include links only to the applicable online resources, thus providing an efficient and focused lesson. WebQuests facilitate effective learning by providing structured resources so that learners do not waste time in fruitless searching; and enable teachers to efficiently use computer resources in classrooms (Milson& Downey, 2001).

Today's students are engaging in technological practices at unsurpassed rates. Therefore, the need for student-centered activities which challenge and increase student proficiency in the field of technology are increasing. WebQuest is designed to lead students through a web-based lesson that can range from one class period to one month in depth and duration. However, WebQuest is more than simply exploring information related to one's content area on the internet. According to Tom March, a true WebQuest requires more than students exploring the internet in relation to a class related topic. A WebQuest requires that students complete a thoughtful and thorough exploration of internet-based content in order to increase their understanding of a topic. This exploration can be used on multiple instructional levels, either allowing for students to work collaboratively or individually.

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" (March 2003).

WebQuests accommodate different student learning style needs and lend themselves well to cooperative learning (Hopkins-Moore & Fowler, 2002). Students who need assistance from others benefit from team work and all students get a chance to learn from others. They learn as they quest on the Web and the interaction is motivating for students.

In 2001, the Prime Minister of Vietnam made a decision of approval on the project "Integrating environmental issues in the general education". Teachers are requested to take advantage of environmental contents in curriculum of different subjects to "equip students with knowledge of ecology, environmental preservation skills and attitudes towards surrounding environment" (Government, 2001, p.1). In reality, this integration is not at all easy. Vietnamese teachers are faced with a

huge workload, time constraints and lack of environmental materials. Therefore, it is necessary to seek an option that both provides scaffolding support for students with sufficient materials and reduces teacher's workloads.

Regarding integration of different Information Communication Technology (ICT) tools in education in Vietnam, since the Master Plan For Information Technology in Education for the period 2001-2005 by Vietnamese Ministry of Education and Training (MOET), the integration of ICT has been considered "a priority task in the socio-economic development strategy"(Government, 2000, p.3). In education, the MOET requires all teaching institutions to apply ICT in teaching and learning to change the pedagogy from traditional teacher-centered to more student-centered. ICT is regarded an effective tool to improve the quality of education. The MOET emphasizes teachers "to reasonably use ICT in every subject, avoid ICT abuse" (MOET, 2008, p.3). Especially, the school year 2008 was launched "The year of ICT". In the school year 2009-2010, MOET launches the e-lesson competition with the slogan "Every teacher builds at least one electronic lecture" (MOET, 2009, p.6).

1.2 Aims of the study

The study seeks to investigate the implementation of WebQuests in the teaching of reading to EFL learners' reading ability. Besides, the research aims to obtain an in-depth understanding about the attitudes (both of negative and positive ones) of the EFL students who were given the WebQuests reading course. In general, the study tries to answer the ensuing research questions:

1. Does using WebQuests in teaching reading improve students' reading performance? If yes, to what extent?

2. What are students' attitudes towards WebQuests-based teaching of reading?

1.3 Significance of the study

The findings obtained in this study provide remarkable and valuable information which contributes to the literature and also enhance awareness of teaching and learning reading through WebQuests. Firstly, the study would support the determination on WebQuests which is being used by the students in schools. Secondly, it could encourage the implementation of web-based teaching in classroom frequently and effectively; motivate the students to learn English through Internet, especially WebQuests model. Finally, the findings gained from the study could raise positive effects of WebQuests in English language reading skill. Therefore, a better use of WebQuests reading course would be considered.

2. LITERATURE REVIEW

2.1 Intensive reading and extensive reading

Intensive reading and extensive reading are two major approaches that have been used to develop reading skill. The two approaches have their advantages to offer different stages of reading instruction. In this research, WebQuest is used to teach reading, which involves intensive reading and extensive reading. An overview of the intensive reading and extensive reading is thus required.

2.1.1 Intensive reading

Intensive reading is commonly considered text-based or skill-based reading. The work of Palmer (1921) notes that "intensive reading" means that the readers take a text, study it line by line, and refer at very moment to the dictionary about the grammar of the text itself, or Haarman et al. (1988) describes intensive reading as "the style we employ when we wish to have a very clear and complete understanding of the written text". Similarly, intensive reading is pointed out as "reading a passage or a book slowly and carefully, paying attention to each word and every idea." (Phirie, Tsimanyana, and Masendu, 2000, pp. 31-32). Nuttall (1996, p. 38) claims that "intensive reading involves approaching the text under guidance of a teacher or a task which forces the student to focus on the text". Intensive reading activities include skimming a text for specific information to answer true or false statements or filling gaps in a summary, scanning a text to match headings to paragraphs, and scanning jumbled paragraphs and then reading them carefully to put them into the correct order. The intensive reading intentionally focuses on essential vocabulary, patterns of text organization and types of text processing needed to adequately comprehend any text. Thus, in intensive reading, students are supposed to comprehend as fully as possible the text which is chosen by the instructor or in the reading course. Intensive reading deals with comprehension mostly at lexical and syntactic level. According to Paran (2003, p.40), intensive reading is needed for four main reasons: to help learners comprehend written texts, to become more aware of text organization to better comprehend, to learn how to use and monitor effective reading strategies, and to develop literacy skills necessary to generate productive expressions in L2. Bruce (2004, p.175) believes that fundamentally, intensive reading involves translation as stating "The

readers may pause to look up words in a dictionary. The reader may also mentally or even physically translate the sentence into the reader's first language (L1) by writing down the translation of words, or speaking the translated sentence aloud."

2.1.2 Extensive reading

It is the view of Palmer (1964) that extensive reading is considered as rapid reading. The attention is paid to the meaning of the text itself not the language. Hafiz and Tudor (1989) deemed extensive reading to be "the reading of large amounts of material in the second language over time for personal pleasure or interest, and without addition of productive tasks or follow up language work". The purpose of extensive reading is for pleasure and information. Thus, extensive reading is also termed as "supplementary reading". Grabe and Stoller (2002) defines extensive reading as an "approach to teaching and learning in which learners read large quantities of materials that is within their linguistic competence" (ibid., p.259). Bamford (2000) discovers that a good number of extensive reading programs use simplified books or in other words grade readers as the basic reading materials.

Day and Bamford (1998, pp.6-8) lists key characteristics of a successful extensive reading program: Students read large amounts of printed material; Students read a variety of materials in terms of topic and genre; The material students read is within their level of comprehension; Students choose what they want to read; Reading is its own reward; Students read for pleasure, information and general understanding; Students read their selection at a faster rate; Reading is individual (students read on their own); Teachers read with their students, thus serving as role models of good readers; Teachers guide and keep track of student progress.

2.2 WebQuests

2.2.1 What is WebQuests?

WebQuests were first introduced in 1995 by Dr. Bernie Dodge, a professor at San Diego State University (SDSU). He originally designed the WebQuests model to integrate the use of the Web into classroom activities. According to Dodge (1995), WebQuests is an inquiry-oriented approach with some or all of the information for learners to work with, coming from resources on the web. Then, Tom March (1998), a co-developer of the WebQuests, noted that WebQuests is a scaffolding 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.

WebQuests for language learning (e.g., TalenQuest) allow students to construct their knowledge of the language through exploring structured web resources on their own (Laborda, 2009). The use of WebQuests in foreign language learning is also supported by Krashen's Input Hypothesis: a foreign language is better acquired when it is meaningful and acquired through experience (1982). In addition, several studies (Bradshaw et al., 2002; Owens et al., 2002; Ridgeway et al., 2002; Zheng et al., 2005) have linked WebQuests to the development of higher order thinking skills and problem solving skills (Zhou & Li, 2010). More importantly, WebQuest learning helps students become better learners by increasing their autonomy and providing them a sense of fulfillment (Cai, 2005; Liu, Song & Kong, 2007; Lou, 2010).

2.2.2 Components of WebQuests

WebQuests, say the teachers who use them, promote high-level thinking, develop problem-solving skills, and provide an avenue for seamlessly integrating technology into the curriculum. And creating one is easier than you might think. Many sites are available to walk you through the process.

One of the most thorough is Bernie Dodge's WebQuest Page. According to Dodge, the building blocks of a WebQuest are:

The introduction serves to launch the topic by providing interesting background information and a blueprint for the whole quest. The task and process sections present a general description of the assigned task and the step-by-step procedure to be followed for completing the task. A set of information sources needed to complete the task is provided in the resources section. Information sources might include web documents, searchable databases on the net, and books and other documents physically available in the learner's setting. The evaluation component is usually in the form of a rubric that will be used to assess students' work, and the conclusion brings the quest to closure, reminds learners of what they have learned and encourages them to extend the experience into other domains. Student-centered and inquiry-based, the WebQuest is generally constructed around a theme of interest. Students who work in small groups follow the steps in the WebQuests model to study the proposed topic, examine the problems, search for information with the web resources provided by the instructor, analyze and synthesize information using guided questions, and complete the required tasks to solve the problems. Often assigned with certain roles in the group, students work on the topics together and collectively contribute to the understanding of the issues with considerable breadth and depth. The instructor scaffolds learners through the entire learning process using a structured approach. Ongoing, formative assessment, which often takes the form of rubrics, is used

to evaluate students' learning, the purpose of which is to help students develop the ability to check and improve their own performances rather than to catalog their mistakes.

In brief, a well-designed WebQuest typically consists of five components (Dodge, 1998): (a) introduction; (b) task; (c) process; (d) evaluation; and (e) conclusion.

Introduction: Introduces a scenario and central question, briefly explains an activity and provide background information which learners need to understand in order to complete an assigned task.

Task: Provides a focus for learners' activities and explains clearly and precisely what learners will have to do as they work their way through a WebQuest task which is both feasible and interesting.

Process: Describes the steps for students to accomplish the learning goal, includes pre-selected Internet resources to allow students to focus on a topic, and offers advice, guidelines on how to organize the information, and scaffolding to provide help in the learning process.

Evaluation: Describes rubrics for evaluating students' performance in doing WebQuest tasks.

Conclusion: Brings closure to the activity and summarizes what the teacher hopes learners have learned as a result of completing the activity, and may also encourage them to extend any knowledge they have gained throughout a WebQuests to other domains.

Two levels of WebQuests exist: short term and long term. Short term WebQuests focusing on learners' knowledge acquisition and integration can be completed in one to three class hours, whereas long term WebQuests emphasize learners' ability to extend and refine knowledge. Long term WebQuests may take between one week and a month in a classroom setting (Dodge, 1997; Gaskill, McNulty & Brooks, 2006).

WebQuests, which use the constructivist approach to learning, are a super learning tool, said Kenton Letkeman, creator of a number of excellent WebQuests.

"With many research projects," Letkeman told Education World, "students feel that they are sucking up information and regurgitating it onto paper for no other reason than to get a good grade. WebQuests give students a task that allows them to use their imagination and problem-solving skills. The answers are not predefined and therefore must be discovered or created. Students must use their own creative-thinking and problem-solving skills to find solutions to problems.

"WebQuests are also a wonderful way of capturing students' imagination and allowing them to explore in a guided, meaningful manner," added Letkeman, a resource-based learning consultant for the Tisdale School Division in Saskatchewan, Canada. "Communication, group work, problem solving, and critical and creative thinking skills are becoming far more important in today's world than having students memorize predetermined content."

"WebQuests allow students to explore issues and find their own answers," he added. "Particularly with controversial issues such as pollution, gambling, and nuclear waste disposal - students must do more than memorize information. They must process the information in meaningful ways and reach moral and ethical decisions guided by facts."

The adaptive dimension, the ability to make adjustments in educational programs to accommodate students' diverse learning needs, is also an important characteristic of WebQuests, according to Letkeman. "With WebQuests, special needs students can be given predetermined roles that are very important and make them feel part of the group," he said. "Advanced students can explore further and do more than is required. The interest this type of project generates makes that a reality, rather than a fantasy".

Dudeney (2003) recognized the WebQuests model as a potential pedagogical tool by pointing out several advantages. They include providing a relatively easy way to incorporate the Internet into the language classroom, encouraging critical thinking, leading to more communication and interaction through group activities, and eliciting greater learner motivation through interdisciplinary studies as well as "real-life" tasks.

Another researcher suggested that "WebQuests benefit language learning in several aspects. Engaged in a WebQuests activity, learners have the possibility of being exposed to the target language by surfing on the web. Making sense out of the web documents while skimming and scanning websites is a useful exercise for learners to increase their language comprehension. In addition, the problem-solving approach of WebQuests may facilitate language learning" (Ge Stoks, 2002).

Moreover, Abdullah (1998) also noted that by posing language learners problems like those found in real life, the gap between language use in the real world and that in the school setting can be bridged. He further contends that when

language learners go through the inquiry process to develop solutions, they need to use language to obtain and communicate information and present their findings, thus learning to listen, speak, read, and write effectively.

2.3 Pedagogical approaches underlying WebQuests

A WebQuest combines the benefits of the constructivist approach, inquiry-based learning approach, project-based approach, and content-based language learning.

2.3.1 Constructivist approach

WebQuests emerge among the several technological tools available as an example of a powerful means for supporting the principles of constructivism (Matusevich, 1995; March, 2008) in language teaching. A WebQuest is in fact a constructivist lesson format. Mary (1998) stated constructivism as both a philosophy and a theory of learning". By changing the focus of the classroom from teacher dominated to student-centered using a constructivist approach we could yield positive results. A major theme in the theoretical framework of Bruner (1990) is that learning is an active process in which learners construct new ideas or concepts based upon their current or past knowledge. The key concept of this approach is that learning is an active process of creating rather than acquiring knowledge. When Internet technology is integrated into the course curriculum, students are enabled to learn by constructing their perceptions of complex concepts (Watson, 1999). Using WebQuests, learners have to activate the mental processing which results in understanding and the creation of meaning from their own experiences (Grant, 2002).

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.

It is the constructivist learning approach and the profound influence of technology on education that require the utilization of authentic activities to give the learning situation a purpose and meaning (Reeves et al., 2002; Matejka, 2004; Baccarini, 2004). If technology is used effectively as a tool for creative work, students can be more autonomous, collaborative and reflective than in classroom without the utilization of technology.

2.3.2 Inquiry-based learning

Inquiry-based learning (Enquiry-based learning in British English) or inquiry-based science describes a range of philosophical, curricular and pedagogical approaches to teaching.

Inquiry-based learning is an instructional method developed during the discovery learning movement of the 1960s. It was developed in response to a perceived failure of more traditional forms of instruction, where students were required simply to memorize fact-laden instructional materials (Bruner, 1961). Inquiry learning is a form of active learning, where progress is assessed by how well students develop experimental and analytical skills rather than how much knowledge they possess.

Pérez Torres (2005) believes: "a WebQuests for teaching and learning a second language is an inquiry oriented activity placed in a relevant thematic context, in which the development of the task implies using web resources and developing high order thinking processes in a collaborative environment. At the same time, it provides the students the opportunity to learn and put into practice some linguistic skills, supported by a set of linguistic and procedural scaffolding."

The process of inquiring commences with gathering information and data through applying the human senses. In fact, memorizing facts and information is not the most crucial skill in today's world as facts change, and information is easily accessible by modern technology. Inquiry is seeking appropriate resolutions to questions and issues rather than seeking the

right answer merely. Teachers therefore should develop their student's inquiry skills and nurture the attitude of seeking information and to encourage and enable individuals to continue the quest for knowledge throughout life. As an old adage states, "Tell me and I forget, show me and I remember, involve me and I understand." The last part of this statement is the essence of inquiry-based learning.

2.3.3 Project-based learning (PBL)

Project-based learning is an instructional student-centered educational approach in which students work in teams to explore real-world problems and create presentations to share what they have learned. (Warschauer et al., 2000).

Project-based learning first began in 1918 with an article called "The Project Method" by Kilpatrick. Although Kilpatrick was influenced by John Dewey who advocated that schools should reflect society, in the late 1800s, he was more interested in group learning than in the cognitive development that resulted from it. More recently, brain research has shown that project-based learning works by "helping move students beyond surface learning, beyond learning held in short-term memory, learned for the test and then dropped… because the learner sees the information as important to him" (Autodesk Foundation, 1998).

In Project Based Learning (PBL), students go through an extended process of inquiry in response to a complex question, problem, or challenge. While allowing for some degree of student "voice and choice," rigorous projects are carefully planned, managed, and assessed to help students learn key academic content, practice 21st Century Skills (such as collaboration, communication & critical thinking), and create high-quality, authentic products & presentations.

In teaching, the Web fits very well with the Project-Based Learning Model. The Web can be an organizer, a research tool, a ready source of data, a means for people to communicate with each other, and a repository for artifacts. Because the Web is a part of the real world, and artifacts on the Web can readily be placed in the world beyond school, projects have a scope for authenticity not usually found in the school environment (Hyosook Jung, Woochun Jun and Le Gruenwald, 2001).

The Web Project Learning can motivate both students and teachers as it provides an appealing way for students to gain Internet skills while being engaged in regular classroom activities. Through the projects, students are encouraged to develop a range of skills relating to reading, writing and researching as well as developing their abilities in selecting, presenting and communicating information. When students work

on their project, they strengthen research and organization skills while being responsible and self-motivated all skills they will need in the information age. Students feel a sense of engagement because they work with topics that they have chosen for themselves (Hyosook Jung, Woochun Jun and Le Gruenwald, 2001).

Dudeney and Hockly (2007) believe that the following can be seen as reasons for using Internet-based projects in the classroom:

There is a structured way for teachers to incorporate the Internet into the language classroom, on both a short-term and a long-term basis. No specialist technical knowledge is needed either to produce or to use Internet-based projects. However, it is certainly looking around on the Internet to see if something appropriate already exists before sitting down to create your own project.

More often than not, they are group activities and, as a result, lend themselves to communication and the sharing of knowledge, two principal goals of language teaching itself. The use of projects encourages cooperative learning and therefore stimulates interaction.

They can be used simply for language learning purposes, but can also be interdisciplinary, allowing for cross-over into other departments and subject areas. This can often give them a more "real-world" look and feel, and provide greater motivation for the learner.

They encourage critical thinking skills. Learners are not required to simply regurgitate information they find, but have to transform that information in order to achieve a given task.

Compared with learning solely from textbooks, this approach has many benefits for students, encompassing: Deeper knowledge of subject matter; increased self-direction and motivation and improved research and problem-solving skills (Blasszauer, 2003).

However, those benefits are merely enhanced when technology is used in a meaningful way in the projects. Blasszauer (2003) also stated that using project-based learning, students can acquire lifelong learning skills which include the ability to find and use appropriate learning resources. The process used in project-based learning is as follows:

Students are presented with a problem (case, research paper, video tape, for example). In groups they organize their ideas and previous knowledge related to the problem, and attempts to define the broad nature of the problem.

Throughout discussion, students pose questions on aspects of the problem that they do not understand.

Students see during the project-based learning that learning is an ongoing process, and that there will always be (even for the teacher) new angles, perspectives, problems to be explored. Dudeney and Hockly (2007) also notes that in order to prepare for Internet-based project work, you will need to do the following: Choose the project topic; Make the task clear; Find the resources and decide on the outcome.

2.3.4 Content-based language learning

Content-based learning is a kind of teaching/learning process organization in which the focus of instruction is shifted from pure language instruction to the integration of mastering both language for professional communication and the content matter of professional disciplines. (Snow, Met, and Genesee, 1989; Spanos, 1990). WebQuests are activities especially suited to content-based language learning. Students perform a real world task using authentic materials related to a topic within their academic discipline (Maria, 2002). According to Pérez Torres (2005), WebQuests are activities that meet the requirements of the three essential conditions for language learning "exposure, use and motivation". March (1997) supports the point as saying that "the pedagogical principles of a WebQuest are to assign small groups of students with a challenging inquiry, provide access to an abundance of online resources, and scaffold the learning process to promote higher order thinking".

WebQuests can meet the four criteria for content-based activities below:

Learning activities should provide more than one perspective on the content area. This is met by WebQuests, which offer a large number of Web pages with information on different aspects of a topic (Marco, 2002).

Activities should present authentic content without oversimplifying it (Spiro and Jehng, 1990).

Activities should incorporate visuals and other aids for making associations, since that facilitates deeper thinking (Craik and Lockhart, 1972). The Web pages used in WebQuests contain not only text, but also pictures, sound, and even animation.

Activities should encourage the SQ3R formula: surveying, questioning, and reading, recalling, and reviewing materials under study (Schmeck, 1986).

Generally speaking, WebQuests are rooted to constructivist, inquiry-based, project-based learning, and content-based language learning approaches (Hopkins-Moore and Fowler, 2002; Matejka, 2004) since they seek student motivation and authenticity, they develop higher thinking skills and promote cooperative learning (Watson 1999; Hopkins-Moore & Fowler, 2002).

2.4 Studies on WebQuests and language learning

Motivation, considered to be an important psychological element in learning, plays an important role in students' ability to accomplish long-term goals (Guilloteaux & Dörnyei, 2008). Dudeney (2003) suggests WebQuests are motivating, authentic tasks that require students to concentrate. Students in all grades, when questioned, indicate they prefer WebQuest to traditional teaching methods (Abbitt & Ophus, 2008; Halat & Peker, 2011; Noordin, Samed & Razali, 2008; Prapinwong, 2008; Puthikanon, 2009). Students may enjoy and remember lessons far better via WebQuest than through the traditional way of learning (Hassanien, 2006). The teacher's role is to guide students on how to use WebQuests in ways that elicit positive educational results. Teachers, by embracing WebQuest technology, can heighten student interest in diverse subject matters while concurrently heightening the educational benefit to their students in a blended learning classroom. Blended learning can be an effective teaching method that is not only viewed positively by students, but that also supports successful learning outcomes (Tavukcu, Gezer & Ozdamli, 2009). As such, teachers continue to play an important role in the blended learning classroom, as students do report having a positive view of face-to-face learning interaction in addition to online learning tools (Tuncay & Uzunboylu, 2011).

WebQuests can be an effective tool to promote different foreign language skills. As discussed by Torres (2007), students are exposed to a large number of resources through the web. They read in the target language and then provide a written report of what they learned in the target language. As many EFL students do not enjoy reading in a second language, it is useful to employ motivational learning tools such as WebQuest in the second language classroom. Although Gaskill, McNulty and Brooks (2006) found no discernable difference in learning outcomes when WebQuests were compared to conventional methods, they did find that both teachers and students enjoyed and spoke highly of WebQuest instruction.

Similar to the findings of Zheng et al., Barros and Carvalho (2007) found WebQuest to be a valuable environment for teaching extensive reading as it can enhance motivation and promote constructivist 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 researcher took the findings of Prapinwong's study in consideration when conducting her study. These Prapinwong's findings should be considered when using WebQuests with EFL students. Prapinwong found that "the use of WebQuests does not create a magic tool for effective language learning in every context".

While participants did express positive attitudes and were very optimistic, Prapinwong recommends further research of the students' observed behavior while engaged in the WebQuests tasks. Additionally, she recommends careful examination of the Internet resources offered and using a small number of Websites 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.

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 Zlatkovska, Emilija. 2010. WebQuests as a constructivist tool in the EFL Teaching Methodology Class in a University in Macedonia. She believes that WebQuests can help instructors better understand the social-constructivist theory and find place for incorporating technology as part of their teaching thus offering an alternative to a teacher-centered approach to learning and accommodating current student generations' learning styles that lean towards teamwork, experiential activities, multitasking, and the use of technology. 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.

Another project related to WebQuests and teaching languages is the Dutch project "Talen Quest" (Koenraad, 2002). "TalenQuest", "talen" means language in Dutch, was initially created with the key objective of customizing the WebQuests 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). In addition, Koenraad (2010) have attempted to illustrate how the WebQuests format can be adapted to design webtasks that help students of other disciplines develop the literacy they will need to function effectively in an ever changing workplace context. This format can be used to design tasks that: (i) teach students to understand, respond to, and produce different types of disciplinary texts, (ii) prepare them for autonomous and lifelong learning, and (iii) train them in the strategic processes of meaning construction that they will need to work in a digital environment.

In María José Luzón's study (2007), she concluded that the WebQuests format has been proposed here as appropriate to design authentic tasks which can meet some of the challenges of ESP instruction: helping students acquire the knowledge and develop the skills necessary to communicate effectively within their disciplinary community, training students into autonomous, active and lifelong learning and promoting the development of new literacy. Taking these three concerns into account, WebQuests for ESP might be expected: to be authentic, purposeful and related to the students' discipline; to develop students' genre awareness and get students in touch with genres used in the discipline; to be adaptative of the students' needs and individual learning goals and lend students control over their learning (allowing different learning pathways, catering to different learning styles); to include the necessary support to assist students in understanding and transforming information and in producing output; to promote higher-order thinking skills; to offer interactive, multimodal, hypertextual resources, and to prompt students to perform tasks involving online communication and interaction with, manipulation and construction of online texts; to encourage students to reflect on the strategies they use to navigate the Internet and interact with online texts, and to train them to use these strategies flexibly, since new forms of

literacy are required as technologies change; to motivate students to self-assess their learning process and the learning output.

In addition to the acculturation to the digital age that students gain from WebQuest, the effectiveness of WebQuests in second language learning also has been the subject of various empirical studies. Laborda (2009) investigated the effectiveness of WebQuest in English for Specific Purposes (ESP) classes (such as tourism). Laborda (2009) noted that in completing the WebQuest assignment, students read different materials and then

come up with their own. This process gives students opportunities to explore how the target language is used and then spontaneously use the language in its correct way. Students are provided with interactive opportunities which make the learning experience meaningful.

With WebQuests, teachers spend less time in classroom while students have more opportunities to explore knowledge and self-direct their study. Information in websites is a rich resource for students to deeply understand environmental issues. With WebQuests, different levels in Bloom's taxonomy are attained: students not only know, but also comprehend information; in addition, they are able to analyze and synthesize information to create a product and self-evaluate their product. One main concern is how to design the task and evaluation indicators for this task. It depends much on teacher pedagogy (Tran, 2009).

Another researcher, Nguyen (2008) noted that the use of class website as supporting web-based tools for IT vocabulary teaching program has better influence in improving the students' vocabulary acquisition than the paper-based vocabulary teaching program in VKITC (Vietnam – Korea Industrial Technology College). In other words, her study has provided a strong case for the conclusion that the web-based program has positive effect on the students' vocabulary acquisition. Students who participate in the web-based program will be likely to make more progress in their reading proficiency than those who just follow the paper-based program.

2.5 Studies on WebQuests in teaching writing and reading skill

WebQuests provide a new instructional opportunity for developing academic reading and writing skills (Peterson et al., 2003). Since WebQuests are a combination of project-based instruction and innovative use of technology for language teaching and learning, these Web-based lessons provide opportunities for learners to be exposed to a variety of authentic texts from the Internet. As there are a lot of attempts to look for ways to make reading and writing a more communicative and authentic learning experience for language learners, WebQuests can then be utilized by teachers who wish to make an effective use of technology to achieve these goals (Egbert & Handson-Smith, 1999).

To enhance students' writing ability, process-oriented writing instruction could be employed for teaching writing skills along with the WebQuest modules in this study. Process writing was taught to students explicitly in the study. Four basic stages of process writing as a classroom activity were demonstrated: "planning (pre-writing), drafting (writing), revising (redrafting), and editing–and three other stages externally imposed on students by the teacher, namely, responding (sharing), evaluating, and post writing" (Seow, 2002).

Not only can WebQuests be used to promote language learning in terms of reading instruction, a number of research findings suggest that the use of WebQuests model is also more effective in enhancing students' writing performance and providing a positive learning experience. In a study by Chuo (2004), the effects of the WebQuests Writing Instruction (WWI) on EFL learners' writing performance, writing apprehension, and perception were investigated. The results showed that the WWI improved students' writing performance significantly more than the traditional writing instruction. The students also revealed positive perception of the WWI, indicating more advantages than disadvantages of language learning through web resources. As stated in Chuo's study (2004), the computer will remain a key component of almost everything we do. As language professionals, we cannot ignore this, as it affects language learners and reshapes their needs. Accordingly, we should keep ourselves fully informed of how modern computer technology can benefit language teaching. Meanwhile, we should have realistic expectations that computer technology, like any other technological innovation, is not a panacea for education. In addition, any technological devices themselves would never replace the importance of the teacher's role in exploiting them in a teaching and learning context. As demonstrated by this research, the Web proved to be an effective tool for language learning only because it was integrated in pedagogically sound instruction based on the WebQuests model.

Research on WebQuests in reading instruction has shown the enhancement of students' reading performance through the use of WebQuests. The research study conducted by Tsai (2005) investigated the effect of EFL reading instruction by using a WebQuests learning module as a CAI enhancement on college students' reading performance and vocabulary acquisition in Taiwanese EFL university students when a WebQuests learning module as a computer-assisted instruction (CAI) was utilized to enhance the traditional EFL reading instruction. The findings indicate that the use of the WebQuests as a CAI

enhancement produced a significant improvement in students' vocabulary acquisition and story reading performance. In addition, this study reported the positive relationship between student attitudes and student perceptions toward the use of the WebQuests module.

In addition to WebQuests effectiveness in improving writing skills, research suggests the tool can be effective in promoting critical thinking skills. Puthikanon (2009) investigated the use of WebQuest by EFL university students in Thailand. Two WebQuests were used as supplementary reading activities in a reading course. The results showed that students used critical thinking during the WebQuest at a high level. They actively analyzed, synthesized, evaluated, and reflected on information pertaining to the topic of the WebQuest. However, low proficiency students struggled to transfer their thoughts and opinions in the end products of the WebQuest. Nonetheless, findings suggested that WebQuest can be a useful activity to promote critical thinking in an EFL reading course.

Tuan (2011), a researcher from Vietnam stated that the use of WebQuests has been discussed and practised in the world of EFL teaching for several years. However, the utilization of this Web-based tool in a reading course still has been a new experience to EFL teachers in the context of Vietnam. The findings of his study reveal that the students who received the WebQuests-based program made considerable improvement in their reading. The findings were also enhanced by the positive feedback of the students towards the use of WebQuests through the online survey carried out after the course. His research provides an implication that WebQuests can promote the teaching of reading. Additionally, this Web-based tool enables teachers to share their own materials and provides free access to a multitude of resources in different disciplines at different language levels. WebQuests appears as a suitable integrated way to immerse the students in a real professional in which to carry out a whole project involving technology.

2.6 Reasearch on students' perception towards WebQuests

Teacher evaluation of Web-based language activities, including those using Internet resources, has shown that students perceived more advantages than disadvantages (Aida, 1995; Mak & Mak, 1995; Shetzer, 1995; St. John, 1995). Advantages reported the most often included the provision of rich, authentic, and current information, exposure to colorful visual elements, enhanced flexibility of individual learning pace, reinforced learning of the subject matter, heightened motivation, and increased interest. Disadvantages included the encounter with some shallow or confusing information, frustration from slow or failed access, and lack of mastery of technology use on the part of the teacher or students. A number of empirical studies have also indicated that students had an overall positive attitude towards learning in a computer-assisted language learning environment (Felix, 2001; Liou, 1997; Osuna & Meskill, 1998; Shen, 1999). In addition, research has revealed that students perceived Web-based instruction as effective for their language skills in general (Osuna & Meskill, 1998) and for the development of specific language skills related to reading, speaking (Stepp-Greany, 2002), and writing (Frizler, 1995).

The two studies of Murray (2006) and Tsai (2006) reported the impact of WebQuests on students' positive perceptions. They found that the participants of the research generally had positive attitudes toward the use of WebQuests lessons.

Pornpilai (2009) noted in his study that students perceived the WebQuest modules as useful lessons for them in terms of building up their vocabulary, helping them gain more knowledge of content, providing them opportunities to practice reading and writing, assisting them to improve their reading and writing abilities, helping them to gain more self-confidence, creating a good learning atmosphere, and providing opportunities for developing problem-solving skills.

The impact of WebQuests on students' positive perceptions was also reported by Murray (2006). In his study, Murray found that the participants of the research generally had positive attitudes toward the use of WebQuest lessons. Similar resear ch results of positive perceptions of students were also found in a study of Tsai (2006), in which students' preferences of WebQuests were reported.

Although research results have revealed the effective use of WebQuest to enhance students' learning in reading and writing instruction, only a few studies on the WebQuest instruction have been conducted in the ESL and EFL settings, (Tsai, 2005; Chuo, 2007). The findings show that WebQuest lessons help students learn better improve their learning outcomes. Since there is little empirical evidence of the effect of the implementation of WebQuests in language instruction on student achievement (Abbitt & Ophus, 2008), the researcher plans to empirically determine if the WebQuest modules in an EFL setting are effective enough to enhance students' reading and writing abilities, and to develop their positive attitudes towards the use of these WebQuest modules.

From some above perspectives, it is thought that teaching and learning English via internet or WebQuests is effective and remarkable. In fact, internet is very common now. Every college student can surf the internet freely and find the information to their taste. Many college students have a computer of their own. If they do not have one, it is very convenient to log on internet because all colleges have many internet classrooms and libraries where students can study by

themselves. Therefore, using WebQuests to teach English skills, for example writing and reading, is a doable and interesting and effective way.

In conclusion, the reviewed literature serves as a base in understanding WebQuests and its components, WebQuests in teaching some English skills such as writing and reading and the perception of learners toward WebQuests implementation. In addition, multiple studies have indicated the connection between using WebQuests in teaching English and the positive effects language learning of learners. Based on this understanding, the study focuses on the effects of WebQuests in teaching reading on learners' reading ability.

WebQuest is one of numerous ways to integrate technology in learning. Technology is proliferating rapidly and teachers can improve classroom education by embracing different teaching methods that make their classes interesting and beneficial. WebQuest has been studied in terms of its effectiveness in language learning as discussed above, but few studies have been conducted in the Vietnam context that investigate its impact on promoting EFL language skills. The lack of published EFL literature in the Vietnam context could be attributed to a demanding administrative and technical workload on teachers. To address this gap in the literature, this study sheds light on the possible effects of WebQuest use on Vietnam EFL university students reading ability.

3. RESEARCH METHOD

3.1 Research aim

The main purpose of the research is to address the effects of using WebQuests to teach reading on non-English majored students' reading ability and their perception toward the implementation of the WebQuests.

3.2 Research questions and hypotheses

Research questions

The following questions were addressed in the study:

a. Does using WebQuests in teaching reading improve students' reading performance? If yes, to what extent?

b. What are students' attitudes towards WebQuests-based teaching of reading?

Hypotheses

Hypothesis 1. It is hypothesized that students' reading ability would be improved significantly as a result of adapting and implementing the WebQuest-based reading course.

Hypothesis 2. Students would have positive points of view toward the use of WebQuest-based in teaching of reading.

3.3 Research Design

This study was carried out to test the effectiveness of WebQuests in teaching reading on non-English majored students' reading ability and their perception. It was designed as an experimental one. The major approach is a combination of quantitative and qualitative study. The experiment was conducted at a university in Mekong Delta region. There were 40 students in one class chosen in the study.

3.4 Participants

The participants are 40 non-English major students in one class at a university in the Mekong Delta region. Their major is in business administration. These students started learning their three sections of general English in the first semester of the academic year 2012. All the students of the class were engaged in this study. Their average age was ranged from 19 to 22. They all studied English at high school and have to study English in three semesters at the university. An experienced English teacher who have taught general English more than five years at the university was also invited to score the reading pre-test and post-test. This research was conducted in 12 weeks during the second term of the school year 2011-2012. The researcher is the teacher who taught students reading by using WebQuests in that time.

3.5 Instruments

The data collection methods included pre-test and post-test on English reading ability and the questionnaires on students' attitudes towards WebQuests-based teaching of reading. Besides, problems hindering the use of WebQuests were used to measure the benefits of WebQuests on 40 students' reading ability.

The instruments include pre-test, post-test, and questionnaire helped collect quantitative data. Each of these instruments was used at different phases of the study and for different purposes. The pre-test and post-test were taken by 40 students involved in the study right before and after the WebQuests-based course in order to measure the improvement in their reading ability and the questionnaire was delivered a week after the course to investigate the students' attitudes towards the course. It was used to measure student perception of using WebQuests to teach reading.

Different data sources and analyses from these three instruments could result in a reasonable measure of reliability in the findings. These research instruments will be described in detail in the following parts.

3.5.1 The pre-test and post-test

The researcher used pre-test and post-test to evaluate the participants' reading ability through English texts after WebQuests course. Specific skills which the students needed to perform were (1) scanning the text for specific information and (2) skimming the text for main ideas.

Those skills are the two major ones which are necessary to learners of English. Moreover, in order to meet the reading text objectives required for the participants at this level, the reading texts were partly selected from *General English level 2* course book. This book was designed for internal use for non-English major students at a university in the Mekong Delta region. The pre-test and post-test was designed with the same organization to check the same reading skills (scanning the text for specific information and skimming the text for main ideas). The topic of the texts was randomly selected that did not include technical words. The participants were asked to complete the reading tests in 30 minutes. (See appendix 1, 2). The test has two parts which included 9 items in part I and 8 in part II. Close-ended, open-ended, true/false and inferences questions are used in the study to test students' reading ability.

Scoring criteria. For the items in part I, six questions included in A were given scores of 5 (correct) or 0 (incorrect); for the three items in B (part I), each of them was scored as correct (10 points) and incorrect (0 point); for the items in part II, eight questions included in A, B and C was given scores of 5 points (correct) and 0 point (incorrect). The total point of the test was 100. The six written responses in A (part I) were focused most on the basis of appropriate and comprehensible in terms of main idea rather than spelling and grammatical structures.

3.5.2 Questionnaire

The pre-test and post-test were used to judge the participants' progress on reading competence. The questionnaire was administrated at the end of the target program would provide more reliable information. In the study, questionnaire was applied for collecting data on students' attitudes towards WebQuests-based teaching of reading with a 5-point Likert scale: (5) strongly agree, (4) agree, (3) neutral, (2) disagree, and (1) strongly disagree. McMillan and Schumacher (1993) stated that surveys are used so frequently in education and others fields "because accurate information can be obtained for large numbers of people with a small sample" (p.279). The reason for using this questionnaire as one of the instruments for data collection was that it allowed for collection of significant amounts of data economically and efficiently. At the same time, the questionnaire was a kind of controlled format in which all respondents were asked the same questions and were exposed to the same response options. There were three parts totally containing 25 items. The items measured five aspects such as (1) students' evaluation about WebQuests, (2) positive effects of WebQuests-based reading course, (3) students' feeling about WebQuests, (4) negative effects of WebQuests-based reading course and (5) students' conclusion on WebQuests-based reading course (See appendix 3 for full questionnaire). The data could be statistically analyzed using statistical package for social sciences (SPSS) version 16.0.

Table 3.1 Clustering the questionnaires

	Name of cluster	Question
1	Students' evaluation about WebQuests	Q1, Q7, Q9, Q11, Q22
2	Benefits of WebQuests-based reading course	Q3, Q5, Q10, Q12, Q14, Q17, Q19
3	Difficulties of WebQuests-based reading course	Q6, Q13, Q15, Q18
4	Students' opinions about WebQuests	Q2, Q8, Q16, Q20, Q21, Q23
5	Students' perception towards the WebQuests-based reading course	Q4, Q24, Q25

3.6 Materials

The instructional materials for treatment were drawn from different sources. They were composed of 4 reading lessons. The main textbook used for the program was *General English level 2* Faculty of Linguistics and Literature of a private university. *General English level 2* student's book was used as the course book for non-English majored students. The book consisted of 4 parts such as (A) Everyday conversation, (B) Grammar, (C) Reading, and (D) Writing. The Reading part had 7 lessons for skill development. Students had to learn this entire book in the second semester. The researcher randomly chose 4 in 7 reading lessons of the textbook to teach reading through WebQuests (used as intensive reading part). Besides, extensive reading part was adopted from other sources (from other textbooks or internet) which had the same topic to the intensive one. For implementing WebQuests-based reading course, the researcher created a WebQuests module at the online address: *http://zunal.com/webquest.php?w=130562*. The online WebQuests which had five components (introduction, task, process, evaluation and conclusion) stated in the literature review before were designed for this course. After having instructed in two hours every week by the teacher, the participants would get assignment via this online WebQuests.

3.6.1 WebQuests – A kind of World Wide Web used as a tool for language teaching

'World Wide Web (WWW) represents a new concept in technology, the library on your desktop, the dictionary at your fingertips, the sound at your ear. There is nothing that we hear or see that will not be available through WWW' (Sangster, 1995).

The World Wide Web (or the Web) is one of the most accessible tools available for academics to use. Academics who wish to create simple computer-aided learning courseware often face the decision of whether they should go down the path of learning a multimedia-authoring tool and distributing the material on a CD-ROM or flash disk; or whether they should move to the Internet and utilize the multimedia and creative activities on the Web. They are confused in choosing what to do since using the Web in teaching has many advantages but also some disadvantages.

There are many advantages of the Web, for instance, one has access to a Web server, publication is free, and once published, the material is made available to an international audience amounting to millions. However, accessing on networks is slow, and by opening up access to an international audience there are serious implications for copyright issues, these are some problems of the Web that academics may deal with.

The Web offers various opportunities for the academic who wishes to mount pedagogical materials via the Internet. According to Stuart Lee (2005), one of the best ways to get out of these troubles is creating a class website; this will act as a focal point for students to come to, detailing course time and changes and so on. Therefore WebQuest, a kind of website, is also a very useful language teaching tool for EFL learners.

3.6.2 Description of the WebQuests at the online address:

http://zunal.com/webquest.php?w=130562

As introduced in the literature review, the WebQuests mainly have five components: Introduction, Task, Process, Evaluation and Conclusion. Besides, the WebQuests may include some other extra parts such as: Welcome, Teacher page, Author, Reviews, Statistics, ect.

An example of WebQuests about Technology

Introduction part

Students were divided into eight groups of five to read the passage relating to Technology carefully and do the task below.

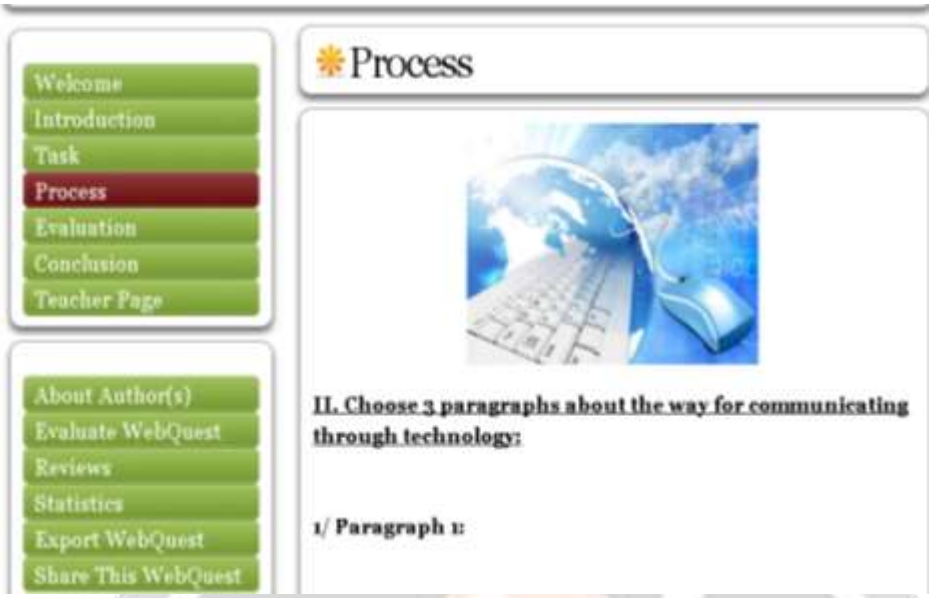
Task part

In this part, all groups have a task to choose 3 technological tools and answer the questions relating to this kind of topic. Each group searched for the information by opening the file *Reading 3-No Wrong Numbers*. The file was availably attached by the teacher in the Introduction part. The groups follow step by step in the Process part to complete this task.

The file *Reading 3-No Wrong Numbers* was available at the online address:

http://www.zunal.com/zunal_uploads/files/20120725050112apeMa.doc

Process part



In the process part, students had to follow these steps:

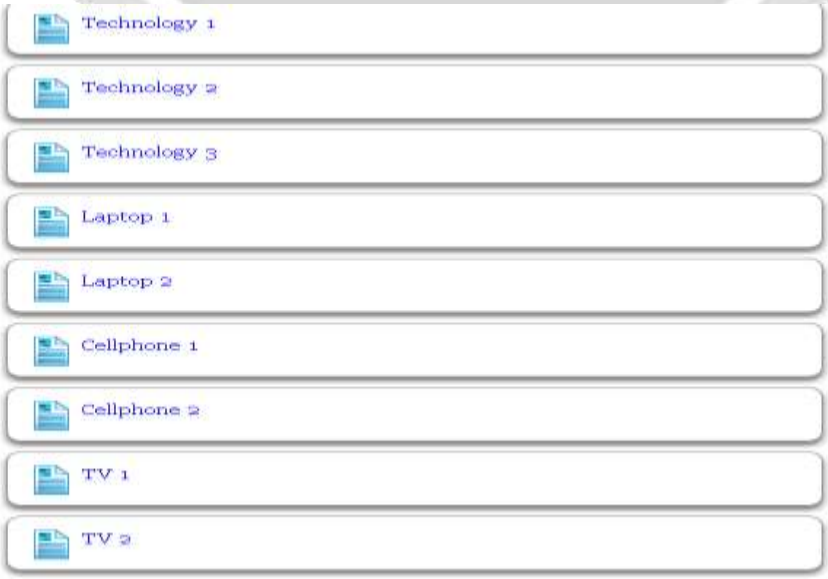
Step 1. Choose 3 paragraphs about the way for communicating through technology:

Step 2. Answer the following questions with information getting from Internet.

- What are some kinds of technology for communication of people? Describe one of them?
- Which kind of technology for communication that you use daily? Why?
- List 5 kinds of communication technology which are very important to people's living.
- Choose a kind of communication technology and tell its significances to you?
- List 5 special points of Laptop.

Step 3. Write the group's answers in the file *Reading 3-No Wrong Numbers.*

Students access on the below links for information:



Technology

http://www.ehow.com/info_7959656_technological-devices-can-used-classroom.html

http://www.nytimes.com/pages/technology/index.html

http://blogs.edweek.org/teachers/leading_from_the_classroom/2011/02/teacher_and_student_insights_on_using_technology_in_the_classroom.html

Laptop

http://computers.toptenreviews.com/laptops/

http://www.pcmag.com/reviews/laptop-computers

Cell phone

http://reviews.cnet.com/cell-phones/

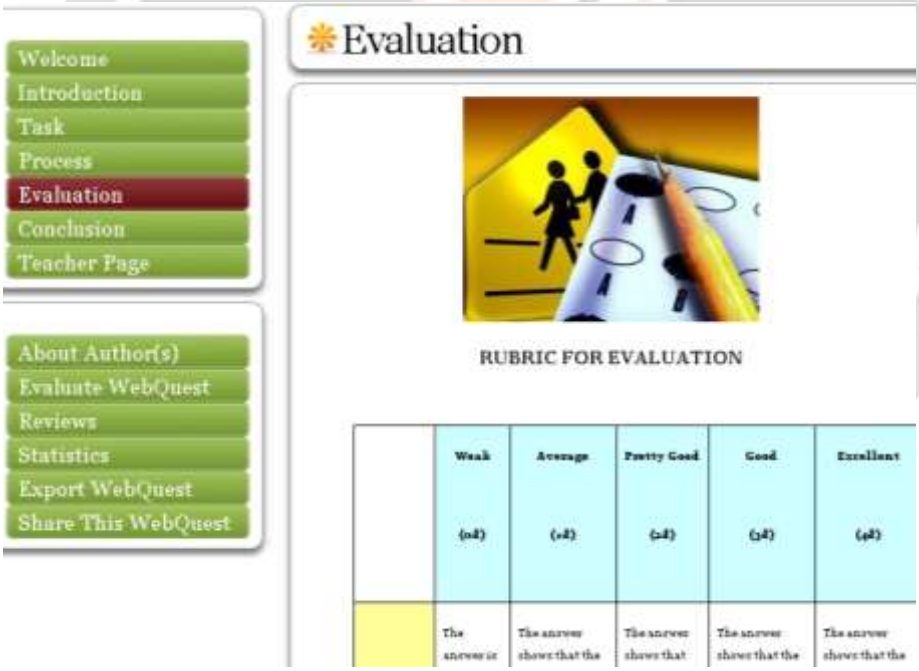
http://www.mobileburn.com/

Television

http://tv.toptenreviews.com/led-tv/

http://www.trustedreviews.com/tvs

Evalution part



In the evaluation part, students are able to look at the page for evaluating students' performance in doing WebQuests tasks.

	Weak (0d)	Average (1d)	Pretty Good (2d)	Good (3d)	Excellent (4d)
Students' responses	The answer is incorrect or not based upon the passage, or the student gives no response.	The answer shows that the student has little understanding of what the question has asked. The answer may be incomplete, may have several mistakes or inaccuracies, and may not fulfill the task required by the question.	The answer shows that the student understood or responded to only part of what the question asked. The information in the answer may be correct and based on the passage, but may not be clearly written, or exact enough.	The answer shows that the student has a complete understanding of what the question asks. The information in the answer is correct, but more supporting information and/or examples based on the passage are needed.	The answer shows that the student has a thorough understanding of what the question asks. The response is both accurate and complete. The student has supported the answer with information and/or examples from the passage, as asked for in the question. The

Conclusion part

In the conclusion part, teacher congratulated the students and assess whether the objectives of the lesson are achieved: Students have just done the task about technological devices. By doing this task and answering the questions, students have a lot of information of Technology in the world and its significant effects to human beings. I hope all of you will enjoy the task and get high point by doing it.

3.7 The pilot study

Piloting the pre-test and post-test

Before reading pre-test and post-test were used in the study, they had been checked for length, format, content and instruction consistency by an experienced English teacher of the school. Then they were given to 40 students in one class as the participants in the study to ensure its reliability and validity.

Piloting the questionnaire

There were 40 students who had the same level of English proficiency with the participants in the main study are given the questionnaires on student's perception about WebQuests-based reading course. This meant to check the questionnaire's reliability before it was used to collect the data.

Results of the pilot study

The researcher used the statistical package for social sciences (SPSS) version 16.0 to calculate the reliability and validity of the reading pre-test, post-test and questionnaire. Firstly, the computed result showed that the reading pre-test, post-test could be used in the study their internal consistency Cronback were 0.71 and 0.73 (See appendix 4, 5). Secondly, the reliability of the questionnaire was proven to be acceptable for collecting data of the study with its internal consistency Cronback was 0.79. (See appendix 6).

3.8 Procedures

Before the experiment, the participants of the study were asked to do the reading pre-tests. The tests were developed by the researcher based on the course objectives. The reading pre-test was administered to assess students' reading ability before the experiment.

The implementation of the WebQuests instruction was carried out two hours a week. The semester lasted for 12 weeks. The first week was devoted to the administering of reading comprehension pre-test. The implementation of the WebQuests instruction started in the second week as an orientation session so that the students got acquainted with the new teaching and learning style. At the end of the course, the reading post-test were administered to the students.

Apart from the quantitative data obtained from the test scores, qualitative data was also collected to determine the effect of the implemented treatment. The questionnaire items included in the guideline mainly concern the students' perceptions of the implementation of the WebQuests instruction (opinion on usefulness, level of difficulty, and their preference in using WebQuests).

Table 3.2 Time of research activities

Time	Research activities
Week 1	Pre-test for the participants
From week 2 to week 10	Teaching reading to participants with WebQuests instruction
Week 11	Post-test for the participants
Week 12	Questionnaires for the participants

Administering the pre-test and post-test. To compare and evaluate the achievement that participants got before and after the implementation of the WebQuests-based reading course in order to check the hypothesized improvement. To ensure the willingness in the study, the researcher asked the students whether they would like to join the study. Before the tests were conducted, the researcher had explained to the participants the intention study. Then, the researcher also explained the tasks they would be required to perform. However, the students were not informed that they would be given the the two tests

with the same format in order to ensure that the learners would not try to copy or memorize the tests items during the test time. Next, the pre-test was given to the students. To ensure the learners' full comprehension of the instructions, the researcher explained the instructions in Vietnamese. In the tests, the learners were given thirty minutes to complete them.

Administering the questionnaires. After completing the implementation of the WebQuests-based reading course, questionnaire was given to 40 participants. This activity was conducted in the class at a university where WebQuests-based reading course had been applied before. The researcher informed to participants about the purpose of questionnaires and asked them to read the items described in a 5-point Likert scale. The responses ranged from 1 (strongly disagree) to 5 (strongly agree). The participants were also reminded that their responses were to refer only to the WebQuests-based teaching of reading applied in classroom. The participants were encouraged to choose their answers honestly and they also asked about any questions they did not understand clearly.

Summary of research methodology

This part mentions the research methodology consisting of research design, participants, instruments, procedure, materials used for the research and the description of WebQuests-based reading course. The results that were obtained from the analysis of the data will be reported and summarized in the next part.

4. FINDINGS AND DISCUSSIONS

4.1 Findings

4.1.1 Research question 1

The statistical analysis of the pretest and posttest scores was aimed to answer the research question 1:

Does using WebQuests in teaching reading improve students' reading performance? If yes, to what extent?

We took into account the level of the group with the help of pretest scores which provided the baseline data for the comparison of posttest scores. The posttest scores comparison of the group would determine the effectiveness of the program on the 40 first-year students.

The test was used for pretesting and posttesting students' reading ability before and after the study. Its reliability is .71 (for pretest) and .73 (for posttest).

Table 4.1 Alpha coefficients of the pretest and posttest

Test	**Cronbach's Alpha**	**n (items)**
Pretest	.71	33
Posttest	.73	33

A paired-sample t-test was conducted to evaluate whether the means of the pretest score and the posttest score are different from each other. The results indicated that the mean score for the pretest (M= 62.00, SD = 10.610) was significantly smaller than the mean score for the posttest (M= 77.84, SD= 11.491), t= 6.421, p= .00 as in the following tables 4 and 5. The participants also increased their test scores from a pretest score mean of 62.00 to a posttest score mean of 77.50. These findings indicated that the WebQuests-based reading instruction had a positive effect on students' reading ability.

Table 4.2 Paired Samples Statistics

		Mean	**N**	**Std. Deviation**	**Std. Error Mean**
	Pretest	62.00	40	10.610	1.678
	Posttest	77.50	40	11.491	1.817

Table 4.3. Paired Samples Test

		Paired Differences						
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference	t	df	Sig. (2-tailed)

				Mean	Lower	Upper			
	Pretest - Posttest	-15.500	15.267	2.414	-20.383	-10.617	-6.421	39	.000

In brief, the t-test result confirmed the hypothesis 1 that the participants' improvement on their reading ability after the WebQuests-based reading course. However, the following questionnaire was administrated to gather the in-depth information on students' perspectives towards the use of WebQuests in teaching reading.

4.1.2 Research question 2

The statistical analysis of the questionnaire was aimed to answer the research question 2: *What are students' attitudes towards WebQuests-based teaching of reading?*

Students' perception of the WebQuests-based reading course (WQRC) was measured by the Questionnaire. Cronbach's alpha formula was used to determine the internal reliability of the collective pool of the 25 items in the questionnaire. The reliability coefficients for the total 25-item questionnaire reached 0.798. The mean score for the composite questionnaire items was 3.00 on a 5-point Likert scale. These findings demonstrated that, overall, students had a favorable perception of WQRC. Students' responses to the questions such as positive perception, even though some disadvantages of WQRC were mentioned. Disadvantages included frustration in dealing with too much unfamiliar vocabulary in the Web materials, confusion in selecting and synthesizing relevant information for the writing tasks, difficulty in working with group members for collaborative reading, and access failure or slow access to some of the Web materials.

The questionnaire consisted of 25 items which focused on 5 aspects: (1) students' evaluation about WebQuests (Q1, Q7, Q9, Q11, Q22), (2) benefits of WebQuests-based reading course (Q3, Q5, Q10, Q12, Q14, Q17, Q19), (3) difficulties of WebQuests-based reading course (Q6, Q13, Q15, Q18), (4) students' opinions about WebQuests (Q2, Q8, Q16, Q20, Q21, Q23) and (5) students' perception toward the WebQuests-based reading course (Q4, Q24, Q25). It was rated by scale with five levels: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The reliability of the questionnaire is .798.

The mean score for the questionnaire items showed that the students had a positive attitude towards the use of WebQuests in teaching and learning reading in general (M=3.72, SD=.214), t=21.452, p=.00 as in Table 6 and Table 7.

Table 4.4 Mean score for students' attitudes toward using WebQuests in teaching reading

	N	Mean	Std. Deviation	Std. Error Mean
mean	40	3.7270	.21433	.03389

Table 4.5. One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
mean	21.452	39	.000	.72700	.6585	.7955

The descriptive statistics of students' attitudes toward WebQuests-based reading course for the overall 25 items were presented in Table 8. The item Q8 "I prefer to choose my own topic in learning reading with WebQuests." had the highest means of all (M=4.30). Meanwhile, item Q23 "I have learnt nothing through this web-based reading course" was the least valued with the mean (M=2.03). To some extend, the results indicated that students had positive perceptions about the use of WebQuests in teaching reading in classroom. The specific facts for each aspect will be reported in the following parts.

Table 4.6 Students' attitudes toward WebQuests-based reading course

	N	Minimum	Maximum	Mean	Std. Deviation
q1	40	3	5	4.10	.632
q2	40	3	5	4.12	.607
q3	40	3	5	3.90	.744
q4	40	2	5	3.90	.709
q5	40	3	5	4.12	.648
q6	40	1	4	2.60	.810
q7	40	2	5	4.10	.810
q8	40	3	5	4.30	.608
q9	40	3	5	3.90	.744
q10	40	3	5	4.12	.563
q11	40	2	5	4.03	.800
q12	40	2	5	3.78	.947
q13	40	1	5	2.92	1.269
q14	40	2	5	3.78	.891
q15	40	1	5	2.57	1.174
q16	40	3	5	4.22	.733
q17	40	1	5	3.75	.954
q18	40	1	5	2.43	1.174
q19	40	3	5	3.82	.675
q20	40	1	5	3.93	.764
q21	40	3	5	4.20	.791
q22	40	2	5	4.22	.800
q23	40	1	5	2.03	1.121
q24	40	3	5	4.13	.648
q25	40	3	5	4.20	.564
Valid N (listwise)	40				

4.1.2.1 Students' evaluation about WebQuests

The information about students' evaluation about WebQuests, shown in table 9 and 10, was identified by three variables (Q1, Q7, Q9, Q11 and Q22). The means of these items were ranged from 3.90 to 4.22. Their average mean was 4.07

(SD=.374). The item Q22 "The WebQuests motivated me to read further" was ranked the highest mean of all. The second ranks were item Q1 "To do the WebQuests task I was able to analyze, synthesize, and evaluate the information when reading it" and Q7 "The WebQuests was rich in content with useful links". But the item Q9 "The materials provided by the WebQuests were appropriate to my English proficiency level" had the lowest mean in this category. The results showed that the participants made positive comments on WebQuests, especially in motivating them in further reading. In generally, they seemed to have good evaluation about the effect of WebQuests-based reading course.

Table 4.7 Students' evaluation about WebQuests

	N	Mean	Std. Deviation	Std. Error Mean
meancluster1	40	4.0700	.37499	.05929

Table 4.8 One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
meancluster1	18.047	39	.000	1.07000	.9501	1.1899

4. 1.2.2 Benefits of WebQuests-based reading course

In table 15 and 16, benefits of WebQuests-based reading course were identified by the items Q3, Q5, Q10, Q12, Q14, Q17, and Q19. The means of these items were ranged from 3.75 to 4.12. Their average mean was 3.89 (SD=.388).

All the items of this category had the means which were above 3.00. The most valued item was Q19 "Through this WebQuest-based reading course, my reading skill has improved" (M=3.82). It meant that the students considered an important benefit that their reading skill was significantly improved after the course. Besides, the one of the two highest means Q5 "Learning a WebQuest task helped me develop my thinking ability (synthetic, analytic, critical thinking...) (M=4.12) showed that learning with WebQuests was a way to enhance students' thinking ability. They were also pleased with the help of WebQuests which considerably enriched their vocabulary (Q17, M=3.75). The Q12 "When doing the WebQuests task I kept reading the documents again until to find the answers I needed" told the students' determination in doing with a WebQuest task. It seemed they were interested in finding what they needed via WebQuests. The other items (Q3, M=3.90), (Q10, M=4.12), and (Q14, M=3.78) indicated more specific advantages of WebQuests-based reading course to all students in the study.

Table 4.9 Benefits of WebQuests-based reading course

	N	Mean	Std. Deviation	Std. Error Mean
meancluster2	40	3.8964	.38819	.06138

Table 4.10 One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
meancluster2	14.605	39	.000	.89643	.7723	1.0206

4.1.2.3 Difficulties of WebQuests-based reading course

The category consists of four items (Q6, Q13, Q15 and Q18) which mentioned about the difficulties of WebQuests-based reading course toward learners in the study. The mean of this category was 2.63 (SD=.792, t=2.943, p=.005) which was below the test value 3.00. These items were designed to investigate the students' self-evaluation of their difficulties

throughout the use of WebQuests. The mean indicated that there was a great percentage of students who did not admit the difficulties from using WebQuests to learn reading. For example, the item Q18 "Learning with a WebQuest task was difficuft to me" had the lowest mean of all (M=2.43). This fact strengthened that the difficulties did not have a great affect on students' learning reading with WebQuests. In other words, the difficulties did not have any important role in their process of learnng reading via WebQuests.

Table 4.11 Difficulties of WebQuests-based reading course

	N	Mean	Std. Deviation	Std. Error Mean
meancluster3	40	2.6312	.79257	.12532

Table 4.12 One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
meancluster3	2.943	39	.005	.36875	.1153	.6222

4.1.2.4 Students' opinions about WebQuests

The category named s*tudents' opinions about WebQuests* had six items which revealed more clearly about students' thoughts of WebQuests-based reading after the course (Q2, Q8, Q16, Q20, Q21, Q23). Table 15 presented the mean of this category (M=3.80). Most of these items had positive viewpoints about WebQuests and its convenience. For example, the most valued items were Q20 "I prefer learning this WebQuest for reading course rather than the traditional paper-based reading course" (M=3.93) which presented the preference of learning reading with WebQuests to traditional one. In addition, students also gave out their feelings through the item Q2 "The lessons are more attractive and interesting with a WebQuest task" (M=4.12) and the item Q21 "Teachers should give more WebQuest tasks to students" (M=4.20). It seemed that the students liked to do more tasks in classroom designed via a WebQuest. Moreover, the other item Q23 showed the negative opinion "I have learnt nothing through this web-based reading course". However, its mean score (M=2.03) was the least valued one of 25 items of questionnaire. Therefore, this indicated that students nearly disagreed with the idea "*learning nothing through web-based reading course*". In other words, students shared the same positive views about what they got from the course.

Table 4.13 Students' opinions about WebQuests

	N	Mean	Std. Deviation	Std. Error Mean
meancluster4	40	3.8000	.34010	.05377

Table 4.14 One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
meancluster4	14.877	39	.000	.80000	.6912	.9088

4.1.2.5 Students' perception toward the WebQuests-based reading course

These items Q4, Q24 and Q25 which had the mean score 4.075, t=15.120, p=.00 were in the category "*students' perception toward the WebQuests-based reading course*". With the mean score 4.075, it confirmed that students positively perceived toward the WebQuests-based reading course. The item Q4 (M=3.90) said that students could work harder when learning with WebQuests assignment while the Q24 raised the idea "The WebQuest task could help me learn English better".

Moreover, the most valued item of all Q25 (*In general, I liked to learn with this WebQuest-based reading course*) was considered a conclusion of students after they had attended the course. This item's mean score was at 4.20 which insisted the choice and preference of students toward learning reading via WebQuests.

Table 4.15 Students' perception toward the WebQuests-based reading course

	N	Mean	Std. Deviation	Std. Error Mean
meancluster5	40	4.0750	.44968	.07110

Table 4.16 One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
meancluster5	15.120	39	.000	1.07500	.9312	1.2188

In short, the results obtained from the questionnaire analysis provided insights into the participants' perception of the targeted training regarding the use of WebQuests in teaching reading strategies, WebQuests-based reading course, its effects on learners' reading ability, the difficulties and benefits of WebQuests in teaching and learning reading during the program.

The data analysis of the pretest and posttest scores the responses to the questionnaire survey prove that the students not only significantly improved their reading ability but also had positive attitude towards the implementation of the WebQuests-based reading course.

4.2 Discussions

4.2.1 The effectiveness of WebQuests-based teaching reading

In investigating the effects of using WebQuests in teaching reading on the reading ability of students at a university in the Mekong Delta region, this research found that the performance of the students improved significantly in reading comprehension scores after the implementation of WebQuests-based reading course. However, the strongly significant differences occurring in the post-test when compared to the pre-test indicate that using WebQuest can improve students' reading ability.

Improvement in students' reading comprehension ability could be due to the knowledge of vocabulary and content that the students gained from the WebQuests lessons. The students stated clearly the usefulness of the WebQuests modules in providing them opportunities to learn new vocabulary and knowledge when they were exposed to a lot of reading materials. This is supported by the view of Nation (2002: 267) in that "reading has long been seen as a major source of vocabulary growth." Moreover, both L1 and ESL/EFL research studies have provided evidence showing the possibility of incidental vocabulary learning through repeated exposure (Pigada & Schmitt, 2006). Besides, practice is necessary for improvement in reading. According to Eskey (1986: 21, cited in Ranandya & Jacobs, 2002: 300), "people learn to read, and to read better, by reading." The more chance of reading practice the students have, the more chance of reading improvement they are likely to get.

Sufficient scaffolding and support can be an important issue for explaining the significant results of reading ability improvement. Theoretically, the design of scaffolding is at the heart of the WebQuests model (March, 2000). It can be noted that when reading authentic texts from the Internet, students always find it very difficult to cope. Although the World Wide Web provides the opportunity for language learners to access authentic materials in the target language, this very authenticity can be problematic due to the level of the language they encounter or the genres with which they are unfamiliar (Murray, 2005). Unlike textbook materials, authentic texts that students read from the Internet cannot be simplified to suit the students' proficiency level. In doing WebQuests, the students have to deal with a lot of authentic materials that can be overwhelming and discouraging for them. Therefore, scaffolding was needed to help students overcome such difficulties.

This research supports the findings of Tsai (2006) who investigated the effects of WebQuests use on the reading vocabulary acquisition and reading performance of Taiwanese EFL university students. Using WebQuests to enhance the normal reading instruction practice in EFL reading courses, Tsai (2006) found that students engaging with WebQuests significantly outperformed those in the control group in both their vocabulary learning and story reading comprehension. Although Tsai (2006) found WebQuests in EFL reading instruction may be useful in increasing students' story reading comprehension but not thematic reading comprehension, this research found that thematic WebQuests also can be effective in improving reading comprehension.

As discussed, previous research on the efficacy of WebQuests suggests that the task supports reading comprehension because it requires student analysis, synthesis, evaluation, judgment, problem solving and creativity (Dodge, 2006; Perkins & McKnight, 2005). The three underlying constructs found by Zheng et. al. (2007) to be critical to the design and related benefits of WebQuests are constructivist problem solving, social interaction and scaffolded learning.

Scaffolding teaching, in which a knowledgeable teacher provides individualized support for students, is a method that aims to build on prior knowledge while internalizing new information or skills. Such as with WebQuests, the task utilized in a scaffolded teaching activity should be just beyond the current ability level of the student. Important to the concept of scaffolded learning is the notion that the support mechanisms of the learning intervention should easily be taken away as the student gains proficiency at the given task. The goal of the teacher is, therefore, to support the student to be an autonomous learner. WebQuests well support this method as the task is designed to motivate students in a blended learning environment by using simple directions to accomplish an activity with clearly defined learning expectations.

Furthermore, as suggested by Zheng et al. (2007), the emphasis of learning via WebQuests could be placed on constructivist learning that incorporates critical thinking and knowledge application. Luźon-Marco (2010) found that WebQuests help students engage with texts related to their discipline by supporting autonomous learning and helping the students become accustomed to the methods of meaning construction needed in digital learning.

Similar to the findings of Zheng et al., Barros and Carvalho (2007) found WebQuests to be a valuable environment for teaching extensive reading as it can enhance motivation and promote constructivist learning. Similarly, this study supports the theory that WebQuests can be a useful tool in constructivist learning as the method does create an environment in which learning seems relevant, supports the acquisition of skills that are needed in real-world scenarios, and encourages students to analyze information using multiple tools and perspectives.

Reading comprehension, the subject of this research, is dependent on the student's ability to analyze and interpret text. Employing critical thinking skills in order to meaningfully draw connections between newly introduced text and previous knowledge is a crucial step in the development of reading comprehension. Finding that WebQuests supports the development of critical thinking, Puthikanon (2009) reported that students actively analyzed, synthesized, evaluated, and reflected on information pertaining to the topic of the WebQuests. Although Puthikanon found that low proficiency students struggled to effectively communicate their thoughts in the final products of the WebQuests task, this difficulty does not necessarily reflect the student's ability to comprehend the text or analyze it critically.

Although the teacher's role is to provide the support, or scaffolding, for the learning activity, student engagement in cooperative learning can effectively further the learning process. An environment such as created by WebQuests in which students work in small group settings with teacher assistance can help in reducing the support required from the teacher by the students. Many studies have found that using WebQuests enhanced vital cooperation and collaboration among students (Gorghiu, González, & García de la Santa, 2006; Lara & Repáraz, 2007; Murray & Mcpherson, 2009; Torres, 2007). This aspect of the learning process, and its role in reading comprehension, was not the specific topic of this research, but should be noted as an area in need of further research.

4.2.2 Students' perceptions toward WebQuests-based reading course

It is interesting to note that the use of WebQuests modules was accepted by most students. The students' language improvement, positive perceptions and attitudes, their increased participation could be considered as indicators of their acceptance. The central focus of investigating the effectiveness of this type of Web-based learning activities is to promote student learning and to create changes in terms of encouraging students to be highly engaged in learner-centered instruction.

The favorable perception of the WQRC from this study was consistent with previous teacher evaluations of Web-based ESL/EFL language learning activities in which Web resources were utilized (Aida, 1995; Mak & Mak, 1995; Shetzer, 1995). It also strengthened the results of prior studies on ESL/EFL learner's perception of using Web resources for language learning in general (Felix, 2001; Osuna & Meskill, 1998) and for learning writing specifically (Alias & Hussin, 2002; Lin & Hsu, 2000; Liou, 1997). In addition, it echoed the results of prior practice and research in which WebQuests

were utilized in learning various subject matter at different academic levels (Lipscomb, 2003; Mathison & Pohan, 1999; Peterson, Caverly, & MacDonald, 2003; Watson, 1999).

While this study specifically focused on non-English major students, previous research has found that students in all grades indicate they prefer WebQuests to traditional teaching methods (Abbitt & Ophus, 2008; Noordin, Samed & Razali, 2008; Prapinwong, 2008; Puthikanon, 2009). Gaskill, McNulty and Brooks (2006), while finding no difference in learning outcomes when WebQuests were compared to conventional methods, did reveal that both teachers and students enjoyed WebQuests instruction and the learning environment it created. Moreover, student perceptions were the focus of this research, general impressions suggest that in agreement with the findings of Vidoni and Maddux (2002), WebQuests can be viewed as an up-to-date strategy that provides knowledge to students in an interesting way.

Based on the findings, the change may be due to the following factors: the use of computers in the classroom can lead to higher motivation and higher levels of student engagement. Most students agree that computer technology suits their interest and their lifestyle. Besides, online activities are more attractive to students than the traditional ones (Urtel et al, 2006). Moreover, the cooperation among group members could help low achievers to gain more confidence when they had to read and write in groups and this was able to lead to more learning. The findings of this study have confirmed the importance scaffolding has for EFL learners, especially for those with low proficiency. The assistance could result in more favorable reading improvement, more positive perceptions, and active participation in the learning process.

5. CONCLUSIONS

5.1 Summary

5.1.1 Summary of the study

The purpose of the study was to evaluate the effects of WebQuests in teaching reading on reading ability of students at a university in the Mekong Delta region. It was hypothesized that the participants' reading ability would be improved significantly as a result of adapting and implementing the WebQuests-based reading course. Another hypothesis was that students would have positive points of view toward the use of WebQuest-based in teaching of reading. There were 40 non-English major students attending an experimental study with one group design. The instruments used in the study were the pretest and posttest for testing students' reading ability and the questionnaire on students' perceptions toward the use of WebQuests in teaching reading. The research took place in 12 weeks after the pretest with four tasks (lessons) chosen from the course book and other source. At the end of the program, participants took the posttest and completed the questionnaire. The data from tests and questionnaire were statistically analyzed by SPSS English version 16.0 package.

5.1.2 Summary of findings

The paired-samples t-test results provided the information that the implementation of WebQuests-based reading course improved students' reading ability. This finding was also confirmed by the questionnaire on students' opinions regarding WebQuests-based reading course. Additionally, the outcomes of the questionnaire indicated students' positive attitudes about WebQuests-based reading course as themselves and problems hindering their learning process of reading with WebQuests in classroom. Specific information showed in questionnaire did promote positive perceptions as well as students' difficulties towards learning reading with WebQuests designed by the teacher. The majority of students reported that their reading skill gradually throughout the course of the study. As a result, these findings illustrated the effectiveness of WebQuests-based reading course in developing students' reading ability.

5.2 Conclusion

In the present study, the author has conducted as an experimental research which applies WebQuests in teaching reading to enhance learners' reading ability at a university. The study was carried on 40 first year students at a university in the Mekong Delta region. The findings show that there was a statically significant difference in mean scores of the pretest and posttest. This means that the students after participated in the WebQuests course had more significant improvement in reading ability compared to theirs before the course. The survey questionnaire provided the favorable responses of the students toward the WebQuests which strongly supported the findings.

However, the statistically significant difference could not be enough to come to conclusion that the WebQuest-based course is much more effective than traditional paper-based program, because it is this research's limitation in terms of sample size and other uncontrollable variables. But the significance of the findings lies in the fact that students had favorable attitudes towards the WebQuests-based reading course which motivated them during the study, and partly contributed to better performance in their posttest.

Moreover, the study also provides information related to problem faced by the students during the experiment of the WebQuest-based reading course. Consequently, these problems will be considered in the future researches in the field.

The results of the study lay foundation for further research in a wider range of population and varying English proficiency levels. The study is hoped to increase the interest of the use of WebQuests in teaching English and in English language teachers for better quality of education in Vietnam.

5.3 Limitations

Despite the significant findings of the study in terms of students' improvement in reading ability and their favorable attitudes towards the use of the WebQuests, it should be admitted that the study has following limitations.

The first limitation is the size of the experiment; the study involved one group of 40 participants received the experimental treatment. Moreover, the experimental subjects' proficiency levels were at elementary in their first year, this narrow range of students' level partly prevented us from getting a full idea of the effect of WebQuests-based reading course at varying levels of proficiency. Therefore, we do not know yet whether students at different levels at the college would make any progress if they participate in this program. It may be more effectively used by more students in English.

The second limitation is attributed to the subjects' gender, 62.5% of the subjects are females. Hence, we could not make sure whether or not the similar effect can happen to a wider range of gender.

The third limitation lies in the fact that the WebQuests-based reading course was conducted for a period as short as twelve weeks with class held once a week for three periods each time. This time limit made a hedge for the researcher to study the participants' background such as their personality, motivations and so on. The results gained may due to the fact that students learn their lessons in out-of-class time.

Last but not least, for the time constrain, the WebQuests for the course were designed with only four in seven lessons for experimented ones. This did not make a straight line in creating learning styles for students. It would be better if the author could fulfill the WebQuests with all the lessons in the course book before taking the experiment into effect.

5.4 Implications

The process of globalization is an issue that directly affects the political, economic, socio-cultural and educational development of a society. Our country is no stranger to these changes; on the contrary we see how the government policies in the educational field are promoting the compliance to international standards of quality and development. Proof of this are the educational innovations that have occurred in recent years, where more importance is given to the need of learning English and computer technology in order to respond competitively to the requirements that these changes demand.

Along with new methodologies for teaching and learning English, the information and communication technologies emerged as support tools that help to optimize and stimulate the educational process, breaking paradigms and displacing many traditional methods, where students were considered as passive containers that could be filled with information.

Without a doubt technology is changing the world we live in, so it is necessary for language teachers to be aware of this reality and find new ways to prepare learners for a more competent world. By combining computers and internet with language instruction, teachers would have the opportunity to encourage students to learn about the target language using real and varied materials.

At the same time, computers give the teachers the opportunity to offer students, through the use of specialized applications and computer-based activities; an environment for interactive learning that can foster the acquisition of communicative skills and place them in similar to real-life situations. One of the great strengths of the Web is the potential to engage students in creative information gap activities and real experiential learning in the form of meaningful, process-oriented projects in authentic settings.

In addition, the use of computer technology in the language classroom fosters student motivation, promotes autonomous learning and stimulates students to take responsibility for their own learning.

Taking into account the above, we should reflect on our role as English teachers and understand that language instruction nowadays should be focused on the implementation of educational strategies that not only promote the acquisition of knowledge, but also the acquisition of significant learning and the development of competences and abilities in learners.

The implementation of this ideal of education is not easy, but it is a commitment that we as teachers must assume if we really want to bring a change to education and society. The English teacher of today should prepare to be competent not only in the domain of a language, but also in didactics where careful planning and organization is needed.

Nowadays, Teachers need to be prepared to offer students learning opportunities supported by ICT. They should be in the capacity of using new technologies as computer and internet to discover how they can contribute to the teaching and learning process.

English teachers need to be prepared to empower students with the advantages that ICTs provide. Schools must require teachers who possess ICT skills and who can effectively integrate this knowledge in the teaching of English.

The findings of the study imply that the WebQuests can serve as an effective tool to help English teaching and learning reading at a university. However, technology is merely a tool, not a method, so it should be used to serve the purpose of teaching and learning.

As this WebQuests-based course has proved in this study to be effective in improving students' reading ability, it is advisable for it to be introduced widely at the university and at difference language proficiency levels. However, the teacher is advised to be considerate and flexible in designing a WebQuests-based course for his/her students.

Whatever the design may come out, the following factors should be observed to make sure that such a course comes into effect:

First, it is necessary to analyze students in terms of their English proficiency levels, and needs. Students also need to have certain knowledge of Internet, as in the present study, they surely have basic computer skills and Internet skills as well.

Secondly, the program needs to be well-designed in terms of its aims and objectives which should be clear to the students at the beginning of the course.

Nowadays, there are some websites that help teachers to create their WebQuests easily with some short steps such as: www.zunal.com or www.questgarden.com, www.teacherweb.com, www.kn.pacbell.com/wired/fil/, etc. However, it is advisable for teachers to take a careful look all to decide which can help them create a WebQuests as their needs for the course. If they are not satisfied with the given form of the website, they can create a WebQuests by their own or with the help of IT web designer, free hosts can help them to post their website to the world, or they can spend some money to possess an own host for their website, which can help teaching and learning better because of faster accessing to the website.

However, the WebQuest creating option is selected, the teacher-designers should follow some useful points below:

WebQuest's title: Make sure the title of the WebQuests is related to the course and the students who are to going to be the users.

WebQuest's menu: Make sure the menu including parts of introduction, task, process, evaluation, and conclusion is created in a suitable way which can help students understand what they are going to navigate the web.

Content: Make sure the activities are appropriate and help students to learn and use English.

Design effectiveness: Make sure the WebQuest is user-friendly and well-designed, which can help students not to be confused when accessing the web.

5.5 Suggested further research

It could be noticed from the literature and the current research findings that using WebQuests in teaching reading has an impact on language learning in general and in students' reading skill in particular. Therefore, it would benefit to test the effect of using WebQuests in teaching other language skills such as writing, speaking and listening or in an intergrated language class in further research for getting insight into the effect of using WebQuests in language learning. In addition, taking into consideration the role of factors effected students' use of WebQuests to learn reading, it is suggested that the use of WebQuests to learn reading should be taken into consideration with factors such as individual's learning style, cultural background, and gender in further research. Finally, since a case study with small subjects did not give a full picture of the matter, further research in the field should be conducted with larger population including English-major students for making generalization. Since generalization is one of the important factors in making a good research, such a wider sample would be effective in giving a holistic view of using WebQuests in teaching reading among students in university.

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