

Writing in an Internet-Based Environment: Improving EFL Students' Writing Performance through Text-Based Chat¹

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Abstract

This study aimed at measuring the effect of an Internet-based instructional program (IBIP) on developing Salman bin Abdulaziz University students' writing performance. The subjects in this study were 98 male students enrolled in a writing course during the first semester of the academic year 2012/2013. This study used the quasi-experimental design. The subjects were randomly assigned into two groups: an experimental group was taught writing via the IBIP; and the control group was taught in the ordinary method. To achieve the purpose of the study the researcher designed an Internet-based instructional program. The website of the program was provided with useful links and learning materials. The findings of the study revealed that EFL students in the experimental group who used the IBIP showed much improvement in their writing performance than the EFL students in the control group who used the ordinary method.

Keywords: essay writing, Internet-based instructional program IBIP, text-based chat, and writing performance.

1. Introduction

In most Arab countries where the native language is Arabic, and English is studied as a foreign language, teaching English can pose a real challenge for instructors inasmuch as they are taking on more responsibility for transferring a teacher-centered classroom to a student-centered classroom. Despite the great advances in the methods of teaching, there are still some instructors dominated by conventional teaching methods based on the teacher-centered approach that "emphasizes lecturing over interaction, favors memorization over comprehension, and fosters individualistic and competition over collaboration and group work" (Al-Jamhoor, 2005).

This practice has had pronounced adverse effects on students' language acquisition, and this adverse effect can be vividly elucidated by shedding light on the students' performance particularly in writing, because writing is a conscious endeavor that requires a great deal of effort and can in many ways provide a credible indicator of the extent to which students are prone to think and produce language creatively. Owing to the status quo of many erroneous traditional teaching practices nowadays, many students are graduated from universities without having attained an advanced English proficiency level. As a matter of fact, students encounter a myriad of problems while learning English as a foreign language in general and writing in particular, since writing can provide a unique opportunity to develop EFL students' writing performance.

Grounded in research, many studies report widespread neglect of writing as a language skill especially in colleges and universities (National Commission on Writing in American Schools and Colleges, 2003). To aggravate the matter, this important skill has not been given due attention throughout the process of teaching/learning at various levels of education. Wooley (2007) shows that several studies recognize neglect of teaching writing among instructors, who test writing but seldom teach it and focus on what students produce, not how to produce it. Keetley (1995) describes various improper techniques used by teachers when teaching writing among these; some instructors teach writing by giving students a topic and allotting students some minutes of silence to complete their work. No interaction arises between the students and the instructor during the task.

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Other instructors consider writing, "a task to be completed with any additional time instructors may have during the course of their teaching" (Keetley, 1995, p. 6), or they may assign it as homework. Therefore, "the teaching writing approach in this context seems to be mostly product-based" (Tran, 2007, p. 152). Valmont (2002) argues that because of the recent shift to communication technology, persistent changes in instructional methods are also required. And, taking into account that teaching today is shifting from teacher-centered to learner-centered (Kim, 2009), it is quite evident that new strategies to increase students' writing need to be implemented. Accordingly, because Internet-based courses focus more on students and engaging them with information in different periods of time, new strategies and techniques are required to facilitate meaningful learning for students.

Today, university students are growing up with the Internet as an integral part of their everyday life. Hence, the use of the Internet cannot be ignored in the classroom because it is part of the students' life. Therefore, it is necessary that EFL instructors should use the Internet and be able to make use of it in the classroom in order to prepare students for their future as best as they can. The Internet has recently played a significant role in foreign language learning. Literature shows that the Internet tools can be accepted as instructional tools to enhance learning in EFL classroom, and that students have benefited a lot from the Internet technology (Barnes, 2003; Jonassen, 2005; Kasper, 1998; Kuo, 2008; Warschauer, Shetzer, & Meloni, 2000; Warschauer & Whittaker, 1997).

Based on recommendations of many previous studies, the Internet should be looked upon as a motivational tool to enhance learning and increase students' engagement in the learning process, since it lends itself attractively to meet students' needs, as well as its ability to be integrated into university subjects. Kern (1995, p. 461) reports some motivational benefits of technology in foreign language learning, including: "Increased learner expression, reduced anxiety level, and creation of a collaborative spirit among learners". In addition, Tsou, Wang, and Li (2002) assert that research findings have supported the use of the Internet in teaching writing in view of the positive influences technology has on students' motivation.

Communication between instructors and their students via the Internet can take place either synchronously (at the same time), or asynchronously (at different times), or both (Shudooh, 2003). Generally, Synchronous communication is a "communication between two or more people, using the keyboard as the means of communication", text-based chat is an example of synchronous communication over the Internet (Dudeney, 2007, p. 130). In contrast, asynchronous e-mail exchange, has been described as "authentic communication with a delay which allows students time to think and compose a message" (Kupelian, 2001, p. 1). These tools enable students to talk at the same time or at their convenience (Eastman & Swift, 2002; Koh, 2007).

In text-based chat, messages are typed, sent, and received instantly (Zhao, 2010). Wong and Schoech (2007) encourage using chat as a tool of learning because it has the advantage of being interactive and allowing for instant interaction between students and instructors. In addition, it is free and widely available. Eastman and Swift (2002) state that education must involve interactivity among teachers, students and the materials, and chat rooms can enrich that interactivity. They also explain that "For several years, we have used discussion groups and chat rooms in web-based classes but have also found that communication can be enhanced in traditional classes through use of these tools" (p.34).

The Internet tools have had a strong impact on students, and the access to the Internet is continuously growing (Dincer, 2012). In the view of research conducted in the field, the researcher believes that EFL students' writing performance can be developed using Internet-based programs when these programs are designed well for teaching writing. In this study, the researcher tries to explore the possibility of using Internet-based tools in developing EFL students' writing performance. To pursue this aim, the researcher developed an Internet-based program that consisted of lessons, activities, tasks, samples, and chat room to help students improve their writing performance.

1.1 Statement of the Problem and Purpose of the study

The problem of this study was that Saudi university EFL students exhibited low writing performance. Therefore, the primary aim of this study was to explore the effect of an Internet-based instructional program on developing EFL students writing performance.

1.2 Research Hypothesis

On the basis of the theoretical and practical literature reviewed in the study, the researcher hypothesized that there would be a statistically significant difference at ($\alpha \leq 0.05$) between the mean scores of the experimental group and those of the control group of English major students' writing performance at Salman bin Abdulaziz University that can be attributed to the IBIP. Accordingly, this study tried to answer the following research question:

“What is the effect of the Internet-based instructional program on developing English major students' writing performance at Salman bin Abdulaziz University?”

1.3 Significance of the Study

This study is significant and original for several reasons. First of all, research on teaching writing using text-based chat is still relatively new. To the knowledge of the researcher, there have been no previous studies in the field of EFL education that have attempted to connect Saudi EFL learners with Internet-based programs to teach writing. Second, the study provides curriculum designers with a framework to begin creating new curricula supported by the Internet. In addition, this study may stimulate Saudi EFL instructors' awareness of the crucial benefits the learners can gain from exposure to Internet-based programs. Furthermore, perhaps instructors of English are encouraged to design activities that can foster meaningful engagement for their students both inside and outside the classroom. Finally, the study encourages Saudi EFL students to take more active part in their own language learning by fostering autonomous learning in a classroom and non-classroom environment.

1.4 Operational Definition of Terms

The terms below, wherever seen, have the following definitions:

. **Internet-Based Instructional Program (IBIP)**

It referred to the program developed by the researcher, delivered via the Internet and supported by the attributes and resources of the Internet. The program provided the students with lessons, activities, tasks on writing, and chat room that are mediated and supported via the IBIP without having face-to-face contact between the instructor and students.

. **Writing Performance**

The students' ability to write a piece of writing effectively and transform thoughts and ideas into written words (Forteza Fernández & Gunashekar, 2009). The act of writing in this study involved writing a five-paragraph essay. The evaluation was limited to the improvement of writing skills adopted by (Al-Abed Al-Haq & Ahmed, 1994) which included (thesis statement, relevance, coherence, cohesion, argumentativeness, quantity, unity, wording, and grammaticality). The scores were valued on a scale from 0 (complete failure) to 4 (complete success). The total number of items in the rubric was 24 with a highest score of 4 for each.

. **Ordinary Method**

In this study, it referred to the current method based on pencil/pen and paper. The students were provided with all the course materials having face-to-face contact with the instructor.

. **Text-Based Chat**

In this study, students interacted online through the IBIP at the same time to discuss the writing topics with one another in groups of four. Students typed messages to each other electronically and exchanged drafts with peers using text-based chat.

1.5 Limitations of the study

This study includes certain limitations that may affect the results. First, this study is limited to the students of Salman bin Abdulaziz University in Saudi Arabia. Second, this study is limited to the students of level four at the Department of English enrolled in the course of Writing Skills (4). In addition, the study is limited to the IBIP designed by the researcher and its components taken from the textbook (*Writing Academic English*). Finally, this study is limited to the development of students' writing performance through the IBIP.

2. Method and Procedures

This section describes the method and procedures that were used in this study. It includes: subjects, instruments and their validity and reliability, description of the IBIP, procedures of the program, equivalence of the groups, control extraneous variables, design, statistical analysis, and procedures.

2.1 Subjects of the Study

The subjects of the study were 98 male students from the Department of English at Salman bin Abdulaziz University during the first semester of the academic year 2012/2013. The subjects were randomly assigned into two groups, an experimental group and a control group; each group consisted of two classes as follows:

Table 1: The Distribution of the Students into Experimental and Control Groups

group	Class	Number of Subjects	Total Number of Subjects
Experimental Group	Writing Class A	25	49
	Writing Class B	24	
Control Group	Writing Class C	26	49
	Writing Class D	23	
Total			98

2.2 Instruments of the Study

The following instruments were used in this study:

2.2.1 The achievement test

In order to answer the research questions, data in this study were collected using an essay-writing test. In the first session, before students received any instruction all the students, the experimental group and the control group, sat for a pretest. All subjects were asked to write a five-paragraph essay. The essay test was developed by the researcher to measure students writing performance, which was evaluated using the scoring rubric developed by Al-Abed Al-Haq and Ahmed (1994). In the last session of the treatment, a five-paragraph essay was given as a posttest to all subjects in the two groups.

2.2.2 The Internet-Based Instructional Program (IBIP)

This program was an Internet-based program that was developed to teach writing through a website designed by the researcher. Lessons on writing skills were chosen in accordance with the course syllabus in the textbook of the first semester: *Writing Academic English*, authored by Alice Oshima and Ann Hogue. Also, the IBIP consisted of seven tasks of writing to help students apply the skills of writing they have learned. Students were given specific topics related to the course syllabus or match with the themes in the textbook prescribed for the fourth level of the first semester. In addition, the IBIP was supported with text-based chat room to give students the opportunity to discuss what they have learned about the topics in groups.

2.2.2.1 Objectives of the (IBIP)

The objectives of this program can be summarized as follows:

1. To measure the effect of an IBIP on the development of EFL students' writing performance.
2. To support Saudi EFL students with useful resources and tools to facilitate their writing performance.
3. To encourage EFL students rely on themselves when writing, without interference from the instructor.
4. To engage EFL students in meaningful interactions where they could work with their partners, share information, solve problems, draw on their existing knowledge and eventually become users of the target language.

2.2.2.2 Description of the Procedures of the IBIP

First, the researcher fully explained the program to the instructor who participated in teaching the program. Then, in the first meeting of the class in the experimental group, the instructor started an orientation session to direct students towards the IBIP. Following, is administering the lessons of the program, which lasted for two months. Each task took three sessions (each session 50 minutes). Seven writing tasks were tackled within the sessions, three meetings every week. It started with a pretest and ended with a posttest that were given to the two groups. The instructor taught the experimental group using the IBIP, while he continued teaching the control group using the ordinary method. Students were encouraged to communicate with one another using the chat room to generate ideas and to review their writings with peers. They were also encouraged to use the supplementary materials such as the writing websites offered by the program to be acquainted with the topics.

The students were asked to submit seven writing tasks via e-mail, one task each week. The researcher and the instructor checked the assignments and sent them with comments back to the students. Each Writing task was carried out in three sequential stages; the prewriting stage, the while/during writing stage, and the post writing stage. These stages were the followings:

- **The prewriting stage: The preparation and brainstorming stage.**

Students were required to research the topic they will be working on the next meeting outside the class hours using one of the search engines, Yahoo or Google. In the First Session, Students were asked to browse the web page containing the lessons where they worked independently to study the lesson set for the task of writing and thus learning writing skills for thirty-five minutes. Then, students were asked to sign in to the text-based chat room which is linked in the homepage to share and exchange ideas and opinions on the topics they are to write about in groups of four. This activity lasted for fifteen minutes.

- **The While Writing Stage: (The drafting Stage).**

At the beginning of the second session, students were encouraged to read a sample model on the topic they were to write about. After that, students were asked to organize the information and ideas they have generated in the pre-writing stage and put them in an essay according to the task of writing for 50 minutes.

- **The Post Writing Stage: Revising, Editing, and Publishing**

Students shared their first drafts with other peers using text-based chat to get feedback. This stage allowed time to reflect upon what had been written to rethink, reconsider, and reshape ideas. Students received the comments, discussed them further with peers and decided what to incorporate in their final drafts. Students were requested to send their final drafts only to the instructor by posting them through the e-mail.

2.3 Validity and Reliability of the Instrument

The validity of the Instruments was gained by giving the instruments to a group of EFL jurors: experienced university professors who expressed their views and gave suggestions. Their suggestions were taken into consideration and the instruments were modified accordingly. The reliability of the instruments was achieved through a pilot study. The researcher selected thirty students from the Department of English at Salman bin Abdulaziz University out of the original total of subjects and administered the test and the IBIP on them. The researcher applied the test/retest method, with a difference of two weeks between the first application and the second application. The value of Pearson correlation between the two applications was (0.90). Additionally, the researcher calculated the value of Kronbach Alpha (0.82). This value was high and indicated the reliability of the instruments for the purposes of the application of the study.

2.4 Equivalence of the Groups

To establish the equivalence between the two groups and after administering the pretest, the researcher compared the means and standard deviation of the experimental and the control groups obtained on the writing pretest. The researcher then conducted the One-way ANOVA to find out whether there were statistical significant differences in these means in order to attribute any later significant change in students' writing to the effect of the implementation of the writing program. It was found that the two groups were equivalent according to group variable and, thus, any later significant change in students' writing performance will be due to the effect of the implementation of the IBIP.

2.5 Control Extraneous Variables

To avoid the extraneous variables the researcher performed the followings:

1. The same instructor taught the two groups.
2. The same content was taught to the two groups (the experimental and the control groups).
3. The program was implemented to the experimental group, and the control group was not allowed to see the program. The program was secured by a proxy that prevented students from the other group from using the program.
4. The time limit to implement the experiment was determined.
5. The researcher activated only the materials that were being used inside the classroom.
6. Students did the task of writing inside the classroom not outside. Students only gathered information about the topics outside the classroom.

2.6 Design and Variables of the Study

This study used the quasi-experimental design. The design for this experiment involved two groups; the experimental group, and the control group. Both groups were taught the same contents. For this study, there were two independent variables: the IBIP which was used to teach the experimental group, and the ordinary method which was used to teach the control group. The dependent variable was the EFL students' writing performance.

2.7 Statistical Analysis

Quantitative data about students' writing performance before and after the treatment was computed and reported using the writing scoring rubric. Then, data was entered and analyzed using the Statistical Package for Social Science (SPSS). The Statistical techniques used in this study were Means, Standard Deviation, and One-way ANOVA.

2.8 Procedures of the Study

To achieve the purpose of this study, the researcher followed the following procedures:

1. Designing the Internet-based instructional program IBIP.
2. Preparing the achievement writing test (pretest and posttest).
3. Assessing the test validity by giving it to a group of experts.
4. Assessing the test reliability through a pilot study.
5. Obtaining permission of Salman bin Abdulaziz University and the Department of English.
6. Obtaining approval of the instructor who taught the two groups.
7. Administering the writing pretest to both the experimental group and the control group.
8. Implementing the IBIP on the experimental group and the ordinary method on the control group.
9. Administering the writing posttest to both groups under the same conditions.
10. Rating the results by the researcher and an instructor using a scoring rubric.
11. Finally, discussing the results, and providing a conclusion and recommendations.

3. Findings of the Study

This section reports the findings of the study that examined the effect of the IBIP on Salman bin Abdulaziz University students' writing performance. To answer the question of the study, "What is the effect of the Internet-based instructional program on developing English major students' writing performance at Salman bin Abdulaziz University?" Means and standard deviations obtained by the experimental group and the control group on the writing posttest were computed as presented in Table (2):

Table 2: Means, Standard Deviations and Number of Cases of Writing Performance Posttest according to Group Variable

Dependent Variable	Group	N	Mean	Std. Deviation
Writing Performance (posttest)	Experimental	49	60.29	15.076
	Control	49	53.08	14.736

Table (2) shows a slight variance in the means of the posttest according to group variable. The findings showed that there were differences in the scores attained by the experimental group ($M = 60.29$, $SD = 15.076$) and the scores achieved by the control group ($M = 53.08$, $SD = 14.736$). To find out whether there were statistical significant differences in these means, One-way ANOVA was conducted and the results are shown in Table (3):

Table 3: One-way ANOVA Results of Writing Performance Posttest Related to Group Variable

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1271.520	1	1271.520	5.722	.019
Within Groups	21333.673	96	222.226		
Total	22605.194	97			

Table (3) shows that there is a statistically significant difference at ($\alpha = 0.05$) in the posttest due to group variable, in favor of the experimental group. [$F(1,96) = 5.72$, $p = .019$]. These results were in favor of the experimental group as the value in the "Sig. (2-tailed)" column is less than ($\alpha = 0.05$).

4. Discussion of the Findings

The findings of the study indicated that there were statistically significant differences between the experimental group and the control group in favor of the experimental group. Various justifications can be put forward to explain this result:

First, the instructional method may have contributed to developing students' motivation and thus developing writing performance. The characteristics of the IBIP could be all seen motivational. This study found that utilizing the writing program may contribute a lot to increasing students' interest which was necessary for motivating students to write their essays. This assumption is supported by Gousseva-Goodwin (2000) who stated that online nature motivated students and increased their positive attitudes, which in turn led to more favorable learning outcomes. The motivational factor seems to be consistent with a great deal of research findings that have supported the use of CMC technology to improve students' motivation, and enhance their language learning (Blake, 2000; Cheng, 2003; Egbert, 2002; Strambi & Bouvet, 2003; Warschauer, 1996b; Williams & Williams, 2000).

Second, the program entailed using the reading-writing strategy. Students were encouraged by their instructor to refer to and carefully read extra material through the website of the program or while searching the Internet. This could have enriched the students writing skills and improved their performance. Therefore, whenever students in this course wrote about a topic they were required to read a lot before doing writing about it. As a result, their writing appeared to be improved because they were assumed to have formed sufficient background knowledge of the topic. Carrell and Carson (1997, p. 55) indicated that "reading strategies must be taught to enable learners to comprehend the text in a way that will allow them to produce an appropriate essay."

Third, the program placed the students in a novel learning context. The instructional system which was applied in this study could have connected the students with the contents of the program in a novel way. This new writing environment may have contributed to the development of students' writing performance. It was found that the students were excited to participate in this new experience during the entire period of the application of the study. Therefore, this new method of teaching is thought to have led to a growth in the students' writing performance in favor the experimental group. The students were assumed to have enjoyed this new electronic method having the potential to communicate with their classmates and the instructor more conveniently than in the ordinary pencil/pen and paper method. This new Internet-based writing environment is in consistent with the findings of (Blake, 2008; Chun & Plass, 2000; Tzouveli, Mylonas, & Kollias, 2004) who considered Internet-based programs a new and revolutionary way of teaching and learning.

Fourth, the program provided the students with environment for collaborative writing and peer review practices. In this study, the collaborative writing environment was part of students' discussion of topics since; students shared and exchanged ideas and thoughts about the topics of writing using the text-based chat. They also exchanged essays with peers and reviewed each other essays, provided comments suggestions on each other's pieces of writing. The major essence of peer editing was to provide opportunities for students to benefit from the information and knowledge that other students have. Much research has shown that students who receive help from a peer learn more than students who work alone (Rosalia, 2010).

Fifth, the program increased autonomous Learning. The study has indicated that students realized the value of self-learning. In practice, when doing their tasks they were asked to integrate their ideas meaningfully and make use of any available information from technology resources. The nature of the program made the students active and responsible learners where they had the final say about the end of their written product. In other words, autonomous language learning is evident, as the learners formulated and structured their thoughts on their own or with help from their friends which in turn led to the growth in their writing skills and therefore improved their performance.

A great deal of research emphasized autonomous learning. Kearsley (2000) maintained that the use of the computer in language learning made the classroom autonomous, interactive, social, collaborative, cooperative, communicative, and student-centered. In addition, Sontgens (1999) found that e-mail enhanced autonomous language learning among her B.A. German students in the United Kingdom. Furthermore, Shanmuganathan (2003) corroborated these findings and claimed that e-mail allows students to learn language without much anxiety, and to experiment, write, edit and review their work at a more leisurely pace, as well, e-mail enhances autonomous language learning among students.

Finally, the program allowed students to write, edit, and review with a reduced level of anxiety. Both asynchronous and synchronous CMC tools have been proved to be low anxious environments (Butcher, 2006; Kupelian, 2001; Shanmuganathan, 2003). The low anxiety environment created a more equal participation among participants resulted in more confidence about participating in text-based discussions (Kern, 1995; Warschauer, 1996a). Beauvois (1998) explained that 92% of her learners favored CMC sessions over oral discussions due to lower anxiety. This lowered anxiety in chat sessions was shown to lead to an increase in writing performance.

4.1 Conclusion

The findings showed that there were statistically significant differences between the experimental and the control groups in favor of the experimental group. The study showed that EFL students' writing performance can be developed if they were taught using Internet-based instructional programs. The IBIP had many features that contributed to the development of students writing performance. First, the instructional method was motivational for the students. Second, the program encouraged students to use the reading-writing strategy. In addition, the program placed students in a new learning context. Also, the program required students to work in a collaborative learning environment. Besides, it increased students' autonomous learning. Finally, the program allowed students to write with a low stress environment which encouraged students to communicate in English without worrying too much about making mistakes.

4.2 Recommendations for Future Research

In light of the results of the study, the researcher recommends that it would be beneficial to replicate this study on other groups of the Saudi population at different educational levels. It would be helpful to have more participants from males and females in order to be able to provide more generalizable, precise and reliable findings on the effectiveness of Internet-based programs for improving EFL students' writing performance. In addition, there is a need to investigate other Internet applications/tools to improve the students' performance like facebook, twitter, blogs, and wikis. These areas are new and need further investigation. Also, this study focused mainly on improving EFL students' writing performance. It would be worthwhile for future researchers to investigate the effectiveness of using technology to improve other language skills like reading, listening, and speaking or to integrate more than one skill such as reading and writing.

References

- Al-Abed Al-Haq, F., & Ahmed, A. (1994). Discourse Problems in Argumentative Writing. *World Englishes*, 13(3), 307-323.
- Barnes, S. (2003). Computer-Mediated Communication: Human-to-Human Communication across the Internet. *Language Learning & Technology*, 7(3), 30-33.
- Beauvois, M. (1998). E-talk: Computer-Assisted Classroom Discussion-Attitudes and Motivation. *Language Learning Online: Theory and Practice in the ESL and L2 Computer Classroom*, 99-120.
- Blake, R. (2000). Computer Mediated Communication: A Window on L2 Spanish Interlanguage. *Language Learning & Technology*, 4(1), 120-136.
- Blake, R. (2008). Brave New Digital Classroom: Technology and Foreign Language Learning. *Applied Linguistics*, 17(1), 67-69.
- Butcher, K. (2006). The Efficacy of Peer Review in Improving ESL Students' Online Writing. Doctoral Dissertation, University of New Orleans Theses and Dissertations.
- Carrell, P., & Carson, J. (1997). Extensive and Intensive Reading in an EAP Setting. *English for Specific Purposes*, 16(1), 47-60.
- Cheng, Y. (2003). The Effects of Web-Based Instruction on Chinese EFL Students' Learning Outcomes. *Dissertation Abstracts International*, 64(2), 382.
- Chun, D., & Plass, J. (2000). Networked Multimedia Environments for Second Language Acquisition. *Network-Based Language Teaching: Concepts and Practice*, 151-170.
- Dincer, S. (2012). A Study of the Relationship between Pupils and Parents' Computer Literacy Level and Use. *Procedia-Social and Behavioral Sciences*, 46, 484-489.
- Dudney, G. (2007). *The Internet and the Language Classroom* (Vol. 2nd ed.). Cambridge: Cambridge University Press
- Eastman, J., & Swift, C. (2002). Enhancing Collaborative Learning: Discussion Boards and Chat Rooms as Project Communication Tools. *Business Communication Quarterly*, 65(3), 29-41.
- Egbert, J. (2002). A Project for Everyone: English Language Learners and Technology in Content-Area Classrooms. *Learning & Leading with Technology*, 29(8), 36-39, 41, 54.

- Forteza Fernández, R., & Gunashekar, P. (2009). A Socio-Psycholinguistic Model for English for Specific Purposes Writing Skill Formation Diagnosis. *Acimed*, 20(6), 141-160.
- Jonassen, D. (2005). *Modeling with Technology: Mindtools for Conceptual Change*. Columbus, OH: Prentice Hall.
- Kasper, L. (1998). ESL and the Internet: Content, Rhetoric and Research. Paper presented at Rhetoric and Technology in the Next Millennium: An Asynchronous Online Conference, June 15-30, 1998. [Online]. Retrieved from <http://members.aol.com/Drifk/rhetoric.html>.
- Kearsley, G. (2000). *Online Education: Learning and Teaching in Cyberspace*: Wadsworth Thomson Learning Belmont, CA.
- Keetley, E. (1995). *Comparison of First Grade Computer Assisted and Handwritten Process Story Writing*. Master of Education Thesis
Johnsen and Wales University, USA.
- Kern, R. (1995). Restructuring Classroom Interaction with Networked Computers: Effects on Quantity and Characteristics of Language Production. *The Modern Language Journal*, 79(4), 457-476.
- Kim, J. (2009). *Assessment of Online Learners' Performance Using Effective Note-Taking in Chat in Online Learning (ENCO)*. Doctoral Dissertation The Florida State University.
- Koh, Y. (2007). *New Literacies for ESL Children: Communicating with Peers in an Online Chat*. Doctoral Dissertation, The University of Texas Austin
- Kuo, C. (2008). *Designing an Online Writing System Learning with Support*. *RELC Journal*, 39(3), 285-299.
- Kupelian, M. (2001). *The Use of E-mail in the L2 Classroom: An Overview*. *Second Language Learning & Teaching*, 1(1), 1-1.
- National Commission on Writing in American Schools and Colleges. (2003). *The neglected R. The need for a writing revolution*. Retrieved from: <http://www.writingcommission.org/report.html>.
- Rosalia, C. (2010). *EFL Students as Peer Advisors in an Online Writing Center*. Doctoral Dissertation, Educational Technonlogy
- Shanmuganathan, T. (2003). *E-mail: A Tool for Teaching Writing?* *Jurnal Pendidikan*, 23, 31-44.
- Shudooh, Y. M. (2003). *The Application of Computers in Developmental Writing Classes*. Doctoral Dissertation, University of Cincinnati.
- Sontgens, K. (1999). *Language Learning via E-mail: Autonomy Through Collaboration*. Paper presented at the Proceedings of the 1999 Conference on Computer Support for Collaborative Learning, Mahwah, NJ: Lawrence Erlbaum Associates.
- Strambi, A., & Bouvet, E. (2003). *Flexibility and Interaction at a Distance: A Mixed-Model Environment For Language Learning*. *Language Learning & Technology*, 7(3), 81-102.
- Tran, L. (2007). *Learners' Motivation and Identity in the Vietnamese EFL Writing Classroom*. *English Teaching: Practice and Critique*, 6(1), 151-163.
- Tsou, W., Wang, W., & Li, H. (2002). *How Computers Facilitate English Foreign Language Learners Acquire English Abstract Words*. *Computers & Education*, 39(4), 415-428.
- Tzouveli, P., Mylonas, P., & Kollias, S. (2004). *SPERO-A Personalized Integrated E-Learning System*. Paper presented at the In Proceedings of the International Association for Development of the Information Society (IADIS) www/Internet 2004 International Conference, Madrid, Spain (October 2004), <http://www.image.ntua.gr/php/savepaper.php>.
- Valmont, W. (2002). *Technology for Literacy Teaching and Learning*. Boston, MA: Houghton Mifflin Company College Division.
- Warschauer, M. (1996a). *Comparing Face to Face and Electronic Discussion in the Second Language Classroom*. *The Computer-Assisted Language Instruction Consortium CALICO Journal*, 13(2/3), 7-26.
- Warschauer, M. (1996b). *Motivational Aspects of Using Computers for Writing and Communication*. *Telecollaboration in Foreign Language Learning*, 29-46.
- Warschauer, M., Shetzer, H., & Meloni, C. (2000). *Internet for English Teaching*. Alexandria, VA: TESOL
- Warschauer, M., & Whittaker, P. (1997). *The Internet for English Teaching: Guidelines for Teachers*. *TESL Reporter*, 30(1), 27-33.
- Williams, H., & Williams, P. (2000). *Integrating Reading and Computers: an Approach to Improve ESL Students Reading Skills*. *Reading Improvement*, 37(3), 97-99.
- Wong, Y. C., & Schoech, D. (2007). *Lessons Learned in Chat Room Teaching Internationally*. *Journal of Technology in Human Services*, 25(1-2), 59-83.
- Zhao, Y. (2010). *Communication Strategy Use and Negotiation of Meaning in Text Chat and Videoconferencing*. Doctoral Dissertation Cleveland State University, Cleveland, OH, USA.