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**ENHANCING FRESHMAN STUDENTS' PERFORMANCE WITH ONLINE  
READING AND WRITING ACTIVITIES**

Reima AL-JARF

*King Saud University, Riyadh, Saudi Arabia*

**Abstract:** *The present study investigates the effectiveness of integrating RCampus in EFL freshman classrooms in developing EFL students' reading and writing skills. Two groups of freshman students majoring in translation participated in the study. Before instruction, pretest results showed no significant difference between the experimental and control groups in their reading and writing skills in EFL (English as a foreign language). Both groups received traditional in-class instruction that depended on the textbook, completed the same chapters, did the same exercises and took the same quizzes. In addition, the experimental group received online instruction using RCampus (www.rcampus.com), an open source Online Course Management System. RCampus has as a discussion forum, ePortfolio for each student, i-Rubrics, course documents, a message center and other tools. The experimental group received online reading and writing extension activities. Each week discussion threads that required the students to search for information, read extra material and respond to questions in writing were posted. The students were free to post their own book summaries, discussion threads and comment on each other's posts. The instructor served as a facilitator. She provided feedback and individual help. At the end of the semester both groups were post-tested and their scores compared to find out the effect of using a combination of online reading and writing activities using RCampus on the students' reading and writing skills development. The students answered a post-treatment questionnaire to find out how they felt about RCampus and their online learning experience. Results will be reported in detail.*

**Keywords:** *RCampus, LMS, reading instruction, writing instruction, EFL, L2.*

## **I. INTRODUCTION**

Students learning a foreign language need a great deal of support and a variety of experiences in the foreign language. They need opportunities for listening to, speaking, reading and writing English (Green, 2005). Technology can play an important role in providing students learning a foreign or second language with enriching language experiences. It can support teachers in making language learning faster, easier, less frustrating, and more engaging. A review of the L1 and L2 research showed that the integration of different types of technology in the teaching of reading and writing was beneficial for students with reading difficulties. In a study by Barrett (2001) resource students watched a weekly video of community leaders modeling the importance of reading. They created PowerPoint presentations describing a career, word-processed their writing assignments, wrote to their favorite writer, wrote book reviews, and read, interpreted, wrote, and illustrated poetry. They also read stories to preschool children. Barrett's results showed that the students read more and enjoyed using technology in completing reading and writing activities. In another study, technology supported the development of emergent reading. Voogt and McKenney (2008) used a software package called "PictoPal" that uses images and text in reading, writing, and authentic applications with a group of children ages four and five years. Results showed a statistically significant effect of the treatment after using PictoPal in the classroom for two months.

In a study with middle school students who lacked comprehension and vocabulary skills in the different content areas, Lange, McCarty, Norman and Upchurch, (1999) found an increase in their reading scores after utilizing a variety of software that incorporated reading strategies across the curriculum. By integrating technology and reading strategies, students were able to transfer knowledge

to all content areas and their personal investment and subsequent engagement in learning increased (Nichols, Wood and Rickelman (2001).

Integrating technology in reading instruction was helpful to students who lacked cognitive and metacognitive processes. Mateos, Martin and Villalon (2008) assessed the online cognitive and metacognitive activities of secondary students who read a text and wrote a summary of it, then read two texts and wrote a synthesis of them. They thought aloud while reading and writing, in order to reveal their comprehension and composition processes. Findings showed that the students lacked the cognitive and metacognitive processes that are important for making strategic use of reading and writing. Students who created the most elaborate products used reading and writing more flexibly.

Joining an Internet learning community can help participants acquire reading and writing skills as well. Manzo, Manzo and Albee (2002) found that the iREAP system (Read, Encode, Annotate, Ponder) improved reading, writing, and thinking and helped students to think from different perspectives. In another study, technology increased students' knowledge, reading skills, and provided opportunities for communicating with diverse audiences (Lawrence, McNeal and Yildiz, 2009).

Integration of technology also helped children and college students in L2 acquisition. In the United Arab Emirates, an interactive multimedia (IMM) program was used to develop ESL skills in 6<sup>th</sup> grade students. Results showed no a significant difference between field dependent and field independent learners in favor of field-independent learners, i.e., the effect of IMM on students' learning with different cognitive learning styles (Almekhlafi, 2006). Similarly, new software technologies significantly facilitated the reading and writing of Japanese by students learning Japanese as a foreign language (Houser, Yokoi and Yasuda, 2002).

Use of multiple technologies in practicing reading and writing skills by small children, elementary, middle, secondary and college students in L1 and L2 seem to be effective, as they accommodate students with different learning styles, abilities and interests and help them practice different skills at the same time. Online Course Management Systems have the advantage of combining several technologies such as online forums, e-mail, word-processing, WWW resources, blogs, e-portfolios that provide additional activities and opportunities to practice specific language skills. Therefore, the present study aimed to find out whether the integration of an open source Online Course Management System in traditional in-class reading and writing instruction significantly improves the reading and writing skills of low ability EFL freshman students. The study tried to answer the following questions: (1) Does online instruction have any positive effects on EFL freshman students reading and writing skill development as measured by the posttest? (2) Does the frequency of using the online course correlate with the students' reading and writing skill level, i.e. are active participants better achievers than passive ones? (3) Does online instruction have any positive effect on students' attitudes towards reading and writing in EFL?

To answer these questions, 43 EFL freshman students participated in the study. Before instruction, all of the students took a reading test with questions that required the comprehension and production of paragraph topics, main ideas, supporting details, inferring the meanings of difficult words from context, summarizing main ideas and supporting details. Quantitative results showed that students' performance was very poor. They had difficulty inferring the paragraph topic, identifying details, understanding the meaning of difficult words from context, leaving the summary question blank or filling the space with any sentences copied from the text, i.e. the students did not know which ideas to include in the summary and outline. Results also revealed many grammatical and spelling weaknesses, even when copying words from the text. To help develop the students' reading and writing skills and provide the students with extension activities, the author used a combination of traditional and online reading and writing instruction with RCampus, an open source learning management system. The impact of online instruction using a mixed approach on EFL freshman students' reading and writing skill development was based on quantitative and qualitative analyses of the pre and posttests given.

## **II. PARTICIPANTS**

43 female freshman students majoring in translation at the College of Languages and Translation (COLT), King Saud University, Riyadh, Saudi Arabia participated in the study. They were

in their second semester of college and were enrolled in their reading course. They were concurrently taking listening (3 hours per week), speaking (3 hours), writing (4 hours), grammar (2 hours), vocabulary building (2 hours) and dictionary skills (2 hours) courses in EFL. The subjects were all Saudi and were all native speakers of Arabic. Their median age was 19 years with a range of 18-20.

At the beginning of the semester, the students were pretested. They took a reading and a writing pretest that consisted of questions covering the reading and writing skills to be studied in the textbook. The participants were asked to write the topic of each paragraph, answer short answer questions, write a summary of the text, infer the meanings of some words from context and write the referent of some pronouns. Results showed severe reading comprehension problems, inability to answer written short answer comprehension questions, construct basic simple sentences and summarize the text.

All of the participants were exposed to traditional in-class instruction and were all enrolled in an RCampus online course. They had no prior experience with online instruction, whereas their instructor had extensive experience in online teaching with Blackboard, WebCT, Moodle and Nicenet.

### III. IN-CLASS INSTRUCTION

The reading course was taught by the author for 12 weeks. All of the chapters in the textbook: *Interactions II: Reading (Middle East 4<sup>th</sup> Edition)* by Elaine Kirn and Pamela Hartman (2009) were covered in class. Each chapter consists of the following parts: (i) *Part I*: Reading skills and strategies: previewing vocabulary, getting meaning from context, identifying the main idea, understanding the reading structure, organizing information. (ii) *Part II*: Before you read; skimming for the topic and main idea, understanding pronoun reference, underlining the main ideas, matching paragraphs with given topics and summarizing. (iii) *Part III*: Building Vocabulary and Study Skills: recognizing word meaning, searching the internet and others. (iv) *Part IV*: Focus on testing and a self-assessment log. The following skills were emphasized: *Identifying and writing the paragraph topic, identifying the topic sentence of a paragraph, identifying the supporting details, inferring the meaning of difficult words from context using semantic and syntactic clues available in the text, figuring out the part of speech of certain words in context, locating compounds and idioms, recognizing and producing word derivatives, summarizing, making an outline*. As for assessment, students were given two in-term tests that tested the following skills: *Writing the topic of several paragraphs in the text; locating specific details; figuring out the meaning of words from context; finding the referents of pronouns; writing a summary of the text or parts of it; filling out an outline... etc*. Both tests were graded and returned to the students with comments on strengths and weaknesses.

### IV. ONLINE INSTRUCTION

In addition to traditional in-class instruction, the students used an online course with RCampus, a free open source Online Course Management System. RCampus has a discussion forum, an ePortfolio, course documents, a message center, a to-do list, bookmarks, a calendar, gradebooks and class rosters. The students used their own PC's and Internet from home, as the internet was inaccessible from college. They were given the class key and they enrolled themselves.

Each week discussion threads that required the students to search for information, read extra material and respond to questions in writing were posted. Reading websites (hyperlinks) related to the reading skills topics covered in class were added. The links contained short stories, world newspapers, an ESL students' magazine, reading comprehension, main idea, recognizing details, and guessing meaning from context examples and exercises. The following are examples:

- *Finding Main Ideas:* <http://elearn.mtsac.edu/amla/readingroom/Mainidea.htm>
- *Identifying details:* <http://elearn.mtsac.edu/amla/readingroom/details.htm>
- *Guessing word meaning from context:* <http://elearn.mtsac.edu/amla/readingroom/context.htm>
- *Reading Comprehension:*  
[http://www.readingmatrix.com/directory/pages/Reading\\_Comprehension\\_Beginner/](http://www.readingmatrix.com/directory/pages/Reading_Comprehension_Beginner/)
- *Short Stories:* [http://www.readingmatrix.com/directory/pages/Short\\_Stories/](http://www.readingmatrix.com/directory/pages/Short_Stories/)

- *Topics magazine for learners of English:* <http://www.topics-mag.com/>
- *How to Write an Essay:* [http://esl.about.com/cs/writing/ht/ht\\_essay.htm](http://esl.about.com/cs/writing/ht/ht_essay.htm)
- *Paragraph Writing:* <http://esl.about.com/od/writingintermediate/a/paragraphs.htm>
- *Sentence Type Basics for English Learners:*  
[http://esl.about.com/od/intermediatewriting/a/sentence\\_types.htm](http://esl.about.com/od/intermediatewriting/a/sentence_types.htm)
- *From Simple Sentence to Complex Sentence:*  
[http://esl.about.com/od/intermediatewriting/a/cplex\\_sentence.htm](http://esl.about.com/od/intermediatewriting/a/cplex_sentence.htm)

The students checked the reading and writing links posted, answered the reading and writing quizzes and did the exercises.

Questions that required the students to write a paragraph about themes similar to those read in class were posted. Some examples are: *An Organization that Supports Poor Women; Current Fads; Effects of Culture on Education in Saudi Arabia; Influence of Advertising; Searching the Internet for News; Large City Problems; Traffic Jams in Olaihah; Summary of a Novel; U.K. Universities.* Exercises that required the students to find the main idea, identify details, recognize the pattern of organization, guess word meaning from context, and understand idioms and phrasal verbs were posted. In addition, reading study guides and strategies were posted.

Throughout the semester, the author served as a facilitator, provided technical support on using the different components of the online course, and responded to individual students' needs, comments and requests for certain sites. She sent public and private messages to encourage the students to interact and communicate. The author did not correct spelling and grammatical mistakes, but pointed out the type of errors made and would ask the students to double-check their posts, or ask the students to correct each other's mistakes. Students were given extra credit for using the online course.

## V. PROCEDURES

Before instruction, the students were pretested and at the end of the semester, they students took a reading posttest that consisted of a text and questions that covered all of the reading skills and subskills studied throughout the semester: (1) *What is the whole text about?* (2) *Write the topic of the following paragraphs;* (3) *True/false inferential questions about details;* (4) *Short-answer inferential questions about details;* (5) *Write a summary of the whole text;* (6) *Complete the outline;* (7) *Give the meaning of each word as used in context;* (8) *What does each word refer to* (9) *Identify the part of speech of each word as used in context;* (10) *Break each word into its component parts.* Most of the questions required production. The pre and posttests were blindly graded by the author on at a time for all of the students. An answer key was used. Marks were deducted for spelling mistakes.

At the end of the course, all of the students answered a questionnaire with the following open-ended questions: (1) *Did you find the online course helpful? Yes/ No? Why?* (2) *what did you like about online course?* (3) *What did you not like?* (4) *Did your reading and writing skills improve as a result of using the online course? In what ways?* (5) *Did it make any difference in reading and writing in English?* (7) *If you did not register, participate or did not post any responses or paragraphs in the online course, why?* (8) *What problems or difficulties did you face in using the online course?* (9) *How often did you use the online course?* (10) *Do you recommend using this online course in other classes, by other students and other teachers? Why?*

## VI. TEST VALIDITY AND RELIABILITY

The posttest is believed to have content validity as it aimed at assessing the students' reading skill in EFL. The tasks included on the posttest were similar to those covered in the book and practiced in class. In addition, the test instructions were phrased clearly and the examinee's task was defined. Concurrent validity was determined by establishing the relationship between the students' scores on the posttest and their course grade and between the students' scores on the posttest and their scores on the second in-term test. The validity coefficients were .55. and .74 respectively. Since the author was the instructor and scorer of the pre and posttests, estimates of inter-rater reliability were necessary. A



30% random sample of the pre and posttest papers was selected and double-scored. A colleague who holds a Ph.D. degree scored those samples following the same scoring procedures and using the same answer key as the author. The marks given by the rater were correlated with the author's. Inter-rater correlations coefficient was .94. Furthermore, examinee reliability was calculated using the Kuder-Richardson formula 21'. The examinee reliability coefficient for the posttest was .68.

## VII. DATA ANALYSIS

The pre and posttest raw scores were converted into percentages. The mean median, standard deviation, standard error and range were computed for the pre and posttest scores. A within group paired T-test was computed to find out whether the students had made any progress as a result of the reading and writing online instruction. A student's posttest score was correlated with the number of responses she posted using the Pearson correlation formula to find out whether there is a relationship between the students' posttest scores and frequency of using the online course.

## VIII. RESULTS

Table (1) shows that the typical EFL freshman student in the present study scored higher on the posttest than the pretest (medians = 60% and 46% respectively) with lower variations among student scores on the pretest than posttest (SD =15.04 and 11.16 respectively). This means that the students made higher gains as a result of reading and writing instruction. However the median and mean scores do not show whether the improvement was significant or not. Therefore, the pre and posttest scores were compared using a paired T-test. Results of the paired T-test showed a significant difference between the pre and posttest mean scores at the .01 level, suggesting that students' reading and writing skills significantly improved as a result of using a combination of online and traditional in-class reading and writing instruction (T =8.66, Df = 42).

**TABLE (1): DISTRIBUTION OF PRE AND POSTTEST SCORES IN PERCENTAGES**

	Mean	Median	Mode	SD	SE	Range
Pretest	46.32%	46%	40%	15.04	1.14	36 – 80%
Posttest	60.76%	60%	60%	11.16	1.72	54--85%

To find out whether the students made any gains as a result of using the online course, the posttest scores of active and inactive participants were compared. It was found that 58% of the participants were active and 42% were inactive (did not post anything). Active participants posted a total of 161 posts (mean=3.7, median=3 and the range = 1 to 38 posts). A comparison of the means scores showed significant differences between active and inactive participants in skill development (T=15.54; df =42).

Since most of the questions on the posttest were production questions, qualitative analysis of the students' responses showed improved comprehension and production of main ideas, and supporting details explicitly or implicitly stated in the text, guessing meanings of difficult words from context, connecting pronouns with their antecedents, writing a summary and an outline of the main ideas and most important details in the text. Improvement was noted in the accuracy of ideas expressed, ability to locate and express details and fewer grammatical and spelling mistakes.

Students' comments and responses to the post-treatment questionnaires showed that online instruction had a positive effect on students' attitudes towards reading and writing in EFL. 81% of the participants found the online reading and writing course useful and fun, and considered it a new way of learning and doing homework. It helped them acquire new vocabulary, learn to read faster, improve ability to summarize and analyze text and ideas, develop typing speed, and construct sentences. It gave them a chance to express ideas in an organized way, expand their general knowledge, learn from and exchange information with others, know other students' perspectives, compare their own proficiency level and skills with other students. They found the discussion threads interesting as they were not limited to themes studied in the textbook, but wrote about themes not covered in the book. They could

learn and practice at home without having to go to class. They also learnt as a team, helped each other, competed in posting responses and comments, developed discussion skills with other students, and had a chance to interact with their instructor and classmates. As a result their participation and language practice increased.

On the other hand, inactive students gave few reasons for not participating which included lack of time, lack of interest and lack of access to computers and internet. One student did not have time because she has children, another lives out of town and gets home late, some spend a lot of time doing assignments for other courses and studying for tests. To some, searching for information, writing and posting threads were time-consuming. Some found it difficult to keep up with students' comments on their posts. Many inactive participants were not interested in computers and had no computer skills. They could not access the internet from college and were not used to this mode of learning. A student mentioned that at first she did not care about the online course, but later she regretted not participating. Few students had difficulty registering; some found the RCampus main page and the way discussion threads and responses are displayed confusing. Other negative aspects of online instruction are that the students did not post any responses, if not prompted by the instructor, and if the instructor did not post new topics and post a sample response. Some started a new thread dealing with the same topic instead of posting a response under that topic. Some wrote "Thank you" notes and compliments.

## IX. DISCUSSION AND CONCLUSION

Significant differences were found between the pre and posttest scores in the present study. A positive correlation between the posttest scores of active and inactive participants (amount of participation) was found suggesting that use of online instruction proved to be a powerful tool for improving students' reading and writing skills in EFL. Online instruction raised good, average and poor student's reading and writing performance. This finding is consistent with findings of prior studies in the L1 and L2 literature using other forms of technology in reading and writing instruction such as Lange, McCarty, Norman and Upchurch, (1999); Nichols, Wood and Rickelman (2001); Manzo, Manzo and Albee (2002); Houser, Yokoi and Yasuda (2002); Almekhlafi (2006); Voogtand McKenney (2008); Mateos, Martin and Villalon (2008); and Lawrence, McNeal and Yildiz (2009). As in Barrett's (2001) study, use of multiple technologies in the present study, i.e., the online discussion forum, WWW links and e-mail, significantly enhanced EFL college students' reading and writing skills.

Moreover, the present study revealed positive effects of online instruction on students' attitudes towards online instruction and reading and writing in English. This finding is also consistent with findings of other studies by Potter and Small (1998) in which a "Writing to Read" computer program was used with Kg and grade 1 children, and by Kramarski and Feldman's (2000) in which an Internet environment had a significant effect on L1 students' motivation. As in Tracy and Young's (2005) study, online reading and writing instruction in the present study provided a self-paced and non-threatening learning environment, and additional reading and writing practice. The students enjoyed using the online course and felt it helped them to learn and improve. The online course provided an environment for social interaction between the instructor and the students and among the students themselves, which lies at the heart of language practice and language learning.

Finally, the present study recommends that students of different college levels and enrolled in the reading and writing I, II, III and IV courses share an online course together with their instructors. To encourage the students to participate, the instructor has to prompt and motivate the students. Rules for using the online reading and writing course should be made clear. The minimum number of posts can be specified. The effect of integrating online listening, speaking, grammar and/or vocabulary building extension activities and using technologies such as text-to-speech software, ebooks, or mobile technology on reading and writing skills development in EFL is still open for further investigation.

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