The Effect of Learning Environment on EFL Undergraduates' Computer-Assisted Language Learning Achievement and Attitudes

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Abstract

The aim of this piece of research was to explore the effect of three different environments of blended learning compared to traditional learning on EFL university students' achievement and attitudes in a Computer-Assisted Language Learning and Specialized Technology Course. A hundred EFL juniors at the Faculty of Education, Kafr El-Sheikh University participated in this study. They were taught the set course by merging lectures with complementary tasks, assignments and activities on a Web site and further illustrations and discussions on Facebook. Participants were free to choose the environment of learning to adopt during their study. At the end of the academic semester, the results of the formal exam held by the Faculty were analyzed statistically by using One-Way ANOVA to attain inferences about the effect of learning environment on achievement. Participants were given a questionnaire for eliciting their impressions and self-assessment of the blended learning they received. Results indicated the claim that learning environment affects achievement was not true. However, attitudes and preferences of blended learning environments varied.

Keywords:Blended Learning, CALL, Social Media, Higher Education, Learning Environments.

Introduction

In the light of the recent increasing advocacies of adopting Quality Assurance and Accreditation standards in the Egyptian Higher Education, coping with such modern teaching methodologies and technological applications as blended learning becomes indispensable. If there is an attitude to produce a distinguished educational output – i.e. a university graduate – who is able to compete with peers internationally, the input quantity and quality should be revolutionized so that he / she receives a similar preparation to his/her international counter- parts . A prominent aspect of this educational revolution is developing the methods of teaching and the techniques of learning in the light of modern trends. Thus, blended learning was thought of as an option including such features that enhance quality. However, the novelty of the experiment in the Egyptian context required testing its effect on students' achievement taking their aptitudes and attitudes towards such an environment of learning into consideration.

Blended learning is that process in which learners receive information and develop skills through a technique that mixes both old traditional teaching practices such as lecturing with one or more modern forms of e-learning. The term is defined by Donnelly et al. (2012) as a "joined-up approach of using online resources to support traditional learning" (p. 4). In other words, it is a "course or subject that combines

face to face classroom with online learning and reduces classroom contact hours". (Balcaen, 2011, p. 50).

Tayebinik & Puteh (2012) tackled the rationale of activating blended learning in teaching, arguing that it has appeared as an outlet to overcome such disadvantages of e-learning environments as the lack of face-to-face communication. Blended learning also makes up for the drawbacks of traditional lecturing. According to those who advocate it, the application of blended instruction is fruitful because instructors believe that varied delivery methods can increase students' satisfaction from the learning experience as well as their learning outcomes. In this concern, they highlight some overt advantages of blended learning. These advantages include increased communication, engagement of face – to - face communication, sense of community, improved academic performance, collaborative tasks, adequate feedback, active participation, providing help, fun and practical manner of teaching and learning.

The characteristics of blended learning are handled by a number of researchers. Rogers (2009) identified three characteristics of blended learning represented in the availability of many possible combinations of time and technology, the existence of multiple options associated with learners' needs and the possibility of employing the blended learning form that fits a particular school or class.

Focusing on the environments of blended learning that take place in higher education environments,

Anastasiades (2012) depicted four different levels: activity level, course level, program level and instructional level. On the same track, Tayebinik & Puteh (2012) referred to the fact that blended learning may take one of three forms: a combination of instructional modalities (delivery media), a combination of instructional methods or a combination of online and face-to-face instruction. The last form is the commonest among scholars.

Macdonald (2012) pinpointed two common components of blended learning: asynchronous forums and face-to-face contact. The first component is usually used for a form of tutor-mediated online support. The second component, however, represents another form of tutor-mediated support delivered in tutorials, seminars, labs or lectures.

In its comprehensive research project report, Hanover University (2011) mentioned a number of worthwhile key findings about blended learning. Among those key findings is the fact that blended learning has the potential to be more economical than traditional face-to-face learning, as it requires fewer teachers to supervise students. In addition, blended learning programs are tailored to meet individual student needs, allow students to self-pace, and are often considered more engaging than traditional courses. Moreover, the implementation of a blended learning program in a school may require a redesign of the space.

There is a plenty of studies that manipulated blended learning in relation to different other variables. So & Bonk (2010) predicted and identified the roles of blended learning approaches in Computer-Supported Collaborative Learning (CSCL) environments by a Delphi method. They discussed findings related to (a) pros and cons of blended learning approaches in CSCL; (b) blended learning for collaboration in various contexts including the narrative accounts of blended learning approaches in CSCL given by the Delphi panelist; and (c) the future of blended learning in CSCL. Data were obtained through three-phases of online survey questions directed to the Delphi panel consisting of experts in online learning from different geographic regions of the world.

An inspiring study to the current piece of research was that conducted by Melton et al. (2009). The purpose of this study was to evaluate students' achievement and satisfaction with a blended learning course delivery compared to a traditional face-to-face class format. Surveys were distributed to randomly selected classes. The sample for the study included 251 participants. The obtained results indicated that a blended course delivery was preferred over a traditional lecture format, and promising data emerged to challenge teachers' traditional approach to teaching general health courses at the university level.

AL-Hunaiyyan et al. (2008) discussed some cultural issues related to what they call blended e-learning. They used this term to refer to the fact that

this environment of learning allowed students from different cultures to select the delivery format of their learning content. The main question they raised was: Can educators design blended e-learning systems to accommodate different cultural groups and various learning strategies? Furthermore, the paper explored issues related to learning design. Results indicated that a need for a blend of both the new techno- logy and traditional learning was due to achieve a truly successfully e-learning environment. Moreover, designers were recommended to construct meaningful frameworks for making appropriate decisions regarding visual design and user interaction. Blended e-learning was found to provide a complementary balance between new and traditional education environments.

Investigating the most suitable learning environments, Akkoyunlu & Soylu (2008) examined students' learning styles and their views on blended learning. The study participants were thirty-four students at Hacettepe University, Ankara, Turkey. They utilized a questionnaire designed to identify students' views on blended learning. Besides, they gathered additional data from achievement scores of students. Results indicated that students' views on blended learning process, such as the ease of use of web environment, better evaluation, face to face environment and other aspects, differed. Moreover, it was found that the highest mean score corresponds to face to face aspect of the process when students' evaluation concerning the implementation was taken into consideration. Generally, there was no relationship

between students' achievement level and their learning styles.

Being interested in a similar population to that of the study at hand, Burgess (2008) conducted a limited investigation about the learning needs of part-time students at The University of Winchester to see whether a blended approach would have benefited their studies. The results of this investigation were used as a basis for developing the course to allow a more blended style. Furthermore, the researcher attempted to outline how the course was designed. A preliminary analysis of the use of blended learning for part-time mature students was also made.

In the same year, Hameed et al. (2008) considered how effective and efficient e-learning was when integrated with traditional learning in a blended learning environment. They provided a comparison between purist e-learning and blended learning environment. Furthermore, they also provided directions for the blended learning environment which can be used by the three main stakeholders: student, tutors and institution; to make strategic decision about the learning and teaching initiatives. Their conclusion suggested that blended learning approaches offer the most flexible and scalable route to e-learning.

A year before, Orhan (2007) examined the effect of blended learning environment on learners' self-efficacy for learning performance and self-regulated learning strategies. The conclusions she reached revealed that students' learning within a blended learning

environment positively affected their perception, meta-cognitive self-regulation, time and study environment management.

Reaching a different indecisive result, Zimitat & Chen (2004) used a taxonomy to explore the quality of learning outcomes of students enrolled in certain classes offered by an institution in wholly online and face to face (blended) learning modes. Students enrolled in the face-to-face course made much less use of the e-learning resources than those in the virtual course. They concluded that at the end of the semester, there was no significant difference in post test scores or ranking between the two classes. However, this is not to say that the two classes resulted in the same individual improvement in learning outcomes. The researchers assumed that if their methodology was adapted to include more assessment items and larger cohorts of students, it might be a useful model for evaluating the pedagogical effectiveness of various e-learning courses.

Theoretically, the current study built on Jean Piaget's cognitive theory. Emphasis was laid on learners' first-hand involvement, experience and grappling with the content (Carter, 2011). A similar theoretical platform was the social constructivist theory that stressed the importance of social interaction and scaffolded support in the learning process. The interaction between a learner and a learning environment was always mediated by meanings which

originate through social relations (Bartlett & Burton, 2012).

Purpose of the Study

The purpose of the study at hand is twofold (a) to investigate the impact of learning environment on EFL undergraduates, and (b) to probe their opinions towards traditional learning and blended learning.

Need for the Study

The current study is considered to be useful to many parties. In the first place, it provides Egyptian educational policy makers with a scientific basis upon which they may take appropriate decisions in the context of developing the system and assuring its quality. In the second place, faculty staff members may attain acumen on planning and executing their courses, as the results of this study shed light on students' reaction to the different environments of learning. In the third place, Web site designers may benefit from the study results to improve their products and avoid the technical defects students indicated.

Hypotheses

The following null hypotheses were formulated to be tested:

- There is no statistically significant difference basing on the learning environment among EFL juniors' achievement.
- There is no difference in EFL juniors' attitudes towards the various learning environments.

Participants

To carry out the study through which the above mentioned hypotheses were tested, a hundred participants were selected to represent the sample for this study by adopting the cluster sampling technique. They were all the students enrolled in a Computer-Assisted Language Learning and Specialized Technology Course. This course – according to the Faculty Bylaw – is taught to Third Year students. The researcher intentionally applied her study to this course because of its practical nature that better served the purpose. As for the characteristics of the participants, their ages were about 20 to 21 years old. The majority of participants were females; there was just one male participant. They were classified – according to their free will preferences of the learning environment – into four groups: 34 students who preferred attending lectures only (traditional learning), 20 students who preferred using Facebook beside attending lectures, 21 students who preferred using the Web site page along with attending lectures and 25 students who preferred using both the Web site page and Facebook as well as attending lectures.

Methodology

In the current study, a between-group experimental design was adopted. All participants were taught the academic course of "Computer-Assisted Language Learning and Specialized Technology" by combining traditional lectures with a Facebook page interaction and a comple- mentary Web site tasks and

activities. Students were free to choose the learning environment they liked most. No compulsion was practiced to force them use a certain learning environment. Even relying on lectures only was available for them. Thus, participants were classified before the experiment into four groups according to the environment of learning they favoured: lecture only, lecture and Facebook interactions, lecture and Web site tasks or lecture, Facebook interactions and Website tasks. In respect of the variables under study, on one hand, learning environment with its four paths represented the independent variable. On the other hand, EFL juniors' academic achievement was the dependent variable of this piece of research.

Materials and Instruments

The materials for this study included a Facebook page and a Web site. The Facebook page was devoted to serve such educational purposes as notification and instruction posts related to the course under study. In addition, it was used for exchanging ideas, sharing information and interacting between the study participants and their peers or between the study participants and the researcher. The Web site page was designed by the researcher and uploaded to a free hosting site; namely, www.somee.com. This Web site page included such basic information about the course as the lecture time and location. It was weekly updated so that the topic of each new lecture was added. Furthermore, videos and PDF files were occasionally uploaded on the site as well as the Facebook page so as

to extend students' base of information about the course content. Announcements about assignments and their deadlines were also found there. As for the lecture participants, they were taught the same content through the traditional regular lectures.

Concerning the study tools, a formal achieve- ment test – administered at the end of the academic semester by the Faculty of Education – on the Computer-Assisted Language Learning and another on Specialized Technology were applied in the end of the first academic semester in January, 2014. According to the Faculty Bylaw, the time allotted for the Computer-Assisted Language Learning was two hours. It consisted of three questions: writing a detailed essay, writing notes on some topics and answering questions that entailed quite short answers, for instance, definitions. A similar exam on Specialized Technology section of the course was also applied in two hours. The total scores of both sections were statistically analyzed. Furthermore, a questionnaire was prepared by the researcher so as to elicit students' attitudes towards blended learning. The questionnaire included a list of general instructions that students read before dealing with its four sections. The first section of the questionnaire was concerned with using the Web site. It had six items: two structured and four unstructured. The second section followed contain- ing four unstructured items save the first. It focused on the Facebook page. Consisting of four items as well, section three explored students' attitudes towards the lecture

that represented traditional learning. Finally, section four aimed at probing students' assessment of the blended learning experiment as a whole. Like sections two and three, section four included four items the first of which is structured.

Results

To test the first hypothesis, One-Way ANOVA was adopted so that decisions could be made about the existence of significantly statistical differences among the four experimental groups; each followed a different learning environment. The following data were obtained:

Table (1): One-Way ANOVA of the Achievement Test Scores

Source of Variance	Sum Squares	Degree of Freedom	Mean of Sum Squares	F
Total Variance	14817973.88	99		
Variance between Groups	567894.87	3	189298.29	1.28
Variance within Groups	14250079.01	96	148438.3231	

Using the formula stated by Gravetter & Wallnau (2008, p. 381), it was found that the calculated value of F equaled (1.28). According to the Table of Critical F Values, the obtained F is less than the critical one at the (0.01) level of significance. The critical F value is (3.98). This context entailed accepting the research null hypothesis which stated that ***there is no statistically significant difference basing on the learning environment among EFL juniors' achievement.***

Seeking further, deep analysis of prospective teachers' attitudes towards learning environment and linking these attitudes to the achievement results, the second hypothesis was tested through a questionnaire. The questionnaire was given to the study participants so as to elicit their impressions about each environment of learning.

Section (A) involved items that investigated the participants' opinions and assessment of the course Web site. The participants who made use of this environment of blended learning were 47% of the sample.

The first structured item in this section required evaluating the layout of the Web site. 18.75% of the participants stated that the site layout was *excellent*. The majority – 47.88% of participants – graded the layout as *very good*. The layout was judged as *good* by 25%. A minor percentage of 6.25% evaluated the layout as *accepted*, whereas fewer participants – 3.13% of participants – found the Web site to have a *poor* layout. Participants' evaluation of the layout was sought so as to attain indications about the appropriateness of such elements as organization, colours links and other graphic components.

The second item in Section (A) was also a structured one. It was concerned with how much benefit participants gained from the Web site content. The majority of participants – 46.88% – declared that they attained *great benefit* from the site content. A near percentage of 43.75% reported that the gain they got

was *moderate*. A minor portion of participants – 6.25% – was convinced that the site content was of *maximum benefit* to them. A lesser percentage of 3.13% estimated the benefit attained from the site content as *little*. Nobody selected the last choice: *No benefit at all*.

Unlike the first two items, the third item in Section (A) was unstructured. Prospective teachers were asked to mention the most beneficial page they found on the Web site. The question page that was constantly updated with each new topic studied was selected by 59.38% of participants. A page that offered multiple kinds of dictionaries was favoured by 18.75% of participants. The majority of participants – 78.13% – chose the downloading page that included various text and video materials. The fewest number of participants – nearly 6.25% – stated that the page of external links that offered references to the course was the most beneficial one on the site.

The merits of using the Web site in learning were the aim of item four in Section (A). Prospective teachers were asked an open-ended question about the advantages they gained from learning with the help of the Web site. The varied content and materials appealed to 37.5% of the participants. In addition, 34.38% of participants pointed out that the related questions posted and updated frequently on the Web site were a great advantage that simplified the course. The ease of using the site which saved learners' time and effort was also mentioned by 25% of the participants. Moreover, the site helped 21.88% of the

participants find clarifications for the ambiguous points uncaught in lectures. The possibility to download different relevant materials was also indicated as a merit of the site by 15.63% of the participants. Nearly 12.5% of the participants said that using the Web site made them feel more apt to cope with modern technology. A number of advantages were stated by the same percentage of 9.38%. These advantages included the varied information related to the course, the free access to the site that was available all the time, getting rid of the boredom of traditional learning and increasing activeness and enriching knowledge. A percentage of 6.25% highlighted the advent- age of increasing a learner's self-esteem and independence. At the tail of the list, 3.13% of the participants mentioned such merits as the site availability to all students, keeping informed in the case of absence from lectures and finding sources of some programs.

Seeking a beneficial feedback about the short-comings of the experiment, the fifth item of Section (A) required prospective teachers to identify the demerits they found in using the Web site . The greatest percentage of the partici- pants – approximat- ely 43.75% – responded that there were no demerits at all. They reported that the Web site was well-organized and easy to use. In addition, those participants mentioned that neither technical nor cognitive problems were encountered during using the site. However, 21.88% of participants stressed computer and Internet connection unavailability; specially, for

those staying in the student hostel. The hostel rules allow its lodgers neither accompany their personal computers nor have an Internet connection. The Web site was hard to reach and to browse by nearly 18.75% of the study sample. Perhaps this was due to their lack of the general basics of dealing with the Internet. Two demerits were stated by 6.25% of participants: poor environmental conditions; namely, electricity frequent power cut; and problems of downloading materials. Other minor demerits stated by 3.13% of participants included the lack of face-to-face interaction, the limited available materials, being distracted by a lot of advertisements and the cost of browsing the site in a cybercafé.

The last item in section (A) manipulated the prospective teachers' recommendations and suggestions to improve the Web site. In this concern, 31.25% of participants believed that the current form and content of the Web site were ideal and thus, no recommendations would be useful. Two propositions were raised by 9.38% of the participants. They included offering the content of the Web site in languages other than English, i.e., Arabic and French; and adding downloadable books for general interests to the download page. A lesser percentage of 6.25% suggested such ideas as uploading various environments of dictionaries, adding recorded lecture videos, improving the site layout and uploading the PowerPoint presentations displayed in lectures. Other suggestions were recommended by approximately 3.13% of the

participants. For instance, a summary highlighting the important points of each lecture was proposed to be inserted. Moreover, adding a general section that offers guidelines on how to improve learning was also recommended. Other ideas included improving site organization; adding a section for students' comments, participations and lecturer's response; adding assignments; lecturing students on how to use the Internet in general and generalizing the Web site experiment to all other courses of study.

Section (B) was devoted to evaluating the Facebook page used as a complementary option with lectures and thus created another environment of blended learning. The percentage of the participants who preferred using this environment of learning was 39.71% of the whole sample.

The section started by item 7 which asked participants to indicate how much benefit they got from the Facebook page. The available answers were structured. A maximum benefit was attained by 33.33% of the participants whereas 37.04% obtained great benefit from the Facebook page. The page was of moderate benefit for 22.22% of the participants, and of little benefit for 7.41%. The last option "*No Benefit at All"* was not chosen by anyone.

Item 8 in Section (B) handled the merits participants found in using Facebook for educational purposes. More than half of the participants – 59.26% – expressed their sense of relief due to the possibility of inquiring any time finding the lecturer's precise answer

in a short time. Communication with peers to exchange and share information about the course, and the daily discussion held by the lecturer at a specified hour were highlighted by 48.15% of the participants. Nearly 25.93% of the participants found it helpful to keep being informed of the lecture content by the updated information on the page; specially, in the case they were absent. A technical merit related to the design and nature of Facebook pages was stated by 11.11% of participants who said that Facebook pages are easy to use and quick to inform. A percentage of 7.41% appreciated the freedom of expression. An equal percentage was satisfied with devoting the page for educational purposes. A number of other advantages was stated by a minor percentage of 3.70%. These included better understanding the course with the help of the clarifications provided on the page, keeping up with the technology of the day and making the course more interesting, using such activities as online chatting.

The demerits of using the Facebook page were indicated by the participants in responding to item 9. A proportion of 66.67% of the respondents believed that using Facebook for learning was bereft of demerits. The unfamiliarity with Facebook and preferring not to use it in discussions were stressed by 11.11%. In addition, 7.41% pointed out that Facebook was a waste of time due to such technical obstacles as Internet humble connections and waiting replies. An equal percentage referred to the lack of Internet connections at some

homes. A minor percentage of 3.70% mentioned such disadvantages as the rarity of educational videos and the lack of practical questions to be answered on the page.

In item 10, prospective teachers were asked to give some suggestions to develop the Facbook usage in the future. Almost one third of the participants – 33.33% – believed the experiment was ideal and had no suggestions at all. A percentage of 7.41% came up with such recommendations as increasing the course related videos on the page; posting the lecture schedule and models of previous exams and adding links to books, songs and speeches to improve language proficiency in general. Besides, 3.70% of the participants suggested forming a course group for discussions, devoting specified time for the lecturer and students online to save time, exceeding the limits of the course by discussing current events and increasing the details related to the lecture content.

Section (C) started with item 11 which was structured for asking the participants to indicate how much benefit they gained from the course lecture. The majority of respondents – 42.65% – stated that they attained great benefit. A less percentage of 33.82% believed that the benefit was moderate. Nearly 20.59% said that lectures were of maximum benefit to them. A minor proportion – 2.94% – believed that lecture benefit was not that much.

Being unstructured, item 12 delved into the merits of lectures in prospective teachers' view points. Face to

face interaction between the lecturer and learners was highlighted by 33.82% of the participants. Better understanding of the content was a worthy advantage for 26.47% of prospective teachers. Nearly 25% stated that the content was easily and directly provided in lecture. A lesser percentage of 19.12% believed that a lecture is a good method for clarifying ambiguous and highly abstract concepts. In addition, 17.65% praised the interaction that took place during lectures in the form of discussion among students. This interaction was said to lead to peer learning. Focusing on details was also highlighted as one of the merits by 11.76%. Almost 10.29% of the participants thought that a lecture is a good method for attracting students' attention. The same percentage proclaimed that lectures correct misunderstanding, misspelling and improve pronunciation. Moreover, 8.82% mentioned two merits: a lecture is a good theoretical base for practical skills and students attending lectures enjoy the traditional style listening and taking notes. A minor percentage of 5.88% asserted such merits as using blackboards, providing a basic source for those who do not have an access to the Internet, compelling students to attend and follow up and shedding light on important points in the content. Lectures are more systematic for 4.41% of the participants as well. Miscellaneous merits also included that lectures take care of students' psychological state; lectures are a source of moral lessons and lectures are condensed so that boredom

does not exist, there is a possibility of repeating explanation.

The demerits of lectures were the concern of item 13. Nearly 30.88% of participants found no demerits at all. A lesser percentage of 14.71% highlighted the difficult nature of the content; the short time span devoted to lectures and the boredom factor resulted from the theoretical nature of the lecturing method itself. Talking in English all the time and the red tape impediments such as amphitheatre poor equipment needled 13.24 % of the participants. The care for checking attendance was also a lecture facet disliked by 8.82% of the sample.

Prospective teachers' recommendations to improve the lecturing method were asked for in item 14. There were no suggestions for 25% of participants. Integrating a lab section as a complementary activity was proposed by 13.24%. Furthermore, about 11.77% advocated decreasing and simplifying the theoretical content. Nearly 8.82% recommended increasing lecturer-student interaction and using such teaching aids as PowerPoint presentations on datashows. Finding solutions to such red tape issues stated in the demerits of lectures was demanded by 7.35%. A percentage of 5.88% suggested increasing the amount of time devoted to the lecture. A minority of 4.41% supported the idea of making formative evaluation during lectures so as to keep minds engaged. The least percentage – about 2.94% – had such ideas as

increasing discussion during lectures and making attendance optional.

Section D – the last section of the questionnaire – focused on blended learning. It started with a structured item – item 15 – which aimed at identifying which environment of learning students preferred. Traditional learning (in lecture) was preferred by 25%. On another hand, pure e-learning was favoured by 2.94%. Blended learning gained the highest percentage: 72.06%. Neither learning through the Web site only nor going to the library and looking references up were chosen by any participant.

Being unstructured, item 16 probed into the merits the participants found in blended learning. Increasing understanding was mentioned by 25%. Expanding ideas and enriching information through a variety of sources available by hyperlinks was an advantage stated by 19.12%. Unlike the complete dependence on lectures, blended learning was time saving for 17.65%. Nearly 16.18 viewed that blended learning was useful for increasing communication with the lecturer making it easy and fast to inquire and solve problems. Moreover, 13.24% mentioned such merits as enabling learners to apply lecture theoretical concepts and having the pros of both lecturing and e-learning. On the contrary, almost 11.76% found no merits at all in blended learning. Active participation was highlighted by 10.29%, while 8.82% found in blended learning an interesting way of learning. Almost 7.35% believed that blended learning was a good means to support lectures.

Peer interaction and being a beneficial way to make up for missed lectures were stated by 5.88%. Learning according to each student self-pace was a merit for 4.41%.

In respect of item 17, the cons of blended learning were made clear by testees. According to 35.29% of participants, blended learning has no demerits. The lack of computers and Internet access at home and at Students' Hostel was stressed by 32.35%. Almost 10.29% stated that there was a lack of equal opportunities as blended learning was not available to all students due to financial and traditional hindrances. An equal percentage highlighted the difficulty of using the Web site. Unfamiliarity with the Internet troubled 8.82%. Moreover, poor Internet connection, the big content and design and organization problems were mentioned by 4.41%.

The last item in the questionnaire –item 18– elicited participants' suggestions and recommendations to improve the blended learning method used in the current experiment. No suggestions were provided by 33.82%.Furthermore, 10.29% suggested providing computer labs with Internet access to be available to all students. Decreasing the heavy dependence on the Internet was recommended by 7.35%. Moreover, 5.88% inclined to giving students more initial and formative instructions on how to deal with blended learning. A percentage of 4.41% suggested such ideas as increasing discussion, generalizing blended learning in all courses of study, setting a good theoretical base and developing

the Web site. A minor percentage of 2.94% proposed increasing the lecture time span and decreasing the content of the course.

Therefore, the second hypothesis, which suggested that there is no difference in EFL juniors' attitudes towards the various learning environ- ments, was rejected. Participants did differ in their attitudes towards learning environments.

Discussion

The statistical testing of the study first hypothesis led to accepting the premise that learning environment does not affect college EFL students' achievement. Blended learning – with its three options offered to students in this study – had no concrete advantage over traditional learning. Comparing this deduction with the results of related literature, there was a good deal of agreement as well as disagreement.

In their responses to some questionnaire items, the participants of the current study attracted attention to a number of institutional shortcomings that negatively affected their experience with blended learning. This very point was the concern of a recent study by Graham et al. (2013) as they focused on institutional policy and adoption issues of blended learning. They believed that more institutional-level blended learning research was needed to guide institutions of higher education in strategically adopting and implementing blended learning on campus. Practically, they investigated six cases of institutional adoption of blended learning to examine the key issues that could guide university

administrators interested in this endeavor. Cases were selected to represent institutions at various stages of blended learning adoption including (1) awareness / exploration, (2) adoption / early imple -mentation, and (3) mature implementation / growth. Worthwhile recommendations were identified to elaborate on core issues related to institutional strategy, structure and support.

Being interested in how university professors employ blended learning, King & Arnold (2012) came up with such worthwhile implications as the contribution of motivation, communication, and course design to the overall success of blended learning courses and students' satisfaction with blended learning courses. Moreover, they also found that course preparation emerged through the participant interviews as a contributing factor. However, they wondered if faculties took these factors into account when preparing to teach a blended learning course. They concluded that there were a number of operational institutional procedures that a faculty should have considered before offering blended courses. These procedures were stated by the current study participants as points of weaknesses in the blended learning experience they underwent.

In a similar study, Napier et al. (2011) found that students' performances in the traditional and blended learning were comparable. Students taking blended learning courses reported some challenges with the instructional format. However, overall, students

reported high levels of interaction with their instructor, and students' satisfaction with the course increased by the end of the semester. Some material could be delivered better online. Faculty expressed concerns about how to effectively convert a face-to-face course to a blended format. The researcher benefited from these conclusions on designing the online tasks and assignments focusing on interaction either between the lecturer and students or among students themselves.

Contrary to most literature, Australia, Yam & Rossini (2011) revealed that students who were exposed to online learning performed better than students in blended learning mode. This suggested that online students might be more self-motivated as most of them were part-time students. In terms of the effectiveness of individual online items, those students who attempted the quizzes after studying the material diligently did well in course.

The result obtained in the current study coincided partially with the conclusion reached by Chen and Jones (2007). These two researchers noted some interesting differences between blended learning and traditional one. They stated that students in the traditional setting were more satisfied with the clarity of instruction. As for blended learning students, their analytical skills were said to be improved as a result of the course. However, the final results of their study suggested that the two delivery methods were similar in terms of final learning outcomes, but that both may be improved by incorporating aspects of the other.

Similar results were declared by Ginns & Ellis (2007). According to their study, students did not show positive attitudes towards blended learning. They opposed the idea that the teaching in an e-Learning context was supportive. Moreover, they did not tend to find other students' on-line submissions overly helpful in clarifying and extending their own ideas. Students, however, were generally positive about the degree to which the course Web site made goals and standards clear for the unit in general and assignments in particular. But, they were less clear about the usage of on-line discussions. In addition, students were most positive about the degree to which on-line materials appeared interesting. Nevertheless, students were most negative about the explanatory value of the on-line teaching materials. The worthwhile implications deduced from Ginns & Ellis (2007) were that student-focused methods of teaching evaluation are possible in the relatively new teaching context of blended learning, and that several key aspects of that context – the quality of on-line teaching, resources, workload, and student interaction – are associated with the quality of students' approaches to study and learning outcomes. In addition, teachers in blended learning contexts need to focus not only on the technical capacities and functions of on-line materials and activities, but must also seek to understand their students' perceptions of this part of the learning environment, and how successfully that part is in supporting student learning across a whole course. The results from this study showed that positive

student perceptions of the quality of teaching on-line and the level of interaction were strongly related with a comparatively higher grade.

In the same year, Weibelzahl & Dowling (2007) concluded that blended learning was not as significant as anticipated. However, they theorized that the inclusion of face-to-face sessions in a blended learning course had a positive impact on the completion rates of the course. These results partially coincided with those attained in the current study.

Conclusion

The current piece of research attempted to determine which environment of learning (traditional, Web site blended or Facebook blended) was advantageous for EFL prospective teachers. The traditional environment was confined to the lecture method complemented by assignments that were delivered in paper form. Blended learning environments were enriched by Web tasks and online feedbacks. Findings indicated that the environment of learning did not affect academic achievement. However, important implications about the pros and cons of each environment of learning in addition to suggested ideas for improvement were provided. Further research was recommended on how to pave the administrative and physical environments for blended learning in higher education. Besides, future studies are suggested to investigate students' needs and aptitude to learn in a blended environment. Researchers may study the effect of learning environments on other educational stages –

i.e. the kindergarten, primary, preparatory and secondary stages.

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