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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching English as a Foreign Language (TEFL)

The Impact of Wiki Technology on Learning Business English Vocabulary

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be accepted in partial fulfillment for the requirements of the degree of

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Dedication

The thesis is dedicated to my family for their love, assistance and confidence in me.

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This research project would not have been possible without the support of many people during my studies and research at AUA.

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Abbreviations

A- Agree

AUA- American University of Armenia

BA- Bachelor of Arts

CALL- Computer Assisted Language Learning

CLT- Communicative Language Teaching

D- Disagree

EAP- English for Academic Purposes

EBAP- English for Business Academic Purposes

EBOP- English for Business Occupational Purposes

EBP- English for Business Purposes

EFL- English as a Foreign Language

EIU- Eurasia International University

EOP- English for Occupational Purposes

ESL- English as a Second Language

ESP- English for Specific Purposes

FL- Foreign Language

L2- Second Language

LT- Language Teaching

MA- Master of Arts

NAND- Neither Agree Nor Disagree

SA- Strongly Agree

SD- Strongly Disagree

SPSS- Statistical Package of Social Sciences

TEFL- Teaching English as a Foreign Language

TESL- Teaching English as a Second Language

Abstract

The aim of this study was to investigate whether wiki technology impacts students' learning of business English vocabulary. The qualitative data for this study were collected by administering four questionnaires to 24 students to see their attitude towards/preferences for completing different types of tasks during the course; by interviewing the students from both groups to explore further their approaches to the types of tasks accomplished via a wiki in one group and on paper on the other group; by observing classes in both groups in order to get in-depth information about the classroom phenomena such as motivation of the students, activities used in the classroom, interactions, instructions, classroom behavior, etc. The quantitative data were collected through pre- and post-tests from the groups of business English courses at Eurasia International University (EIU).

The results of the quantitative analysis of between-group comparisons demonstrated no significant difference on average in performances of both groups during the pre- and post-tests, separately. The students' achievement from test to test within the groups, in both experimental and comparison groups, revealed significant difference between pre- and post-tests results in favor of the post-test.

The results of the qualitative data showed that students were more motivated to learn business English vocabulary through the types of activities in the experimental group than the students in the comparison group.

Chapter One: Introduction

Within the last few years in the field of Teaching English as a Foreign Language (TEFL) there has been a paradigm shift both in teaching and in learning (Chen, 2005). There have been numerous innovations in educational theory and practice from the traditional teacher-centered instructions to student-centered instruction (Donnelly & Roe, 2010). Correspondingly, in the field of English for Specific Purposes (ESP) there have been significant changes which affect ESP students' learning and classroom practices (Gatehouse, 2001). The role of the ESP teacher has changed a lot; from a person-oriented teaching ESP has become job-oriented training (Frendo, 2005). Many practitioners and researchers have tried to find ways to encourage the active involvement of learners in the process of language learning. Vocabulary teaching strategies in TEFL have also changed being illustrated in ESP course design as well (Botswana, 2007). Consequently, other ways such as the use of various technologies like wikis, blogs, wallwisher or digital storytelling have become common in language teaching (Elerick, 2002).

One of the ways of integrating current technologies in the process of language teaching is the use of wiki technology in various contexts (Kavaliauskiene & Kaminskiene, 2010). Having advantages of being a database, collaborative tool for learning, and discussion medium, promoting student autonomy and serving a wide range of purposes, wiki technology has gained a crucial role in promoting collaborative language learning (Chen, 2008). The word wiki comes from the Hawaiian word for "quick" to represent that a wiki web site could be quickly created for a collaborative team (Deters, Cuthrell & Stapleton, 2010). In education, wiki technology can serve various purposes (Knobel & Lankshear, 2009). One of the fields that wiki technology can be implemented as a learning tool, is English for Business Purposes (EBP). Generally in ESP, vocabulary plays a crucial role because a student may be proficient in the English language but may not know the meaning of a word specific to the field. Hence, it can be deduced that in EBP courses, vocabulary is given a very specific role as well (Master, 1998). Thus, there is a need to stress the role of vocabulary in language teaching and learning from ranking the students as passive and active users of specific vocabulary according to their ability of using the words in particular situations into a far more collaborative way to help all

students succeed (Botswana, 2007). The collaborative learning environment provided by wiki technology can help EBP students improve their specific vocabulary through collaboration, negotiation, self/peer correction, etc.

1.1 Statement of Purpose

The present study was designed to find out the impact of wiki technology on learning business English vocabulary. If in learning foreign language vocabulary the collaborative learning environment is significant, then wiki technology should impact on students' knowledge of word stock specific to business English positively.

1.2 Significance of the Study

The shift in the incorporation of current technologies into language learning has resulted in using wiki technology for a wide range of educational purposes as a collaborative way of actively engaging students in the process of knowledge construction. Although there is a lot of research on how wiki technology impacts on learners' motivation, autonomy, creative thinking and general English learning (Aborisade, 2009; Chen, 2005; Chen, 2008; Coniam & Kit, 2008; Deters, Cuthrell & Stapleton, 2010; Elgort, Smith & Toland, 2008; Johnston, Tulbert, Sebastian, Devries & Gompert, 2000; Judd, Kennedy & Cropper, 2010; Knobel & Lankshear, 2009; Kovacic, Bubas & Zlatovic, 2008; Lund, 2008; Matthew, Felvegi & Callaway, 2009; Ruth & Houghton, 2009; Schwartz,Clark, Cossarin & Rudolph, 2004; Sharma & Barrett, 2008), there is a room to investigate whether wiki technology impacts on EBP vocabulary learning and how wiki technology can be applied in the Armenian settings. The purpose of this study is to find out the relationship between using wiki technology and learning EBP vocabulary. The study also aimed at investigating whether contributing to the course content may affect the enhancement of students' positive attitude towards implementing wiki technology for learning purposes. Accordingly, the study is significant in that it touches upon unexamined / very little examined relationship between using wiki technology and learning EBP vocabulary.

1.3 Research Questions

The research questions of the present study are as follows:

1. *Is there any relationship between using wiki technology and learning business English vocabulary?*
2. *How does wiki technology impact students' learning processes?*
3. *To what extent does the use of a wiki technology influence EBP students' attitude towards integrating technologies into the learning in Armenian settings?*

1.4 The Structure of the Thesis

The thesis encompasses four more chapters:

Chapter 2 reviews the relevant literature on the theoretical background of wikis, English for specific purposes and vocabulary teaching strategies.

Chapter 3 describes the methodology that was used to conduct this research. It presents the participants and setting of the study, research design, instrumentation and procedure of data collection.

Chapter 4 illustrates and analyzes the quantitative and qualitative data collected in attempted to provide an answer to the research questions.

Chapter 5 summarizes the findings, specifies the answers of the research questions, includes the discussion of the findings, points out the main limitations of the study and provides suggestions for further research.

Chapter Two: Literature Review

The central theme of this study is to investigate the impact of wiki technology (online spaces for collaborative learning) on business English vocabulary learning. This chapter will review relevant literature related to the present study. First, it will define the concept of English for Specific Purposes drawing a parallel with the concepts of English for Business Purposes and vocabulary learning and teaching strategies. It will also examine the distinction between business English and general English courses, will expand the discussion into the importance of needs analysis in ESP, specifically in business English and will set up the roles of the business English teacher in teaching business English vocabulary. The next step, after discussing the strategies of vocabulary learning in business English, will be to give the theoretical background of wiki technology exploring their purpose, general guidelines, and user-friendliness, and the effectiveness of applying wiki technology in an English as a foreign language (EFL) setting with the focus on business English vocabulary learning.

2.1. English for Specific Purposes

In the literature, when speaking about English for Specific Purposes, some authors mention that it is a movement based on the intention that language teaching should be specific in nature to meet the specific and language needs of particular groups of students (Donna, 2000; Frendo, 2005; St John & Price-Machado, 2001; Robinson 1991). The study of language for specific purposes dates back to the 1960s, when ESP became a new stream within the Teaching of English as a Foreign or Second Language movement (TEFL/TESL) (Dudley-Evans, &St. John, 1998). Robinson (1991) characterizes ESP as "normally goal-oriented" courses developed from a needs analysis, which "aims to specify as closely as possible what exactly it is that students have to do through the medium of English" (as cited in Dudley-Evans & St John, 1998, p.3). As ESP courses are goal-oriented, various 'branches' exist within the ESP movement (Thomas, 2002). The main 'branches' of the ESP movement can be categorized by professional area (Dudley-Evans & St John, 1998). The classification is presented in a tree diagram in Figure 1:

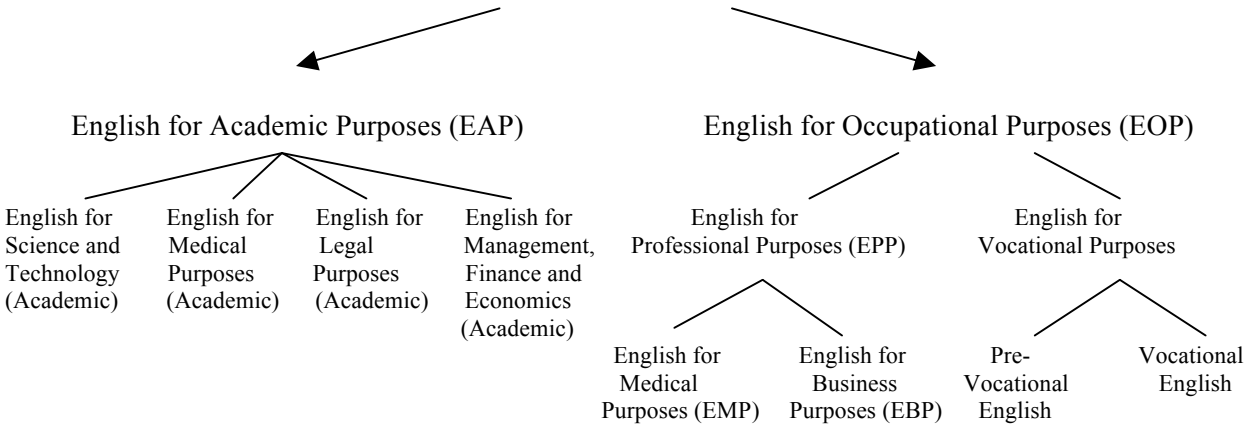


Figure 1: Classification of ESP Categories by Professional Area

As can be seen from the diagram, ESP is classified into two categories, namely, EAP and EOP. According to Dudley-Evans & St John (1991), EOP is the category which refers to English that is not for academic purposes; it is for professionals in the field of management, business administration and medicine, as well as for non-professionals for vocational purposes that are in-work and pre-work situations. The difference between EOP and EAP is in that the latter is designed for students who are studying science and technology, law, medicine, business and many other things during their academic years. On the contrary, EOP is designed for in-service and pre-service people, i.e. for practicing doctors and businessmen, for example (in-service people), and those who want to find a job and practice their interview skills (pre-service people) (Ellis, & Johnson, 1994).

2.1.1. English for Business Purposes /EBP/

The classification of ESP sets English for Business Purposes (EBP) under the category of EOP because it takes in the important elements of needs analysis, syllabus design, course design, materials selection and development which are common to all fields of work in ESP (Ellis, & Johnson, 1994). But EBP sometimes goes beyond EOP as it includes some elements of General English along with the corpus specific to business (Master, 1998). According to Kelly, the term ‘specific’ is used to cover a variety of Englishes some of which are very specific, and some are not (Kelly, 2005). As a business purpose is an occupational purpose itself, some authors find it reasonable to see EBP under the category of EOP (Donna, 2000; Ellis & Johnson, 1994).

Business English is considered special because of the opportunity it gives the practitioner to fulfill students' immediate needs for English (Frendo, 2005). The same cannot be said for General English classes, since students' needs are rarely so immediate or urgent in EGP classes (Ellis & Johnson, 1994). Moreover, Gui-min notices that business English is an individualized learning program, which is a flexible, learner-centered ESP program based on two strictly different strategies: firstly- the content, which is provided by the students through needs analysis; and secondly- the book, which is designed from the perspectives of a businessperson and a language teacher (Gui-min, 2008). Some authors point to several key factors that distinguish business English classes from general English classes (Ellis & Johnson, 1994). However, there are several situations where the distinctions are not so clear. The description below shows how business and general English programs are different and similar at the same time.

The first aspect that illustrates where is the line between business and general English programs and where they come together is *needs analysis*. If general English programs assess the language needs of the learner, business English programs assess the needs of the organization, job, and learner as well and define the level of the language mastery required by the job.

Assessment of level is the second aspect which is employed in general English programs by using placement tests or interviews to form groups of a similar language level. Assessment of level can also be applied in business English programs by using formal tests or interviews.

In business English courses, *syllabus*, which is another aspect that distinguishes it from general English programs, will have special objectives in case of special courses but set courses will have fixed syllabus and objectives. However, in general English programs, the course textbook determines the syllabus and objectives of the course.

Both business English and general English programs define *course objectives* (the next aspect) according to the needs analysis. In business English, course objectives might be employed according to the requirements of organization, job, and learner. In general English programs, course objectives

might aim to help learners pass examination courses, travel and live abroad, feel more confident in searching for new job opportunities, etc.

Time, which is considered another aspect of distinction, can be more compressed in business English programs than in general English ones because of the need for training to be cost-effective. General English programs are usually open-ended, which means that the examinations may be repeated several times.

The next feature that business English and general English programs have is *learner expectations*. In business English programs, learners' expectations from the course are high, since the learners are more goal-oriented and want to reach higher professionalism and positions. Learners, involved in general English programs, also have expectations but not so high- they want to make progress during the course.

Materials used in business English and general English programs cannot be the same as they are to meet the needs of two different courses with different learner expectations. Handouts, video, audio materials can be off the shelf for business English programs but they may not meet the needs of the course; however, all those materials can be freely applied in general English courses. That is why the teacher of a business English course may find it useful to develop materials that will address specific needs of specific tasks. However, general English teachers are usually not expected to develop materials for the course.

Business English and general English programs follow almost the same *methodology* in language teaching. Learning tasks and activities such as problem-solving, decision-making and team-building tasks as well as role-plays, discussions, presentations are common among both programs; however, activities will be differ greatly in vocabulary.

Evaluation of progress is another aspect that can draw some lines (both distinctive and common) between business and general English programs. Generally, in business English programs, the learners' progress is evaluated informally, which means that the learners are evaluated in their ability to communicate in the particular situation, their problem-solving abilities, etc. But if EBP

courses are designed in universities or colleges for academic purposes, formal examination (written or oral) takes place. In general English programs, formal evaluation (written or oral examinations) is mainly used. Formal evaluation evaluates learners' ability to use proper grammar and vocabulary, fluency of the ideas, and coherence of the paragraph or whole text. Oral examination also evaluates the learner's pronunciation and general communication skills. In general English programs, informal evaluation takes place throughout the course with the aim of assessing learners' progress in grammar choice and word choice, their communication skills, accuracy in pronunciation, etc (Fuentes & Rokowski, 2002; Ellis & Johnson, 1994; Frendo, 2005; Donna, 2000).

From these aspects mentioned above, it becomes clear that in many cases, a strict line between general English and business English programs can be drawn in the choice of vocabulary. Hence, business English vocabulary encompasses all the words that are of need to business English learners (Fuentes & Rokowski, 2002). The main concern here is in the choice of teaching general business English vocabulary or specific business English vocabulary (Rosenberg, n.a.). According to Rosenberg, the teacher has to choose which vocabulary to teach during the course: to do so, the teacher should take into consideration the following factors:

- The type of EBP course- academic vs. occupational
- Students' level of language proficiency
- Required skills to be emphasized
- Materials
- Time budgeted for the course

2.2. Vocabulary Teaching Strategies in English

As vocabulary plays a key role in language teaching (LT), the strategies for teaching vocabulary vary along with the goals of the course, needs of the learners and the knowledge of the teacher. In the next two subsections, vocabulary teaching strategies in EFL are described and how they are employed in EBP vocabulary teaching is illustrated.

2.2.1 Vocabulary Teaching Strategies in EFL

Vocabulary along with lexical competence has a leading role in language learning since it is at the very heart of communicative competence (Jun & Xiaomei, 2009). However, the role of vocabulary has not received sufficient attention in the past (Nizbet, 2010). Syntax and phonology have been prioritized over vocabulary; it was believed that second language vocabulary could be acquired naturally without any emphasis (O'Dell, 1997 cited in Kesler, 2010).

In modern language teaching, when the Grammar Translation Method was first introduced, grammar was prioritized over vocabulary; vocabulary items were selected to illustrate grammar rules (Schmitt, 2000 cited in Nizbet, 2010). In the 1970s, while Audio-Lingual Method was dominant, language learning was believed to be a process of habit formation. The primary focus of the method was on pronunciation and oral drilling of sentence patterns; new words were introduced only if they were needed to make drill possible (Larsen-Freeman, 2000). The secondary status of vocabulary in language teaching remained the same in the 80s when the Communicative Language Teaching (CLT) emerged. Vocabulary was taught mainly as support for functional language use (Shujuan, 2009).

Only in the Vocabulary Control Movement did vocabulary receive significant attention. Ogden and Richards were the first who tried to compile a list of minimum necessary English vocabulary (as cited in Nizbet, 2010). The list, known as "Basic English", consisted of 850 words. From then on, the main criterion in selecting words was considered the frequency of words, and, nowadays, vocabulary is treated as one of the most important aspects of L2 learning (Shujuan, 2009). Consequently, the recent development of computer-generated corpora has led to the compilation of various word lists intended for teachers (Benthuysen, n.a.). But the controversial point is which of two strategies, implicit and explicit ways of teaching, are more effective in L2 vocabulary instruction. According to Ellis (1994), implicit learning is the natural and simple way of acquiring knowledge without conscious operations. In contrast, explicit learning has to do with conscious operations wherein the learner "makes and tests hypothesis about the target language" (Ellis, 1994).

The debate over the effectiveness of implicit versus explicit instruction and learning applies to all components of L2 learning including vocabulary. Krashen (1989) points to implicit way of L2 vocabulary instruction; on the other hand, West assumes that explicit learning is more effective than implicit (as cited in Nizbet, 2010). Over the last fifteen years researchers and methodologists have devoted a great deal of time and effort to find out which way of L2 vocabulary instruction is more effective (Benthuysen, n.a.). According to some convincing research results, L2 learners benefit more from explicit vocabulary instruction than from incidental vocabulary learning (Hinkel, 2006; Nation, 2005; Sokmen, 1997 cited in Nizbet, 2010). However, some methodologists think that both implicit and explicit processes take place in L2 vocabulary acquisition. Ellis is a representative of this position, and he claims that "the recognition and production aspects of vocabulary learning rely on implicit learning, but meaning and meditational aspects of vocabulary heavily involve explicit, conscious learning processes".

2.2.2. Teaching Vocabulary in Business English Courses

As mentioned in previous subsections, business English courses require special vocabulary, which differs from general English vocabulary (Donnely & Roe, 2010). Learners who are generally fluent in English may still have a lack of vocabulary knowledge used in the business world. These learners may be students learning at universities, colleges as well as business people, who need English for their current or future jobs (Gui-min, 2008). The role of the teacher is to find a wide variety of ways to help their learners acquire, retain and be able to use the words they need in their professional lives (Rosenberg, n.a.). Since English for Business Purposes is a category of ESP, which is a stream within TEFL/TESL, the methodology of teaching specialized vocabulary may not differ radically from that of general English. Hence, the same questions as how to teach vocabulary explicitly or implicitly, or the combination of two, arise in teaching specialized vocabulary as well (Fuentes & Rokowski, 2002).

Beck, McKeown and Kucan (2002) propose a useful way for classifying vocabulary and making instructional determinations regarding the choice of words and the way of teaching new words (as cited in Nizbet, 2010). According to this framework, vocabulary within a given discourse can be

grouped into three tiers. Tier 1 encompasses commonly-occurring, basic words of English that are easily recognized by native speakers. Tier 2 words include academic vocabulary and other lexical items which appear frequently across a variety of domains. This category of words is very essential in teaching specialized vocabulary since it plays crucial role in understanding the meaning of a text. Tier 3 words are low-frequency words which are often discipline-specific.

From this framework, it becomes clear that different words within a given text require varying degrees of instructional focus in the classroom (Fuentes & Rokowski, 2003). Some words require in-depth teaching whereas others can be addressed with brief explanations. For example, Tier 2 words are often very important for comprehension of a text and should be addressed with special attention: multiple-meaning words, which have specialized meanings in particular disciplines fall into this category (Nizbet, 2010). Thus, Rosenberg suggests starting with Tier 2 words to teach specialized vocabulary. This rule remains the same in teaching business English vocabulary as well. According to Beck, McKeown and Kucan (2002), the following steps should be taken for selecting vocabulary in classroom instructions (as cited in Nizbet, 2010):

1. Select a text to be covered by the students learning business English
2. Identify the vocabulary items that the students will likely be unfamiliar with
3. Classify the words according to tiers
4. Analyze the word list taking into account the following: a) which words are Tier 2 words; b) which Tier 2 words are the most crucial for comprehension of the text; c) does the text contain other words (Tier 1 and/or Tier 3) that are of need for the comprehension of a text
5. Provide the way that will be more effective in teaching the words

These steps should be taken after deciding the purpose of the business English course - academic or occupational. Consequently, the materials should be appropriate to the level of the particular business English course and meet the students' needs (Dudley-Evans & St John, 1998).

2.3. The Business English Teacher

In most other fields of teaching, the teacher knows more about the subject than the learner, but in business English, the relationship can be more symbiotic; the teacher knows about language and communication but the learner may know more about the job and its content (Ellis & Johnson, 1994). Business English teacher needs to be able to make proper decisions about the language and language teaching. The teacher needs to be informed about the business world and be able to address language teaching issues within EBP (Frendo, 2005).

Within the field of business English, the teacher may have several roles. Frendo (2005) sees the business English teacher as a trainer, coach and consultant.

2.3.1. Roles of Business English Teacher

According to Frendo (2005), one of the main differences between the teachers teaching business English classes and other fields is that a business English teacher may sometimes be a *trainer* rather than a teacher. Traditionally, a teacher is a person whose aim is to educate someone giving them a chance to succeed in life. On the contrary, a trainer is someone whose aim is to change a person's behavior, abilities so that they can do a specific job. Teaching is person-oriented, whereas training is job-oriented (Dudley-Evans & St John, 1998). Thus, a language teacher helps a student to learn a language for a variety of purposes; however, a trainer is training them to gain needed abilities and behave in a certain way (Frendo, 2005).

Another role of a business English teacher identified by Frendo (2005) is the role of *coach*. A coach is someone who helps the learner to better understand his or her own strengths and weaknesses, and take advantage of the learning opportunities in his/her own working environment. A coach assists the learner to take full responsibility for his or her learning becoming an autonomous learner.

Frendo (2005) also suggests the role of a *consultant* for a business English teacher, as a consultant has an ability to identify the main needs of the course and evaluate training delivery and outcomes. While Frendo (2005) combines the roles of *researcher, collaborator* and *evaluator* into the

role of a consultant, Dudley-Evans and St John (1998) use those concepts to give the business English teacher various roles. According to the authors, the researcher is someone who carries out needs analysis to find out the type of business English course – EBAP or EBOP, collaborator cooperates with subject specialists to design the course, and evaluator assesses the progress of students and evaluates the effectiveness of courses and teaching materials.

Meanwhile, Dudley-Evans and St John (1998) also mention that EBP teacher should have the following skills:

- a knowledge of the communicative functioning of English in business contexts;
- an understanding of business people's expectations and learning strategies
- an understanding of the psychology of personal and interpersonal interactions in cross-cultural settings
- some knowledge of management theories and practice
- first-class training skills

2.4. Summary of the Section

This section encompasses major differences between general and business English courses giving the characteristic features of both types of courses. The main difference between those two courses is the specialized vs. general English vocabulary and the needs of the students enrolled in the courses – job specific vs. general needs. The latter characteristic feature results in the role of the trainer teaching general/subject specific fields. This goes in line with the way of teaching, for the purposes of this study, the way of teaching specialized vocabulary. Besides, there is a need to identify the group of specific words, which is to be taught in the area specific context in order for students to be able to use the words in their daily communication. This distinction helped me understand the main stone of business English vocabulary which is to practice business words in a way that would provide the students with business collaborative environment.

2.5. EBP Vocabulary and Technologies

Technology innovations enable the expansion of educational courses all over the world (Ruth & Houghton, 2009). Innovations like on-line learning are major streams that have radically changed the track of education (Chen, 2008). On-line learning provides major benefits to both students and teachers. The benefits include convenience, time and geographic flexibility. Moreover, multimedia tools simulate real task environments, which can motivate learners as they facilitate learning (Knobel & Lankshear, 2009).

Here arises a question about what links EBP vocabulary with technologies. According to Schmitt and McCarthy (1997), *vocabulary* is the knowledge of individual's word stock and the ability to use those words in particular situations, i.e. for communicative purposes. Hence, what links vocabulary learning with wiki technology is the collaborative learning environment provided by wiki technology (Coniam & Kit, 2008).

2.6. Wiki Technology

Among the recent computer-based resources that facilitate Foreign Language (FL) learning and teaching are wiki technology. The word "wiki" is derived from Hawaiian word "wiki wiki", which means "fast, quick; to hurry, to hasten" (Coniam & Kit, 2008, p. 53). A w*iki* is a net-based, hypertextual and collective authoring tool, where each page can be changed (or deleted) by pressing an editing button, and the new version is immediately available online (Lund, 2008). The first wiki was created in 1995 by Howard Cunningham as a novel way of developing private and public knowledge bases (Leuf & Cunningham, 2001 cited in Knobel & Lankshear, 2009). Wiki technologies are tools that challenge traditional approaches of learning in terms of facilitating the construction of knowledge at the screenface rather than in face-to-face interaction (Ruth, 2004, cited in Ruth & Houghton, 2009). And nowadays, the world demands differ from those of 20th century. Teaching methods have been changed to meet the needs of the growing world. Technology integration into the teaching environment has brought noticeable opportunities for learners to feel the effect of technologies in learning processes. Teachers use technological tools in order to make teacher-student, student-student

interactions closer and to reach more effective results in a short period of time (Sanden & Darragh, 2011; Knobel & Lankshear, 2009).

Among those technological tools is the use of wiki technology in education. Wiki technologies are educational tools that promote collaborative and interactive nature of learning and teaching. There are thousands of wiki pages designed for different courses with course specific objectives. This means that wiki technology can be applied for various purposes like promoting students' social, emotional and identity development by giving them ownership, responsibility and personal voice (Sanden & Darragh, 2011.

Another characteristic featured by wiki technology is the way of collaborating and sharing information in local and global settings. It is done by joint creation of content, where each individual has its own contribution to the course content and the outcome is the final complete version.

The period of time, when wiki technology as a learning tool has been used, course developers noticed that wiki technology can also promote critical analysis skills in students. This is done by giving them an opportunity to estimate their peers' posts and write their own point of view on that particular issue. Students can also search for relevant information in the Internet and upload some articles (or whatever they find important) to the course wiki page (Sanden & Darragh, 2011; Duffy, Peter and Bruns, Axel, 2006).

Moreover, teachers' use of wiki technology in learning environment gives the students a chance to be guided by their instructors in order to understand what is required by them to do in one hand, and to gain deeper knowledge of collaborative creation of class context, on the other hand.

The use of wiki technology by teachers provides students the exposure to the various word processing tools, which can promote students' literacy strategies for managing different types of texts in various contexts.

Wiki technology also has another value for their users: it is that they give students from different cultural settings to communicate with each other in an online collaborative environment utilizing each other's experiences and fund of knowledge.

From the above mentioned six advantages of utilizing wiki technology for educational purposes, it becomes obvious that new technologies such as wikis, in line with other teaching tools, can also be effective teaching a modality addressing the needs of evolving teaching demands (Sanden & Darragh, 2011; Elgort, 2007; Kovacic, Bubas, Zlatovich, 2008).

2.6.1. Wiki Technology and EFL Learning

Wiki technologies are believed to be useful in supporting collaborative activity and improving student interaction throughout the course (Deters, Cuthrell, & Stapleton, 2010). Incorporating wiki technology into EFL learning has brought a flexible and user-friendly interface for collaboration, knowledge creation, archiving, and student interaction (Schwartz, Clark, Cossarin & Rudolph, 2004). Wiki technology enables EFL learners to improve their writing and reading skills in an online environment through collaborative interaction and participation. Due to the ease of collaboration, wiki technology has become one of the tools for project management, collaborative writing and reading in EFL learning and teaching (Raygan & Green, 2002). In classrooms, learners may not have time to read and build on each other's work; however, in a collaborative online environment, they are given this opportunity (Matthew, Felvegi & Callaway, 2009). Research, discussions, and reflections started in the classroom can be continued online; reading and reflecting on course content outside the classroom increases learners' understanding and retention (Ball & Washburn, 2001). Contributing to a wiki through creating course resources and building course content in a shared space, learners can add, delete, and revise their writing, which then enables them to learn the material better than if they only read the textbook (Engstrom & Jewett, 2005; Evans, 2006; McPherson, 2006; Parker & Chao, 2007, cited in Matthew et al., 2009). Following is the list of some of the courses where wiki technology can be realized as a learning tool in EFL: a) writing courses; b) reading courses; c) ESP courses; d) project-based learning courses; e) distance language learning courses; f) computer-assisted language learning (CALL) courses; etc.

2.6.2. Wiki Technologies in Business English Settings

All wiki technologies can potentially adopt all features found in other wikis, simply by accessing and customizing the source code. According to Meatball Wiki (2003), there are more than 200 wiki programs, although only some of them might be considered unique: Dolphin Wiki, Php Wiki, MoinMoin, Swiki Clone, Twiki Clone, UseMod Wiki, TikkiTavi, Zwiki Clone, and Open Wiki (Schwartz, Clark, Cossain, Rudolph, 2004). One free, easy-to-use wiki provider is Wikispaces. This wiki program was chosen by BESIG (Business English Special interest group) and is used by teachers across the world to share information on business English language teaching materials (Sharma & Barrett, 2008). Moreover, each teacher can create the course specific web-page in a wiki to share course materials, promote collaborative learning, make discussions on different topics, and provide additional video, audio recordings.

The use of wiki technologies in teaching business English vocabulary can enrich the students' word stock because wiki technology has the following educational uses – a) motivates students to collaborate with each other and share their ideas; b) students have a chance to revise course materials several times; c) integrates students to the online environment of language learning.

These factors have a crucial role in developing EFL vocabulary, in business English vocabulary particularly, because the students read various sources related to the business world and contribute to the course content. These are all prerequisites for digesting the vocabulary specific to business English (Elerick, 2002). Wiki technology can be used for collaborative business communication through writing and can support various content-based and form-based language learning activities like the creation of reports, presentations, and graphical pages with links to external sources (Coniam & Kit, 2008). The use of social software like wikis creates an opportunity for designing problem-based learning activities, where students can propose their own solutions having looked at their fellowstudents' suggestions as well (Kovacic, Bubas & Zlatovic, 2007).

Though there is a lot of research done in the field of business English vocabulary teaching and learning as well as in finding out the impact of wiki technology on learning various subject areas and

on business related areas, as well, there is a lack of sufficient research (at least, within the literature reviewed for this thesis) in finding out the relationship between the use of wiki technology and business English vocabulary learning. Hence, this research will try to discover the impact of wiki technology on business English vocabulary learning.

2.7. General Guidelines for Using Wiki Technologies

There is no single way of creating and implementing wiki technologies, and some researchers have already observed that teachers go to different degrees of organizational process when implementing wiki technology within their classrooms to promote collaborative learning (Elgort, Smith,&Toland, 2008). Nevertheless, in literature and software tutorials some general guidelines for using wiki technology in education exist. According to Ruth & Houghton (2009), guidelines for using wiki technology in education are very much like guidelines offered for report writing, and successful wiki development will depend on the following steps and guidelines:

- *Getting started* – teachers must take the lead in giving clear directions to students and putting them on the right track. Many students might never have been introduced to wiki technology before and may be confused about what wiki technology is. Thus, in the beginning, it is important to build a clear understanding of what wiki technology is in students and what is the essence of using wiki technology in education (Judd, Kennedy, & Cropper, 2010). It can be useful to show a sample of wiki page that will help students to inspire thoughts on why to use wiki technology in education.
- *Choose a good title* – choosing a good title is one of the most important parts of creating a wiki page. A good title will make it easier for people to understand what the page is about and to link to that page (Knobel & Lankshear, 2009).
- *What kinds of sources should be stored in wikis* – the wiki can contain a wide range of materials starting from Microsoft office word documents, articles, pictures, diagrams, audio, video recordings to external links. The variety of materials stored in wikis can be both teachers' and students' contributions to the course content (Knobel & Lankshear, 2009). There should be certain criteria for including and excluding any piece of educational materials, and these decisions should be

shared by teachers and students so that both teachers and students maintain ownership of and responsibility for their wiki content.

- *Make contributions to the page easy* – a wiki is primarily about many people are doing small contributions to the page gradually. If someone wants to create a new page in a wiki, the aim should not be to make it very personally because in that case you will scare away other contributions (Judd, Kennedy, & Cropper, 2010).
- *Who has access to wiki technology* – each person can have an access to wiki technology by having a username and password. In establishing the wiki, the owner (teachers or learners) may control who can view or contribute to the site. There are four options available to control the wiki page: a) closed – only users approved by the owner can read the wiki page; b) semi-closed – only users approved by the owner can read and/or post; c) semi-open – anyone can read, but only approved users can post; d) open – anyone can read and/or post (Ruth & Houghton, 2009).

2.8 Advantages and Disadvantages of Using Wiki Technologies

The integration of wiki technologies into education has emerged during the last 15 years and has brought a new approach and style in learning (Lund, 2008). As a wiki technology is one way to 'reach' the students and to allow students to benefit more from the learning process, the users of wiki technology noted several advantages and disadvantages while using wiki technology for educational purposes. The advantages of wiki technologies are as follows:

1. *Promote collaborative learning* – collaborative learning skills are widely believed to be acquired in the wiki environment. The collaborative context provided by wiki technology promotes users to negotiate and collaborate with others as well as to learn from others' work (Lund, 2008).
2. *Provide open-editing* – users can change their own and others' work. Wiki technologies provide an easy way for competing collaborative projects, extending group work by continuing it asynchronously outside the course, which encourage learners to participate discussions in the online environment.

3. *Allow non-linear text structure* – wiki technology enables non-linear navigation of text structure, which means that users can edit their posts multiple times and each time the changes can be saved and viewed by other users (Ruth, & Houghton, 2009).
4. *Encourage multiple modalities* – wiki technology is able to incorporate graphics, audio, video and animation that allow students to express themselves and express meaning which may not be fully expressed in the text format.
5. *Provide a simple editing environment* – the easy editing process (little navigation and clicking are required) enables non-technical users to participate in the collaborative work (Schwartz et al., 2004).

On the other hand, the teachers point to some disadvantages that they faced while using wiki technology for educational purposes (Sharma, & Barrett, 2008):

1. *Students may not be comfortable or familiar with collaborative learning* – students may have some difficulties in sharing their work in a public space and may have some concerns in commenting on others' work.

2. *Online texts may increase challenges in learning* – the text format in multimedia tools differs from that found in formal printed text formats, which may reduce learners' comprehension of the text.

2.9 Summary of the Section

This section clarifies the use of wiki technology in EBP vocabulary learning drawing the clear line between the communicative approach of vocabulary teaching and collaborative learning environment provided by wiki technology. It says that a person needs to know some words in order to communicate with others: wiki technology gives the person an opportunity to collaborate with each other and learn from others, which is a communicative environment itself. That is why wiki technology is considered one step towards the communicative approach of vocabulary learning.

However, as each way of communication, the wiki way of learning has its own advantages and disadvantages, as well. But there is a need to pay attention to the fact that disadvantages of wiki technology are less than advantages. Hence, wiki technology can be considered among the useful tools for language teaching and learning purposes.

Taking into account all the advantages and disadvantages of using wiki technology for educational purposes, the current study was constructed in a way that would increase the value of wiki technology in business English vocabulary learning.

Chapter Three: Methodology

The present study was designed to investigate whether and to what extent wiki technology influenced EBP learners' vocabulary learning and engaged them into the learning process. The study was also aimed at investigating whether collaborative learning environment provided by wiki technology may affect the enhancement of students' positive attitude towards implementing wiki technology for language learning purposes in Armenian settings. Hence, this chapter presents the setting and the participants of the study, instruments of data collection, and the procedures. The underlying assumption was that wiki technology may have positive impact on EBP students' vocabulary learning and may positively affect their attitude towards using wiki technology for educational purposes in Armenian settings.

The study followed a mixed methodology: a combination of both qualitative and quantitative methods.

3.1. Restatement of the Research Questions

The research questions of the present study were as follows:

1. *Is there any relationship between using wiki* technology *and learning business English vocabulary?*
2. *How does wiki technology impact students' learning processes?*
3. *To what extent does the use of a wiki technology influence EBP students' attitude towards/preferences for integrating wikis into the learning in Armenian settings?*

In order to find answers to the above questions, quasi-experimental research design was used. As the participants of the study were not randomly assigned to the experimental treatment, the pre-experimental intact group design was employed. This is the design that most classroom researchers use where the students are placed in the classes on the bases of some criteria, i.e. scores on a placement test (Farhady, 1995).

To find some relationship between using wiki technology and learning business English vocabulary (i.e. the first research question), the research followed some of the characteristics of the true experimental method, i.e. pre- and post- tests administered before and after the treatment. For seeking the answers to the second and the third research questions, a type of descriptive method of research, i.e. causal-comparative study of interrelational methods, was implemented.

3.2. Setting and Participants

The research was conducted in the business English classes, Department of Management and Finance at the Eurasia International University in Armenia (EIU). The course lasted 16 week starting from March 4, 2011 to June 17, 2011. The classes met once a week for 80 minutes.

The total number of the participants of the research was 24 placed in two groups, i.e. experimental group with 11 students and comparison group with 13 students. The participants were 3rd year BA (Bachelor of Arts) students studying business English academic course at EIU. The age range of the students was from 18 to 24; they were mixed gender students. The students mother tongue was Armenian and they were learning English as a foreign language. The participants' business English language proficiency level was intermediate on the basis of a final test taken after completing business English academic course at EIU for low intermediate learners and before being transmitted to the intermediate business English academic course.

Two groups that were not randomly assigned, i.e. convenient sampling approach was implemented, were similar in that they accomplished the same three types of tasks during the study but the way of handing in those tasks was different. The students of the experimental group accomplished the tasks via a course wiki; whereas, the students of the comparison group did the same tasks on paper.

The experimental group was taught by the instructor from EIU and the researcher helped her throughout the classes and acted as a co- instructor. The comparison group was taught by another instructor from EIU.

3.3. Materials

The textbook used during the course was "*Market Leader*" by Falvey D., Kent S. and Zemach D. (2005). This is a "multi-level business English course for businesspeople and students of business English" (Falvey, Kent & Zemach, 2005). It has been developed in association with the *Financial Times*, one of the leading sources of business information in the world. The book consists of 14 units based on topics of great interest to everyone involved in international business.

This new edition of the Intermediate level features new authentic texts and listening, and reflects the latest trends in the business world. If the student is in business, the course will greatly improve his/her ability to communicate in English in a wide range of business situations. If the student is not in business, the course will develop the communication skills needed to succeed in business and will enlarge his/her knowledge of the business world. The set consists of Student Book, Workbook, Teacher's Manual and Class CDs.

The first seven units (including Brands, Travel, Organization, Change, Money, Advertising and Cultures) of the course-book had been covered during the fall, 2010. The last seven units (including Employment, Trade, Quality, Ethics, Leadership, Innovation and Competition) were covered during this study conducted in the spring, 2011.

3.4. Instrumentation

Six instruments were designed to collect information for the present study. Those tools were:

1. Pre- and post-tests administered before and after the treatment
2. Analysis of wiki history
3. Follow-up instruction attitudinal questionnaires for students of the wiki group
4. Post instruction attitudinal questionnaire for students of both groups
5. Observation- field notes
6. Semi-structured interview

Each instrument is briefly explained below.

3.4.1 Tests

The pre- and post- vocabulary comprehension tests were developed exclusively for the purpose of this research (Appendices 1 and 2). Both tests were the combination of *discrete-point* and *integrative methods* to testing. Discrete-point testing assesses one distinct content point, i.e. it measures whether learners have knowledge of particular structural elements of the language: in the case of vocabulary assessment, it refers to word meanings, word forms, sentence patterns, etc. Integrative testing design requires the test- taker to use more than one skill or piece of knowledge for completing the particular task. The test items were measured according to the *content-dependent* dimension of vocabulary assessment, which tends to assess "the test taker's ability to take account of contextual information in order to produce the expected response" (Read, 2000, p.9).

In designing the tests, all attempts were made to make the pre-test parallel to the post-test in structure and in number of items. The items included in the pre- and post- tests were taken adapted from the tests of the course-book, i.e. from the Market Leader. The total number of target business vocabulary items included in 7 units and covered during the study was approximately 75.

The pre- and post-tests consisted of two parts and included 37 vocabulary items that were randomly chosen from seven units covered throughout the course. The first part, which was *Word Choice*, intended to check the students' ability of choosing the correct word (from three possibilities) for each individual sentence. Overall, this part took in thirty words including destructors. In the second part, *Letter Writing*, the students were to continue and finish a business letter, which first part was given, using any five words out of seven.

In the table of specifications below, the number of words randomly chosen from each unit is presented.

Table 1: *Table of Specifications*

Units / **Test parts**	*Employment*	*Trade*	*Quality*	*Ethics*	*Leadership*	*Innovation*	*Competition*	**TOTALS**
Part I	5	4	4	4	5	4	4	**50%**
Part II	-	2	1	1	1	1	1	**50%**

A total number of 5-6 words from each unit were randomly chosen for designing the tests. The time allocation for both tests was 30 minutes and the total score for each test was 20.

Part I (Word Choice) of the Vocabulary Comprehension Test consisted of 10 sentences with missing words; the students were to fill in the missing words choosing the correct alternative for each sentence. A total of 10 points was given to Part I- each vocabulary item 1 point.

Part II (Letter Writing) of the Vocabulary Comprehension Test intended to measure the students' ability of using any five words from the given seven vocabulary items appropriately, grammatically in the sentence and making meaningful connections among sentences in the paragraph. The total point given to this part was 10:

a) each correct use of word (1 point);

b) choosing correct word form (0,5 point);

c) for meaningful connections among sentences in the paragraph (0,5 point).

3.4.2 Analysis of wiki history

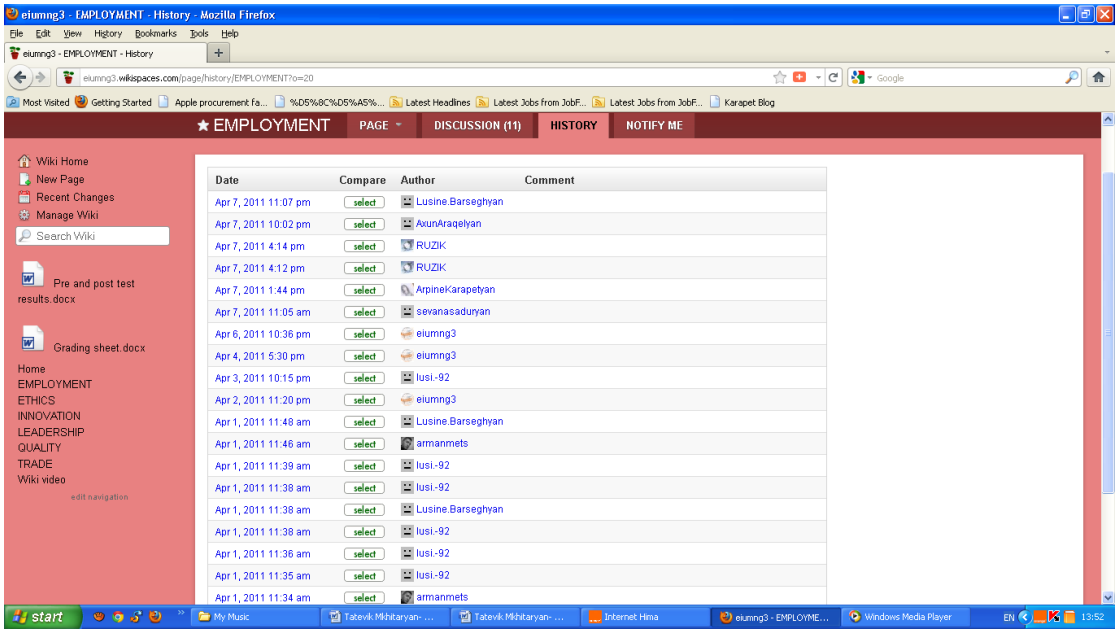
When Ward Cunnigham created the first wiki page named "WikiWikiWeb" in 1994, he aimed at facilitating communication between software developers. Hereinafter, thousands of wiki pages were created for educational purposes. Different wiki pages had different aims and purposes such as promoting users' language abilities, enhancing their awareness of the particular sphere of study, sharing information, etc.

Analyzing various wiki pages that were implemented for promoting users' language abilities including vocabulary enhancement, I decided to create a wiki page for the current study. Analyzing the history of the course wiki, the following outline can be drawn:

1. All students take part in classroom activities;
2. Students log in the course wiki several times in a week and work on the assignments (e.g. make corrections);

3. Healthy competition takes place among the students (e.g. who will reply to the original message first).

Below is given the screen shot of a wiki history of the unit “Employment”.



Through the “History” tab every member of the page can go and see the names of the students who contributed to the particular task.

It is worth mentioning that at the very beginning of the course 1-2 students had difficulties to join the course wiki page. With the help of their fellow students, the difficulty was surmounted.

3.4.3 Questionnaires

Four questionnaires (three follow-up instruction attitudinal questionnaires for students of the experimental group on wiki tasks and one post instruction attitudinal questionnaire for the students of both groups) were developed to collect information about the students’ attitude towards/ preferences for learning business English vocabulary via wiki technology, their preferences in teaching tasks used in the classroom, their expectations from the course and suggestions or comments on the tasks for further change or improvement. While completing the questionnaires, the participants were asked to give some biographic information related to their age, gender, major and course of the study.

The questionnaires were in English. In order to make sure that the items were appropriate, before administering the questionnaires, each of them was revised by the supervisor and the reader. When the necessary corrections were made, the questionnaires were ready for distribution among the participants of the study. When the questionnaires were distributed among the participants, the researcher each time explained the rules of completing the questionnaire and went over every item. This was done in order to make sure that the students understood every questionnaire item and in case of questions gave explanations in English and in Armenian.

The questionnaire items were developed based on reviewed literature on wiki history, and on the questions cropped up during the class observations. The questionnaires took approximately 10-15 minutes to be completed. All four questionnaires were validated by the supervisor and the reader of the thesis themselves. Before administering the questionnaires to the students of the study, all questionnaires were piloted to three students- one from AUA and two from Yerevan State University. It is worth mentioning that the students did not face any difficulties concerning the wording of the questionnaire items. The format of the questionnaires was also lucid according to the students' opinion.

All three follow-up questionnaires were designed especially for the students of the experimental group. The questionnaires consisted of 5 items divided into two sections. The first section contained 4 closed-ended items in five-point Likert scale format (ranging from "Strongly agree" to "Strongly disagree"), which intended to find out the students' attitude towards/ preferences for accomplishing particular type of task via a wiki. The second section consisted of only one open-ended item, which aimed to find out the advantages and disadvantages of the particular task mentioned by the students (Appendices 3-5). Overall, follow-up questionnaires intended to figure out the students' attitude towards/ preferences for integrating wiki technology into the learning business English vocabulary and rank the effectiveness of tasks accomplished throughout the course via a wiki for EBP vocabulary learning.

As during the study three types of tasks (Matching activities, Discussions, and Glossaries) were implemented, the three follow-up questionnaires were devoted to each type of the task.

The first follow-up questionnaire aimed at revealing the students' attitude towards/ preferences for accomplishing Matching activities via a wiki (Appendix 3). The second follow-up questionnaire was to find out the students' attitude towards/ preferences for accomplishing the second type of activities, i.e. Discussions, via a wiki (Appendix 4). And the aim of the third follow-up questionnaire was to find out the students' attitude towards/ preferences for accomplishing Task 3 on compiling Glossaries via a wiki (Appendix 5).

Below is the table which shows how many times each type of task was carried out during the study:

Table 2: *Frequency and total number of tasks carried out during the study*

TYPE OF TASK	FREQUENCY	TOTAL NUMBER
Matching task	Every 2-3 units	2 times
Glossary	Every unit	7 times
Discussion	Every other unit	3 times

The tasks were assessed based on the formative assessment tool, i.e. the instructors provided feedback on a student's work throughout the course. The tasks were the part of the students' homework assignment; hence, their homework assignments were the part of their final grade. Final grade was counted on a 100 % scale, where homework assignments constituted 20 % of the whole grade.

Post instruction attitudinal questionnaire designed for the students of both groups, i.e. experimental and comparison, consisted of 12 items divided into two sections (Appendix 6). The first section with 9 items intended to find out the student's attitude towards/ preferences for learning business English vocabulary through Matching activities, Discussions, and Compiling Glossaries. This section was constructed according to the five-point Likert scale format (ranging from "Strongly agree" to "Strongly disagree"). The second section with the last three questions, which were open-ended items, was to figure out what suggestions or comments the student's might have on the tasks. Overall, post instruction attitudinal questionnaire aimed at revealing the difference between the students' attitude of both groups towards accomplishing the tasks throughout the course: as mentioned above,

the students of the experimental group accomplished the tasks via a course wiki; whereas, the students from the comparison group did the same tasks on paper.

The main reason for constructing some of the items of the questionnaires in closed-ended Likert scale format was "to organize and analyze the data with consistency within a domain of provided responses" (Farhady, 1995, p.216). Another reason according to Farhady (1995) was that closed-ended questionnaires are easy to be filled out and do not take a great amount of time from the respondents.

3.4.4 Classroom Observation field notes

For carrying out this research, several classes were observed in both experimental and comparison groups. Classroom observation is considered to be one of the techniques for qualitative data collection in classroom research (Mackey & Grass, 2005). According to Farhady (1995), observation is a method of collecting data through which a researcher can witness the variable or the outcome of the variable. The way of observing the classes was *direct observation*, i.e. "the researcher directly observed a behavior and records the happenings" (Farhady, 1995, p.219). Generally, direct observations require careful scheduling and a checklist to record the data. The checklist of observing the classes for this research was taken from the classroom observation form provided by Connecticut Community Colleges (Appendix 7). The form included a list of clearly defined items that were relevant to the phenomenon of this study. After each item some space was left for some descriptive information, which intended to be filled out by the observer.

The classroom observation form originally contained four items and required the observer to fill in some information about the faculty member, evaluator, date and class. To adapt it to the needs of the study, some of the items were changed. The adapted four items of the checklist focused on lesson organization and presentation issues, students' interest towards and participation in class activities, teacher-student and student-student interactions, as well as on the effectiveness of classroom instruction and types of tasks used during the course on students' motivation to learn EBP vocabulary.

The observations were made by the researcher herself. The total number of classroom observations was 3 in each group for 30 minutes. The observations aimed at comparing the findings obtained from both groups, and finding out the similarities and differences across the groups in learning processes.

3.4.5 Interview

Despite many advantages that questionnaires might have, the main problem with them is that "they take away the freedom with which respondents can answer the questions and limit them to certain choices provided by the researcher" (Farhady, 1995, p.216). Thus, in order to minimize the effect of the disadvantage of the questionnaire, a semi-structured interview was conducted the purpose of which was to collect qualitative data for the study.

The format of the interview was semi-structured and open-ended. The items for the interview were developed based on the questions that surfaced after the class observations and follow-up questionnaires. There were 4 open-ended items in the interview (Appendix 8). The interview aimed at eliciting the following information: a) the students' attitude towards/ preferences for completing the three types of tasks throughout the course, and b) the impact of tasks, accomplished via a course wiki in the experimental group and on paper in the comparison group, on EBP vocabulary learning. The interview was conducted in Armenian in order to avoid misunderstanding of questions by the students or not to be shy because of the language during the interview. Selection of the students for the interview was made according to the purposive sampling approach: in this case gender, highest and lowest scores; and participation in/contribution to class activities were taken into account. Overall, 8 students from the experimental group and 6 students from the comparison group participated in the interview.

The interview time was planned in advance and agreed upon by all the participants. The interview conducted at the end of the last class after administering the post- instruction attitudinal questionnaire for students of both groups. The interviewees were told that the interview was going to be conducted in Armenian and it would be recorded. The interviewees were also told to feel free and

be honest in their answers- they were not limited in their answers, i.e. they were encouraged to go deeper into the question and give more details. The administration of the interview took about 5-7 minutes.

Chapter Four: Results

In this chapter, the results of each research question will be discussed separately according to quantitative vs. qualitative analysis of findings.

4.1 Is there any relationship between using wiki technology and learning business English vocabulary?

To find an answer to this research question, pre- and post-tests were administered before and after the treatment, which were analyzed quantitatively.

4.1.1. Pre- and post-tests results

The pre-test and post-test results were analyzed quantitatively through the statistical package of social sciences (SPSS software, version 16). The quantitative analysis was obtained through two sets of scores from each group. The purpose of this analysis was to compare the results of pre- and post-tests of both groups in order to see which group showed higher achievement.

As it is stated in Hatch and Farhady (1995), all the variables of the experiment should be described and identified according to the type of relationship which is investigated. It should be noted that there was one independent and one dependent variable with two levels. The dependent variable was the scores of the pre-test and post-test obtained from both groups. The independent variable was the way of teaching EBP vocabulary throughout the wiki- computer assisted versus paper based.

The comparison of pre- and post-test results was done through descriptive and inferential statistics. To describe the data obtained from the tests, measures of central tendency (mean, median and mode) and measures of variability (standard deviation) were computed. The table below represents descriptive statistics of both tests:

Table 3: Descriptive statistics of pre- and post-tests

	Pre-test		Post-test	
	Exp	Comp	Exp	Comp
Mean	5.18	7.00	11.18	10.00
Median	3.00	7.00	12.00	11.00
Mode	2.00*	3.00	5.00*	4.00*
St. Deviation	3.63	4.33	4.42	4.74

* Multiple modes exist. The smallest value is shown.

From the table above it becomes obvious that mean score of the comparison group on pre-test is higher than that of the experimental group. But the results are vice versa in post-test. The students of the experimental group performed better achievement as compared with the students of the comparison group. As the aim of the study was not to describe the characteristics of the small sample from which the data had been collected, inferential statistics were used to generalize the findings from a sample to the population. To make generalization from sample to population, between and within-group comparisons were done.

In order to compare the test results of the two groups, instead of applying parametric independent samples and paired samples t-tests, the non-parametric 2 independent samples Mann Whitney's U test was applied as the samples of both groups were small (less than 30). Non- parametric tests are for comparing the average ranks. Non-parametric two independent samples Mann Whitney's U test converts the scores to ranks between the two groups. The comparison between groups shows whether the ranks for the two groups differ significantly or not.

Table 4- Descriptive statistics of Mann-Whitney Test

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Pre-test	Experimental	11	10.68	117.50
	Comparison	13	14.04	182.50
	Total	*24*		
Post-test	Experimental	11	14.09	155.00
	Comparison	13	11.15	145.00
	Total	*24*		

Table 5- Inferential statistics of Mann-Whitney Test

TEST STATISTICS [b]		
	Pre-test	**Post-test**
Mann-Whitney U	51.500	54.000
Z	-1.172	-1.018
Asymp. Sig. (2-tailed)	.241	.309
Exact Sig. [2*(1-tailed Sig.)]	.252[a]	.331[a]

a. Not corrected for ties
b. Grouping Variable group

The results of Mann-Whitney U tests show that the Z value is -1.172 for pre-test and -1.018 for post-test with a significance level of p= .241 for pre-test and p= .309 for post-test (see Table 3, Test statistics). The pre-test comparison between groups through Mann-Whitney U test demonstrates probability value p= .241, which is not less than .05. This means there is no significant difference on average in performances of both groups during the pre-test. Mann-Whitney U test for between-group comparisons in post-test shows probability value p= .309, which is again not less than .05. Hence, the results of post-test are not significantly differ from group to group.

The data were also analyzed through Wilcoxon Signed Ranks Test since it is designed for the use of repeated measures. It means measuring the participants' performance on two occasions (pre-test and post-test) (Pallant, 2007, p. 223).

Table 6: Wilcoxon Signed Ranks Tests

RANKS [d]							
		N		**Mean Rank**		**Sum of Ranks**	
Posttest -pretest		Experimental Group	Comparison Group	Experimental Group	Comparison Group	Experimental Group	Comparison Group
	Negative Ranks	1[a]	0[a]	2.50	.00	2.50	.00
	Positive Ranks	10[b]	12[b]	6.35	6.50	63.50	78.00
	Ties	0[c]	1[c]				
	Total	*11*	*13*				

a. posttest < pretest
b. posttest > pretest
c. posttest = pretest
d. group (experimental; comparison)

Table 7: Wilcoxon Test Statistics

TEST STATISTICS [b]		
a. b. c. d. e. f. g. h. i. j. k.	**Posttest - pretest**	
	Experimental Group	Comparison Group
Z	-2.719[a]	-3.084[a]
Asymp.Sig. (2-tailed)	.007	.002

a. based on negative ranks
b. group (experimental; comparison)

The results of Wilcoxon Signed Ranks Test show that the Z value is -2.719 for pre-test and post-test comparison for the experimental group with a significance level of p= .007, and Z= - 3.084 for the comparison group with a significance level of p = .002. It becomes obvious that the probability value of Wilcoxon test of both experimental and comparison groups for the within-group comparison is less than .05 in pre-test and post-test comparison (p= .007 and p.= 002), which means there is a significant difference between pre- and post-tests results for both groups in favor of the post-test.

As the SPSS does not provide an effect size statistic, which is the difference between the means, the Z value was used to calculate an appropriate value of r (*r = Z/square root of N, where N is the total number of the cases*). According to this formula, the r values of the Wilcoxon test for pre-test and post-test comparison for the experimental group and comparison groups separately are as follows:

Table 8: Effect size of the experimental and comparison groups

Experimental Group	**Comparison Group**
r = 0.555	r = 0.63

The effect size (r) for pre-test and post-test comparison is equal to 0.555for the experimental group, and 0.63 for the comparison group. This means that according to Cohan's (1988) criteria there was statistical difference and more than large size effect. The difference seems stronger in the comparison group where the effect size is higher than that of the experimental group.

The analysis of pre- and post-tests showed positive relationship between using wiki technology and learning business English vocabulary as the students showed higher achievement in post-test as compared with the pre-test.

4.2. How does wiki technology impact students' learning processes?

Analyses of wiki history and classroom observations were the instruments for collecting data for the second research question.

4.2.1. Analysis of Wiki History

The analysis of wiki history showed that all students from the experimental group are involved in course activities and have their own contribution to the course content. However, in the comparison group, where the wiki technology was not used, not all students took part in class activities. It is worth mentioning that the students of the experimental group were competing with each other for being the first who would reply the original message posted in a wiki. Analyzing the time when students of the experimental group logged in the course wiki, it becomes clear that there is no specific hour for the students to contribute to the course content.

4.2.2. Classroom Observations field notes

In general, the aim of observation is to provide a careful description of classroom procedures without influencing the events occurring during the class (Mackey & Gass, 2005). Classroom observations can provide an opportunity to gather in-depth information about the events happening in the classroom, such as activities, interactions, classroom behavior, etc. (Mackey & Gass, 2005).

While observing the classes in the experimental and comparison groups, the lesson observation guide was used. The guide was taken and adapted from the classroom observation form provided by Connecticut Community Colleges (see Appendix 7). The form takes into account the following factors:

- ✓ Lesson organization and presentation
- ✓ Students' interest towards and participation in class activities
- ✓ Teacher-student and student-student interaction
- ✓ The effects of classroom instruction and types of tasks used during the course on students' motivation to learn EBP vocabulary.

The results of classroom observations in the experimental (wiki) and comparison (non-wiki) groups are provided below.

It should be noted that the physical environment of the classrooms was good. The classrooms were light, clean and had blackboards. The classroom of the experimental group was equipped with the

projector and the desks were arranged in a circle form, which allowed students to see each other and be more as a group rather than individual, separate students. However, the classroom of the comparison group was not equipped with the projector. The desks were arranged in a semi-circle way, which provided students an opportunity to interact with each other during the course activities and work cooperatively as a group.

Was the lesson organized and clearly presented?

In terms of lesson organization and presentation, it should be noted that the lessons were well organized and clearly presented in both groups. Both teachers had lesson plans with them. The tasks were thoroughly and purposefully selected and presented for each class. The tasks were related to the target unit, vocabulary and grammatical structures. Both teachers gave clear and concise directions to students for carrying out the tasks. The more effective and useful tasks in the experimental group were matching activities and discussions, where students mainly practiced current vocabulary items. There were also comprehension question activities on reading materials. The tasks used in the comparison group were more grammar centered; current vocabulary items were practiced through matching activities and gap filling tasks. Discussions and readings were effectively used during the classes providing students with problem solving skills in various business topics. The usual activities which were used in the comparison group were the discussion of homework. On the contrary, in the experimental group, the students that did the tasks via a wiki as homework assignments already received their feedback through wiki email notification one day before the class. During the class, the teacher answered the questions raised by the students concerning the feedback.

The lessons were well paced and the rate of speech and pronunciation of both teachers was clear and understandable. Both teachers tried to speak less to involve the students in active discussions of the lesson so that students could use the language more and express their thoughts in English.

Describe the level of students' interest towards and participation in class activities.

It should be noted that the level of students' interest towards the course was not the same across the groups. The students of the experimental group showed genuine interest towards the class

activities. It was obvious from the very first minutes of observations. The students of the experimental group were involved in class activities with great pleasure; they were trying to do their best to accomplish the tasks on time and be the first to present. During the discussions, the students were expressing their ideas freely; however, when encountering with language problems, the teacher encouraged the students to convey what they want in Armenian. It is worth mentioning that not all students were active during the course – one-two students were less active than others in the group. It was noticeable that those less active students were interested in class activities a lot but due to some language problems or being not well prepared to the lesson, there were some cases when they did not want to take part in class events. However, the teacher tried to do everything to help the students overcome the language barrier and encouraged them to join in class activities. In the majority of cases the teacher succeeded in involving not active students in class discussions.

In the comparison group, the students were not so active as compared with the experimental group. They were interested in class activities but I could not notice healthy competition among the students. There were 1-2 cases when several students even did not prepared to class at all. They were rather indifferent about what was going on the classroom and sometimes were speaking with each other in a whisper. The teacher always tried to raise their interest towards class activities with interesting discussions, tasks, etc. As a result, there were some cases when those students showed some interest towards the activities and were a part of the group. Other students freely participated in class discussions and keenly did the tasks assigned by the teacher. Of course, there were some language problems accompanied some tasks, but with the help of the teacher, the students were able to overcome those problems.

Describe teacher-student and student-student interactions.

While observing both classes, I noticed that both teachers were trying to encourage the students to participate in class activities. Both teachers were willing to answer the students' questions and were open to any discussions, disagreements and ideas related to the lesson. The teachers tried to create a friendly atmosphere in the classroom encouraging full student participation in class. In an informal teaching and learning environment, the students felt more comfortable while collaborating with the

teacher and with their fellow students. In this environment, the teachers encouraged the students to use English during the classes. Moreover, the students were trying to do their best to use the language for communicative purposes. It is worth mentioning that the teachers did not interrupt (or did it in few cases) the students for correcting their pronunciation or grammar mistakes while discussing different business topics, reading some passages and carrying out other tasks.

In terms of student-student interaction, I noticed that during the pair works/ group works, the students' interaction with each other was very warm, respectful and friendly. When some students had difficulties with tasks, other students tried to help their friends with great pleasure and enthusiasm. In the experimental group, I noticed healthy competition among the students; in the comparison group, the students were mostly calm and the interaction between them was not as close as in the experimental group.

The effect of types of tasks and the way of accomplishing those tasks on students' motivation to learn EBP vocabulary.

Activities used in the experimental and comparison classrooms and the ways they were presented to students had a great role in promoting motivation in students to learn EBP vocabulary.

While observing both the experimental and comparison groups, it was obvious that the students in both groups were interested in subject a lot. The students were willing to do any task assigned by their teacher. However, in the experimental group, where the way of completing homework assignments was done via a wiki, the students were more curious about the class activities. Their involvement and active participation in class activities differed from that of the comparison group. The students of the comparison group accomplished homework assignments in a traditional way i.e. on paper. The level of those students' motivation to learn EBP vocabulary through that way of accomplishing homework assignments was different from the experimental group in interest towards the class activities. The comparison group students were involved in class discussions and other activities but not as active as the students of the other group.

Analyses of wiki history and classroom observations revealed that wiki technology positively impact on students learning process. The students became more self-confident and motivated during the classes which are caused by the collaborative and informal learning environment provided by wiki technologies.

4.3. To what extent does the use of a wiki technology influence EBP students' attitude towards/preferences for integrating wikis into the learning in Armenian settings?

The data for this question were collected through the qualitative research, through the questionnaires and interview in particular.

4.3.1. Students' Questionnaires

- Follow-up Instruction Attitudinal Questionnaires

Three follow-up instruction attitudinal questionnaires for students of the experimental group on wiki tasks and one post instruction attitudinal questionnaire for the students of both groups contained closed ended and open ended items. All three follow-up questionnaires consisted of five items- four of which were closed ended ones in five-point Likert scale format (ranging from "Strongly agree" to "Strongly disagree") and one item was an open ended one.

The first follow-up instruction attitudinal questionnaire for students of the experimental group was on Task 1- *Matching activities*. The questionnaire was distributed among the students after accomplishing matching activities via a wiki on *open and protected markets*, and *managing meetings*. It was the tenth week of instruction, when the first questionnaire was administered. The purpose of this questionnaire was to find out the student's attitude towards/preferences for accomplishing matching activities via a wiki.

After another two weeks of instruction (week 12), the second follow-up instruction attitudinal questionnaire was administered. The questionnaire was to elicit the student's attitude towards/preferences for having *discussions* on different topics (as Policy for smokers, Quality not quantity, and Important innovations) via a wiki.

After another three weeks of instruction (week 15), the third follow-up instruction attitudinal questionnaire was distributed among the students of the experimental group. This questionnaire was on compiling *glossaries* via a wiki. The students compiled glossaries for every unit, and the questionnaire was to find out the student's attitude towards/preferences for compiling glossaries via a wiki.

Besides three follow-up questionnaires, there was post instruction attitudinal questionnaire for the students of both groups, which was administered at the last day of the instruction. The questionnaire contained 12 items, 9 of which were in five-point Likert scale format (ranging from "Strongly agree" to "Strongly disagree") and 3 items were open-ended questions. The aim of the post instruction attitudinal questionnaire was to find out the impact of wiki technology on EBP students' vocabulary learning as compared with the comparison group, where wiki technology were not introduced as learning tools.

All questionnaire items that were in Likert scale format were analyzed quantitatively (using the SPSS program through frequency analysis for follow-up questionnaires and Mann Whitney U Test for post questionnaire) and qualitatively. The number of students who filled out the questionnaires was 11 for follow-up questionnaires (experimental group) and 24 for post questionnaire (experimental and comparison groups).

4.3.1.1. Results of the first follow-up instruction attitudinal questionnaire for students of the experimental group

The first follow-up questionnaire, distributed among the students of the experimental group, had four closed items in Likert scale format from which the students had to choose the answer, and one open-ended question asking about advantages and disadvantages of doing Matching activities via a wiki. All four items in Likert scale format were analyzed through SPSS. Some of the descriptive statistics (mean and standard deviation, particularly) of the 1st follow-up questionnaire are given in the table below:

Table 9: Descriptive statistics of the 1st follow-up questionnaire

	Open and Protected Markets	**Managing Meetings**
	Mean / St.Dev.	Mean / St.Dev.
Item 1	4.09 / .30	4.09 / .54
Item 2	4.27 / .65	4.09 / .70
Item 3	3.00 / 1.18	3.00 / .77
Item 4	2.00 / 1.55	2.00 / 1.55

The means of all four items reveal no difference in students' answers given to the Matching activities. In the section below, student's attitude towards/preferences for accomplishing Matching activities via a wiki on *open and protected markets*, and *managing meetings* is presented in details through percentages.

Item 1: I developed my business English vocabulary very well after accomplishing Matching activities in the course wiki page.

According to the statistics that provide the frequency of Item 1, the majority of students of the experimental group thought that Matching activities helped them in developing business English vocabulary. However, there is a difference in students' attitude between open and protected markets and managing meeting as types of Matching activities accomplished via a wiki. 90, 9% agreed and 9, 1% strongly agreed with Item 1 on open and protected markets; however, 72, 7% of the students agreed, 18, 2% strongly agreed and only 9, 1% neither agreed nor disagreed with Item 1 on managing meetings.

Table 10: Item 1- Open and protected Markets; Managing Meetings

	Open and Protected Markets		**Managing Meetings**	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	0	0	0	0
Disagree	0	0	0	0
Neither Agree Nor Disagree	0	0	1	9.1
Agree	10	90,9	7	72.7
Strongly Agree	1	9,1	2	18.2
Total	**11**	**100,0**	**11**	**100.0**

Item 2: Matching activities in a wiki motivated me a lot to learn business English vocabulary.

The vast majority of the students agreed that matching activities in a wiki motivated them a lot to learn business English vocabulary. Students' responses showed that 54, 5% agreed that both tasks *open and protected markets* and *managing meetings* as matching activities equally motivated them in learning EBP vocabulary. The students' attitude towards *open and protected markets* was slightly different from that towards *managing meetings*. For example, 36, 4% and 27, 3% of the students participated in this study strongly agreed with Item 2 on *open and protected markets* and *managing meetings*, respectively. Another difference can be seen in the students' response of neither agree nor disagree on *open and protected markets* and *managing meetings* - only 9, 1% and 18, 2% of the students choosing this response could not be more specific in their responses on whether matching activities motivated them in learning EBP vocabulary or not.

Table 11: Item 2- Open and protected Markets; Managing Meetings

	Open and Protected Markets		**Managing Meetings**	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	0	0	0	0
Disagree	0	0	0	0
Neither Agree Nor Disagree	1	9,1	2	18,2
Agree	6	54,5	6	54,5
Strongly Agree	4	36,4	3	27,3
Total	**11**	**100,0**	**11**	**100.0**

Item 3: Many of the words/phrases used in Matching activities in a wiki are still unfamiliar to me.

From the students' responses, it became obvious that 36, 4% (SD + D) disagreed with Item 3 concerning unfamiliarity of the words/phrases used in Matching activities particularly in *open and protected markets*. The same percentage of the students' responses, i.e. 36, 4% (A + SA), agreed with Item 3 thinking that there were still some words/phrases that they didn't know. 3 students, which comprised 27, 3% of the responses, chose neither agree nor disagree option on Item 3.

The percentage of disagree and agree responses given to Item 3 on *managing meetings* was 27, 3 each, which meant that 3 students disagreed and 3 of them agreed with the statement. The option of neither agree nor disagree comprised 45, 5% of the whole response.

Table 12: Item 3- Open and protected Markets; Managing Meetings

	Open and Protected Markets		**Managing Meetings**	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	1	9,1	0	0
Disagree	3	27,3	3	27,3
Neither Agree Nor Disagree	3	27,3	5	45,5
Agree	3	27,3	3	27,3
Strongly Agree	1	9,1	0	0
Total	**11**	**100,0**	**11**	**100.0**

Item 4: I would rather do Matching activities on paper than via a wiki.

Students' responses on *open and protected markets* didn't differ from those of *managing meetings*. Moreover, 81, 8% of the students disagreed with the statement, i.e. they preferred doing Matching activities via a wiki over on paper. 18, 2% of the students agreed with the statement and thought that it would be better to do those activities on paper than via a wiki.

Table 13: Item 4- Open and protected Markets; Managing Meetings

	Open and Protected Markets		**Managing Meetings**	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	6	54,5	6	54,5
Disagree	3	27,3	3	27,3
Neither Agree Nor Disagree	0	0	0	0
Agree	0	0	0	0
Strongly Agree	2	18,2	2	18,2
Total	**11**	**100,0**	**11**	**100.0**

Item 5: Mention some advantages and disadvantages of doing Matching activities via a wiki.

This item was an open ended one, which assumed the respondents to freely express their position on doing Matching activities via a wiki. Only nine students out of eleven expressed their attitude towards doing Matching activities. Some of the students' thoughts were repeated, some were not; on the whole, categories mentioned below classify all nine thoughts into four groups:

- Everything was good enough- four students couldn't find any disadvantage of doing Matching activities via a wiki.
- Doing Matching activities via a wiki was interesting- three students mentioned that they accomplished activities with great pleasure because they were interesting. Moreover, students mentioned that they got familiar with a new technological educational tool.
- Time saving- one student said that doing activities via a wiki was time saving because if you are a computer literate person, it becomes easier for you to accomplish assignments.
- Learning more- one student mentioned that through the activities accomplished via a wiki s/he learned more as while matching the words with their definitions, s/he had to look at his/her fellow students' matches for not repeating and making corrections (if needed).

4.3.1.2. Results of the second follow-up instruction attitudinal questionnaire for students of the experimental group

The items of the second and third follow-up instruction attitudinal questionnaires were taken and adapted from the first follow-up instruction attitudinal questionnaire.

In this section, the results of the second follow-up instruction attitudinal questionnaire are presented. The aim of the questionnaire was to figure out the students' attitude towards/ preferences for having discussions on different topics in a wiki. Topics for wiki discussions were the following: *Policy for smokers*, *Quality not quantity*, and *Important innovations*. The questionnaire also consisted

of 4 closed ended items and one open-ended one. The table of descriptive statistics bellow includes mean and standard deviation of 4 items in Likert scale format.

Table 14: Descriptive statistics of the 2nd follow-up questionnaire

	Policy for Smokers	**Quality not Quantity**	**Important Innovations**
	Mean / St.Dev.	Mean / St.Dev.	Mean / St.Dev.
Item 1	4.27 / .65	4.27 / .90	4.18 / .75
Item 2	4.45 / .52	4.54 / .52	4.54 / .52
Item 3	3.09 / .94	2.91 / .94	3.00 / 1.18
Item 4	1.64 / 1.03	1.64 / 1.03	1.64 / 1.03

The means of the first two items and the last one reveal that the students have the same opinion on all three discussion topics. The students' answers to the third item somehow varied from topic to topic: the students were stricter in their answers given to the topic "Quality not Quantity" than to the topics "Policy for Smokers" and "Important Innovations". Below more detailed information about the students' attitude towards the issues under consideration is presented in percentages.

Item 1: I developed my business English vocabulary very well after the Discussions put in the course wiki page.

From the tables below, it became obvious that 81, 9% (SA + A) – 90, 9% (SA + A) of the students' responses (given to each discussion topic) gave very important role to the wiki discussions. They thought that all three discussion topics helped them a lot develop their business English vocabulary. However, one student (comprising 9, 1% of the students' response given to the "*Quality not quantity*" discussion topic) disagreed with Item 1 on its effectiveness of developing EBP vocabulary. The frequency of neither agree nor disagree response occurred 1-2 times on the topics of "*Policy for smokers"* and "*Important innovations"*, respectively.

Table 15: Item 1- Policy for smokers; Quality not Quantity; Important Innovations

	Policy for Smokers		Quality not Quantity		Important Innovations	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strongly Disagree	0	0	0	0	0	0
Disagree	0	0	1	9,1	0	0
Neither Agree Nor Disagree	1	9,1	0	0	2	18,2
Agree	6	54,5	5	45,5	5	45,5
Strongly Agree	4	36,4	5	45,5	4	36,4
Total	**11**	**100,0**	**11**	**100.0**	**11**	**100.0**

Item 2: Wiki Discussions motivated me a lot to learn business English vocabulary.

The second question aimed to find out whether wiki discussions motivated students to learn EBP vocabulary. All students found that all three discussion topics were the source of motivation for them while learning business English vocabulary.

Table 16: Item 2- Policy for smokers; Quality not Quantity; Important Innovations

	Policy for Smokers		Quality not Quantity		Important Innovations	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strongly Disagree	0	0	0	0	0	0
Disagree	0	0	0	0	0	0
Neither Agree Nor Disagree	0	0	0	0	0	0
Agree	6	54,5	5	45,5	5	45,5
Strongly Agree	5	45,5	6	54,5	6	54,5
Total	**11**	**100,0**	**11**	**100.0**	**11**	**100.0**

Item 3: Many of the words/phrases used in wiki Discussions are still unfamiliar to me.

The aim of the third question was to find out whether the students were still unfamiliar to some of the words/phrases used in wiki discussions. Most of the students, i.e. 45, 5%, agreed with Item 3 on the discussion topic *"Policy for smokers"* thinking that there were still some words/phrases that were unfamiliar to them. On the contrary, 36, 4% of the students' responses disagreed with Item 3 on the

same discussion topic thinking that there were not any words/ phrases unfamiliar to them. The rest of the students, which comprised 18, 2% of the responses, chose neither agree nor disagree option on *"Policy for smokers"*.

The same picture but from the opposite angle was found in the next discussion topic "*Quality not quantity"*. Most of the students, i.e. 45, 5% disagreed with Item 3 thinking that they knew all words/ phrases used in "*Quality not quantity"*. However, 36, 4% of the students' responses agreed with Item 3 on the same discussion topic thinking that they still didn't know some words/ phrases used in the topic. And only 18, 2% of the responses chose neither agree nor disagree option as they were not able to become conversant with their answers.

As in case of *"Imortant innovations",* the majority of the students that comprised 54, 5% of the responses disagreed with Item 3 and found that they knew all words/ phrases used in the discussion topic. The rest of the students (36, 4% agreed and 9, 1 strongly agreed) agreed that they still did not know all the words/ phrases used in the discussion topic.

Table 17: Item 3- Policy for smokers; Quality not Quantity; Important Innovations

	Policy for Smokers		**Quality not Quantity**		**Important Innovations**	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strongly Disagree	0	0	0	0	0	0
Disagree	4	36,4	5	45,5	6	54,5
Neither Agree Nor Disagree	2	18,2	2	18,2	0	0
Agree	5	45,5	4	36,4	4	36,4
Strongly Agree	0	0	0	0	1	9,1
Total	**11**	**100,0**	**11**	**100.0**	**11**	**100.0**

Item 4: I would rather have Discussions during the class than via a wiki.

The fourth question aimed at finding out whether the students liked having wiki discussions or they preferred having class discussions over wiki ones. From the table below, it is obvious that the students' responses do not differ from topic to topic. The vast majority of students, i.e. 81, 8 % (strongly disagreed 63, 6 % and disagreed18, 2%), disagreed with Item 4, which showed that the

students preferred having wiki discussions over class discussions. Only one student (9, 1%) agreed with Item 1 preferring class discussions over wiki ones. And one student could not be more strict in his response concerning the way of having discussions and chose neither agree nor disagree response.

Table 18: Item 4- Policy for smokers; Quality not Quantity; Important Innovations

	Policy for Smokers		**Quality not Quantity**		**Important Innovations**	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strongly Disagree	7	63.6	7	63.6	7	63.6
Disagree	2	18.2	2	18.2	2	18.2
Neither Agree Nor Disagree	1	9.1	1	9.1	1	9.1
Agree	1	9.1	1	9.1	1	9.1
Strongly Agree	0	0	0	0	0	0
Total	**11**	**100,0**	**11**	**100.0**	**11**	**100.0**

Item 5: Mention some advantages and disadvantages of wiki Discussions.

Besides the first 4 items, which were in Likert scale format, the last item of the questionnaire, the fifth one, was an open ended question. The purpose of Item 5 was to find out the advantages and disadvantages of wiki Discussions mentioned by students. In the space provided for the students' thoughts, only eight students' comments could be found. Taking into consideration the fact that some of the comments were repeated, some were not, all eight comments could be categorized into four groups:

- Everything was good- four students liked wiki Discussions and did not mention any disadvantage.
- Time saving, motivating, and vocabulary developing- two students mentioned that wiki discussions helped them save time, and learn more vocabulary items with highly motivating topics.
- Interesting- one student found that wiki Discussions were interesting in nature as they brought something new to their classes.

- Time consuming- one student mentioned that wiki Discussions took much time from him/her to participate in discussions.

4.3.1.3. Results of the third follow-up instruction attitudinal questionnaire for students of the experimental group

This section presents the results of the third follow-up instruction attitudinal questionnaire on compiling glossaries via a wiki. The total number of glossaries compiled by the students throughout the course was seven. This number corresponded to the number of units (including Employment, Trade, Quality, Ethics, Leadership, Innovation and Competition) that the students covered during the study- one glossary for each unit. The aim of the third questionnaire was to find out the students' attitude towards/ preferences for compiling glossaries via a wiki.

This questionnaire also contained 5 items, four of which were in Likert scale format and the last question was an open ended one. The table of descriptive statistics (mean and standard deviation) is presented below:

Table 19: Descriptive statistics of the 3rd follow-up questionnaire

	Glossaries
	Mean / St.Dev.
Item 1	4.27 / .65
Item 2	4.45 / .52
Item 3	2.36 / 1.21
Item 4	2.36 / 1.63

The means of the first two and the last two items show that the students have the same opinion on the statements. More detailed information about the students ' attitude towards the issues under consideration is given below.

Item 1: I developed my business English vocabulary very well after compiling Glossaries in the course wiki page.

The purpose of Item 1 was to figure out whether compiling Glossaries in the course wiki page helped the students develop their EBP vocabulary. The vast majority of the students (54, 5% agreed and 36, 4% strongly agreed) found that they develop their business English vocabulary very well after compiling glossaries in the course wiki page. Only one student neither agreed nor disagreed with Item 1.

Table 20: Item 1- Compiling glossaries via a wiki

	Frequency	Percent
Strongly Disagree	0	0
Disagree	0	0
Neither Agree Nor Disagree	1	9,1
Agree	6	54,5
Strongly Agree	4	36,4
Total	**11**	**100,0**

Item 2: Compiling Glossaries via a wiki motivated me a lot to learn business English vocabulary.

The second question aimed at finding out whether the students considered compiling glossaries via a wiki as a source of motivation for learning business English vocabulary. The results showed that all students (54, 5% agreed and 45, 5% strongly agreed) found compiling glossaries via a wiki a source of motivation for learning EBP vocabulary.

Table 21: Item 2- Compiling glossaries via a wiki

	Frequency	Percent
Strongly Disagree	0	0
Disagree	0	0
Neither Agree Nor Disagree	0	0
Agree	6	54,5
Strongly Agree	5	45.5
Total	**11**	**100,0**

Item 3: Many of the words/phrases included in wiki Glossaries are still unfamiliar to me.

The aim of the third question was to figure out whether the students (after compiling wiki Glossaries) were still unfamiliar with some of the words/phrases included in wiki Glossaries. 45, 5% of the students (36, 4% strongly disagreed and 9, 1% disagreed) found that they knew all the words/phrases included in wiki Glossaries. On the other hand, 18, 2% of the students agreed with the question thinking that there were some words/phrases that they still do not know. The percentage of neither agree nor disagree responses was 36, 4%, which meant that 4 students could not be more strict in their answers and chose neither agree nor disagree option.

Table 22: Item 3- Compiling glossaries via a wiki

	Frequency	**Percent**
Strongly Disagree	4	36,4
Disagree	1	9,1
Neither Agree Nor Disagree	4	36,4
Agree	2	18,2
Strongly Agree	0	0
Total	**11**	**100,0**

Item 4: I would rather compile Glossaries on paper than via a wiki.

The aim of the fourth question was to elicit the students' preferences for compiling Glossaries via a wiki over on paper. The majority of the students, i.e. 63, 7% (45, 5% strongly disagreed and 18, 2% disagreed), disagreed with Item 4 and preferred compiling Glossaries via a wiki over on paper. However, 27, 3% of the students (9, 1% agreed and 18, 2% strongly agreed) would rather compile Glossaries on paper than via a wiki. And only one student neither agreed nor disagreed with Item 1.

Table 23: Item 4- Compiling glossaries via a wiki

	Frequency	Percent
Strongly Disagree	5	45,5
Disagree	2	18,2
Neither Agree Nor Disagree	1	9,1
Agree	1	9,1
Strongly Agree	2	18,2
Total	**11**	**100,0**

Item 5: Mention some advantages and disadvantages of compiling wiki Glossaries.

This last question aimed to reveal the students' attitude towards compiling Glossaries via a wiki mentioning some advantages and disadvantages of the task. As the question was an open ended one, SPSS package was not used to analyze the results. Only seven students wrote their thoughts on the space provided below the question. Some of the thoughts were repeated some were not; but all seven thoughts can be grouped into two categories:

- Everything was good enough- six students mentioned that they liked compiling Glossaries via a wiki and did not mention any disadvantage.
- Motivating, fascinating- one student mentioned that compiling Glossaries via a wiki motivated him/her a lot making the process of EBP vocabulary learning easier and assisted the development of EBP word stock.

The analysis of all three follow-up instruction attitudinal questionnaires reveals that the students accomplished the tasks via a wiki with great pleasure showing genuine interest towards all types of activities.

❖ Post Instruction Attitudinal Questionnaire

The aim of the post instruction attitudinal questionnaire was to find out the students' attitude towards/ preferences for learning business English vocabulary through Matching Activities,

Discussions, and Compiling Glossaries. The purpose of administering the same questionnaire to both groups was to find out the difference in students' attitude towards/ preferences for learning EBP vocabulary through the three types of tasks. The groups were different in that in the experimental group the students were asked to accomplish the tasks through the wiki; whereas, the students of the comparison group did the same tasks on paper.

4.3.1.4. Results of the post-instruction attitudinal questionnaire for students of both groups

The items of the post questionnaire were developed based on the questions that surfaced during the class observations. There were 9 five-point Likert scale format items and 3 open ended ones in the post questionnaire. For comparing the answers of the two groups given to all 9 items in Likert scale format, the data were analyzed through descriptive and inferential statistics. Among descriptive statistics mean and standard deviation were calculated. The tables presented below show that the students from the experimental group gave "agree" answer to the first six questions. However, the dominant answer of the students from the comparison group was "neither agree nor disagree" choice. As for the last three questions, the students of the experimental group were stronger in their answers compared with the students of the comparison group.

Table 24: Descriptive Statistics of the experimental group

	N	Mean	Std. Deviation
q1expgroupmatchingactivities	11	4,2727	,46710
q1expgroupdiscussions	11	4,4545	,52223
q1expgroupglossaries	11	4,5455	,52223
q2expgroupmatchingactivities	11	4,4545	,52223
q2expgroupdiscussions	11	4,6364	,50452
q2expgroupglossaries	11	4,4545	,68755
q3expgroupmatchingactivities	11	4,0909	,83121
q3expgroupdiscussions	11	4,3636	,80904
q3expgroupglossaries	11	4,6364	,50452
q4expgroupmatchingactivities	11	4,1818	,98165
q4expgroupdiscussions	11	4,4545	,93420
q4expgroupglossaries	11	4,1818	,87386
q5expgroupmatchingactivities	11	4,3636	,80904
q5expgroupdiscussions	11	4,3636	,80904
q5expgroupglossaries	11	4,3636	,80904
q6expgroupmatchingactivities	11	4,3636	,80904
q6expgroupdiscussions	11	4,4545	,68755
q6expgroupglossaries	11	4,2727	,78625
q7expgroupmatchingactivities	11	2,0000	1,09545
q7expgroupdiscussions	11	2,0000	1,09545
q7expgroupglossaries	11	2,0000	1,09545
q8expgroupmatchingactivities	11	1,7273	1,00905
q8expgroupdiscussions	11	1,8182	1,16775
q8expgroupglossaries	11	1,7273	1,00905
q9expgroupmatchingactivities	11	1,7273	1,27208
q9expgroupdiscussions	11	1,7273	1,27208
q9expgroupglossaries	11	1,7273	1,27208
Valid N (listwise)	11		

Table 25: Descriptive Statistics of the comparison group

	N	Mean	Std. Deviation
q1comparisongroupmatchingactivities	13	3,6923	,63043
q1comparisongroupdiscussions	13	3,7692	,72501
q1comparisongroupglossaries	13	4,0769	,64051
q2comparisongroupmatchingactivities	13	3,7692	,43853
q2comparisongroupdiscussions	13	3,7692	,72501
q2comparisongroupglossaries	13	3,8462	,68874
q3comparisongroupmatchingactivities	13	3,6923	,63043
q3comparisongroupdiscussions	13	3,7692	,59914
q3comparisongroupglossaries	13	3,9231	,64051
q4comparisongroupmatchingactivities	13	3,0769	,75955
q4comparisongroupdiscussions	13	3,6154	,50637
q4comparisongroupglossaries	13	3,5385	,51887
q5comparisongroupmatchingactivities	13	3,6923	,48038
q5comparisongroupdiscussions	13	3,9231	,64051
q5comparisongroupglossaries	13	4,0000	,57735
q6comparisongroupmatchingactivities	13	3,7692	,92681
q6comparisongroupdiscussions	13	4,2308	,72501
q6comparisongroupglossaries	13	4,5385	,51887
q7comparisongroupmatchingactivities	13	2,7692	,83205
q7comparisongroupdiscussions	13	1,9231	,75955
q7comparisongroupglossaries	13	2,0769	,75955
q8comparisongroupmatchingactivities	13	2,3077	,85485
q8comparisongroupdiscussions	13	2,3846	1,12090
q8comparisongroupglossaries	13	2,3077	1,03155
q9comparisongroupmatchingactivities	13	2,6154	1,04391
q9comparisongroupdiscussions	13	1,8462	,68874
q9comparisongroupglossaries	13	2,5385	1,19829
Valid N (listwise)	13		

For making a generalization from sample to population the data were analyzed through inferential statistics. The non-parametric two independent samples Mann Whitney's U test was used as the samples were small. As mentioned in the analysis of pre- and post-test results, non-parametric tests are for comparing the average ranks. Mann Whitney's U test converts the scores (in this case, the scores range from 1 to 5 for Strongly Disagree to Strongly Agree) to ranks across the groups. It also

shows whether the ranks for the two groups differ significantly or not. If the analysis of 9 items in Likert scale format was done through the SPSS program, then for the analysis of the rest of the questionnaire items that were open ended questions, SPSS program did not used.

The analysis of each post questionnaire item is given below.

Item 1: These activities were effective for learning business English vocabulary.

The first question aimed to elicit the students' attitude towards the effectiveness of all three activities for learning business English vocabulary. The results of Mann-Whitney U tests show that the Z value is -2.285 for Matching activities, -2.303 for Discussions and -1.794 for Glossaries with a significance level of p= .022 for Matching activities, p= .021 for Discussions and p= .073 for Glossaries (see the table below). The probability values (p) of Matching activities and Discussions are less than .05, which means there were significant differences between the two groups in Item 1. In case of Glossaries, there was no significant difference on average in students' attitude between groups towards the first item because the probability value is not less than .05.

Table 26: Descriptive Statistics of Mann-Whitney Test for Item 1, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	15.59	171.50
	Discussions	11	15.82	174.00
	Glossary	11	15.00	165.00
Comparison	Matching activity	13	9.88	128.50
	Discussions	13	9.69	126.00
	Glossary	13	10.38	135.00

Table 27: Inferential Statistics of Mann-Whitney Test for Item 1, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	37.500	35.000	44.000
Z	-2.285	-2.303	-1.794
Asymp. Sig. (2-tailed)	.022	.021	.073
Exact Sig. [2*(1-tailed Sig.)]	.047[a]	.035[a]	.119[a]

a. Not corrected for ties
b. Grouping Variable group

Item 2: These activities have improved my business English vocabulary.

Through the second question, the researcher wanted to find out the effect of activities on the improvement of students' business English vocabulary. The results are as follows: the Z value is -2.886 for Matching activities, -2.768 for Discussions and -2.031 for Glossaries with a significance level of p= .073 for Matching activities, p= .004 for Discussions and p= .006 for Glossaries (see the table below). The probability value (p) of Matching activities is not less than .05, which means that there is no significant difference on average in students responses of both groups towards the second item. However, the probability values of Discussions and Glossaries are less than .05, which indicate significant differences between the two groups in Item 2.

Table 28: Descriptive Statistics of Mann-Whitney Test for Item 2, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	16.27	179.00
	Discussions	11	16.55	182.00
	Glossary	11	15.45	170.00
Comparison	Matching activity	13	9.31	121.00
	Discussions	13	9.08	118.00
	Glossary	13	10.00	130.00

Table 29: Inferential Statistics of Mann-Whitney Test for Item 2, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	30.000	27.000	39.000
Z	-2.886	-2.768	-2.031
Asymp. Sig. (2-tailed)	.004	.006	.042
Exact Sig. [2*(1-tailed Sig.)]	.015[a]	.009[a]	.063[a]

a. Not corrected for ties
b. Grouping Variable group

Item 3: I have learned a lot of business English words/ phrases through these activities.

The third question aimed at eliciting whether the activities helped the students learn business words and phrases or not. According to the results, the Z value is -1.250 for Matching activities, -1.963 for Discussions and -2.588 for Glossaries with a significance level of p= .211 for Matching activities,

p= .050 for Discussions and p= .010 for Glossaries (see the table below). The probability value (p) of Matching activities is not less than .05, which means that there is no significant difference on average in students' responses of both groups towards the third item. However, the probability values of Discussions and Glossaries were less than .05; consequently, there is significant difference on average in students' responses of both groups towards Item 3.

Table 30: Descriptive Statistics of Mann-Whitney Test for Item 3, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	14.32	157.50
	Discussions	11	15.36	169.00
	Glossary	11	16.18	178.00
Comparison	Matching activity	13	10.96	142.50
	Discussions	13	10.08	131.00
	Glossary	13	9.38	122.00

Table 31: Inferential Statistics of Mann-Whitney Test for Item 3, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	51.500	40.000	31.000
Z	-1.250	-1.963	-2.588
Asymp. Sig. (2-tailed)	.211	.050	.010
Exact Sig. [2*(1-tailed Sig.)]	.252[a]	.072[a]	.018[a]

a. Not corrected for ties
b. Grouping Variable group

Item 4: These activities have motivated me to learn business English vocabulary.

By means of the fourth question, the researcher tried to uncover the influence of activities on the students' motivation to learn business English vocabulary. The picture is the following: the Z value is -2.709 for Matching activities, -2.886 for Discussions and -2.396 for Glossaries with a significance level of p= .007 for Matching activities, p= .004 for Discussions and p= .017 for Glossaries (see the table below). The probability values (p) of all three types of activities are not less than .05, which means that there is significant difference on average in students' responses of both groups towards Item 4.

Table 32: Descriptive Statistics of Mann-Whitney Test for Item 4, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	16.59	182.50
	Discussions	11	16.73	184.00
	Glossary	11	15.91	175.00
Comparison	Matching activity	13	9.04	117.50
	Discussions	13	8.92	116.00
	Glossary	13	9.62	125.00

Table 33: Inferential Statistics of Mann-Whitney Test for Item 4, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	26.500	25.000	34.000
Z	-2.709	-2.886	-2.396
Asymp. Sig. (2-tailed)	.007	.004	.017
Exact Sig. [2*(1-tailed Sig.)]	.007[a]	.006[a]	.030[a]

a. Not corrected for ties
b. Grouping Variable group

Item 5: My business English vocabulary has improved after accomplishing these activities.

The aim of the fifth question was to find out the students' attitude towards the activities in improving their business English vocabulary. Here are the results: the Z value is -2.269 for Matching activities, -1.531 for Discussions and -1.395 for Glossaries with a significance level of p= .023 for Matching activities, p= .126 for Discussions and p= .163 for Glossaries (see the table below). The probability value (p) of Matching activities is less than .05, which means that there is significant difference on average in students' responses of both groups towards the fifth item. However, the probability values of Discussions and Glossaries are not less than .05, which specify no significant difference on average in students' responses of both groups to Item 5.

Table 34: Descriptive Statistics of Mann-Whitney Test for Item 5, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	15.77	173.50
	Discussions	11	14.73	162.00
	Glossary	11	14.50	159.50
Comparison	Matching activity	13	9.73	126.50
	Discussions	13	10.62	138.00
	Glossary	13	10.81	140.50

Table 35: Inferential Statistics of Mann-Whitney Test for Item 5, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	35.500	47.000	49.500
Z	-2.269	-1.531	-1.395
Asymp. Sig. (2-tailed)	.023	.126	.163
Exact Sig. [2*(1-tailed Sig.)]	.035[a]	.167[a]	.207[a]

a. Not corrected for ties
b. Grouping Variable group

Item 6: Such activities help improve business English vocabulary.

With the sixth question the researcher wanted to figure out the students preferences for improving business English vocabulary through these three types of activities. The results are the following: the Z value is -1.591 for Matching activities, -.795 for Discussions and -.776 for Glossaries with a significance level of p= .112 for Matching activities, p= .427 for Discussions and p= .438 for Glossaries (see the table below). The probability values (p) of all activities are not less than .05, which means that there is no significant difference on average in students' responses of both groups towards the sixth item.

Table 36: Descriptive Statistics of Mann-Whitney Test for Item 6, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	14.86	163.50
	Discussions	11	13.64	150.00
	Glossary	11	11.41	125.50
Comparison	Matching activity	13	10.50	136.50
	Discussions	13	11.54	150.00
	Glossary	13	13.42	174.50

Table 37: Inferential Statistics of Mann-Whitney Test for Item 6, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	45.500	59.000	59.500
Z	-1.591	-.795	-.776
Asymp. Sig. (2-tailed)	.112	.427	.438
Exact Sig. [2*(1-tailed Sig.)]	.134[a]	.494[a]	.494[a]

a. Not corrected for ties
b. Grouping Variable group

Item 7: I find business English vocabulary difficult to learn through these activities.

The seventh question intended to explore the students' position on the types of activities as tricky ways of learning business English vocabulary. The results provided the following picture: the Z value is -1.806 for Matching activities, .000 for Discussions and -.366 for Glossaries with a significance level of p= .071 for Matching activities, p= 1.000 for Discussions and p= .714 for Glossaries (see the table below). The probability values (p) are not less than .05, which means that there is no significant difference on average in students' responses of both groups towards the seventh item.

Table 38: Descriptive Statistics of Mann-Whitney Test for Item 7, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	9.77	107.50
	Discussions	11	12.50	137.50
	Glossary	11	11.95	131.50
Comparison	Matching activity	13	14.81	192.50
	Discussions	13	12.50	162.50
	Glossary	13	12.96	168.50

Table 39: Inferential Statistics of Mann-Whitney Test for Item 7, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	41.500	71.500	65.500
Z	-1.806	.000	-.366
Asymp. Sig. (2-tailed)	.071	1.000	.714
Exact Sig. [2*(1-tailed Sig.)]	.082[a]	1.000[a]	.733[a]

a. Not corrected for ties
b. Grouping Variable group

Item 8: These activities have not helped me improve my business English vocabulary.

The aim of the eighth question was to reveal how students feel about the types of activities as an unproductive way of learning business English vocabulary. The results are as follows: the Z value is -1.855 for Matching activities, -1.403 for Discussions and -1.492 for Glossaries with a significance level of p= .064 for Matching activities, p= .161 for Discussions and p= .136 for Glossaries (see the

table below). The probability values (p) are not less than .05, which means that there is no significant difference on average in students' responses of both groups towards the eighth item.

Table 40: Descriptive Statistics of Mann-Whitney Test for Item 8, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	9.82	108.00
	Discussions	11	10.41	114.50
	Glossary	11	10.27	113.00
Comparison	Matching activity	13	14.77	192.00
	Discussions	13	14.27	185.50
	Glossary	13	14.38	187.00

Table 41: Inferential Statistics of Mann-Whitney Test for Item 8, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	42.000	48.500	47.000
Z	-1.855	-1.403	-1.492
Asymp. Sig. (2-tailed)	.064	.161	.136
Exact Sig. [2*(1-tailed Sig.)]	.093[a]	.186[a]	.167[a]

a. Not corrected for ties
b. Grouping Variable group

Item 9: I think these activities were boring way to learn business English vocabulary.

The last question in Likert scale format was to figure out whether the students were encouraged to learn business English vocabulary through these activities or not. The followings are the results: the Z value is -1.978 for Matching activities, -1.100 for Discussions and -1.819 for Glossaries with a significance level of p= .048 for Matching activities, p= .271 for Discussions and p= .069 for Glossaries (see the table below). The probability value (p) of Matching activities is less than .05, which means there is significant difference on average in students' responses of both groups towards the ninth question. However, the probability values of Discussions and Glossaries are not less than .05, which specify no significant differences between the groups in Item 9.

Table 42: Descriptive Statistics of Mann-Whitney Test for Item 9, post questionnaire

RANKS				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Experimental	Matching activity	11	9.55	105.00
	Discussions	11	10.91	120.00
	Glossary	11	9.82	108.00
Comparison	Matching activity	13	15.00	195.00
	Discussions	13	13.85	180.00
	Glossary	13	14.77	192.00

Table 43: Inferential Statistics of Mann-Whitney Test for Item 9, post questionnaire

	TEST STATISTICS [b]		
	Matching activities	**Discussions**	**Glossaries**
Mann-Whitney U	39.000	54.000	42.000
Z	-1.978	-1.100	-1.819
Asymp. Sig. (2-tailed)	.048	.271	.069
Exact Sig. [2*(1-tailed Sig.)]	.063[a]	.331[a]	.093[a]

a. Not corrected for ties
b. Grouping Variable group

Item 10: List some advantages of learning business English vocabulary through these activities.

The aim of Item 10 was to figure out the advantages of these activities listed by the students while learning business English vocabulary. The results of this and following two items were not analyzed through SPSS program as these items were open ended items.

In the experimental group, only five students out of eleven wrote their thoughts concerning the question. As the students' thoughts were mostly repeated, they were grouped into the following categories:

- Everything was very good- two students wrote that altogether the activities were very good for learning business English vocabulary.
- Interesting and motivating- two students mentioned interesting and motivating factors as advantages of learning EBP vocabulary through the three types of activities.
- Innovative, time saving, and actual- one student pointed out these three features as advantages of the activities accomplished via a wiki for learning EBP vocabulary.

In comparison with the experimental group, two students from the comparison group mentioned the following features as the advantages of learning EBP vocabulary through three activities:

- Everything was good enough
- Interesting

Item 11: List some disadvantages of learning business English vocabulary through these activities.

Item 11 aimed at revealing the disadvantages of learning EBP vocabulary through the activities mentioned by the students of both groups, who accomplished the same activities in one group via a wiki, in the other group on paper.

Three students from the experimental group expressed the following thoughts concerning the question:

- There were no disadvantages- two students mentioned that they did not find any disadvantages of learning EBP vocabulary through the activities accomplished via a wiki.
- The words were complicated- one student indicated that the words included in the activities were complicated but the way of learning those words made the process of perceiving them interesting.

Students from the comparison group did not write any disadvantage concerning the activities accomplished on paper during the study.

Item 12: If you have any other suggestions or comments, please, write tem in the space below.

These are the suggestions made by six students from the experimental group. Other students did not write any suggestion:

- More discussions in a wiki- one student indicated that it would be better to have more discussions in a wiki.
- Have another opportunity with technology- one student mentioned that it would be better to have another course with technology.

- The lessons were active- one of the students expressed gratitude for making classes active.
- Liked all activities- three students wrote that they liked activities accomplished via a wiki very much.

In comparison with the experimental group, one student from the comparison group wrote the following suggestion/comment regarding this question:

- Have another course of business English- one student wanted to have a course of business English in the 4th year of study as well.

The results of between-group comparisons on the post questionnaire items revealed that the students of both groups benefited from the activities a lot. But the students of the experimental group were highly motivated in taking another course with wiki technology.

4.3.2. Interviews with the Students

The items for the interview were developed based on the questions that emerged during the classroom observations and follow-up questionnaires. The interview was conducted in both groups, i.e. experimental and comparison, addressing the same 4 open-ended items each, which were exclusively developed for the purposes of this study (see Appendix 8). The total number of students participating in the interview was fourteen – 8 students from the experimental group, and 6 students from the comparison group.

The aim of the interview was to elicit the following information: a) the students' attitude towards/ preferences for completing the three types of tasks throughout the course, and b) the impact of tasks, accomplished via a course wiki in the experimental group and on paper in the comparison group, on EBP vocabulary learning.

4.3.2.1. Results of the Interviews with the Students of the Experimental and Comparison Groups

1. **Did you face any difficulties in accomplishing the types of tasks (matching activities, discussions, and glossary) for improving business English vocabulary?**

Among the difficulties, students from the experimental group mentioned

- *technical issues – w*ithin technical issues, most of the students pointed out that at first sight it was difficult to run the course wiki because it was their first experience of dealing with wiki technology in general and using them for learning purposes. But after some experience, the students gained confidence in using the course wiki.
- *vocabulary problems* – when talking about vocabulary problems that the students faced, unfamiliarity with new business terminology used in tasks was the commonly appeared one.

Two students from the experimental group did not mention any difficulty when accomplishing the tasks.

Students from the comparison group pointed out the following difficulties:

- *vocabulary problems* – when talking about vocabulary problems, the students mentioned the difficulty concerning newly learned business terminology. The students said that Matching activities were somehow confusing- some of the definitions that should be matched with appropriate words were confusing and very similar in meaning.
- *not clarity in task instructions* – in several cases, students were talking about the task instructions as another difficulty that they faced mentioning that some instructions were not so clear- the students had to read the instructions several times in order to understand them.

2. **Do you consider the tasks (matching activities, discussions, and glossary) as an effective tool in EBP vocabulary learning? Why do you think EBP vocabulary tasks (matching activities, discussions, and glossary) accomplished throughout the course are effective / ineffective?**

Students from the experimental group thought that all types of tasks were highly effective. According to the students, accomplishing the tasks through wiki technology brought a new way in learning, which raised the effectiveness of the types of tasks. The students mentioned that they

accomplished the tasks with great pleasure, they became more responsible in terms of doing assignments on time, started thinking in English, working collaboratively, and were able to contribute to the course content without talking with each other (through the screen face). All these brought healthy competition among the students. One of the students specifically mentioned the effectiveness of compiling glossaries via a wiki pointing out that this type of tasks expand learners' word stock a lot. Another student did not want to use the word effective/ineffective to describe the efficacy of tasks noting that the same assignments they could do on paper and would get the same results.

The students from the comparison group thought that each type of task has its own role in the enlargement of EBP vocabulary in students. Most of the students could not mark any type out; however, several students mentioned compiling glossaries and discussions as the most effective ones among the types of tasks. According to the students, including new words/ phrases in glossaries and using them in discussions helped them enlarge their active vocabulary. But one student mentioned that the types of tasks accomplished during the study were the same as in the previous courses so the effectiveness of the tasks falls somewhere in the middle.

3. **What is your attitude towards/ preferences for the types of tasks completed during the course?**

As for the attitude towards the types of tasks, the students from both groups had almost the same approach to it. Students from the experimental group mentioned that they did all types of tasks with great pleasure but the most motivating type of task was discussion. The students also pointed out that compiling glossaries helped them improve their EBP vocabulary a lot because words/phrases, included in glossaries by the students, were given with English explanations. Only one student among the experimental group students marked out matching activities along with discussions as her preferable type of tasks. Students from the comparison group mentioned that all types of activities served their purposes; however, two students marked out discussions and other two students pointed out glossaries as the most liked types of tasks.

4. **Do you have any suggestions concerning the use of these tasks (matching activities, discussions, and glossary) in EBP vocabulary learning?**

Students' responses to this question can be categorized into the ones that do not want to change anything in tasks and ones that want to make them better with their suggestions. Some of the students from the experimental group wanted to add the types of tasks (such as those that would give them more chance to deal with the current problems in market) to wiki assignments. Other students wanted to have more topics for wiki discussions and have Armenian translations accompanied to some of the instructions of wiki assignments. Students from the comparison group also wanted to have more topics for discussions and clarity in instructions.

Analyzing the results obtained from the interview and questionnaires, it can be inferred that the use of wiki technology highly influence EBP students' attitude towards integrating technologies into the learning in Armenian settings.

Chapter Five: Discussion and Conclusion

In this chapter, the summary of findings and the answers to the research questions are presented. The chapter also provides the limitations of the study and suggestions for further research.

The study aimed at finding out the impact of wiki technology on business English vocabulary learning, which was guided by the following three research questions:

- *Is there any relationship between using wiki technology and learning business English vocabulary?*
- *How does wiki technology impact students' learning processes?*
- *To what extent does the use of a wiki technology influence EBP students' attitude towards/preferences for integrating wikis into the learning in Armenian settings?*

5.1.Findings and Conclusion

The findings of data collection instruments are organized according to the research questions. Conclusions after each research question are also made.

5.1.1. Is there any relationship between using wiki technology and learning business English vocabulary?

Discussion of findings of pre- and post-tests results

The results of the quantitative analysis illustrated that the students' performance in the experimental group and in the comparison group was not significantly different. The quantitative analysis of the results of pre- and post-tests demonstrated that in the experimental group students performed similar to the students in the comparison group.

While comparing the students' achievement from test to test within the groups, in both experimental and comparison groups it was found significant difference between pre- and post-tests results in favor of the post-test. Within- group comparison revealed that there was a positive relationship between using wiki technology and learning business English vocabulary. This might be

due to the collaborative and informal learning environment provided by wiki technology; however, between-group comparisons in pre- and post-tests revealed no significant difference on average in students' performances. There might be different reasons for this. One of the reasons could be the teacher's attitude towards the types of activities used during the course, which mostly affected students' motivation. Another reason could be short duration of the study (16 weeks). If there was a chance to conduct a longitudinal study it could affect the results of the research. It is worth mentioning that the students did not have a chance to use wiki technology during the classes (except for one-two cases) - wiki activities were completed as homework assignments and discussed during the class-time. This might also affect the results of between-group comparisons in the post-test.

5.1.2. How does wiki technology impact students' learning processes?

Discussion of findings of wiki history

From the analysis of wiki history it can be inferred the following:

- The students build course wiki page with active integration and contribution to the course content.
- Collaborative and informal learning environment provided by wiki technology increase students self-confidence and motivation.
- Being a discussion medium and learning tool, wiki technology positively impacts on the process of knowledge formation in students.

Discussion of findings of the classroom observations

The results of classroom observations revealed that the classes in the experimental group were more active than the classes in the comparison group. The students were keenly involved in class activities and considered themselves as the parts of their lessons. In the comparison group, the classes were not so active- the atmosphere was positive but quiet. The students from both groups were willing to complete any activity assigned by their teacher. However, in the experimental group students were

more willing and motivated to do their best because the way of accomplishing activities required more student involvement and active participation.

From the analysis of these two data collection tools, it can be inferred that high motivation and active involvement in classroom activities in students is led by the innovative way of approaching teaching and learning processes.

5.1.3. To what extent does the use of a wiki technology influence EBP students' attitude towards/preferences for integrating wikis into the learning in Armenian settings?

Discussion of findings of the questionnaires

The results of the qualitative data (questionnaires and interview, in particular) revealed that Matching activities, Discussions and Glossaries were an effective, fascinating and motivating way of learning business English vocabulary. Moreover, summing up the results of all three follow-up instruction attitudinal questionnaires (administered in the experimental group), the following conclusions can be drawn from:

- Development of EBP vocabulary through Matching Activities, Discussions, and Glossaries are effective means.
- Matching Activities, Discussions, and Glossaries are a source of motivation for students in learning EBP vocabulary.
- Unfamiliarity with some of the EBP words/phrases still exists even after accomplishing Matching Activities and Discussions. The same cannot be said for Glossaries.
- Students prefer accomplishing Matching Activities, Discussions, and Glossaries via a wiki to completing them on paper.
- Matching Activities, Discussions, and Glossaries are interesting, fascinating, time saving and vocabulary developing activities.

Comparing the results of post-questionnaire administered in both groups, it can be stated that the students from both groups found Matching activities, Discussions and Glossaries an effective way of

learning EBP vocabulary. However, according to the inferential statistics, the students of the experimental group gave more important role to the types of activities as compared with the students of the comparison group. The students of both groups thought that the types of activities were not difficult for learning EBP vocabulary. They also shared the same opinion about the unproductive way of learning EBP vocabulary through the types of activities- the students did not find activities as boring way of learning EBP vocabulary.

Discussion of findings of the interview with students of the experimental and comparison groups

The results of the interview with students from both groups revealed that having quite different way of completing the tasks throughout the course, the students agreed upon the thing that all types of tasks served their purposes i.e. enlarged their EBP vocabulary. However, among the preferred types of tasks were discussions and compiling glossaries. Students would like to have more topics for discussion. Both groups had some difficulties with vocabulary. In the experimental group, students also had some technical difficulties concerning the use of the course wiki. On the contrary, students from the comparison group had difficulties with task instructions. They wanted the task instructions to be clearer. It should be noted that the interviewees from the experimental group were more motivated to learn than the students from the comparison group. It can be inferred that the high motivation of the students of the experimental group is connected with the integration of wiki technology into the study.

5.2. Pedagogical Implementations of the Study

The pedagogical implementation of this study is that it investigated the relationship between using wiki technology and learning business English vocabulary. The study can guide language teachers in understanding the importance of integrating technologies into the language learning environment. As wiki technology is new in the Armenian learning settings, I would recommend investigating the impact of wiki technology on foreign language learning deeper. This might give language teachers an opportunity to achieve better results through modern methods of teaching.

5.3. Limitations of the Study

Limitations of this study are as follows:

First, the study was conducted in the short period of time (16 weeks). This might have influenced the results of the research. Had the research been conducted within a longer period of time, the results might have shown significant difference in performance between-group comparisons in the post-test in favor of the experimental group.

Second, the number of students involved in the study was small. Had more students been involved in the study, the results could be more valid. If more students were took part in the study, more group comparisons would be done, and therefore, the results could be easier to generalize across the groups.

Third, the students for the study were not randomly selected. The method of selecting groups for study was availability sampling, i.e. the students were already assigned to the groups. Therefore, the data obtained from non-random samples are not as valid as the data obtained from random samples because non-random samples are not true representatives of the population.

Fourth, experimental and comparison groups were not taught by the same teacher. This might be one of the reasons for students of being highly motivated and actively engaged in classes in one group and relatively calm in another group. Should the groups have been taught by the same teacher, the results would be more visible in terms of performances.

Fifth, the students of the experimental group did not have more opportunity except for one-two for using wiki technology during the classes. They accomplished the activities as homework assignments. Were they given a chance of using wiki technology in the classroom as well, the post-test results between-group comparisons could be significantly different in favor of the experimental group.

5.4. Suggestions for Further Research

For further investigation, it is recommended to conduct more research and find out the impact of wiki technology on business English vocabulary learning in-depth. Conducting longitudinal studies

with more groups that would be chosen randomly could be more preferable as the data obtained from those groups would be more valid. Possibly, it would be better to use wiki technology not only for accomplishing homework assignments but also during the classes.

Having the same teacher in all groups, would lower the teacher's factor in students' motivation and involvement in class activities. Another way of making the qualitative data (observations, in particular) more valid, is to have more classroom observations than three. And finally, it would be better to have two open-ended items in all three follow-up questionnaires instead of one open-ended one. In case of two open-ended items, the students would have a chance to write advantages and disadvantages of doing a type of activities via a wiki separately. This would yield more valid and in-depth data.

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APPENDIX 1

Eurasia International University

Faculty of Management and Finance

Business English Classes

Pre-test for 3rd year BA students

*Name*_____

*Date*_____

Student's Name_____

Date_____

Time: 30 minutes

Yerevan, Armenia

2011

Business Vocabulary Comprehension Test

Part I: Word Choice (10 points)

Complete the sentences with the correct word.

1. Two men were arrested for using PayPal for money_____.

   a) *fixing* ***b)*** *trading* ***c)*** *laundering*

2. I refuse to work for a company that does animal_____.

   a) *fraud* *b) discrimination* *c) testing*

3. We need a strong negotiator, someone who's really_____.

   a) *assertive* ***b)*** *diffident* ***c)*** *formal*

4. He would do anything to succeed. He's completely_____.

   a) *principled* ***b)*** *ruthless* ***c)*** *laid-back*

5. We need to _____ decision-making to give middle management more control.

   a) *relocate* ***b)*** *relaunch* ***c)*** *decentralise*

6. Customer _____ means consumers like to keep buying our brand.

   a) *image* ***b)*** *loyalty* ***c)*** *awareness*

7. Americans usually say _____ for a 'single' ticket.

   a) *round-trip* ***b)*** *one-way* ***c)*** *return*

8. After the new team have had time to settle in, we'll _____ the situation.

   a) *reassess* ***b)*** *upgrade* ***c)*** *deregulate*

9. When a famous actor says he uses a product, that's called a/an _____.

a) *endorsement* ***b)*** *launch* ***c)*** *share*

10. When you reduce the number of employees in an office, you call it _____.

a) *downsizing* ***b)*** *desizing* ***c)*** *resizing*

Part II: Business Letter Writing (10 points)

Read the first part of the business letter addressed to Mr. John Taylor, Director of Operations at Vancouver Manufacturing. Continue and finish the letter using any FIVE of the following SEVEN words. Write 6 to10 sentences.

business activity	*fine service*	*food industry*	*reputation*
mass- produced	*guarantee*	*transparent*	

Vancouver Manufacturing

9102 NW 99th Street, Vancouver, Washington 98665

(800) 555-1212

September 25, 2009

Mr. John Taylor
Director of Operations
ABC Corporation
100 E Main Street
Vancouver, WA 98685

Dear Mr. Taylor:

As our new letterhead indicates, we have recently changed the name of our business from Fort Vancouver Manufacturing to Vancouver manufacturing.

There has been no change in management. Moreover, _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Total-------/20

APPENDIX 2

Eurasia International University

Faculty of Management and Finance

Business English Classes

Post-test for 3rd year BA students

*Name*_____

*Date*_____

Student's Name_____

Date_____

Time: 30 minutes

Yerevan, Armenia

2011

Business Vocabulary Comprehension Test

Part I: Word Choice (10 points)

Complete the sentences with the correct word.

1. For high performers, a good _____ is not all that matters. They need a challenge as well.

   a) payroll *b)* financial *package* *c) renewal*

2. We' are looking for an alternative _____ in case our usual one can't deliver next week.

   a) supplier *b) messenger* *c) paymaster*

3. Many business people agree that a good _____ is just as important as the product itself.

   a) bargain *b) after-sales service* *c) compensation*

4. _____ of foreign goods is driving domestic companies out of business.

   a) Regulation b) Customs c) Dumping

5. Their summer collection has items so similar to our own new designs that we think this might be a case of _____.

   a) industrial espionage *b) secrecy* *c) disclosure*

6. When high _____ are charged on imports, the market isn't really free.

   a) barriers b) tariffs c) quotas

7. If you want to get to the top, you have to be _____, I mean be prepared to take risks and to try new ways of doing things.

   a) flexible *b) adventurous* *c) impulsive*

8. Our _____ are in central London but we manufacture our products all over the country.

a) factories b) headquarters c) plants

9. The managerial staff of the company takes it to be an important _____ in the field of telecommunication.
   a) break-in *b) brainwave* *c) breakthrough*

10. A good leader has to be able to make _____ decisions when necessary, and to make them quickly.
    a) heavy *b) strong* *c) tough*

Part II: Business Letter Writing (10 points)

Read the first part of the business letter addressed to Mrs. Agnes Wong, Flight Coordinator at Star Travel. Continue and finish the letter using any FIVE of the following SEVEN words. Write 6 to 10 sentences.

baggage	*contract*	*setback*	*check-in & passport control*
drawing board	*compensation*	*annoying*	

COMPUTER HARDWARE SUPPLIES

Riverside Industrial Estate, Unit 7A, Selby, YO8 9JH

01757 998 099

May 15, 2008

Mrs. Agnes Wong
Flight coordinator
Star Travel
100 E Main Street
Hong Kong

Subject: Hong Kong Travel arrangements

Dear Mrs. Wong:

Last month my company arranged flights, ground transfers and hotel accommodations through your company, Star Travel. We were hosting a meeting for our regional managers here in Hong Kong. We were very unhappy with the results of the booking.

Though all of the flight arrangements were acceptable, two members of our group had some problems at the airport. One of them_____

_____

_____

_____

_____

_____

_____

_____

Total—---/20

APPENDIX 3

Task 1

Matching Activity

QUESTIONNAIRE

Dear student,

The purpose of this questionnaire is to find out your attitude towards/ preferences for accomplishing matching activities via a wiki. The questionnaire is anonymous; thank you for honest opinion.

Age _____

Gender _____

Major _____

Course _____

Instructions: Please, circle one response for each item.

Strongly agree /SA/- 5
Agree /A/- 4
Neither agree nor disagree /NAND/- 3
Disagree /D/- 2
Strongly disagree /SD/- 1

Student's attitude towards/ preferences for accomplishing matching activities via a wiki

N	Questions	Open and protected markets					Managing meetings				
		SA	A	NAND	D	SD	SA	A	NAND	D	SD
1	I highly developed my business English vocabulary after accomplishing Matching activities posted in the course wiki page.	5	4	3	2	1	5	4	3	2	1
2	Matching activities motivated me a lot to learn business English vocabulary.	5	4	3	2	1	5	4	3	2	1

3	Many of the words/ phrases used in Matching activates are still unfamiliar to me.	5	4	3	2	1	5	4	3	2	1
4	I would rather do Matching activities on paper than via a wiki.	5	4	3	2	1	5	4	3	2	1

5. Mention some advantages and disadvantages of doing Matching Activities via a wiki

_____
_____
_____
_____
_____
_____

Thank You!!!

APPENDIX 4

Task 2

Discussion

QUESTIONNAIRE

Dear student,

The purpose of this questionnaire is to find out your attitude towards/ preferences for accomplishing Task 2 on discussion topics via a wiki. The questionnaire is anonymous; feel free to be candid in your responses.

Age _____

Gender _____

Major _____

Course _____

Instructions: Please, circle one response for each item.

Strongly agree /SA/- 5
Agree /A/- 4
Neither agree nor disagree /NAND/- 3
Disagree /D/- 2
Strongly disagree /SD/- 1

Student's attitude towards/ preferences for accomplishing Task 2 on discussion topics via a wiki

N	Questions	Policy for Smokers					Quality not Quantity					Important Innovations				
		SA	A	NAND	D	SD	SA	A	NAND	D	SD	SA	A	NAND	D	SD
1	I developed my business English vocabulary very well after the Discussions put in the course wiki page.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
2	Wiki Discussions motivated me a lot to learn business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
3	Many of the words/ phrases used in wiki Discussions are still unfamiliar to me.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

4	I would rather have Discussions during the class than via a wiki.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

5. Mention some advantages and disadvantages of wiki Discussions

_____
_____
_____
_____
_____
_____

Thank You!!!

APPENDIX 5

Task 3

Glossary

QUESTIONNAIRE

Dear student,

The purpose of this questionnaire is to find out your attitude towards/ preferences for accomplishing Task 3 on compiling glossaries via a wiki. The questionnaire is anonymous; thank you for your responses.

Age _____

Gender _____

Major _____

Course _____

Instructions: Please, circle one response for each item.

Strongly agree /SA/- 5
Agree /A/- 4
Neither agree nor disagree /NAND/- 3
Disagree /D/- 2
Strongly disagree /SD/- 1

Student's attitude towards/ preferences for accomplishing Task 3 on making glossaries via a wiki

N	Questions	SA	A	NAND	D	SD
1	I have developed my business English vocabulary very well after compiling glossaries in the course wiki page.	5	4	3	2	1
2	Compiling Glossaries via a wiki motivated me a lot to learn business English vocabulary.	5	4	3	2	1
3	Many of the words/ phrases included in wiki Glossaries are still unfamiliar to me.	5	4	3	2	1
4	I would rather compile Glossaries on paper than via a wiki.	5	4	3	2	1

5. Mention some advantages and disadvantages of making wiki Glossaries

_____
_____
_____
_____
_____

Thank You!!!

APPENDIX 6

Post Instruction Attitudinal Questionnaire for Students

Dear student,

The purpose of this questionnaire is to find out your attitude towards/ preferences for learning business English vocabulary through Matching Activities, Discussions and Compiling Glossaries. The questionnaire is anonymous; thank you for your responses.

Age _____

Gender _____

Major _____

Course _____

Instructions: Please, circle one response for each item.

Strongly agree /SA/- 5
Agree /A/- 4
Neither agree nor disagree /NAND/- 3
Disagree /D/- 2
Strongly disagree /SD/- 1

Student's attitude towards/ preferences for learning business English vocabulary through Matching Activities, Discussions and Compiling Glossaries

N	Questions	Matching Activities					Discussions					Glossaries				
		SA	A	NAND	D	SD	SA	A	NAND	D	SD	SA	A	NAND	D	SD
1	These activities were effective for learning business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
2	These activities have improved my business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
3	I have learned a lot of business English words/phrases through these activities.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
4	These activities have motivated me to learn business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
5	My business English vocabulary has improved after accomplishing these activities.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
6	Such activities help to improve business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
7	I find business English vocabulary difficult to learn through these activities.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
8	These activities have not helped me improve my business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
9	I think these activities were boring way to learn business English vocabulary.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

10. List some advantages of learning business English vocabulary through these activities.

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11. List some disadvantages of learning business English vocabulary through these activities.

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12. If you have any other suggestions or comments, please write them in the space below.

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Thank You!!!

APPENDIX 7

CLASSROOM OBSERVATION FORM

FOR ESL SETTINGS

Taken and adapted from Connecticut Community Colleges

Faculty Member_____
Evaluator_____
Date_____
Class_____

1. Was the lesson organized and clearly presented?

2. Describe the level of students' interest towards and participation in class activities.

3. Describe teacher-student and student-student interactions.

4. What were the effects of classroom instruction and types of tasks used during the course on students' motivation to learn EBP vocabulary?

APPENDIX 8

Interview Questions

for

Wiki (experimental) and Non-Wiki (comparison) Groups

1. Did you face any difficulties in accomplishing the tasks (matching activities, discussions, and glossary) for improving business English vocabulary?
2. Do you consider the tasks (matching activities, discussions, and glossary) as an effective tool in EBP vocabulary learning? Why do you think EBP vocabulary tasks (matching activities, discussions, and glossary) accomplished throughout the course are effective / ineffective?
3. What is your attitude towards/ preferences for the types of tasks completed during the course.
4. Do you have any suggestions concerning the use of these tasks (matching activities, discussions, and glossary) in EBP vocabulary learning?

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APPENDIX 9

Transcription of the Interview Conducted with the Students of the Experimental Group

I. Did you face any difficulties in accomplishing the types of tasks (matching activities, discussions, and glossary) for improving business English vocabulary?

S1. - I had only technical difficulties because I did not have any experience of working with wikis before.

S2. - I faced technical difficulties while working with wiki technology. For example, at first, I did not know how to check my wiki inbox when the instructor was sending us an email notification of homework assignment.

S3. - I had some difficulties concerning the language used in wiki tasks. I did not know the explanation of some words/phrases (i.e. business terminology) and had to go to check them up in the dictionary in order to complete the tasks.

S4. - As it was my first experience of working with wiki technology, I faced mostly technical difficulties.

S5. - While completing wiki tasks, I had two types of difficulties- technical ones and vocabulary problems.

S6. - I had some vocabulary difficulties, specifically I faced them in discussions as I had to first translate the topic of the discussion, then my fellow students' responses in order not to repeat their answers, after which write down what |I think.

S7. - I did not have any difficulties while doing the tasks.

S8. - I can't remember any difficulty that I faced.

II. Do you consider the tasks (matching activities, discussions, and glossary) as an effective tool in EBP vocabulary learning? Why do you think EBP vocabulary tasks (matching activities, discussions, and glossary) accomplished throughout the course are effective / ineffective?

S1. - Yes, I think the tasks were motivating, the way of completing them was also motivating and innovative, of course.

S2. - In my opinion, they were effective, because nowadays most of the students spend great amount of their time in front of the computer and doing assignments in a traditional way, is less effective than via a computer.

S3. - It is somehow difficult to say the types of tasks accomplished via a wiki were effective or ineffective because the same assignments we could do on paper and would get the same results.

S4. - The tasks accomplished via a wiki were effective in that they brought a new way in learning; hence, we were motivated a lot. Besides, each of us had his/her own contribution to the content, which raised our responsibility.

S5. - I think all three types of tasks were effective and did not take much time and efforts to accomplish them.

S6. - In my opinion, the way of doing the tasks was very effective as there was no way of not doing them- everything was obvious in the wiki and the instructor could even see the time of completing the task by each student. So there was no way to come to class not prepared and copy the assignment from others several minutes before starting the class. Along with this, doing tasks through a wiki was interesting as it brought healthy competition among students- e.g. who would be the first completing the task and so on.

S7. - The tasks were really effective, especially compiling glossaries via a wiki- we had to write English explanations for the words, which expanded our word stock.

S8. - Of course, they were an effective way of learning EBP vocabulary because doing the tasks via a wiki, I started thinking in English. Moreover, I accomplished the tasks with great pleasure as the way of doing the tasks was up-to-date.

III. What is your attitude towards/ preferences for the types of tasks completed during the course?

S1. - I liked all tasks accomplished via a wiki, especially discussions.

S2. - Discussions and compiling glossaries helped me a lot for improving my EBP vocabulary.

S3. - All tasks were effective and I liked all of them.

S4. - I have a positive attitude towards all types of tasks accomplished during the course as they improved my EBP vocabulary a lot.

S5. - I liked compiling glossaries very much.

S6. - Discussions and matching activities were very effective.

S7. - Three types of tasks were really helpful for learning business English vocabulary.

S8. - I did all types of tasks with great pleasure but the most motivated one were discussions.

IV. Do you have any suggestions concerning the use of these tasks (matching activities, discussions, and glossary) in EBP vocabulary learning?

S1. - I would like all tasks to address current problems in market. Or even have more opportunity to discuss different business topics and give our solutions.

S2. - Add the number of tasks accomplished via a course wiki.

S3. - Have more discussions in a course wiki as it gives an opportunity to think of some business problems raised in the topic and think about solutions.

S4. - The only suggestion that I would like to make, is to include other types of tasks in wikis as well.

S5. - Everything was good.

S6. - It would be better to have more discussions during the course, since they gave me a chance to use new words/phrases in context. I would also like to see the Armenian translations accompanied to some of the instructions of wiki assignments.

S7. – In my opinion, everything was good enough.

S8. - The types of tasks were selected reasonably and I do not have any suggestions.

APPENDIX 10

Transcription of the Interview Conducted with the Students of the Comparison Group

I. Did you face any difficulties in accomplishing the types of tasks (matching activities, discussions, and glossary) for improving business English vocabulary?

S1. – I had some difficulties with new learned business vocabulary.

S2. - Matching activities were somehow confusing- some of the definitions that should be matched with appropriate words were confusing and very similar in meaning. Sometimes even could not find the right definition of the particular word.

S3. - Difficulties that I had during the accomplishment of the tasks merely concerned new learned business vocabulary.

S4. – I had some difficulties in remembering some of the newly learned business words/ phrases.

S5. – I had some difficulties in understanding the task instructions. In some cases, instructions were not so clear to me.

S6. – There was some words/phrase that required more practice from me to remember.

II. Do you consider the tasks (matching activities, discussions, and glossary) as an effective tool in EBP vocabulary learning? Why do you think EBP vocabulary tasks (matching activities, discussions, and glossary) accomplished throughout the course are effective / ineffective?

S1. - I think that discussions and compiling glossaries were highly effective but matching activities not so much.

S2. - I consider all types of tasks as an effective way of learning EBP vocabulary.

S3. – In my opinion, compiling glossaries are hundred percent effective as they expand EBP word stock a lot.

S4. - Each type of task has its own contribution to the enlargement of EBP vocabulary. That is why I can't mark any type out.

S5. - The same types of tasks we did during the previous courses, so the effectiveness of the tasks was somewhere in the middle.

S6. - Discussions helped me practice newly learned words in context; hence, I think that discussions were highly effective.

III. What is your attitude towards/ preferences for the types of tasks completed during the course?

S1. - I prefer discussions over other two types of tasks accomplished during the course as discussions promoted the use of current vocabulary items in context.

S2. - I think that all types of activities served their purposes.

S3. - Compiling glossaries was the most effective one in terms of EBP vocabulary learning.

S4. – I liked discussions very much and would like to have more topics for discussions during the course.

S5. - I liked all types of activities.

S6. - If I had to scale the types of tasks according to the favorite ones, the first place would be given to glossaries, after it would be discussions, and the last one would be matching activities.

IV. Do you have any suggestions concerning the use of these tasks (matching activities, discussions, and glossary) in EBP vocabulary learning?

S1. - I don't have any suggestions.

S2. - It would be reasonable to have more topics for discussions.

S3. - Everything was good.

S4. - During the course, it would be better to add topics for discussions.

S5. - I would like task instructions to be clearer.

S6. - I don't have any suggestions.