

**The Effect of the Internet on Improving Foreign Language Students'
Writing Performance**

أثر استخدام الانترنت على مهارات الكتابة لمتعلمي اللغة الانجليزية كلغة أجنبية

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Abstract

This study examines and explores the effect of the internet on improving university students' writing performance. The population of the study consisted of all students in the English language Department at Al-Isra' University who were enrolled in (Writing One), in the first semester of the academic year 2006/2007. The purposeful sample of the study consisted of 62 students. They were divided into two sections: Section One which comprised the experimental group was supported by a web-based software while, Section Two, which was regarded as the control group, created their articles via paper and pencil. A web page was designed with a useful link and learning materials were included, and an e-mail address for the course teacher was determined. Statistical analyses were used to analyze data from the pre-test, post test scores to answer the question of the study, that is: Does using the internet to teach writing to university students improve their writing skill compared to the traditional method of teaching? The results showed that students who worked with the internet had significant gains in their writing performance compared with the control group. Additionally, the students who worked with the internet were more motivated to write than the other group. In the light

of the above findings, it is recommended that the internet should be incorporated in the teaching of writing and other language skills.

ملخص

تستقصي هذه الدراسة أثر استخدام الانترنت على مهارات الكتابة لطلبة اللغة الانجليزية، وقد تكون مجتمع الدراسة من كافة طلبة اللغة الانجليزية في جامعة الإسراء. وأخذت عينه الدراسة من كافة الطلبة المسجلين في مساق كتابة (١) في الفصل الدراسي الأول من العام الدراسي ٢٠٠٦/٢٠٠٧ وكان عددهم (٦٢) طالباً موزعين على شعبتين، شعبة (١) تكونت من (٣٣) طالب وطالبة تم اختيارهم كمجموعة ضابطة، في حين أن شعبة (٢) تتكون من (٢٩) طالب وطالبة تم اختيارهم كمجموعة تجريبية. وقد صمم موقع الكتروني لمتابعة وتقويم أداء طلبة المجموعة التجريبية إلا أن المجموعة الضابطة كانت تقوم بتقديم واجباتها بصورة تقليدية (القلم والورقة)، كما أن الباحث قام بتوزيع عنوانه الالكتروني. كما استخدم الباحث المعادلات الإحصائية لتحليل البيانات في الامتحان القبلي والبعدي من أجل الإجابة على السؤال التالي: هل هناك اثر لاستخدام الانترنت على تطوير مهارة الكتابة لطلبة الجامعة بالمقارنة بالطرق التقليدية لتدريس هذه المهارة ؟ حيث بينت نتائج الدراسة بان هناك فرق بين أداء المجموعة الضابطة والمجموعة التجريبية في الامتحان البعدي لصالح المجموعة التجريبية. وفي ضوء نتائج الدراسة يوصي الباحث باستخدام الانترنت في تدريس مهارة الكتابة والمهارات اللغوية الأخرى.

Introduction

The internet and the multimedia enrich the student community for accessing the educational materials. The world wide web (WWW) offers educators a new medium to deliver teaching and learning material, allowing flexibility for learning from home or workplace and the ability to cope with a widening variety of backgrounds and qualifications. The difficulty comes from finding ways to apply the new technologies to a learning process with proven educational benefit. Recently, the university lecturers have received the training and skills needed to exploit the web, and they have found it approachable and less technical than expected in general. Broadband internet access opens up new opportunities and new challenges for tertiary education to go online, that is, for educational services delivered to students at home and in their workplace, overcoming the time and travel constraints of conventional place-based face-to-face educational methods. Thus, internet-delivered online

multimedia education (OLME) is developing into a major mechanism for the provision of off-campus education. In this OLME, a student uses a personal computer to access an educational server computer, the latter typically is a university or other educational service provider.

Educators constantly look for better ways to provide an interactive learning environment to attract the attention of students. They encourage them to exchange views and experiences. The internet technology is one of the most effective means of providing such rich learning environment, which can work in cooperative projects between the various schools, and the students to develop their knowledge of subjects through contact with colleagues and experts with the same concerns. It is the responsibility of students seeking information and formulation which develop their thinking skills. The communication via the internet develops writing skills of the English language where students and teachers alike exchange texts written in English on various subjects and different levels.

As for the teachers, the global communication network enables them to access educational experiences that are difficult to access in other ways. The strength of the internet appears in its ability to link between the people across the vast distances between different sources of information. The use of this technology increases the opportunities for education and extends beyond the scope of schools.

Speedy communication and networking: Over the e-mail joins teachers and students with each other quickly and effectively.

(Charp, 2000), reviewed ninety studies from different countries on the role of the internet in education. It became apparent that this technology has a positive impact on the abilities of students to learn and increase their self-learning, and improve communication skills and writing skills.

What distinguishes the internet is that it provides everyone with the ability to be a publisher. Most companies communicate with web space that is available for individuals to disseminate materials. The teacher could exchange information with other sources. Students can also participate in the publication of their work under the supervision of

school and the exchange of feedback through the possibility of contact with experts in various topics.

It Provides the opportunity to learn at any time and any place. Online learning provides learning environment that is not restricted to class room. Freedom of time and space stimulates relations with others for feedback and information from various sources.

In the light of the above discussion, internet should be incorporated in the teaching of writing and other language skills.

1.1.1. Statement of the Problem

A long experience of working as a foreign language teacher, supervisor and curriculumist has shown that FL student have weakness in writing. This might be due to the failure of the traditional methods of teaching in helping students and the teacher to learn/ teach this skill efficiently(Kauffmann,1996). The researcher tries to examine the effect of using the internet on improving foreign language students' writing performance because such technology might save time and effort.(Ferguson,2001) Moreover, the teacher does not usually find enough time for scoring papers and writing feedback to students.

1.1.2. The Purpose of the Study

The researcher tries to explore the effect of the internet on improving foreign language university students' writing performance.

1.1.3. The Hypothesis

There are statistically significant differences in students' achievement in writing due to using the internet.

1.1.4. Significance of the Study

This study might be one of a few studies to be implemented on teaching writing on – line at a Jordanian university. The researcher hopes that this study will add to the findings of others concerning the possibilities of using e-mail in language teaching and learning in general,

and in developing the process of teaching writing at Jordanian universities in particular.

1.1.5. Definition of Terms

The following definitions will be adopted for the purpose of this study:

Electronic Mail (e-mail): It is the online equivalent of sending a letter in the regular mail but much faster. This type of communication is asynchronous, as the writer and reader do not need to be online at the same time (Frizler, 1995).

Online: Computer is connected to the Internet. When one is online he/she is at that time hooked to the internet and actively operating the program (Atkinson, 1998).

Traditional Classroom Setting: In a traditional classroom setting, university students usually meet for an hour, listen to the lecture and get the assignment. There is eye to eye contact, direct interaction and intervention, and an established routine. In such setting the teacher decides methods, activities, and techniques that are to be learned and how the class is to be run (Freeman, 2000).

Web page: It is a Web document which can have any length from a few lines to several hundred lines, but which is accessed through one site (Atkinson, 1998).

Web site: It is a series of interlinked web pages such as the site of a school, college, company, local authority (Atkinson, 1998).

World Wide Web (WWW): It is a global system of electronic documents accessible via the internet (Atkinson, 1998).

Writing Courses: These are the writing courses offered by the English Department at Al Isra' University, Writing 1 and Writing 2.

1.1.6. Limitations

1. The sample of the study was limited to 62 students majoring in English at Al-Isra university in (Writing One) during the second semester of the academic year 2006/2007.
2. There are limitations related to the difference between the number of students in the control group 28 and the experimental 34, also the number of students taking the pre-test and post – test due to registration policies at the university.
3. Both the control group and the experimental group were taught by the same teacher, who presented the same concept, assigned the same work and had the same criterion of assessment and evaluation.
4. It is limited to measuring the effect of using two different methods on FL students' performance in writing (spelling, ideas, punctuation, grammar, organizing a text and writing coherent paragraphs).

1.1.7. Review of Related Literature

Fletcher and Atkinson (1972) conducted one of the earlier studies in which children of the experimental group received 8 to 10 minutes of the computer assisted instruction per day for 5 months. Results of the post-test gain scores showed that most students who received CAI performed better than that those who did not.

Arroyos (1992) examined the effect of using computer on reading achievement. The subjects of the study consisted of 75 seventh grade students. The result showed that the use of the computer appeared to increase students motivation to learn.

Chan (1993) sought to understand the uses of computer in ESL education and to examine how the interactions between technology, education, language and culture defined the way computers were used in the ESL classroom. The study focused on what kind of learning environment was created by ESL teachers using the computer on ESL teaching and learning.

De Ridder (2000) argued that the case for the evaluation of some of the additional feature of CALL material designed to enhance second language reading comprehension was important. Her findings demonstrated that randomly highlighting words in a text on screen influenced the amount of vocabulary incidentally learned by the reader. Moreover, the results strongly indicate in highlighted setting were fundamentally different from reading a text in unmarked condition. She stated that this calls for reflection on how to present the learner with the enhancements of CALL.

Berge and Collins (1995) believed that the classroom of the past is no longer applicable to the world we live in which we are attempting to prepare our students to function in language. According to them, computerized classes and specially the on – line classroom offers opportunities to mentoring/ tutoring, project-based instruction (individual and group), retrieval of information (from on-line archives and database), course management, interactive chat, personal networking and professional growth, peer review of writing, and practice and experience using modern technology.

Sivin-Kachala and Bialo (2000) reviewed 311 research studies on the effectiveness of technology on students' achievement. Their findings revealed positive and consistent patterns when students were engaged in technology-rich environments, including significant gains and achievement in all subject areas, increased achievement in preschool through high school for both regular and special needs students, and improved attitudes toward learning and increased self-esteem.

O'Dwyer, Russell, Bebell, and Tucker-Seeley (2005) found that, while controlling for both prior achievement and socio-economic status, fourth-grade students who reported greater frequency of technology use at school to edit papers were likely to have higher total English/ language arts test scores and higher writing scores on fourth grade test scores on the Massachusetts Comprehensive Assessment System (MCAS) English/Language Arts test.

Michigan’s Freedom to Learn (FTL) initiative, an effort to provide middle school students and teachers with access to wireless laptop computers, has been credited with improving grades, motivation and discipline in classrooms across the state, with one exemplary school seeing reading proficiency scores on the Michigan Education Assessment program (MEAP) test, administered in January 2005, reportedly increasing from 29 percent to 41 percent for seventh graders and from 31 to 63 percent for eighth graders.

In examining large-scale state and national studies, as well as some innovative smaller studies on newer educational technologies, Schacter (1999) found that students with access to any of a number of technologies (such as computer assisted instruction, integrated learning systems, simulations and software that teaches higher order thinking, collaborative networked technologies, or design and programming technologies) showed positive gains in achievement on researcher constructed tests, standardized tests, and national tests.

Cavanaugh’s synthesis (2001) of 19 experimental and quasi-experimental studies of the effectiveness of interactive distance education using video conferencing and telecommunications for K-12 academic achievement, found a small positive effect in favor of distance education and more positive effect sizes for interactive distance education programs that combine an individualized approach with traditional classroom instruction.

Boster, Meyer, Roberto and Inge (2002) examined the integration of standard-based video clips into lessons developed by classroom teachers increased student achievement. The study of more than 1400 elementary and middle school students in three Virginia school districts showed an average increase in learning for students exposed to the video clip application compared to students who received traditional instruction alone.

Researchers are also making progress on the more complicated task of investigating the impact of technology use on higher order thinking skills as measured through means other than standardized tests. They are examining students’ ability to understand complex phenomena, analyze

and synthesize multiple sources of information, and build representations of their own knowledge. At the same time, some researchers are calling for newer standardized assessments that emphasize the ability to access, interpret, and synthesize information.

Research indicates that computer technology can help support learning and is especially useful in developing the higher-order skills of critical thinking, analysis, and scientific inquiry “by engaging students in authentic, complex tasks within collaborative learning contexts” (Roschelle, Pea, Hoadley, Gordin & Means, 2000; Means, et. Al., 1993).

While research linking technology integration, inquiry-based teaching, and emphasis on problem solving with student achievement is emergent, some research exists that suggests a connection. In a 2001 study of Enhancing Missouri’s Instructional Networked Teaching Strategies (eMints) program, a statewide technology integration initiative, eMINTS students scored consistently higher on the Missouri Assessment Program (MAP) than non-eMINTS students, including eMINTS students classified as having special needs. The higher MAP results were found to be associated with the instructional practices (Evaluation Team Policy Brief, 2002). The eMINTS program provides teachers with professional development to help integrate technology so that they can use inquiry-based teaching and emphasize critical-thinking and problem-solving skills.

The program has since expanded to not only Missouri schools and districts but also other states as well. Currently, 232 Missouri districts, 10 Utah districts, 56 Maine districts, 2 Nevada districts, and 1 Illinois district, representing 1000 classrooms and 22500 students now take advantage of the eMINTS program offerings. Test results continue to show that, on most state tests, students enrolled in eMINTS classrooms scored higher than students enrolled in non-eMINTS classrooms and that low-income and special education students in eMINTS classes generally score higher than their non-eMINTS peers (eMINTS, 2005).

Results from other studies (Perez-Prado and Thirunarayanan 2002; Cooper 2001; Smith, Ferguson and Caris 2001) also suggested that

students could benefit from technology-enhanced collaborative learning methods and the interactive learning process. The time of the experiment was only six weeks and it was very difficult to convince the school administration of the new changes and orientations.

1.1.8. Subjects of the Study

Sixty-two students, at Al-Isra' university in two sections of (Writing One) course participated in the study. (28 students in the control group and 34 in the experimental group).

1.1.9. Instrument of the Study

This study sought to identify differences in learning outcomes of students in two sections in Writing One course. Both sections were taught using the same syllabus, text and assignments.

However, one section relied on the textbook and traditional teaching methods (paper and pencil besides the black board), while the other section incorporated the use of internet in their home-work assignments: In the first week of the semester, both groups sat to a pre-test to decide their actual level before being taught. After that, the experimental group met in a computer Lab for half of the class sessions, whereas the control group met in a regular classroom for all its sessions.

Assignments for both groups were on (paragraph writing, writing letters, short reports and progress reports).

Many different measures for determining technical writing competency were taken through the semester in order to assess the overall effect of internet on students' writing performance successfully.

The Pilot Study

Decision taking should rely on accurate information. To get accurate information, the investigation tools should be sharp, valid, and reliable. Therefore, the aim behind carrying out the pilot study is to make sure that the investigation tool used in this study possesses all the above-mentioned dualities of a good investigation tool. The investigation is

limited to measure the effect of the internet on language accuracy (writing skill and its mechanics) that include: Organizing a text, writing coherent paragraphs, grammar, vocabulary, punctuation, spelling and ideas.

The Jury

Having finished the preparation stage, the researcher gave the final version of the test and the table of specifications to a jury of twelve people who are well-known for their long experience in the field of teaching EFL.

The jury members were asked to decide on:

- a. face and content validity of the test, and
- b. the suitability of the items to test the points and skills assigned to them "in the table of specifications.

All the jury members decided that the test had face and content validity and that the test items that include (organizing a text, writing coherent paragraphs, grammar, vocabulary, punctuation, spelling and ideas were skillfully selected and organized.

Validity of the Instrument

Prior to the administration of a test, a pilot study is needed. Conducted on a group of subjects who are similar in background and level to those who will take the final examination, it can provide valuable information about the ease of administering the test, the time students need for completing it, the clarity of instruction, the kind of language being elicited in the open – ended question, the usability of the marking scales, and so on. The results will reveal many unanticipated flaws in the test, and will save time and effort when the main trials are run. (Alderson et al., 1999:75). The pilot study is also useful in determining the difficulty level and discriminatory power of the test items.

The initial form of the test has been administered to a sample of 15 students from the same population after the establishment of the face and content validity of the test.

The procedure followed in item analysis is to distribute the weights of marks logically among language skills and mechanics that include: Organizing a text, writing coherent paragraphs, grammar, vocabulary, punctuation, spelling and ideas.

Reliability of the Test

A reliable test is one that gives the same or almost the same results consistently on different occasions when given under identical conditions (Hamash et al, 1982). One of the methods that can be used to find out test reliability is the test retest method. Thus to establish the reliability of the tests, the test-retest technique was used. A random sample of (15) students was selected from the same population from which the actual sample was drawn. They were given the test. Two weeks later, the pilot group was given the same test. In both administrations favorable and identical conditions were secured concerning the place, the time, the clarification of each test item, and discipline. By using Pearson's formula, the pilot administration of the test have shown that, the correlation coefficient between students' ranks on both testing occasions were computed and found to be 0.91 According to Pearson's formula, the reliability coefficient of a test would be acceptable if it is not less than (0.50). thus the test can be described as being highly reliable.

1.1.10. Procedures

Data Collection Procedures

1. A pre-test was administered at the beginning of the experiment for both groups.
2. Assignments note book was used to document and verify events that took place during the composing process.
3. A post test was used to assess students' progress in writing.

1.1.11. Implementation

During the first week of the semester, students sat to a paragraph writing test on different topics to decide their actual level before they start learning new writing mechanics.

To avoid bias, the compositions written by the end of the course were scored using the same scale used for scoring the compositions at the beginning of the course by both groups. After scoring students' performance in the pretest, the researcher wrote reports on the actual level of every student in both groups to watch his progress objectively through the course.

Students produced a total of nine written assignments over the term. Then average of every students' performance was found out in both groups to see if change occurred, if it occurred, to what extent and what diminution and for the favour of which group.

The experimental group students would then send the teacher their assignments to a special e-mail address, then the teacher would send them with comments back to students. Finally, A post test was conducted for both groups. Students were asked to write on the same topics as the pre-test and were given 50 minutes to do so.

1.1.12. Results and Discussion

Students taught with internet methods scored significantly higher than the traditionally taught class on the compositions written at the close of the term.

In other words, the experimental group advanced their skill to an even greater degree than did the control group. The elements that seemed to ultimately account for the difference in scores were spelling, grammar and punctuation. Moreover, those in the experimental group expanded their ideas to a greater extent than did the students in the control group.

Table (1): Clarifies these Differences in Numbers.

Writing skills and mechanics	Control Group			Experimental Group		
	pre	post	P value	pre	post	P value
Organizing a text	3.7	4.2	0.029	3.5	4.0	0.030
Writing coherent paragraphs	3.6	4.1	0.048	3.3	4.1	0.000
Grammar	3.2	4.0	0.034	3.2	4.1	0.000
Vocabulary	3.5	3.9	0.187	3.1	4.0	0.001
Punctuation	2.7	3.2	0.135	3.0	3.5	0.018
Spelling	2.5	3.9	0.000	2.4	4.1	0.000
Ideas	2.3	3.8	0.019	2.5	3.8	0.010

These results agree with the views Fletcher and Atkinson (1972), Berge and Collins (1995), Sivin-Kachala and Bialo (2000), O’Dwyer, Russell, Bebell, and Tucker-Seeley (2005) and some others who strongly believe in the effect of instructional technologies in general and the internet in particular on FL students' performance in language. They emphasize the view that the internet works as a facilitator in our FL classes specially in teaching writing.

1.1.13. Conclusion

The results mentioned above of the end-term evaluation showed that students who studied writing via the e-mail performed higher in the post – test than those who learned in the traditional way so the hypothesis of the study is confirmed. As a result, the researcher might be allowed to say that internet has a great effect on students' writing skill, in the sense that it improves their spelling, their grammar and vocabulary besides their punctuation and ideas.

1.1.14. Recommendations

- Similar programs could be developed to help improve the language instruction like grammar, spelling and punctuation and other language skills; reading, speaking and listening.

- The researcher believes that there is a need for revising and modifying English language curricula to incorporate new tools like on-line learning and other language skill and areas.
- Studies must investigate the possibility of mixing both the traditional classroom and the e-mail method.
- Foreign language teachers must be aware of the complexity of the on-line learning environment such as; scheduling computer labs, finding computers hard ware, software problems, absent partners, and lack of responses.

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