WEB-BASED WRITING INSTRUCTION AND ENHANCING EFL LEARNERS' WRITING QUALITY

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ABSTRACT

The purpose of the present study is to determine whether Web-based Writing Instruction (WBWI) has any influence on the writing quality of Iranian EFL learners.

Two groups of EFL learners who were studying English in an English Language Institute participated in the experiment. They were enrolled in an advanced writing course. Before instruction, both groups were pre-tested through writing essays. T-test results illustrated significant differences between two groups in writing ability. The experimental group made too many errors and had many writing problems. Both groups studied the same in-class material, and were given the same assignments and assessment. In addition, the experimental group used an online course, which was provided for them through establishing a so-called website, from home. Experimental students posted their points, wrote short essays and posted stories in the comment section of the so-called website.

They located information in sites like "Yahoo Movies" and "webMD". They processed their essays and checked their spelling through Microsoft Office Word (2007). At the end of the experiment, both groups were post-tested through writing an essay. ANCOVA results showed considerable differences between two groups. The experimental group made more gains as a result of web-based instruction. They became more proficient, and made few errors.

Keywords: **Web-based Writing Instruction; EFL; E-learning; Writing Skill**

INTRODUCTION

Although the number of schools and classrooms using technology in general and distance learning in particular is growing, many researchers are concerned with the effect of educational technology on student achievement since the efficient utilization of technology needs momentous investments in hardware, educational software, staff development, and technical support. Evidence that use of technology in instruction is constructive, necessary, and cost-effective is also required. A review of the L1 and L2 writing research on technology and student achievement has shown three paradoxical findings.

Studies by Meem (1992), Batschelet and Woodson (1991), Cifuentes and Hughey (1998), Chambless and Chambless (1994), Hood (1994), Clark (1996), Grejda and Hannafin (1992), and Jannasch-Pennell, DiGangi, Yu, Andrews and Babb (1999) found that use of word-processing, use of a accompanying program that guides students through the writing process, computer conferencing, computer-based instruction, electronic mail, and World Wide Web page design had no significant differences on the writing quality nor attitudes towards writing between L1 elementary, middle school, secondary and college students who used technology and those who did not.

In contrast, studies by Jones (1994), Davis and Mahoney (1999), Beyer (1992), Shaver (1986), and Allen and Thompson (1994) shown that word processing, participation in a project using a personal computer in the classroom to teach the writing process, using the Writing- Aid and Author's Helper (WANDAH) computer writing system, and using a computer assisted collaborative writing by L1 elementary, high school and college students amplified the quantity of writing instruction and the amount of student writing more than those using conventional instruction. The quality of students' writing and their attitudes towards writing on the computer enhanced as well. Similarly, Pennington (1993), Sullivan and Pratt (1996), Braine (1997) and Liou (1997) found that the writing skills of ESL students who used word-processing, a computer-mediated networked environment, and web-based materials improved considerably.Amazingly, in some ESL classroom settings, traditional instruction was found to be more successful. For instance, Izzo (1966) found that technical essays written by ESP college students in Japan using computer workstations were not as well organized and were extensively shorter than hand-written essays.

Results of a study with college students in Taiwan found that face to face discussions that preceded writing activities in a traditional classroom were superior to computer-mediated discussions in producing written comments and clarifications of their plans for writing more. Students in the face-to-face group could support and refute each other's arguments better (Huang, 1998). Given those opposing results about the effect of technology on student achievement in the writing skill, it seems that the effect of technology on learning depends on the learning objectives, varieties of tasks and activities involved, kind of technology used, how long it is used, and how it is used. Therefore, the present study attempted to use a variety of instructional technologies consisting mainly of an online (web-based) course, some WWW resources, e-mail and word processing in EFL writing instruction from home, in combination with traditional writing instruction. The primary focus of this study was to find out whether the incorporation of technology in traditional EFL in-class writing instruction significantly improves the writing skills of EFL learners. The present study attempted to answer the following questions: Is there a significant difference between EFL learners exposed to a combination of traditional in-class writing instruction and web-based instruction and those exposed to traditional in-class writing instruction only in their writing achievement as measured by the posttest?

THE STUDY

Participants

A total of 52 EFL learners, studying advanced writing course in two intact classes, participated in the present study. The study was conducted in Jahan Elm Higher Education Institute, which is one of the most well-known IELTS centers in Iran. One of the classes was considered as Control group and the other one as Experimental group. Students in both groups were all from Iran, and were all native speakers of Farsi. Their age range was 18-21.

The participants of both classes had passed two writing courses, i.e. Basic and Intermediate Writing Courses, before entering the advanced course. Therefore, all of them were to a great extent in the same level of writing proficiency.

Instruction

The same traditional in-class writing instruction was applied on the experimental and control groups. They studied the same writing textbook assigned by the institute which is "Interactions I: A Writing Process Skills Book, by Segal and Pavlik. The aim of the book is to develop the students' ability to write an academic essay that has an Introduction paragraph along with at least three Body paragraphs and one conclusion paragraph. The book consists of 12 chapters. Each chapter was completed over one week, i.e. three class sessions per week, and the book was covered over 10 weeks.

Each week, students in both groups completed all the skills, exercises and writing tasks in the chapter and wrote two essays per week. Students were always required to do all the exercises and at least write part of their essay in class and rewrite them when necessary. While doing the exercises and writing the essays, students' work was scrutinized and individual aid was provided. The students received communicative feedback focusing on meaning. Feedback was provided on the presence and location of errors but no correct forms were provided. Self-editing and peer-editing were encouraged.

For assessment, students in both groups were tested every other week. They were given a total of 5 quizzes. On quizzes 1 and 3 the students wrote an essay and on quizzes 2, 4, and 5, they completed different tasks similar to those covered in the book. Quizzes were always graded, returned to the students with comments on strengths and weaknesses.

Treatment

In addition to the traditional in-class writing classroom instruction, the experimental group used an online (web-based) course provided for them via a so-called website that the author developed. Prior to the web-based instruction, students' computer literacy skills were assessed by a questionnaire. The purpose of IT questionnaire (Adapted from www.staff.bath.ac.uk/pssrj/IRN/LTSN%20questionnaire%20(Gre).doc Greenwich University Website available at:), including 58 items, was to distinguish between IT literate participants and those with no or low level of IT literacy.

Course components were explained and introduced once. Instructions on how to use them were also posted in the "For Students" area of the so-called website. Sites were added in the "External Links" according to the specific writing skills and grammatical structures under study in the classroom. Web-based instruction was started by the author posting an Announcement note in the "For Students", by starting a point on the "Discussion Board" and by sending e-card to the group. He continued to do so occasionally throughout the semester.

The students responded by similar points, e-cards and group messages. Then, they started to post their own points on the "Discussion Board" on a topic they have studied in the book or any topic of their choice. They responded to the instructor's or another student's point. They posted the stories that they had read and liked to share with others.

They felt free to e-mail each other or e-mail the instructor on any occasion like a student's birthday, religious and national holidays or whenever they needed help. Students checked the links posted in the "External Links".

Many students wrote a paragraph about themselves in the "Student Expressions". They answered the quizzes posted in the "Assessment" area and send them back to their teacher. In addition to the online course, the experimental group found information related to the topics covered in the book from internet sites like "Yahoo Movies", and "Encarta". They were also encouraged to word-process the essays they wrote in class and check their spelling at home using MS WORD. Typed essays were analyzed in class, so that students could read each other's essays.

Throughout the semester, the author served as a facilitator. He offered technical support on word-processing, using the different components of the online course, and responded to individual students' needs, comments and requests for certain sites. The author did not spell-check word-processed paragraphs. Students were given extra credit for using the online course, word-processing their essays and locating information from internet resources. The online course was not assigned a part of the final course grade.

Procedures

Before instruction, the experimental and control groups were pre-tested. They took the same pretest that consisted of an essay. Test instructions specified the essay length and essay component related to the tasks and skills to be practiced in the book. At the end of the experiment, the experimental group answered a post-treatment questionnaire that aimed at finding out how the students felt about the online instruction and whether they found it helpful. At the end of the course, both groups were post-tested. They took the same posttest. The posttest consisted of an essay that the students had never seen nor practiced in class or in the online course. The essay topic was within the students' background knowledge. The test instructions specified the essay length and essay components that were taught and practiced during the course.

The pretest and post-test essays of both groups were holistically graded based on a general impression of content, organization, cohesion, word choice, language use and mechanics. All essays were read once and a quality rating of high, above average, average, below average and low was given to each paper. Essays were then read for a second time and each was assigned a grade. Those who graded the essays were from among the professors who had been teaching Writing Courses for at least four years in the institute.

Test Validity and Reliability

The posttest is believed to have content validity as it aimed at assessing the students' ability to develop an essay. The topic was based on a new situation and was not a reproduction of the material offered in the textbook or classroom. The essay components and writing tasks required in the posttest were equivalent to those covered in dhe book and practiced in class. The test instructions were expressed clearly and the students' task was defined. The minimum and maximum essay length was specified (120 – 180 words). 96% of the experimental and control students comprehended the essay topic and writing tasks and responded to the topic as instructed. Concurrent validity was determined by establishing the relationship between the students' scores on the posttest and their scores on the last essay quiz that was administered two weeks prior to the administration of the posttest. The validity coefficient was .75 for the experimental and .79 for control groups.

To estimate inter-rater reliability, a 55% random sample of the pretest and posttest essays was selected and double-scored. A colleague who taught Writing and hold an MA degree in TEFL scored the pretest and posttest essay samples holistically.

He followed the same scoring procedures employed by the author. The marks given by both raters for each essay in the sample were correlated. Inter-rater correlation was 93% for each group.

In addition to inter-rater reliability, participants' reliability was computed as it indicates how consistently examinees perform on the same set of tasks. Examinee reliability was calculated by correlating the students' scores on the posttest with their scores on another essay-type subtest that was administered at the same time as the post-test. The post-test consisted of several objective and essay-type questions.

On another question, which was part of their final exam, the students were asked to write a letter. Reliability of the posttest scores was computed using student scores on both subtests (essay and letter).

The Kuder-Richardson formula 21 for essay tests was used. The examinee reliability coefficient was .77 for the experimental group and .88 for control groups.

Data Analysis

All pretest and post-test raw scores were converted into percentages. The mean, median, standard deviation, standard error and range were computed for the pretest and posttest scores of both groups.

To find out whether there is a considerable diversity in ability between the experimental and control groups prior to instruction; a T-test was run using the pretest scores.

Results are reported in table (1), Result section. Since difference in the writing ability existed between the experimental and control groups prior to the experiment, and the two groups were intact and unequal in size, Analysis of Covariance (ANCOVA) was run using the posttest scores as the response variable and the pretest scores as the covariate to correct for chance differences that existed when the participants were assigned to treatment groups.

This correction will result in the adjustment of group means for pre-existing differences caused by sampling error and reduction of the size of the error variance of the analysis. Finally, to understand whether each group has made any progress as a result of the writing instruction, a within group paired T-test was computed for each group to find out whether there is a significant difference between the pretest and posttest mean scores of each group.

FINDINGS

The pretest scores showed that the experimental (online) and control (traditional) groups varied significantly in their writing ability before the writing instruction began ($T=5.65$, $Df=161$, $P<.01$). The control group outperformed the experimental group (see Table: 1).

The typical students in the control group got a score of 82% on the pretest compared to 69% for the experimental group, with more variations existing among students in the experimental group as depicted by their pretest standard deviation and score range.

Table: 1
Distribution of Pretest Scores of Experimental and Control Groups in Percentages

Group	Mean	Median	SD	SE	Range
Experimental	54.08	59	18.43	3.30	15-85
Control	69.61	72	16.77	3.35	22.88

A qualitative analysis of the pretest paragraphs demonstrated many writing problems that the experimental group had. Experimental students made too many spelling mistakes, did not use punctuation marks at all, and had difficulty expressing, generating and organizing ideas. Many wrote incomprehensible sentences. By contrast, the control group could construct sentences and express ideas. Their spelling ability and knowledge of punctuation marks was much better.

As indicated in table (2), the typical learner in the experimental group scored higher than the typical student in the control group (medians=88% and 76% respectively) with less variations existing among students in the experimental group (SD=14.6) than the controls (SD=17.10).

Table: 2
Distribution of Post-test Raw Scores of the
Experimental and Control Groups in Percentages

Group	Mean	Median	SD	SE	Range
Experimental	81.04	88	14.60	3.11	64-100
Control	74.71	76	17.10	4.01	38-100

Results of the paired T-test reported in Table (3) illustrate a major difference between the pre-test and post-test mean scores of the experimental group at the .01 level, suggesting that student achievement in the experimental group has significantly improved as a result of using a combination of web-based writing instruction and traditional in-class writing instruction (T=14.15, Df=64). Similarly, a significant difference between the pretest and post-test mean scores of the control group was found at the .01 level, suggesting that achievement in the control group has significantly improved as a result of the traditional in-class writing instruction (T=5.9, Df=56).

Table: 3
Results of the T-test for posttest and pretest mean scores of
Experimental and control Groups

Group	T	DF	Mean Difference	SD Difference	P
Experimental	14.15	64	27.78	18.24	.01
Control	5.9	56	8.92	12.23	.01

However, T-test results alone do not show which group has made higher gains. After adjusting for initial group differences on the pretests, Analysis of Covariance (ANCOVA) on adjusted post-test means revealed significant differences between the experimental and control groups (F=31.48, P<.0001).

The experimental group has made higher gains in writing achievement than the experimental group as a result of web-based instruction. The effect size, i.e. degree of superiority of the experimental treatment over the control treatment was .62.

CONCLUSION AND RECOMMENDATION

The present study found that participants in the experimental group who were taught using a combination of web-based writing instruction and traditional in-class writing instruction scored significantly higher than controls that were taught using traditional in-class writing instruction only. Use of web-based instruction as a supplement to traditional in-class writing instruction was significantly more effective than using traditional writing instruction alone. Web-based instruction seems to be an important factor in enhancing the writing quality of EFL learners. It enhanced their writing abilities and resulted in a significant improvement in their posttest scores.

Qualitative analysis of the posttest essays indicated that participants of the experimental group showed a great development in their writing skill. They became more competent, could write fluently and communicate easily. They could write long essays, with lengthy sentences and more compound and complex structures instead of short and simple sentences at the beginning of the semester.

There was a significant decrease in spelling, punctuation and capitalization errors. Only 6% of the students failed the course as opposed to 31% of the controls. Moreover, students' responses to the post-treatment questionnaire showed that the online course had a positive effect on their attitude towards the writing process. It enhanced their self-esteem, motivation and sense of achievement and improvement. The students enjoyed writing and were motivated to write. Online learning encouraged writing and exchange of ideas. Student-student and student-instructor interactions increased. Achievement was enhanced by the multiple skills practiced: writing, reading, spells checking and word-processing, and by the variety of innovative technologies utilized: the online course, WWW resources, e-mail and word-processing.

The effect of online instruction on the writing achievement of EFL writers obtained in the present study is consistent with findings of other studies conducted with learning disabled or remedial writers in the L1 and L2 literature. Lewis (1998) conducted a study with learning disabled students in grades 4-12 who used word processing tools (spelling and grammar aids). He found that word processing had the most impact upon the writing accuracy of learning disabled students. Spell checks were found to be effective editing tools but grammar checks were not. Spell checks had a more positive effect on students' writing quality and accuracy than synthesized speech. In another study, Wresch (1993) found that use of writing process software has improved disadvantaged college students' writing performance and pass rates. Furthermore, Spaulding and lake (1991) found that freshmen remedial writers who used a set of networked computers to assist them in their writing lessons interacted freely and comfortably with their teachers and peers and thus opportunities to learn and grow increased. Finally, Jacoby (1993) found that secondary limited English proficient students who used a word processing program and were encouraged to use the computer independently acquired word processing skills and learned to use the computer for daily written assignments for regular classes.

The positive effect of web-based instruction on the attitudes of EFL learners in the present study is also supported by findings of other studies. For example, Huang (1999) found that the EFL college students using internet-related assignments had positive attitudes towards use of the internet in writing instruction.

In addition, Richards (1996) surveyed teachers, library media specialists and students in grades K-12 and found that the internet is a great motivational tool for students. Moreover, Shields (1991) used an 8-week practicum that aimed at improving use of Standard English and attitude towards writing of students in grades 6-8.

Assessment of students' stories showed that they had improved their use of Standard English and the post treatment questionnaire indicated that students enjoyed writing the stories and felt more positive about the writing process.

Despite the positive attitudes that experimental students had towards writing as a result of their web-based writing experience, the author had always to prompt the students to use the course site by sending a group e-mail and by responding to and commenting on students' ideas.

The minimum requirements of students' contributions in online course should be specified. A percentage of the course grade should be also assigned to using the online course in order for the students to take it more seriously.

In the present study, web-based writing instruction was found to be a powerful tool for improvement of EFL learners' writing ability. Online instruction was found to be effective in improving student-writing skills.

Improvement was distinguished in the computer generated and handwritten assignments. Differences in length, neatness, mechanical correctness and style were also observed. Results also demonstrated that in learning environments where technology is unavailable to EFL learners and instructors, use of technology from home and even as a supplement to traditional classroom techniques helps motivate and enhance EFL learners' writing skills.

As a result, use of web-based writing instruction to improve the writing skills of EFL learners is strongly recommended. It is also recommended that EFL instructors be trained to use the internet and online instruction in teaching EFL to students from home as it requires no equipment and connectivity from campus and no scheduling. In Addition, use of web-based instruction should be extended to students in other levels and to other skills taught such as speaking, listening, reading, spelling, grammar, vocabulary building and dictionary skills. It is also recommended that other researchers and instructors fully deliver whole writing courses and other EFL language courses online.

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