Email and its Effects on Iranian EFL Learners' Writing Ability[1]

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Abstract

Today is the age of cyber-tech with which students as members of this technological age must be familiar. Being as one of the most popular cyber-products, email is understood as the device people use to interact on the net. Promoting its use in the classrooms can improve students' cyber-literacy. The effect of email on EFL learners' writing ability has scarcely been examined within the context of Iran. This study is thus concerned with examining the relationship between using email as a communication tool and students' writing achievement. Following a pre-test, one group was taught the procedures of writing a paragraph in class while another group received instruction via email. The results of the study indicated a significantly positive relationship between using email and students' writing performance.

Resumen

Nuestra época es de tecnología cibernética con la cual los estudiantes de esta era tecnológica deben estar familiarizados. Siendo uno de los mas populares productos, el correo electrónico (email) se entiende como un artefacto que la gente usa para interaccionar en la red. El promover su uso en el salón de clases puede mejorar la alfabetización cibernética de los estudiantes. El efecto del email en las habilidades de escritura de los aprendices de EFL escasamente se ha examinado dentro del contexto en Iran. Este estudio es, por tanto, relacionado con el examen de la relación entre el uso del email como herramienta de comunicación y los logros de los estudiantes en la escritura. Siguiendo un pre-examen, a un grupo se le enseñaron en clase los procedimientos para escribir un párrafo mientras que otro grupo recibió las instrucciones vía email. Los resultados del estudio indican una relación significantemente positiva entre el uso del email y desempeño de los estudiantes en escritura.

Introduction

Today, technology plays an important role in our daily lives. More and more people are using technology in their lives and in education. The use of technology may increase students' motivation for learning. With the advent of cyber-tech era, students use email and are familiar with its uses. Email, as one of the most prevailing by-products of computer technology, is a way for students to interact, or exchange information. Hence, using email in the classroom is a possible way to make the students cyberly literate.

Results of studies show that email is a convenient way of teaching English (Lee, 1998a; Warschauer, 1995). According to Belisle (1996, cited in Noraien, 2007, p.1), email can be used in many forms of communication including formal and informal discussions, dialogs, journals, and writing conferences. Consulting with teachers is difficult for students because students may be shy, or busy with their fast life styles. Studies show that students who email write more, ask more questions, and use more language functions (Belisle 1996, cited in Noraien, 2007, p.1). Email also helps teachers to check students' writing in order to save class time (ibid.).

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Warschauer (1995a) points out three advantages of email. First, it provides a good opportunity for students to use real communication. Most EFL students do not have ample opportunity to communicate in English. Second, email helps students to develop independent learning skills which are essential for second language (L2) writing. Third, email facilitates students to communicate with other students.

This article aims to show the significance of using email, in an EFL writing class for students. The study illustrates how email may give the students a better chance to improve their writing skill.

The internet and learning

Nowadays, we witness the world's ongoing transformation which deeply affects society. The evolution is happening on two levels: information and communication in a general sense and Internet in a more specific sense.

The Internet is a virtual space where we can do many things. Using the Internet in the classroom, we can perhaps virtually be able to dispense with the physical boundaries of classroom. Furthermore, it can help students to improve their research and analytical thinking skills and become more experienced at exploiting visual technologies (Van Fossen, 2001, p.57). Diverse learning situations such as distance education, electronic learning (e-learning), electronic teaching (e-teaching) and blended learning are rendered available by the Internet. Such an educational milieu necessitates proper learning surroundings accompanied by well-designed resources (Khan, 1997, p.5).

There is, in effect, a serious argument about whether it is the use of a particular delivery technology or the method of the instruction that improves learning (Clark, 2001, p.125; Kozma, 2001, p.137). In 1991 and again in 1994 Kozma claimed that media affects both learning and motivation. His argument was that "if there is any relationship between media and learning it may be because we have not yet made one" (Kozma, 1994, p.7). Schraman (1997) maintains that regarding learning materials, it is rather the content or the instructional strategies that influence learning than the type of technology used to deliver instruction.

The emergence of the Internet marks a benchmark in the development of English teaching (Ganderton, 1998; Hellebrandt, 1999; Kelm, 1992; Lee, 1997; Sanaoui & Lapkin, 1992; Van Handle & Corl, 1998; Warschauer, 1996). With the Internet providing accessibility to language resources, English learners are granted the opportunity to be connected to native speakers English. First, learners are able to practice using information; second, they can overcome the decontextualized obstacle of English learning. Students can experience learning listening, speaking, reading and writing English integratively in real world situations. Students may thereby broaden their international viewpoints, learn different knowledge forms, and become familiar with different cultures. As part of its standards for foreign language learning, the American Council on the Teaching of Foreign Languages (ACTFL) supports applying the "five Cs" in language learning: communication, cultures, connections, comparisons, and communities. Communication is the keystone in acquiring second language. The interconnection between language and culture is natural and hence familiarity with the target language culture functions can boost understanding of the language. Such links act as passages through other disciplines into information acquisition, which in turn expands learner ideas of content-area, reading and functional writing across disciplines.

Comparisons of languages and cultures can be a rich experience for learners. In the case of communities, we are here dealing with learner participation in multilingual communities at home and around the world. With a host of cyber-tools offered on the World Wide Web (conferencing, email, whiteboard, streaming "plug-in" technologies, etc.), students have opportunities to cultivate the "five Cs" via many ways (listening, speaking, writing, reading, and communicating). By providing a worldwide system of interconnected networks with an infinite quantity of documents, resources, databases and various communication mechanisms, the Internet functions as a virtual world and a global arena in which to develop the "five Cs".

Email and its effects on learning

Email is the application most used in the Internet (LeLoup, 1997; Warschauer, 1995a). Foreign language teachers may skillfully interweave email-based tasks into their syllabus (LeLoup, 1997; Warschauer, 1995). An example is international key pal projects in which people exchange correspondence through electronic mail allowing students to communicate with native speakers of English effortlessly. Students have the access to essential materials and foreign linkages (Knight, 1994; Shelley, 1996). The basic email requirements are minimized, hence making it the most user-friendly of Internet tools. Distance learning is another curricular area where email is being used (Ponterio, 1996). Today, email is available in many different languages; it can transmit diacritics and include word-processed files as attachments. Email also allows one to attach sound and image files so as to enrich the contextualization of the communication.

Receiving feedback is one of the key issues in second language writing classrooms. A number of studies on error correction in L2 writing classes have shown that students receiving error feedback from teachers improve in accuracy over time (Chandler, 2003; Hyland, 2003). The function of feedback in second language instruction has two functions: reinforcement and information. Email can cover both of them. Email emphasizes a two-way communication channel. It assumes the existence of a dynamic system in which an individual can receive feedback on her/his work instantly. The system can affect and alter the learning behavior of the students. The rapidity, influence, and flexibility with which computer and email are characterized, can effectively facilitate second language writing. In EFL writing classes, email is a useful and powerful vehicle for teaching. It enables the teacher to monitor the process of the students' writing to save class time for the teacher's assignments and comments (Belisle, 1996, cited in Noraien, 2007, p.1).

Using email entails diverse skills including knowing how to use a computer, knowing how to surf cyberspace, and becoming familiar with the special register of email communication. Mastering these skills enables students to use email and other types of telecommunications for the rest of their lives. Email allows students to communicate easily with other students. By providing information, contact, and stimulation, email supplies the teacher with more effective and enjoyable teaching situations. To conclude, email offers students the opportunity of communication, collaboration, and information.

Email can be a somewhat problematic medium. It is a hybrid form of communication that has been shown to exhibit characteristics of both oral and written discourse (Crystal, 2001; Davis & Brewer, 1997; Gruber, 2000; Matthews, 2000; Rice, 1995). These attributes influence messages sent via email with the informal, casual structure of

conversation together with the permanence of a written document (Deegan, 2000). The writing style common in email communication has unique characteristics: specifically, creative non-standard spelling, excessive punctuation (Mallon & Oppenheim, 2002), playful use of creative greetings and improvisational language (Danet, 2001), and an extensive use of multiple fonts (Trupe, 2002). The messages sent via email tend to be more ambiguous and subject to misinterpretation than is commonly realized (Adam, 2002; Kruger, Epley, Parker & Ng, 2005). Written materials mixed with oral elements included in email lead to messages that are more spontaneous, less inhibited, and more carefree than traditional written communication (Crystal, 2001; Jonsson, 1998; Naughton, 1999; Rice, 1995).

The role of technology in teaching writing

Using the Internet as a way of teaching and learning has brought about many changes in education, with the most significant of these changes occurring in writing education. In the 70s, as computers became an essential part of education, students were introduced to the learning of writing in a completely new way.

According to Garcia and Arias (2000), using technology in a classroom has some advantages: increased motivation of the students, individualization of the learning process, immediate feedback, non-linear access to information, and the introduction of new types of exercises in the classroom.

Being familiar with computer technology enables the students to experience written communication interactively with teachers and friends via email. In the beginning of the 1990s, many writing instructors moved their classes from the traditional classroom to the computer room/lab. A good number of recent studies report that computers are beneficial for the teaching of composition. Scholars such as Li (2000) and Belisle (1996) suggest that composing directly on the computer helps students to become more conscious of the process that takes place when they write.

Because email is a quick tool, writing has become a purposeful learning experience. According to Belisle (1996) in EFL writing classes, email is a useful and powerful means for teaching. It enables the teacher to monitor the process of the students' writing to save class time for the teacher's assignments and comments. So the students are involved more in active and interactive learning. Electronic mail is preferred to the postal service due to its rapid speed of delivery and inexpensive person-to-person engagement (Stafford, Kline, & Dimmick, 1999). Recently, the use of email has been a means of official communication between students and professors in universities. Another advantage of email is that it makes people free from the limitations of the time and place of language learning; therefore, email allows the learners to communicate from their own room, from a library or from a café.

Despite the advantages that email has in language learning, some scholars have voiced objections. Goodfellow (2003) argues that email pulls students attention away from the conventions of academic writing because their focus shifts. Email is limited in symbolic representation; therefore, it demands more of the students' writing abilities in order for them to avoid misunderstanding. Informality is another supposed feature of email. Writers of email sometimes neglect to capitalize or they may create spelling such as "2" for "too" and acronyms such as "u" for "you" which are against the principles of academic writing.

Considering the significant part that virtual communication plays in educational settings, the present study aims to investigate whether using email improves Iranian students' academic writing ability.

Educationally contextualized properties of email

Email is an electronic communication tool that precedes the Internet. It was used initially for intra-corporate communication via mainframes and later by private dial-up networks. Following this, the US Department of Defense set up the first operational packet switching network known as the Advanced Research Projects Agency Network (ARPANET), specifically to provide a strong communication medium that helps people to communicate with each other. Once developed, ARPANET was widely used by scientists and academics (Hauben, 2000). As the Internet developed and the notion of a world-wide web became popularized, email was equipped with a host of other richer media for communication. These comprised (but are not limited to) online text chat, voice chat, bulletin boards, streaming video, live web-casting, and video conferencing. Today, in spite of the emergent competition from these recent high-bandwidth media, email is still known to be one of the communication devices most broadly exercised in education (Le & Le, 2002). Some research has gone so far as to conclude that email is more popular than face-to-face interaction between students and instructors (Berge, 1997; Gustafson, 2004). Being an educational communication medium, email is characterized with a number of advantages and disadvantages. These properties represent a powerfully popular education device with some considerable shortcomings.

Method

Participants

Ninety Persian learners of English, who had been studying English (at BA level) at Shahid Chamran University of Ahvaz, were taken as the population of the study. In order to evaluate the homogeneity of the participants, we used a practice TOEFL (Test of English as a Foreign Language) test (Phillips, 2001). Thirty male and female students whose scores fell between one standard deviation above and one standard deviation below the mean were selected as the participants of the study. In fact, these thirty students' scores were higher than the remaining students. Fifteen of the participants (control group) were given the instructions by the teacher and the other fifteen students (experimental group) were given the same instructions via email by one of the researchers.

Instruments

As mentioned before, a sample TOEFL test (Philips, 2001) was used to screen participants according to their language proficiency. The test consisted of forty multiple choice items on vocabulary, grammar, and reading comprehension and one writing task which required the students to write on a given topic about comparing living in a small town versus living in a big city. The total score for the test was seventy. Only two language skills were chosen because the study aimed to measure an aspect of writing and the more relevant language skill to writing was reading. Therefore, our decision about their language proficiency is restricted to their ability in the students' writing skills. Another reason for choosing these two skills was practicality. In fact, the difficulty of administering a speaking and listening test within a short time limit provided the

rationale to run only the more relevant sections of the test. The writing instruction in this study followed Arnaudet and Barrets' (1990) framework from their book *Paragraph Development: A Guide for Students of English*. The book consists of eight chapters, and each chapter is a step for paragraph writing: topic sentence, supporting topic sentence, enumeration, types of enumeration, cause and effect, comparison and contrast, and definition. Only three chapters of the book were taught: cause and effect, comparison and contrast, and definition. The choice was made because these three chapters introduce writing a complete paragraph but, for example, the chapter on topic sentence only works on one sentence and not in writing a paragraph.

Instructional Procedure

When the results of the language proficiency test were analyzed, the instruction was begun. Instruction lasted for six sessions for the three selected lessons: two sessions for each lesson. For the control group, the teacher taught the lesson in one session and asked the students to work on that lesson during the second section. The students were asked to write a paragraph about one of the topics which were suggested at the end of each chapter in the book. Their paragraphs were marked by the teacher and the students had to make the corrections and rewrite the paragraph. For the experimental group, the same instruction for the lessons was sent to the group via email and they were provided with the relevant topics which were suggested in the book after each session. The procedure was the same for both groups, first the instruction was taught and then the students were asked to apply the given instructions in their writings. The topics for both groups were the same and were given at the end of each of the book chapters. The corrections were made by the instructor using Hughes (1989) scales which were the corrections of errors of grammar, vocabulary, mechanics, fluency, and form. The feedback was written as comments at the top of the line which included errors and students were asked to correct them and correct their errors and deliver the same paragraph again. For example, when the paragraph had a grammatical error, the error was underlined and a comment was written in the margin telling the student why this part is not correct. The procedure was the same for errors of vocabulary; a comment was written beside the incorrect word that using this word here was not appropriate and that it should be replaced by a more appropriate word. In order to measure the students' progress as a result of instruction, a post-test similar to the pre-test, a forty-item multiple choice test with a writing topic, was given at the end of the study and it was expected that after the experiment, students would score higher marks compared to the pre-test. The conditions such as no negative score for wrong answers and the duration of the test were identical in both tests. One score was assigned for each item. The assigned score for the writing question was thirty according to Hughes scale.

To check the learners' progress as a result of instruction, a paired t-test was administered for each group. Also, to see whether the two types of instruction resulted in different degrees of learning, the equality or non-equality of variance of the two groups was tested through Leven test (f statistic).

Results

The Results of the Pre-test

The homogeneity test was given sixty minutes, followed by twenty minutes assigned to the topic which the students were supposed to write on. Below in Table 1, the results of

the pre-test of the control group/teacher-led and experimental group/email groups are presented.

Group	N	Mean	SD	Std. Error Mean	t	df
Control group/teacher-led	15	36.13	3.64	.940	-.218	28
Experimental group/email-led	15	36.40	3.01	.779	--218	27.06

Table 1 Independent samples t-test on the pre-test

As the above table shows, the difference between the mean scores is subtle. In other words, there is no significant difference between the mean scores of the two groups which might be justified by the fact that the students of both groups did not receive any instruction in this regard. Also, a Leven test was used to calculate the variance of the two groups followed by their mean scores.

The Results of the Post-Test

Having calculated the mean and standard deviation, an independent samples t-test was conducted on the participants' performance to determine the effect of email on the learners' writing performance. As the following table displays, the t value obtained was 5.618 at the confidence level of 95, degree of freedom 28 and the significance level of 0.000. Comparing the t obtained with the t-critical revealed that the difference was statistically significant. In other words, the use of email in this study produced a significant difference in the writing performance of the email group compared with that of the teacher-led group. Table 2 displays the descriptive statistics and the results of the t-test.

Group	N	Mean	SD	Std. Error Mean	t	df
Control group/teacher-led	15	54.66	3.61	.934	-5.618	28
Experimental group/email-led	15	62.26	3.78	.978	-5.618	27.941

Table 2 Independent samples t-test on the post-test

According to Table 2, the mean scores in the two groups differ significantly. That is to say, the mean score of the email group in the post-test exceeded that of the teacher-led group. For the purpose of clarification, the mean scores of both groups in the post-test are represented in Figure 1.
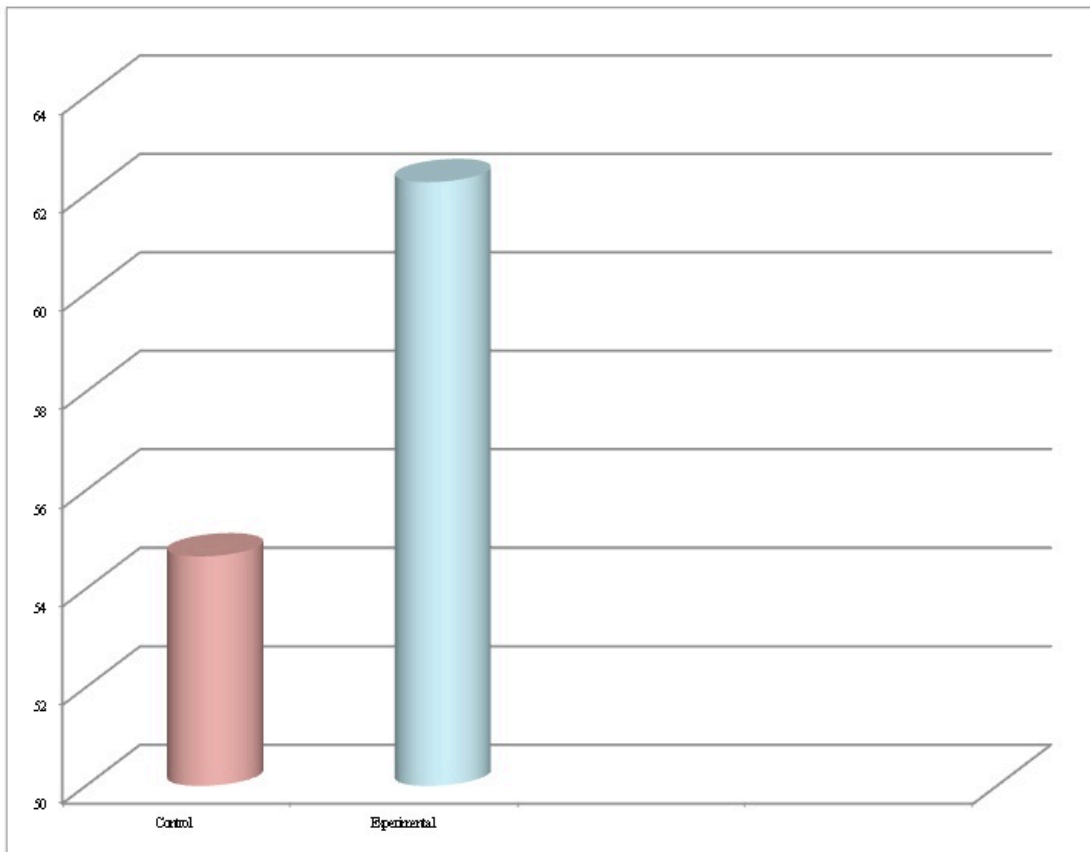
Figure 1 Mean score of both groups in the post-test

Figure 2 reveals that the mean scores obtained in the pre-test differ from the scores obtained from the post-test, which shows that both types of instruction contributed to learning improvement but the mean score of the email group is higher.
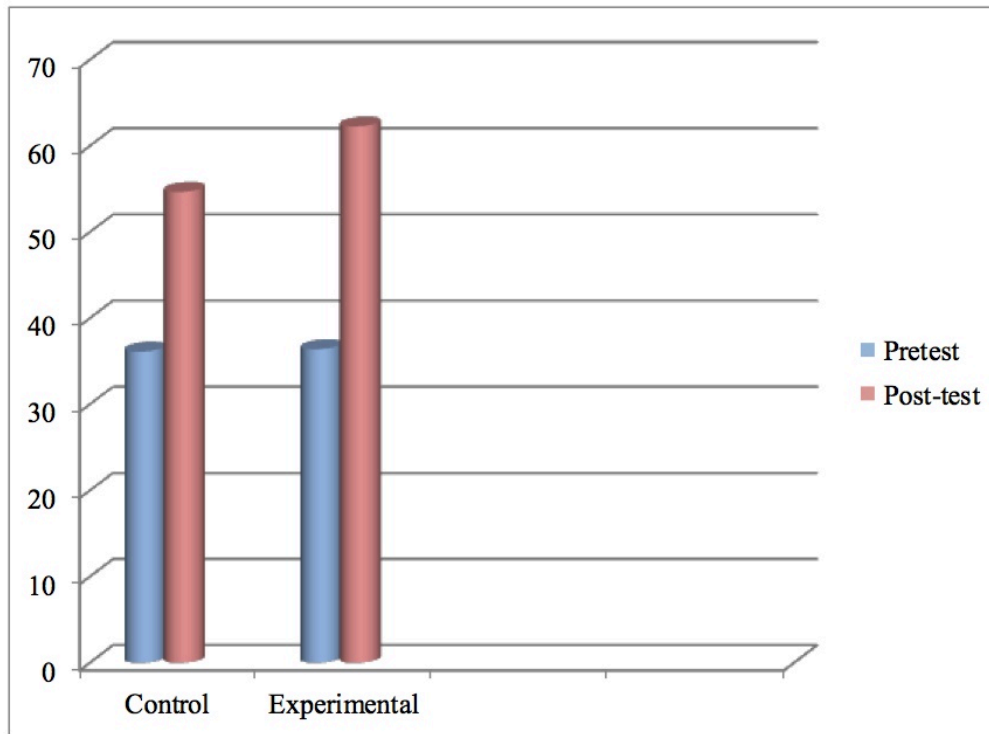
Figure 2 Mean score of pre-test and post-test in the two groups

The difference between the means (36.40 vs. 62.26) and standard deviations (3.01 vs. 3.78) of the two groups shows the effectiveness of email based language learning because the mean scores improved from pre-test to post-test. Significant differences also existed between the mean scores of the teacher-led group in pre-test and post-test (36.13 vs. 54.66). This difference reveals that the students improved from pre-test to post-test.

Discussion

Considering that computers and the internet nowadays play an important role in the lives of learners and that they have become a new source of language input for new generations, communication via online writing has gained much attention recently. Since distance learning and e-learning are becoming popular in the world and hopefully in Iran, more research into the field of CALL in Iran is required. Inspired by these developments, the aim of the present study was to find out if there is any significant difference between the writing ability of the students who receive instruction via email compared with those students who receive instructions traditionally. In this section, the findings of the study will be discussed to form a conclusion.

Analysis of the results of the post-test suggested that the groups differed in post-test regarding their scores. According to the results, a significant difference was observed between the mean scores of the students in the email group who received the instruction via email and the group who received the same instruction in a traditional way. This difference was in favor of the email group.

The total mean scores of the email group in the post-test was (62.26) while it was (543.66) for the control group/teacher-led group. This means that the achievement in the post-test for the groups is attributed to the option of using email. In other words, the use of the email has noticeably enhanced the abilities of the students of the

respective group. The findings of the study reveal that the performance of the email group is due to students' freedom, familiarity with online communication, absence of the conventional restrictions, a multitask environment, and feedback. In the following, we discuss the results in light of the questions posed earlier.

Freedom of the Students

One possible explanation for using email in teaching English writing is that computers enable each individual to work according to his or her own pace. The user may move freely from one component to another as s/he wishes and based on her/his needs. This is a characteristic of a CALL program that allows them to be attuned to individual differences. Some students write fast but others need more time for writing. When they are writing via email, students are comfortable because they know that all the students are not required to finish their writing at the same time.

What is more, the control group/teacher-led group had to attend the class according to the specified program and gear themselves to the rate of the class, but in the email group the students were able to study and learn at their own pace, so this could be one of the reasons for the difference between the performances of the two groups.

Familiarity with Online Communication

Furthermore, such findings may construct significance around the fact that the students of the email group were accustomed to the use of online communication. They were familiar with this medium since, nowadays, students make use of the internet in different contexts, especially in the university. The more frequent reason for this familiarity is that many instructors ask students to email their work, papers, and etc. to them. By the same token, they have to do their credit selection using the internet. This type of communication may, perhaps in the long run, improve the students' English writing.

Absence of the Conventional Restrictions

In addition, another difference between email based learning and the traditional way of learning writing arises from the assumption that learners are free from time and place which are two important elements in a traditional way. This freedom is likely to empower the students to learn outside of conventional classrooms and their restrictions. Therefore, the students' opportunities for learning will be extended to places other than the educational settings. For example, students can sit in a cybercafé and read eBooks, journals, and improve their writing skill. In other words, learners probably have autonomy, and this can motivate students to improve their writing better than the students in the classrooms who may lack this kind of autonomy.

Multitask Environment

To make these differences plausible, we can consider the fact that the email group benefited from the availability of the computers and internet at home or in the university. During their connection to the internet, the students may do more things while typing their email. For example, they could check their inbox, chat with their friends, search for articles, and download whatever program they want at the same time. Although these facilities of the internet are not related to the purpose of the

present study, we name them to claim that the existence of such facilities can motivate the students to prefer learning via the internet over the traditional ways.

Feedback

Compared with the traditional way of teaching, using technology may enable learners to receive feedback more easily, which can consequently develop their self-reliance skills. While using computer technology, the students have the chance to use many senses during the learning process. The use of the computer screen which is accompanied by animation, pictures, colors, music and sounds, attracts students' attention. Technology provides students with additional resources by which students can learn more efficiently and effectively.

Comparing the results of this study with the results of the studies mentioned earlier, we found that this study is consistent with many practical studies which were conducted before. The study is consistent with Lee's (1998b) study which stressed that the students' writing ability improved using the internet technology in general and email in particular. Also, the results of this study are in line with those of Liao's (2002) key pals project with her students in Sophomore EFL Writing at National Chung Hing University (NCHU). Her findings indicated that emailing improves EFL learners' writing abilities as it provides practice in reading and writing using the target language to express ideas and opinions to a real audience. She claims that this kind of writing activity is an interesting and motivating activity because it exposes students to authentic discourse. This is a non-threatening and interactive form of writing which encourages students to write freely without the fear of being corrected in the classroom. She points out that familiarizing learners with email activities gives them a sense of security and allows them to create a bridge between the other classmates and the teacher. They become active, responsible, and empowered learners who can communicate in the target language. Learners can prepare and send their messages to the teachers at their own pace and initiation. They receive feedback on their writing without fear and anxiety. Learners experience little and sometimes no pressure in an on-line world which is *not face-to-face*. Thus, the results of the present study can be discussed in light of the findings of Liao's study: The interactive and the non-threatening nature of emailing, the sense of security and the feedback that they receive through emailing and the absence of the pressure which is bound to traditional way of learning writing skills.

Likewise, Gill (2006) claims that technology is a powerful tool when used correctly. The students' writing ability improves by using the internet technology. In using technology, time and course objectives play important roles. The teachers must know how much time is needed for the course. Allotted time should not be short because using technology in a short time does not result in reliable changes. Teaching materials should be used according to a time scale. The result of this study shows the positive effect of using email related to writing and the interrelationship between the volume of teaching material and the length of time allotted to it. In turn, this suggests that we utilized technology effectively.

However, the results of the present study are different from the results reported by Ghasemi and Hashemi (2010) who point out that email is not a well-known educational tool among Iranian English students as well as the teachers. They claim that only a few Iranian students have addresses and they have little knowledge of email. The results of

the present study confirm the effectiveness of using technology in educational settings. At the beginning, while introducing the study to the students, we took the students' email addresses and all the participants had their own email addresses. This reveals that the students had enough knowledge of email. Nowadays, many teachers have email addresses and ask students to send their work via email. Thus, contrary to Ghasemi and Hashemi's (2010) findings, the results of this study confirm that email is a possible educational tool among Iranian English students as well as teachers.

Conclusion

Based on the findings of the study, it is suggested that when integrating computers into Iranian EFL settings, there is generally little need to introduce this kind of technology to the students because they are familiar with it. They do not need time to get acquainted with such an environment. We know for a fact that the field of CALL is a new concept in Iranian educational settings, so it requires investigation and research in our context. Conducting more investigation in this field can help educational policy makers to come to an understanding of the conditions under which technology can be used to enrich learning and instruction. Thereby, for a proper use of the internet, both teachers and learners are expected to be given the chance to access, experience and be familiar with the internet and its mechanics in their educational lives. Using Internet in educational contexts is recommended for many reasons such as: ease of access, quickness and low cost of putting information on line and simplicity of updating information.

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