Teaching Grammar to Iranian EFL Learners through Blended Learning Using Multimedia Softwares

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Abstract

This study was aimed at investigating the effects of blended learning and multimedia softwares on Iranian EFL students' grammar learning. To do so, 87 Iranian EFL learners at elementary level of language proficiency were assigned to three groups: the experimental, control, and constant groups. A grammar test was given to the students in order to have homogeneous experimental and control groups before the experiment. The experimental group received instructions through multimedia softwares, the control group received traditional instructions, and the constant group used worksheets prepared by their language school. The data was collected through a grammar post-test, a questionnaire, and classroom observations. The results showed a great level of disparity between the two groups of learners regarding their acquisition of new grammar. In other words, multimedia softwares had positive effect on the students' grammar learning.

Keywords: multimedia softwares, blended learning, teaching grammar, Iranian EFL learners

INTRODUCTION

There is a great interest in using computers and technology in EFL classes (Albirini, 2006; Bartsch & Cobern, 2003; Connor & Wong, 2004; Lee, 2000; Timucin, 2006). This interest has not been confined in classrooms. curriculum designers have tried to include computer and technology courses in educational curricula (Atai & Dashtestani, 2011; Aydin, 2012; Karber, 2001; Madden, Ford, Miller, & Levy, 2005). It has been proved through the numerous studies that have been done in this field that computers and technology can facilitate teaching and help the students to learn another language better (Cancannon, Flynn, & Campbell, 2005; Hermans, Tondeur, Van Braak, & Valke, 2008). Technology has positive effects on students' motivation (Mahdizadeh, Biemans, & Mulder, 2008), autonomy (Claudia, Steil, & Todesco, 2004), critical thinking (Lim, Teo, Wong, Khine, Chai, & Divaharan, 2003).

Grammar knowledge has been considered as one the most important factors like vocabulary in academic achievement for second or foreign language learners (Bismonte, Foley & Petty, 1994; Evans, 1978; Laufer, 1996; Pellow, 1995; Pouwells, 1992; Tozcui & Coady, 2004; Watts & Bucknum, 1996). Learning grammar unfortunately is not an enjoyable or easy task for students to handle and teachers are even bored with their constant complains about the problems that they have in learning and applying what they have learnt in their speech. Some of their statements are:

- "I cannot speak fluently due to my lack of grammar knowledge."

- "I do lots of exercises and I review them constantly but I forget them soon."

- "I really want to improve my grammar but I do not know how."

By observing and considering the wide interest and the potential capacities of technology, it is assumed that multimedia softwares and blended learning have positive effects on students' grammar learning; therefore, this study has been conducted to show how multimedia softwares can facilitate grammar teaching and learning.

REVIEW OF THE RELATED LITERATURE

Blended learning (BL), a combination of face-to-face teaching with computer technology (online and offline activities/material), has been recommended by many researches. Ability to match learning styles, individually tailored solutions, improving the learning rate, optimizing development cost and time, optimizing business results (reduces travel costs and learning objectives are obtained quicker), ease of revision, personal agency (i.e. learner control and choice), and improving the teaching of large groups have been listed as benefits of employing BL in EFL classes (Dewar &Whittington, 2004; Osguthorpe & Graham, 2003; Singh & Reed, 2001). Sharma and Barret (2007) consider convenience, cost, and the ability to work in your own time and at your own pace asthe major reasons of employing BL in business that are also usable in EFL classes. Hockly's views (2011: 58) are not in line with what Sharma and Barret listed before. Hockly categorizes three other reasons for employing BL in EFL classes.

-Flexibility: University students and adults prefer to match and fit their learning into their busy lives.

-Ministry of Education: In some contexts teachers are advised to suggest BL options.

-Learners' expectations: These days learners prefer to have more advanced classes that are equipped with technology.

The research area here is concerned with comparing traditional instruction that is face-to-face instruction without CALL and blended learning instruction that is face-to-face instruction along with CALL.

These studies have been done by Adair-Hauck et al., Bagheri et al., 2012; Barr et al., 2005; Chenoweth and Murday, 2003; Chenoweth et al., 2006; Echavez-Solano, 2003;

Ghabanchi and   Anbarestani, 2008; Green and Youngs, 2001; Seida and Saury, 2006; and Shahrokni, 2009. These researchers came to different results. Some of them stressed the major role of multimedia in the EFL classrooms and the others found nothing important. The studies that are not concerned with comparing traditional and blended learning are called as non-comparison studies. Here the comparison ones are scrutinized.

 Adair-Hauck et al. in 1999 used reading, grammar, and vocabulary CALL programs in treatment group and his variables were listening, speaking, reading, writing skills, and cultural knowledge. What they found demonstrated no significant differences between the groups on speaking, listening, writing, and cultural knowledge. The students were asked to see videos, do both grammar and vocabulary exercises in Dasher, and read texts in French. What the results demonstrated was that the students both in treatment group and control group performed equally on listening and speaking but students in treatment group had a better performance on reading and writing.

 Barr et al. (2005) employed Tell Me More software which is a four-skill software in their studies. The experiment contained pronunciation drills and role plays with the software, voice recordings, and surfing the internet. In this research the variables were listening, speaking, and pronunciation. The experiments indicated that both groups had achievements, but the group which was not exposed to technology had a greater progress.

 In a comparative study which was done by Chenoweth and Murday (2003) blended learning group had synchronous chat program using course management system WebCt. Their variables were grammatical knowledge, listening and reading comprehension, and written and oral production. The students were asked to send text chats and emails, and post on the bulletin board and do some exercises in hot potatoes. The experiments results indicated better performance of experimental group on writing, but there wasn't any significance difference between the two groups on oral production, listening and reading comprehension, and grammatical knowledge.

 Echavez-Solano (2003) took language proficiency, listening and speaking skills as their variables. They utilized course management system Mallard in blended learning group. Doing asynchronous text chat and watching videos were primarily tasks of the students. The results demonstrated no significance difference between the two groups.

 In 2006 Chenoweth et al. did a similar research in comparing blended learning classes and traditional ones. Like the previous study (Chenoweth & Murday, 2003) the technology that utilized was WebCT. The students were supposed to send text chats, e-mail messages, post on bulletin board, and also do exercises in hot potatoes. Their variables in this research were the four skills along with vocabulary. The only difference between this study and the previous one was that they took 21 classes as the control and 13 classes as the blended learning classes instead of having only 2 classes. The experiments results indicated no significance difference at any levels between the groups, but it is worth mentioning some exceptions. For Example one control group had

a better performance on vocabulary, two control groups performed better on listening and reading comprehension, one blended group had a better performance on written production measure and another one performed better on oral production measure.

In 2006 Seida and Saury examined the effect of hybrid course model versus traditional classroom model on student grades. They also investigated the perceived effect of web-based vocabulary and grammar drills on students' abilities. This research revealed the blended learning group had better grades.

In an Iranian context, Ghabanchi and Anbarestani (2008) tried to seek the possible effect of CALL programs on acquiring language components and even to see whether CALL programs have any effect on contextualized learning or not. The results of the immediate test in this research indicated that the control group had a better performance, but the results of the delayed test showed better performance of experimental group. In a similar study which was done by Bagheri, Roohani, and Nejad Ansari in 2012 they found that there was no significance difference in performance of CALL users and non-CALL users.

METHOD

Participants

Students

In the first sample 3 students out 50 students did not take the test. The students were male elementary EFL students of Shokouh Keyhan Language Institute which is located in the north part of the city of Isfahan, Iran. Their textbook was Four Corners 1, part 2, by Jack C. Richards in the summer term, 2014. They were 16-30 years old students and their first language was Persian. In sum, 87 Iranian EFL learners at elementary level of language proficiency were assigned to three groups: the experimental, control, and constant groups.

Instructors

All the instructors of Shokouh Keyhan Language Institute who had previously passed an EFL training course as a requirement of their employment, took part in the study. The instructors here are all familiar with utilizing multimedia in their classes. Due to the fact that this institute is a TTC based language school all the instructors go through the same steps and they all use same materials and worksheets. Their worksheets are enough complete to include even educational games, so it can be said that all the classes have the same conditions. Instructors in Shokouh Keyhan language institute are mainly BA and MA holders. The two selected instructors for this experiment are male MA holders.

The class setting

All the classes are equipped with speakers, smart markers, computers, and data shows in Shokouh Keyhan language school. It is worth mentioning that the two classes of both

treatment and control group share the same conditions. Based on the prepared worksheets the instructors choose the more appropriate software among several softwares available on the computers.

Four Corners series by Jack C. Richards and David Bohlke are the course books for elementary and intermediate levels in this language school. *Four Corners* Classware let the students enjoy the class more and they rarely refer to their printed books in classroom. The student's book, class audio, and videos for each level are different components of Four Corners Class ware. This class ware can be used a whiteboard, a projector and a computer interactively.

All the classes will be observed randomly by the researcher through the cameras to check what is going on in the classes. The aim of these observations is to evaluate the teachers and to see and check the overall conditions of both treatment and control group classes.

Materials

Selecting the multimedia softwares

For selecting the multimedia softwares, the researcher looked for the best two softwares on grammar and gained information form more than 20 teachers who are familiar with softwares. A software evaluation website (http://esl-software-review.topinterviews.com) was also useful in providing some articles on learning English and some reviews on ESL softwares. There are certain criteria that the website evaluates softwares based on them. These criteria are as follow:

a. **Features set**: images, games, playback and record can be classified here.

b. **Fundamentals:** It includes basic components of English such as reading, writing, vocabulary, comprehension, grammar, pronunciation and cultural aspects of speaking countries.

c. **Effectiveness**: it deals with how different softwares can satisfy people with different learning styles.

d. **Ease of use:** one of the most important features of a good software is its user-friendliness. People who use these softwares should feel comfort with them without any difficulties for their lack of knowledge in English or working with computer.

e. **Ease of setup**

f. **Technical support:** providing more help and information to support users by email, phone, and FAQs pages.

Rosetta Stone

This software has been considered as one of the best softwares for learning English. It includes 200 hours of instructional materials for presenting not only grammar but also

vocabulary and pronunciation. This software includes variety of visuals and repetitions to help the users.

Four Corners Multi-Rom

One of the most important features of four corners is its multi-rom. This multi-rom is available on an extra CD which is on the course book. This multi-rom contains different parts as vocabulary, conversations, reading, pronunciation and grammar. Every unit has its own parts and these parts are related to the students' book. Grammar parts especially are in harmony with what they have in their books. Different exercises are available such as filling the blank spaces and choosing the correct response. Through these exercises students have the opportunity to engage more in an enjoyable setting and learn the presenting materials better.

Questionnaire

The questionnaire "Technology in the Classroom" by Dudeney and Hockly translated for the present study. Mackey and Gass (2012) believe that the best questionnaire is one that is translated and presented in the respondents' own mother tongue because the data that is collected through this questionnaire is more precise and qualified.

In order to check the equivalence of the translated version and the original one the researcher consulted some other bilingual reviewers and went through the modifications. This 13 item questionnaire prepared to check the students' attitudes toward technology and multimedia softwares in EFL classes.

Pre-test

In order to check the homogeneity of both groups a grammar test before the experiment was administrated. All the students had 10 minutes to complete the test. This test was in two sections and it included 12 items. The first section had 7 multiple choice questions and the second section contained 5 items in the form of a cloze test.

Post-test

At the end of the course in order to check the influence of treatment and placebo, a grammar test which was a teacher-made test based on the presented materials was administrated. Like the pre-test this test was also in two sections. The first section contained 7 multiple-choice questions and the second one included 5 items in a cloze test. To check the reliability of the test, Cronbach's alpha was utilized. In statistics a commonly accepted rule of thumb for explaining internal consistency using Cronbach's alpha is as follows.

The reliability of our grammar post-test was 0.74 (Cronbach's alpha) which claimed that the reliability of this test was good.

Table 1. Internal consistency

Cronbach's alpha	Internal consistency
Alpha ≥0.9	Excellent (High-Stakes testing)
0.7≤alpha≤0.9	Good (Low-Stakes testing)
0.6≤alpha≤0.7	Acceptable
0.5≤alpha≤0.6	Poor
Alpha≤0.5	Unacceptable

Procedure

Before the experiment in order to check the equality of the groups a pre-test was administrated. It took 1 intensive summer term for the experiment to be done. Classes were daily classes and each session lasted one hundred minutes. 15 minutes of 5 sessions was devoted to the experiment. Software contents and new structures were selected and analyzed carefully in relation to the course book. The selected new structures were related to the title of student's book, but they were not included in the student's book. When the grammatical structures were presented, new grammatical structures were also introduced.

By using softwares the instructor in experimental group presented the new grammatical structures, the instructor in control group only went through definitions and examples. In order to see the effect of treatment and the difference between the two groups a grammar post-test was administrated at the end of the experiment. Students' attitudes toward the softwares were asked through questionnaire at the last session.

Treatment and placebo

Both the experiment and control group were introduced to the same grammatical structures in this study; however the methods of clarification were different. Because the instructors in this language school are supposed to follow the same worksheet, they both teach the same materials every day. New grammatical structures were related to the grammar parts in student's book.

New grammatical structures were presented through softwares in experimental group and through definitions and examples in control group at the same time. The instructor in experimental group was enough aware the softwares to find the related materials as quickly as possible. The instructors in both groups go through different steps for reviewing the presented materials. In control group students were asked traditionally, while in the experimental group they went through prepared exercises and games of the softwares.

RESULTS

To answer the first research question, the researcher statistically analyzed the scores on the post test. The descriptive statistics of participants' performances are presented in Table 2.

Table 2. Group statistics on post-test score

Grammar Learning	N	Mean	Std. Deviation	Std. Error Mean
Traditional method	23	13.0000	4.62945	.96531
Blended method	24	16.1250	2.89771	.59149

As it can be observed, students in the blended learning group (BL) had a better performance on the post-test. The average mean score of BL group (16.12) was better than the mean of control group (13.00). This information is illustrated in the Figure 1.
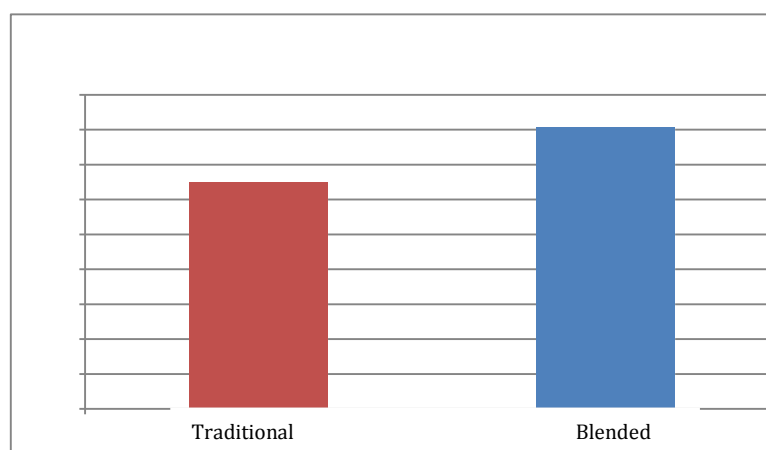
Figure 1. Graphical representation of Groups' performances on post-test

An independent-sample test was conducted to compare the grammar test scores for traditional and blended methods (Table 3).

Table 3. Independent Samples Test on grammar posttest

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Interval Difference	
	F	Sig	t	df	Sig.	Mean Diff.	Std. Error Diff.	Lower	Upper
Equal variances assumed	2.514	.120	-2.787	45	.008	-3.12500	1.12140	-5.38362	-.86638
Equal variances not assumed			-2.760	36.67	.009	-3.12500	1.13211	-5.41956	-.83044

As it can be observed from the tables above, there was a significant difference in scores for traditional ($M = 13.00$, $SD = 4.62$) and blended ($M = 16.12$, $SD = 2.89$; t (47) = 2.76, p =.009, two-tailed) methods. The P value was 0.009 (P < 0.05), based on which it can be said that the groups' performances were significantly different, therefore, the null hypothesis was rejected.

DISCUSSION AND CONCLUSION

The first research question tried to check the effectiveness of blended learning through multimedia softwares on grammar learning of Iranian EFL learners. The results of independent sample t-test showed that there was a significance difference between learners' performances in the experimental group and the control group. This indicated that multimedia softwares had a positive effect on learners' grammar learning. The results of the first research question were in line with the findings of Matic, Lauc, and Mekelic (2006) who believed in the effectiveness of multimedia softwares on a better instruction to learners. It is good to say that the findings of this research were in contrary with the idea that there is no significance difference between CALL-based and non-CALL based methods of grammar instruction that was expressed by Roohani, Nejad Ansari, and Bagheri (2012).

This study was aimed at investigating the effect of multimedia software instruction on grammar learning of Iranian EFL learners. The results of this research supported the fact that there is a positive relationship between student grammar learning and technology use. These results have also indicated that using technology can lead to students' satisfaction. Moreover, applying technology in classes and learning through it can enhance activity engagement. The results of this study have also shown that student-centered classes and interactive education can be achieved through the application of technology in EFL classes

IMPLICATIONS OF THE STUDY

 The findings of this study can have implications for curriculum designers, administrators, and teachers. For Curriculum designers, integration of courses with appropriate software application is important. Curriculum designers should also bear in mind that the teachers should teach course contents along with CALL. In order to do so teachers should be provided with a well-structured worksheet, which is prepared for the available softwares to let the teacher use the appropriate softwares without taking too much time.

 Administrators should equip their classes with the available facilities for CALL programs. They should also keep in mind that hardwares not softwares should always be up-to-date, because in this field newer has not always been the better. Administrators need to realize the importance of integrating CALL and multimedia software in EFL classes. There are different softwares in the market; here the role of administrators is to select the appropriate ones based on their course objectives and goals. They can also make benefits of CALL experts. In order to improve teachers' literacy in computer and multimedia, administrators can include some related instructions to their teacher training courses and programs.

 The most important role in the effectiveness of CALL programs belongs to the teachers, because they are the link between these programs and learners. Therefore, passing a training course in computer and multimedia should be a requirement for their

employment. Teachers also should let their learners recognize the importance of CALL in their learning process and make them aware of advantages of computer and softwares in better understanding of the materials they study. In order to increase learners' autonomy, it is suggested that teachers in the first day of their classes teach the students how to use these softwares at home.

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