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THE EFFECT OF WEB-BASED AND FACE-TO-FACE DISCUSSIONS IN THE SPEAKING SKILL OF IRANIAN STUDENTS

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ABSTRACT

The present study attempts to investigate the effect of Web-based discussions on the speaking skill of a group of Iranian female learners of English. The statistical population of the study includes 105 students selected randomly out of 800 students studying at the Gifted Girls High School in Tehran. To ensure the subjects` homogeneity in terms of expected language proficiency level, one of Nelson Proficiency Tests was used. Finally, out of 105 female students taken the standardized test, 45 subjects met the required criterion were selected as the statistical sample divided into two experimental and control groups. As revealed, there is a significant difference between the performance of the students in the experimental group received Web-Based Instruction. To sum up, the feedback received from the subjects indicates that in spite of all authenticity, attraction, novelty, and fruitful learning environment provided by the Internet for the language learners, autonomous learning will better pay off providing that it is postponed to more advanced levels.

Keywords: Web-Based Instruction; Speaking; Computer-Assisted Instruction; Iranian English learners

INTRODUCTION

We are living in the age of brisk, power, and efficacious communication. Needless to say, in order to have swift, efficient and effective communication, having an acceptable command of the important languages of the world is a necessity, and actually, as the consequence of the Second World War, amongst the prominent

languages of the world, the position of English language is transcendent and incomparable with the most of them. The importance of communication in the modern world has resulted in a new impetus to develop theories and methodologies of language instruction. Again, in this field, the position of English is unique since perhaps a vast majority of the literature produced in this field abounds with theories in this language. In addition, the significance of English and its various functions, applications and advantages as the international language have created the rapid dissemination of this language all over the world, in a sense that today learning English is an important task for schools and universities students of different countries, and teaching English is an important part of the formal and informal education systems of the countries around the world. Moreover, on account of the wider uses of English in countries such as India, Singapore, and Papua New Guinea in a process termed internationalization, English has been adopted as an official language for such purposes as education (Wardhaugh, 2006) and governmental affairs, and it has consequently increased the need of learning the language and having an acceptable command over it.

The next peculiarity of language teaching, particularly teaching English as a second or foreign language, is the consistently increasing the application of different technologies and newly found or invented euimpments in the process of teaching and learning a second or foreign language. In fact, in the modern world, technology permeates all domains of human life; and teaching and learning a language, specifically a second or foreign language, is not an exception. Computer is one salient - perhaps the most salient one- manifestation of the influence of technology over human life. In the field of TEFL (Teaching English as a Foreign Language), the advent of computer has been so prompt and pervasive that its presence cannot possibly be overlooked, and it seems now completely defensible to declare that Information Technology and Computer-Assisted Instruction render good promises to linguists and educators as well as language learners.

The essential of computer in teaching and learning English is owned to the fact that it has been able to resolve a large number of traditional problems of the field in a such way that nowadays Computer-Assisted Learning has opened new, bright horizons of success for learners and has introduced innovative avenues to the teachers of English as a foreign language. Furthermore, using computer technology in language learning and teaching has been influential in

eliminating numerous teaching/learning shortcomings and has made it possible for both the learners and the teachers to learn and work in a more pleasant environment; and all in all, the emergence and development of the Internet has specially revolutionized the utilization of computers in teaching and learning foreign languages.

Internet provides language teachers with network-based teaching environments allowing them creating meaningful tasks and using different materials for language learners. Particularly, the hypermedia nature of the World Wide Web has highly expanded the power of computer-assisted language learning (CALL) through letting learners to find their learning channels by themselves and providing them with easy access to an on-line resources database. Among various kinds of computer-mediated communication (CMC) tools, the Web can help language teachers integrate Web resources into the language classroom (Son, 2007; Warschauer, 2001). Also, it provides a virtual library with a large quantity of valuable information for ESL teaching (Allodi, Dokter & Kuipers, 1998; Bell, 1998; Felix, 2001; Murray & McPherson, 2004; Son, 2005; Warschauer & Healey, 1998). Moreover, Web-based language learning (WBLL) can increase learners' motivation and involve them with culturally authentic and highly interactive language experiences (Chun & Plass, 2000; Gruber-Miller & Benton, 2001; Kung).

According to Warschauer, Shetzer and Meloni (2002), computer technology makes ESL/EFL classrooms alive (Authenticity, Literacy, Interaction, Vitality, Empowerment). Today, online education is a prominent feature of CALL and the easiest and the most popular approach to higher education because of advanced computer technology. Such new trend is called Web-based Learning. As Scholars defined, WBL is "a hypermedia-based educational program which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported" (Khan, 1997). Pedagogically, WBL changes the traditional teacher-centered classroom to a learner-centered environment, encourages learners to learn by themselves and makes them motivated to continue relying on their own learning through connection with other people.

This study attempts to demonstrate the possible ways through which the Internet facilitates learning process in EFL teaching classes in Iran, as well as to specify the learners' reactions toward Web-based discussions and Web tools.

2. The research questions

Considering the above mentioned, the research questions can be presented as follows:

a. What are the impacts of Web-Based Instruction (WBI) on the speaking **(Needless to say, among the skills we need to have command on in the process of learning a language, speaking has a particularly important position, so that "the mastery of speaking skills in English is a priority for many second-language or foreign-language learners. Consequently, learners often evaluate their success in language learning as well as the effectiveness of their English course on the basis of how much they feel they have improved in their spoken language proficiency" (Richards, 2008, p. 19).)** ability of the students?
b. What are the impacts of Eclectic Method Instruction (EMI) on the speaking ability of the students?

3. The research hypotheses

The null hypotheses tested to answer the research questions include:

a. There is no statistically significant difference between the pre-test and post-test mean scores of the students in the experimental group who performed Web-based discussions.
b. There is no statistically significant difference between the pre-test and post-test mean scores of the students in the control group who performed traditional face-to-face discussions.

This study encountered some difficulties such as underprivileged economy and cultural boundaries besides finding qualified subjects and computer equipment. As one of the limitations, it can be referred that not all the students have money or inclination to purchase a PC. Also, some of the students' families do not allow them to use the Internet due to some cultural sensitivity, neither in school nor at home. Further, finding schools or institutes equipped with the proper required equipment and earning the work authorization is a difficult and boring task. The school where we have done the research is 'Gifted Girls High School' in Tehran. Although the students of this particular school have much better conditions and skills in comparison with the students in other schools, they still lack the standard fluency in Latin typing, and not all of them are much acquainted with the CALL technology and the Internet as well as the chat system. As other challenges of applying Web in learning and teaching English as a foreign language, access to the Internet, plus low speed Internet in Iran can be mentioned.

The rapid and continuous changes in the dissemination of global information, global

interactions, and global techniques used currently in language learning have altered the traditional ways of human communication so that now, it seems imperative for linguists, specifically language teachers to fully understand the Internet influence on the way the English language -as the language of international interactions- should be taught in the modern world (Nomass, 2013; Al-Omari, & Shdeifat, 2009; Son, 2008; Fleming, Motamedi, & May, 2007; Li & Ben-Canaan, 2006). Today, fortunately, there is an extensive literature about the worth and value of Internet application in education, and especially, in the second and foreign language teaching and learning. In all these researches, researchers have drawn consideration to a great deal of factors that could make the Internet a very important tool for both language learners and teachers. Warschauer (1996) asserted that students consider computers as devices helping them learn better and faster and can increase their creativity and independence. He also stated that communicating with others certainly enhances and strengthens personal power and paves the way for overcoming isolation. Moreover, the Internet provides rich opportunities for interaction with other people and for reciprocal exchanges of knowledge in the process of learning a language (Lock & Redmond, 2006). The fact that the Internet is a massive source of authentic material is another fact often repeated in the literature (González-Lloret, 2003; Brandl, 2002). Furthermore, the new tools and facilities provided by the Internet such as blogs and wikis serve as the media for publishing and distributing creative works and provide language learners with incomparable experience of writing in new formats (Bloch, 2007).

In this regards, distance education has been rapidly increasing in recent years and new technologies along with the Internet have had an influential role in this process. Some researchers believed that long distance education is important in facilitating, solving and supporting an immense number of requisites for technology in promotion of ELT programs (Genc Ilter, 2009; Bain & Rice, 2006-2007; Taylor, 2007). Refereing to the reluctance of Turkish students in learning English, Gence Ilter (2009) concluded that the motivating factors for the students should be aimed at achieving effectual learning. Therefore, in her study, she tried to ascertain whether the technological-based classrooms, the Internet and distance education provide proper solutions for de-motivated students. However, some researchers including Shin and Son (2007) assumed that educators may encounter difficulty to attain appropriate teaching materials and to integrate those

into their curriculum when they utilize the Internet. Due to the wide scale and diversity, the general absence of bibliographical control, together with the concerns over the scarcity of the authenticity and reliability of the information available, using the Internet resources for teaching and learning a second or foreign language is problematic and subsequently de-motivating.

In her Ph.D. thesis, Noytim (2006) investigated the impact of the Internet on English language teaching in Thailand. Her case study was implemented in Thai Rajabhat University. The findings rvealed positive effects of engaging Internet in the process of teaching English. Hemenway (2000), on the other hand, studied the effect of using Internet in classroom in teacher-student relationship. one of his main questions of the study indicated that "if students can gather information on such an immense variety of subjects, what happens to the teacher's role in a classroom where the Internet is available as a teaching tool?". He also believed that in contrast to traditional types of classrooms subjugated by educators, nowadays, with this astonishing technological phenomenon (Internet), the ease of information availability out of the classroom is incalculable. in fact, not only Internet could be viewed as a "dynamic, broad-based, relatively inexpensive tool" for communicating and information gathering, but also it could be appraised as a rather proper educational device which "allows collaborative learning" as well as multi-media learning experiences. In addition, Internet addresses the "natural learning intelligences" of learners in better ways; in a sense that students can enter upon the process of more effectively comprehending the data of their surrounding world. Moreover, Internet promotes students to learn appropriate ways of using Internet as learning source "that will be updated minute-by-minute" (pp. 114-119).

Studies on some states of the world as Thailand (Yutdhana, 2004) and Korea (Shin & Son, 2007) indicated that inadequate infrastructure and low availability of computers, poor Internet access, poor quality network connections, and insufficient time are amongst the major barriers for employing the Internet in teaching and learning foreign languages.

Al Masri (2011) examined the influence of applying Web-based curricula on Jordanian schools learners' "achievement in English language". In this study, Al Masri found that there are statistically significant differences in the post-test between the control and the experimental groups in favor of the experimental group, and also there is no statistically significant difference in the

students' achievement due to gender. Further, there is no statistically significant difference due to the interaction between gender and group (p. 543).

Chang (2005) based on his study conducted at a school, observed positive responses to web-based instruction. As he concluded, most of the students preferred web based instruction to traditional face-to-face classes. As observed, students liked the convenience of the web-based course because they could learn whenever they felt like learning, and they could listen to the instruction and review the materials as many times as they needed.

Talebi and Teimoury (2013) studied the impact of computer-aided language learning on the development of EFL learners' pronunciation skill in an Iranian girl high school. In their study, the administration of a pronunciation test was proved that the two groups were homogeneous in terms of their pronunciation skills at the entry level. While both groups had the same instructor during 8 sessions, only the experimental group received the materials by using computer. The performance of the experimental group on pronunciation test held at the end of the course showed that the mean score of this group was significantly higher than the control group (p. 52).

Rezvani and Ketabi (2011) inspected the differences between materials chosen from websites and textbooks for instructing English. In their study, they selected 120 Iranian intermediate English learners, categorizing them into 3 groups including the textbook group, the website group and the control group. The findings showed that websites improve the motivation and performance of the learners so that it seemed the integration of the Web-based materials in English learning classrooms increases the learners' knowledge of English grammar. In a similar study, Rahimi and Yadollahi (2011) surveyed the relation between the attitudes of female students in an Iranian high school toward computer-aided language learning. The results of this study revealed that these female students showed positive attitudes toward utilizing computer and the Internet in teaching English. In contrast, the study by Rahimi and Hosseini (2011) manifested that students had extreme negative attitudes towards replacing traditional ways of instruction merely with computer-aided language learning. In other words, it seemed that they prefered amalgamating traditional methods of instructing and learning with the modern ones. This finding was consistent with Lee's assertion (2000) that "computers can/will never substitute teachers" (p. 5).

Barani's (2011) also addressed the impact of computer language learning on listening

skill. He reported that those learners applied computer had also surpassed nonusers in the listening test. Marzban (2011), in another study, indicated that computer-aided techniques utilized in English educating had actually progressed Iranian learners' learning/reading comprehension capabilities. Similar result was seen in another investigation performed in Taiwan by Liu, Chen, and Chang (2010).

METHODOLOGY

The statistical population of the present study included 105 students selected randomly out of 800 students (aged 14-17) studying in the Gifted Girls High School in Tehran. To ensure the subjects` homogeneity in terms of expected language proficiency level, one of Nelson Proficiency Tests was used, one of Nelson Proficiency Tests was used. Out of 105 female students taken the standardized test, 45 subjects met the required criterion were selected as the statistical sample divided into two experimental and control groups.

The instruments applied in the present study included (a) a standardized Nelson Proficiency Test, (b) a test of oral English in the form of two interviews, one serving as a pre-test and the other as a post-test, (c) computer hardware, (d) computer software, the experimental group used the computer equipment for communication (sending e-mail to the teacher/peers and online discussions) as well as viewing and hearing audio and video files, and (e) the Internet services.

Nelson English Language Tests (Test 200 D) measured the subjects' achievement with reference to unit 1 up to unit 13 of Headway Pre-Intermediate. According to Fowler and Coe (1977), these tests "are designed for a 30 (60%) pass mark in all cases, although schools may adjust this in the light of their particular needs" (p. 13). Therefore, when the students' scores became less than 30 (60%), that test was considered as an inappropriate one for the desired level. On the other hand, in the test 200 D, the scores of 30-35 (60 to 70%) showed that the test might be the appropriate one. Actually, the test was to measure the subjects' general level of English (general proficiency) consisting of 50 items (36 multiple-choice grammatical structure items and 14 grammatical structure items in continuous prose cloze format). To standardize the test, it was administered to 53 female students at three different high schools in Tehran. Since the researchers decided to delete the difficult items, the test was shortened from 50 items to 45 items with 13 grammatical structure continuous prose cloze items, and 32 four-choice grammatical structure single items, with the time allocation of 45 minutes.

To assure that the previously selected subjects by the written homogeneity test (45 students) were also homogeneous in their speaking and communication ability, an oral pre-test in the form of interview was administered. At the end of the course, a post-test of speaking with the same format was administered. The interviews consisted of a conversation between the examinee and an examiner that took between 10 to 15 minutes. To control possible factors that might affect the results of the study, the researchers made the interview environment uniform for all the 45 subjects of the study and it was arranged in a way that the examinees who had finished the interview could not meet those who had not taken the test then.

The required computer hardware consisted of an e-learning/Internet classroom including a set of computers linked to a server, equipped with graphic and sound cards as well as speakers, and a printer which was situated in the server room, out of the classroom to minimize distraction. Of course, students in the experimental group had to have Personal Computers (PCs) and access to the Net at home. These computers should also be equipped with the vital software such as the latest versions of Windows, and all the software needed to play audio/video files and view animations, along with Yahoo Messenger which was utilized for multiple communicative purposes such as sending e-mails, online discussions, and controlling the experimental group's assignments/writings. Moreover, a Web-site designed by the researchers, serving as the course book.

An excerpt of the revised Michigan English Language Speaking Test Rating Scale was applied for the ease of its usage and the clarity as well as the brevity of its salient features. To analytically assess the students' communication and speaking ability in the pre-test and post-test, four salient and common features in all different forms of speaking rating scales, and related to the purpose as well as the subjects' level of this study, were taken into consideration: Speech including fluency (pausing/hesitation and rate of speech) and intelligibility (accent), interaction including conversational development (topic development and interactional facility), conversational comprehension (mutual comprehension), and in conclusion, language including vocabulary and grammar. In order to improve the assessment of the speaking test and to neutralize the effects of any inconsistent marking behavior of the scorers, the examinees' assessment was made by three raters, marking independently. The raters, including one native speaker were all experienced teachers. The raters, then, were

given separate sheets including five columns allotted to the four selected salient features as well as the final score. Final scores, each of which being out of 40, were computed by adding the individual rater's scores awarded analytically. The grades given to the online and face-to-face discussions were not supposed to have any influence on the students' final scores. Also, the subjects in both groups were assigned to write a paragraph of about 150 words on two of the six given topics, receiving identical and detailed instructions by the researchers, as how to write a well-formed paragraph.

In order to save the valuable time and for the sake of manageability, the researchers constructed a site (WWW.Iran_EnglishMind.Com) and after studying innumerable language sites, they adapted the net materials and uploaded them onto the site on the basis of their content as well as their availability. Considering the fact that speaking is only one of the four skills of a language, the site considered to be the learners' course book, consisted of various interesting, interactive sections of listening, speaking, reading, writing, grammar, together with vocabulary, etc. The experimental class started with a full briefing on the e-learning/Internet classroom, the site, the online discussions, and all of the learners' requisites for the course. Teacher's instruction of grammar, vocabulary (daily words, idioms, slang, and proverbs), reading, etc. was followed by different online exercises that the students had to do under the supervision of the researchers. The speaking section of the site consisted of three separate categories: Pronunciation (various pronunciation exercises including minimal pairs), chat with Alice (an intelligent robot programmed to communicate as an interlocutor), and finally, online discussions. Experimental group had four online discussions from home on certain, unanimous time and dates; these four on-line, out-of-class discussions, convened for the experimental group were in the forms of conferences and person-to-person messages. The duration of their on-line classes was one and half an hour. The control group studied the same material as the experimental group, and received eclectic and rather traditional training. Also, four in-class, face-to-face discussions were invited to the control group with the same timing, as its regular classes. The control group's instruction was accompanied by light music. They also had to act like a TV announcer and do a one or two-minute report; these acts were scored by the peers. During the course, the students watched two movies about which they should later answer the researchers' questions. These parts were considered as a

compensation for those potential capabilities of the e-learning class that a traditional class lacked. It is worth noting that the topics for both experimental and control groups' discussions were all selected from amongst students' favorites.

At the end (the 16th session), both groups finished the course by attending the post-test in the form of an interview, the same as the pre-test.

DISCUSSION AND RESULTS

5.1. Data Analysis

Different data analysis techniques were employed to analyze the data gathered through this study. Item Analysis including item facility (IF), item discrimination (ID), choice distribution, and alpha (ρ) were used for reliability index; independent t-test was run to compare the mean scores of the two groups on the written pre-test (homogeneity test). Owing to the fact that there were more than one variable in this study, and in order to compare the mean scores of the experimental and control groups on the oral pre-test and post-test, multivariate analysis of variance (MANOVA) was applied and also, to compare the mean scores after the multivariate analysis of variance, the post-hoc Scheffe's test was utilized. Additionally, Correlation analysis was used to find the inter-rater reliability indexes. And finally, descriptive statistics including mean, standard deviation, variance, etc., were applied in the present study.

As discussed earlier, the World Wide Web, as the most exciting pedagogical resources used, triggers communication. WWW includes an unlimited amount of Educational materials remodeling teaching methodology through integrating Wed-based learning (Web-based CALL). In fact, the WWW is socialization factor providing communication and authentic opportunities for interaction. Therefore, interactivity can be considered as the key element in WBL providing a constructivist model of learning, helping students become more interactive and more involved in their own learning leading to constructing their own knowledge.

Considering the purpose of the present study investigating the effect of Web-Based and Face-to-Face discussions on Iranian students` speaking skill improvement, the results obtained from analyzing the data using descriptive and referential statistics are recounted to answer the research questions and to determine the extent of significance for the acceptance or rejection of the null hypotheses.

To make sure of the lack of statistically significant difference between the experimental and control groups prior to the oral pre-test administration, the mean scores of the students were compared in the

experimental and control groups on the basis of their scores in the written homogeneity test using an independent t-test. The t-test was demonstrated that the two groups were homogeneous in terms of their language proficiency. The t-observed value, 0.37 at 43 degree of freedom, is much lower than critical value of t, i.e., 2.02 (**Table 1**). Subsequently, an f-test was run to check the homogeneity of the two groups' variance. The observed f- value is 1.16, which at 1 and 43 degrees of freedom has a p-value greater than 0.05, i.e., 0.75. These results indicated that the two groups were homogeneous in terms of their variance, and thus, the obtained results of the t-test were reliable. As can be illustrated in Table 2, the mean scores in both groups, being calculated based on their homogeneity-test scores also indicated the homogeneity of the groups.

Following the administration of the oral homogeneity test (pre-test) and after the verification of the two groups being also orally homogeneous, the experimental group received a treatment based on Information Technology (IT) while the control group participated in a class run by the Eclectic Method (EM). At the end of the course, a post-test of speaking was administered to the subjects that were again rated by the same three raters. Needless to say, the post-test and the pre-test were the same and they had the same quality and characteristics with respect to their administration, scoring, timing, nature, etc.

In an attempt to investigate the construct validity, factorial analysis was utilized as an extremely valuable technique to clarify the relationship between reliability and validity as well as to discover underlying factors being tested by our measurements (Hatch & Farhady, 1982, p. 260). As a consequence, a factor analysis through the Varimax rotation method was run to probe the underlying construct (construct validity) of the tests employed in this study. The analysis extracted only one factor; that is, all the tests used in this study, as shown in Table 3, load on a single factor, factor 1, which can be called the general language proficiency factor due to the fact that all the tests components including grammar, vocabulary, and speaking, are measures of language proficiency (Farhady & Farzane Nazhad, 1996).

In addition, the correlation coefficients between the oral pre-test and post-test with the written homogeneity test were utilized as the indexes of the two oral tests validity. Two of the coefficients are significant at the level of .000. However, as shown in **Table 4**, the correlation between the oral pre-test and the written homogeneity test is significant at the level of .006.

By using the average correlation among the three raters in both the pre-test and post-test, the inter-rater reliability for the oral pre-test and post-test was computed. As revealed by the results of the inter-rater reliability, all the indexes are significant at the level of .00, i.e., there is not even one chance out of one hundred to obtain such high indexes on pure chance. Therefore, according to **Table 5**, it can be concluded that there is significant agreement among the raters both on the pre-test and the post-test. The reliabilities calculated are between raters 1 and 2, 0.84; between raters 2 and 3, 0.86; and eventually, between raters 1 and 3, 0.77.

Shown in **Table 6**, to compare the mean scores of the experimental and control groups on the oral pre-test and post-test and to investigate any possible differences between them, a multivariate analysis of variance (MANOVA) was carried out. The observed f-value, as shown in **Table 6**, for the effect of the grouping variable, 0.052, at 1 and 43 degrees of freedom is much lower than the critical value of F, i.e., 4.08, at the significance level of 0.05.

The observed f-value for the effect of the two phases of the study, i.e., pre-test and post-test, is 84.95. As is shown in **Table 7**, this amount of f at 1 and 43 degrees of freedom is much greater than the critical value of f, i.e., 4.08 at the significance level of 0.05. The observed f-value for the interaction between the grouping variable and the phases of the study, 0.40, is lower than the critical value of f, i.e., 4.08, at the significance level of 0.05 indicating that there is no interaction between the two variables. Following the application of the multivariate analysis of variance, the results of the post hoc Scheffé's test demonstrated that the mean score of the experimental group on the post-test, i.e., 31.28, is not significantly different from the control group, as presented in **Table 8**.

Consistent with the result of the primary comparison in the Scheffé's test, as shown in **Table 8**, it can be observed that there is a significant difference between the experimental group's mean scores on the pre-test and the post-test since the observed difference between the two means, i.e., 2.80, is greater than the critical difference, i.e., 2.49. By the virtue of this finding, the first null hypothesis is rejected. Thus, it can be claimed that the Web-Based Instruction (WBI) has a significant impact on the speaking and communication performance of the Iranian EFL students. Since their mean score on the post-test is greater than their mean on the pre-test, the distinction is therefore statistically significant. So, it is observed that they have a much better performance on the post-test due to the type of instruction, i.e., the Web-based instruction they received in the course of

study. Similarly, as it is determined by the second comparison of the Scheffé's test, the difference between the control group's post-test mean score, i.e., 31.30, and that of those on the pre-test, i.e., 28.09, has been proved to be statistically significant. Thus, the second null hypothesis is rejected indicating that there is no significant difference in the mean scores of the control group both in the pre-test and the post-test. It can be concluded that in the post-test, the control group received Eclectic Method Instruction (EMI) has performed much better. Further, it can be claimed that since both of the groups have improved and executed much better on in their post-test speaking performance than in their pre-test, these findings serve that each one of the two methods of instruction, i.e., Web-Based Instruction (WBI) or Eclectic Method Instruction (EMI), leads to a higher speaking performance of the students.

To sum up, it is worthy to note that participants of the study, all throughout the sessions of the e-learning class, have shown positive attitudes toward learning English by the Web and they have also claimed that they would like to use more of the Internet-based activities in and out of the class time. Moreover, to be able to develop and implement an effective curriculum for the Internet-based language teaching/learning environments, teachers not only should be familiar with the indispensable technologies and be able to use the Internet deftly to eliminate the deficiencies in the procedure, but also they should have adequate motivation, eagerness, energy and knowledge to provide suitable materials for the learners as well as precise strategies for the teaching process.

Table 1: Written Homogeneity Test: Independent T-Test

t-observed	d.f.	t-critical
0.37	43	2.02
P ≤ 0.05		

Table 2: Exp. and Cont. Groups' Homogeneity-Test Means, Variance, etc.

Group	Mean	Std. Dev.	Variance	N
Control	28.91	3.67	13.46	24
Experimental	28.52	3.41	11.62	21

Table 3: Factor Analysis

Tests	Factor 1
Post-Test	0.91
Pre-Test	0.83
Written Homogeneity Test	0.75

Table 4: Validity Indexes

Test	r	p
Pre. Post.	0.70	.000
Pre. Hom.	0.37	.006
Post. Hom.	0.56	.000

Note: Pre. = Pre-test, Post. = Post-test, and Hom. = Homogeneity Test

Table 5: The Correlation (r) of the Three Raters' Scores in the Pre-Test and Post-Test

	Pre-Test				Post-Test				
Raters	**Exp.**	**$p_{Exp.}$**	**Cont.**	**$p_{Cont.}$**	**Exp.**	**$p_{Exp.}$**	**Cont.**	**$p_{Cont.}$**	**r_a**
R1R2	**0.80**	**0.000**	**0.81**	**0.000**	**0.86**	**0.000**	**0.89**	**0.000**	**0.84**
R2R3	**0.72**	**0.000**	**0.90**	**0.000**	**0.90**	**0.000**	**0.93**	**0.000**	**0.86**
R1R3	**0.55**	**0.004**	**0.85**	**0.000**	**0.78**	**0.000**	**0.91**	**0.000**	**0.77**

Note: R = rater and a = average.

Table 6: MANOVA: Tests of Between-Subjects Effects

Source of Variation	Sum of square	D.F.	Mean Square	$F_{observed}$	$F_{critical}$
Group	**0.73**	**1**	**0.73**	**0.052**	**4.08**
Within Cells	**598.78**	**43**	**13.93**	**—**	**—**

Table 7: MANOVA: Tests Involving 'Phase' Within-Subject Effect

Source of Variation	Sum of square	D.F.	Mean Square	$F_{observed}$	$F_{critical}$
Phase	200.65	1	200.65	84.95	4.08
Group × Phase	0.95	1	0.95	0.40	4.08
Within Cells	101.57	43	2.36	—	—

Table 8: Scheffé's Test for the Comparison of Pre-Test, Post-Test by Group

			Difference		
No.	**Comparisons**	**Mean**	**Observed**	**Critical**	**Significance**
1	**Post-Exp.**	**31.28**			
	Vs		**2.80**	**2.40**	*****
	Pre-Exp.	**28.48**			
2	**Post-Cont.**	**31.30**			
	Vs		**3.21**	**2.33**	*****
	Pre-Cont.	**28.09**			
3	**Post-Exp.**	**31.28**			
	Vs		**3.19**	**2.23**	*****
	Pre-Cont.	**28.09**			
4	**Post-Cont.**	**31.30**			
	Vs		**2.82**	**2.23**	*****
	Pre-Exp.	**28.48**			
5	**Post-Exp.**	**31.28**			
	Vs		**0.02**	**2.23**	**NO**
	Post-Cont.	**31.30**			
6	**Pre-Exp.**	**28.48**			
	Vs		**0.39**	**2.23**	**NO**
	Pre-Cont.	**28.09**			

Note: * denotes significant difference at the significance level of 0.05

CONCLUSION

The present paper attempted to investigate the effects of Web-Based Instruction (WBI) in a group of Iranian female English learners, particularly in the development of the students' speaking and communication ability. Based on the analysis of the data, is was concluded that there is a statistically significant distinction between the pre-test and post-test mean scores of the students in the experimental group, who has received one of the Information Technology-based Instruction (ITI), i.e., Web-Based Instruction (WBI). In other words, they have performed higher in the post-test. On the equal ground, it can be claimed that there is a statistically significant difference between the pre-test and post-test mean scores of the students in the control group received Eclectic Method Instruction (EMI), in a sense that they have performed better in the post-test. Moreover, the findings revealed that there is no statistically significant difference between the post-test mean score of the students in the experimental group, performing out-of-class, on-line discussions (distance discussions), and that of those in the control group, rendering inside class, face-to-face discussions. Therefore, concerning these findings, currently, it can be declared that both Web-Based Instruction (WBI) and Eclectic Method Instruction (EMI) improve the students' speaking skill.

In addition to the findings obtained from the data analysis and apart from the entire motivation and rhapsody the students exhibited of themselves for learning English as well as improving their speaking ability in the e-learning class, there still are left some ambiguous points or problems along with some equivocal instructions, words or statements for the students that make them require teacher's assistance. Hence, it is claimed that in spite of the totality of the genuineness, usefulness of the Internet learning environment for language learners, self-teaching through the Web should be postponed at least until more advanced levels. And last but not least, considering the fact that training qualified and proficient TEFLers in speaking is not an easy work to do in some countries like Iran, the Internet technology can be irreproachably utilized for TEFLers' self-instruction as well as for their updating knowledge. In the same line, by the Internet, TEFLers can be exposed to the extensive, various, new, and modern ways of material presentation among which they can benefit from the ones which suit their needs the best.

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