

**The Effect of Using Computer in Teaching English
Grammar to the Jordanian University Students:
the Passive Voice a Model**

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Abstract

This ad hoc study concentrated on investigating the effectiveness of utilizing an instructional computer program of English language on the achievement of university level students in Jordan. The sample of the study consisted of (160) students distributed randomly on two experimental groups and two control groups. The instruments employed in the study were an instructional computer program for teaching the passive voice and an achievement test. An analysis of covariance was utilized to figure out the effect of the instructional program on the students' achievement in the passive voice.

The findings of the study revealed that: 1. There were statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in the passive voice attributed to the instructional method of teaching. This difference is in favor of the students in the experimental groups 2. There were statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in the passive voice attributed to gender. This difference is in favor of male students. 3. There were statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in grammar attributed to the year of study. This difference is in favor of the (junior & senior) group students. In light of the findings of the study, it was recommended that university instructors use CALL lessons in the teaching of English grammar(Passive Voice).

Keywords: computerized instructional program, passive voice, computer- assisted language learning, achievement.

أثر استخدام الحاسب الآلي في تعلم طلبة الجامعات الأردنية قواعد اللغة الإنجليزية (المبني للمجهول أنموذجا)

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الملخص

هدفت هذه الدراسة إلى التحقق من فعالية استخدام برنامج تعليمي محوسب في تحصيل الطلبة الجامعيين في قواعد اللغة الإنجليزية (المبني للمجهول) في الأردن. تكونت عينة الدراسة من (110) طالبا موزعين بشكل عشوائي إلى مجموعتين إحداهما تجريبية و الأخرى ضابطه. استخدم الباحث أداتين وهما: البرنامج التعليمي المحوسب لتعليم المبني للمجهول. واختبار تحصيلي. واستخدم الباحث تحليل التباين لمعرفة أثر استخدام هذا البرنامج على تحصيل الطلبة في المبني للمجهول. وأظهرت نتائج الدراسة وجود فرق ذي دلالة إحصائية على (0.05 α) في تحصيل الطلبة في المبني للمجهول يعزى إلى طريقة التدريس. وكان الاختلاف لمصلحة المجموعة التجريبية التي درست بالحاسوب. وبينت النتائج أيضا وجود فرق ذي دلالة احصائية على (0.05 α) بين المجموعتين عائد إلى الجنس لمصلحة الذكور، ووجود فرق ذي دلالة إحصائية في تحصيل الطلبة في قواعد اللغة الإنجليزية (المبني للمجهول) عائد إلى السنة الدراسية ولمصلحة طلبة السنة (الثالثة والرابعة). وفي ضوء نتائج الدراسة أوصى الباحث باستخدام الحاسوب في تعليم قواعد اللغة الإنجليزية (المبني للمجهول) في الجامعات الأردنية.

الكلمات المفتاحية: برنامج تعليمي محوسب. المبني للمجهول. تعلم اللغة باستخدام الحاسوب. التحصيل.

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Introduction:

There is a de facto consensus which exists among practitioners in the realm of education that the computer can be a useful tool in learning and teaching languages. Consequently, Jordan has recognized the indispensable role of information and communication technology in the global economy where knowledge is becoming the primary engine of growth and development (Rousan, 2006). They are so widespread that one feels outdated if they are not utilized (Moras, 2001). The positive influence of these over powerful technological instruments has pervaded all aspects of the educational, business, and economic sectors of our world (Singhal, 2004).

Additionally, there is no doubt that just as the computer has established itself firmly in the world of business and communication technology, it has also succeeded in acquiring a fundamental role in the educational process. This role is becoming more authentic as computers become cheaper, smaller in size, more adaptable and easier to handle. Computers are becoming more appealing to teachers because of their huge capabilities and extensive effectiveness. (Dhaif, 2004)

Moreover, the idea of utilizing the computer for teaching purposes in subjects like modern languages arouses mixed feelings and encounters with a variety of reactions (Abolghasem,2010). The fact that computers are used in the teaching of other subjects and are put to a great many applications in society makes one suspect that no field lies completely outside their scope and that they might indeed be of some use. (Bani Hani, 2009)

To many, the prospect of using computers is not without appeal; it is the kind of challenge which one feels drawn to respond to. At the same time

the technology frightens us; we are afraid that it may come to dominate us, we have qualms about dehumanization in a subject which is concerned above all with human communication, and we may even be afraid of losing our jobs. It is also known that language teaching does not escape the waves of fashion; we remember the errors of the past, the theories and inventions which failed to come up to expectations (Abdul Razak, Noor & Eswaran, 2010). Is the use of computers in language teaching, as some critics say, “the language laboratory the same all over again”? (Moras, 2001). In our view, this might not be true, because unlike language laboratory, the computer has witnessed a tremendous amount of improvements.

However, such anxieties can be dispelled only by a proper acquaintance with the facts. To begin with, a computer is nothing more than a tool, an aid to be used or not, as the teacher thinks fit. The computer, like any other electrical or mechanical gadget, provides a means of amplifying, or extending the effectiveness of our natural talents and capabilities. And like other such machines, without the human input and control they are useless. Used properly, however, they can be very effective indeed, enabling the individual to carry out tasks inconceivable by other means. Computers, however, are technologically different from language laboratories. Not only do they involve primarily the written language, they are much more versatile; their impact on language teaching and language learning is, therefore, likely to be very different. There is no reason to believe that history will necessarily repeat itself; everyone is aware of the mistakes which were made, and those engaged in computer assisted language teaching are the first to stress that computers are not a universal panacea.

In addition, few teachers nowadays, at least in the Western world, rely solely on chalk and blackboard. Over the years, more and more technical inventions have taken their place among the educational aids with which teachers surround themselves, so as to make their teaching more effective. What distinguishes the computers from other pieces of teaching equipment, such as tape recorders and film projectors, and what forms in fact the basis of its being an educational aid is its interactive capability.

The unique characteristic of the computer as a medium for education is its capability to interact with students. Books and tape recordings can

tell a student what the rules are and what the right solutions are, but they cannot analyze the specific mistake the student has committed and react in a manner which leads him not only to correct his mistake, but also to understand the principles behind the correct solution. (Bani Hani, 2009)

Similarly, the computer gives individual attention to the learner at the console and replies to him. Traditionally, it acts as a tutor assessing the learner's reply, recording it, pointing out mistakes and giving explanations. It guides the learner towards the correct answer, and generally adapts the material to his or her performance. This flexibility, which can include allowing the learner to choose between several modes of presentation, is something impossible to achieve with written handouts and worksheets; it would require huge "scrambled books" with pages and pages of mostly unnecessary explanations, together with an extremely complicated system of cross-references. Nor would the learner get the instant feedback so beneficial to the learning process which the computer provides. The computer thus promotes the acquisition of knowledge, develops the learner's critical faculties, demands active participation and encourages vigilance (Hah, 1996). Gonglewski, Meloni, & Brank (2007) maintained that computer mediated instruction can provide a very valuable language learning experience.

Computer Assisted Language Learning (henceforth CALL) is the acronym for computer assisted language learning and it is related to the use of computers for language teaching and learning. Significant use of CALL began in the 1960s. Since then, the development of CALL software has followed the changes in teaching methodologies (Hah, 1996). As teaching methods changed to audio - lingual and communicative approaches, CALL software included simulations and more interactive programs. Research has shown that learning strategies employed in CALL can affect the quality of learning the language. However, it still lacks methods and a clear theoretical foundation (Bani Hani, 2009) .

Statement of the Problem:

In the light of the information revolution and the scientific challenges of the 21st century, there is a sweeping trend to use computers in all aspects

of life and education is no exception. Moreover, the world is heading towards knowledge economy and a lot of money will be invested in (CALL) instructional software programs. Therefore, it is worth investigating the effectiveness of such CALL programs on the performance of learners.

The Objectives of the Study:

The general objectives of this study are the following:

- Implementing a computerized instructional program for teaching a grammatical item of English language which is the passive voice, and
- Investigating its effect on improving university students' achievement in English grammar (The Passive Voice).

Questions of the Study:

The study attempts to answer the following questions:

- (1) Are there any statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in grammar attributed to the instructional method of teaching (traditional & computerized)?
- (2) Are there any statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in grammar attributed to gender (male & female)?
- (3) Are there any statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in grammar attributed to the year of study ([freshman, sophomore], [junior, senior])?

Significance of the Study:

One pushing impetus for carrying out this study is that the domain of CALL in Jordan is in need of further research. To the researcher best knowledge, studies about computer-based instruction in Jordan are not so many. Moreover, a few studies about the use of CALL in teaching passive voice to Jordanian English as a Foreign Language (henceforth EFL) learners have been conducted. Therefore, it is anticipated that this study will shed light on the effects of using computers in language learning in general, and in learning English grammar (passive voice) in particular. This study also attempts to bridge the gap between the theoretical and practical aspects of

using CALL in teaching the English passive voice.

Another driving reason behind conducting this research is that the findings of this study may be functional for different categories of people; it may help EFL curricula designers and methodologists develop teaching materials which suit various ways of teaching and match students' level of achievement in English language in general and in grammatical structures in particular. Moreover, this study helps teachers by facilitating their role as well as students by helping them absorb the structures and rules of English passive quite easily and smoothly. Finally, this study may encourage other researchers to conduct further or similar studies pertaining to other aspects of the English Language Grammar.

Limitations of the Study:

This study was limited to the following:

- This study was limited to the English language major students in the academic year 2012/2013 at Al- Albalq'a Applied University.
- The results of this study may be limited to the English major students only.
- The study is restricted to one aspect of language which is the passive voice.

Review of Related Literature:

A good number of researchers and practitioners are interested in using computers as a medium for teaching and learning languages. Therefore, many studies were conducted on using CALL for teaching English. To the researcher's best knowledge, a few studies were conducted on using CALL in teaching English grammar in Jordan. However, this section contains studies conducted on teaching other aspects of the English language via computer.

Salaberry (1999) replicated Van Patten and Cadierno's study. No significant difference was found between the input processing group and the output-processing group. Alsouki (2001) investigated the effect of using computers in the teaching of L2 composition on the writing performance of learners. The findings revealed that there were considerable differences for using computers as an effective writing tool.

Nutta (2001) compared between the computer-based grammar instruction

and the teacher-directed grammar instruction. The results showed that for all levels of English proficiency, the computer - based students scored significantly higher on open-ended tests covering the structures in question rather than the teacher-directed instruction. The results indicated that computer-based instruction could be an effective method of teaching L2 grammar.

Similarly, Noriko (2002) developed a language tutor program to improve learners grammatical and sentence production skills in Japanese language. The study revealed that students' achievement improves tremendously. To measure their attitude towards the program, the researcher designed a questionnaire. The results indicted an enthusiastic student response.

Following the same path, Abu-Seileek (2004) conducted a study to explore the effect of a CALL program on students' writing ability in English by teaching the program cooperatively and collectively. The findings of the study revealed that there were statistically significant differences between the experimental group, who studied via computer, and the control group, who studied in the traditional method. The difference was in favor of the experimental group who studied via computer.

Al-Qomoul (2005) investigated the effect of an instructional software program of English language functions on tenth graders' achievement. The results revealed that the students who studied the English language functions through CAI lessons performed better than those who learnt by the traditional method.

Almekhlafi (2006) ascertained the effect of CALL on elementary-prep school students' achievement in EFL. Students' achievement and attitudes towards learning English in the United Arab Emirates were investigated in this study. The results showed that students in the experimental group have a positive attitude towards CALL, perceived its utility for helping them learn EFL, and have a strong intention to use it in the future. The findings also revealed a positive effect of CALL on students' achievements. The researcher recommended the use of CALL in the United Arab Emirates elementary schools.

Shang (2007) examined the overall effect of using e-mails on the writing performance of Taiwanese students in English. The major findings

demonstrated that students made improvements on syntactic complexity and grammatical accuracy. The results also revealed that the e-mail writing was a positive strategy that helped improve their foreign language learning and attitudes towards English.

Al Abdel Halim (2009) examined the effectiveness of computerized language learning program on the achievement of the first secondary students on the reading comprehension skills in English. For the purpose of this study, the researcher constructed an instructional program to teach reading via the computer and implement it in one of the secondary schools in Irbid, Jordan. The results of the analysis showed a significant difference between CALL users and nonusers in favor of the experimental group (computer users). Results of this study provided evidence for the effect of CALL on learning English as a foreign language.

In conclusion, having reviewed the above studies, we find that many researchers assert the importance of computer-assisted language learning. It is clear from the studies that using CALL is more beneficial and helpful than using the traditional methods, e.g., Alsouki (2001), Nutta (2001), Abu-Seileek (2004), Al-Qomoul (2005) Almekhlafi (2006), Al Abdel Halim (2009). However, only few of them report that there are no significant differences between the CAI lessons and the traditional methods of instruction.

This study is different from the previously mentioned studies. It dealt with a component, which was neglected by many researchers; English grammar. To the researcher's best knowledge; few studies were conducted on teaching grammar through computers in Jordan. For this purpose, the researcher developed an instructional program for teaching the passive voice.

Methodology and Procedures:

Sample of the Study:

Two colleges (Irbid and Ajloun) were purposefully chosen from Al-Balq'a Applied University. The two colleges have computer labs and students were assumed to have previous experience in using software. The sample of the study consisted of (80) female and (80) male English major students assigned randomly to four sections. Two sections were randomly

assigned to the experimental group, each section consisted of (40) students selected and assigned randomly, and two sections were randomly assigned to the control group, each section consisted of (40) students selected and assigned randomly. Concerning the year of study, the sample was distributed to the following two groups: the first consisted of (39) freshmen and (40) sophomores, the second consisted of (42) junior and (39) senior. The experimental groups were taught the passive voice through the computer while the control groups were, simultaneously, taught the same grammatical item by the traditional method.

Research Instruments:

To implement this study successfully, the researcher has employed two types of instruments: an achievement test, and a computer program for teaching the passive voice.

The Achievement Test:

The test was designed by the researcher. It was used as both a pre-test and a post-test to find out the impact of the software program on students' achievement. The test comprises (30) multiple-choice items of four alternatives related to the passive voice. At the beginning of the test, the instructions of the test were introduced. The subjects were asked to choose the correct answer. The time allocated for the test was (50) minutes. Concerning the marking scheme, there is one mark for each item, so the total score is out of (30). The students' previous knowledge was assessed by the pre-test administered to both groups (control and experimental) before the study started. The objective of the pre-test was to assess the students' background knowledge of the passive voice. The same pre-test was used at the end of the study as a post-test to assess the students' achievement on the topic; the passive voice. The objective of the posttest was to assess the effect of both instructional methods (traditional and computerized) on students' achievement.

Test Validity:

The content of the test was validated by a jury of English language

specialists. The jury was asked to validate the content of the test with regard to test instructions, the relevance of questions to content, its suitability to the research goals and objectives, the number and arrangement of questions, and the suitability of the time allocated to the test. The remarks of the validating jury, their notes and suggestions were taken into account, and the researcher made the necessary modifications before applying the test.

Test Reliability:

The reliability of the test was obtained through a test-retest method, which was applied on a pilot group of (30) students who were randomly chosen from the population of the study and excluded from the sample. Two weeks later, the test was repeated on the same group to check its reliability. The reliability correlation coefficient of the test-retest was calculated using Pearson Correlation Formula. The reliability of the instrument test was (0.83), and was considered to be suitable from a statistical point of view for the purpose of this study.

The Software Program:

The program manifested in this study was adapted from Abu Naba'h, Hussain, Al-Omari and Shdeifat (2008). The program was designed to teach English passive voice to learners of English as a Foreign Language (EFL). After consulting some practitioners, methodologists, educational technologists and computer experts, some modifications (more difficult examples) were made on the program to suit university level students. Concerning the validity of the Software Program, the content of the program was validated by TEFL and curricula designing specialists. The validating committee consisted of three PhD holders in curricula and instruction, two of them are specialized in educational technology, six highly qualified instructors of English, and three specialists in computer from Irbid Community College.

Findings Related to the First Question:

The first question was about the existence of any statistically significant differences ($\alpha < 0.05$) between the students' achievement mean scores in

grammar attributed to the instructional method of teaching (traditional & computerized). Analysis of Covariance (ANCOVA) was performed to test the significance of the differences between the experimental groups who were taught the passive voice via the computer and the control groups who studied the same grammatical item using the traditional method. Table 1 presents the means and standard deviations of the experimental and control groups for students' achievement in the post-test.

Table 1
Means and standard deviations in the post-test
according to the method applied

Method	Means	Std.deviation	Number
Computerized	27.31	2.23	80
Traditional	24.38	2.01	80
Difference	2.93	0.21	-

As indicated in Table 1, there are statistically significant differences between the mean scores in the achievement test of both the experimental group who used the computer and the control group who were taught by the traditional method. The mean scores of the experimental group is (27.31) while it is (24.38) for the control group. The difference between the two groups' mean scores is (2.93). To find out the statistical significance of this difference, the researcher employed the 3-Way ANCOVA to the results of the post-test according to the variables of the study (method, gender, year of study). The variance among the dependent variable groups (achievement in the post- test) is the same, since the calculated significance level (0.121) was greater than the postulated significance level ($\alpha < 0.05$). The results of the analysis of covariance are as shown in Table 2:

Table 2
3-Way analysis of covariance (ANCOVA) for students'
achievement in the post-test

Sources of variance	Sum of squares	df	Means squares	F	Sig.
Method	146.837	1	146.837	74.45*	0.00

Table 2 Continued

Sources of variance	Sum of squares	df	Means squares	F	Sig.
Gender	31.176	1	31.176	14.253*	0.00
Year	32.415	1	32.415	15.953*	0.00
Pretest	313.962	1	313.962	161.144*	0.00

Table 2 revealed that there were statistically significant differences ($\alpha < 0.05$) between the mean scores of the students who were taught the passive voice via the computer (the experimental group) and those who were taught the same grammatical item using the traditional method (the control group). The computed (F) value was (74.45) which is statistically significant at ($\alpha < 0.05$). This showed that there is a significant effect of the manifestation of the computerized software program on the students' achievement. This effect was in favor of the experimental group who were taught via the computer.

Findings Related to the Second Question:

The second question was about the existence of statistically significant differences ($\alpha < 0.05$) between students' achievement mean scores in grammar attributed to gender (male & female). To test this question, the researchers calculated the students' mean scores and standard deviations in the post-test for both groups of study (male and female students). The findings are shown in Table 3.

Table 3
Means and standard deviations in the post-test
for female and male students

Gender	Means	Std.deviation	Number
Male	26.21	2.39	80
Female	24.32	2.33	80
Difference	1.89	0.06	-

Table 3 indicated that there was a difference between the mean scores of both male groups and female groups in the post-test. This difference was

(1.89) in favor of the males. The mean scores of the males was (26.21) while it was (24.32) for the females. To reveal the statistical significance of these differences, the researchers employed the 3-Way ANCOVA to the results of the post-test according the variables of the study (method, gender, and year).

Table 2 also showed that there were statistically significant differences ($\alpha < 0.05$) between the mean scores of both male and female students. The calculated (F) value was (14.253) which was considered statistically significant at ($\alpha < 0.05$). This proved that there was an effect on students' achievement attributed to gender. This effect was in favor of male students.

Findings Related to the Third Question:

The third question was about the existence of statistically significant differences ($\alpha < 0.05$) in the students' achievement mean scores in grammar attributed to the year of study (freshman, sophomore), (junior, senior) ? To test this question, the researcher calculated the students' mean scores and standard deviations in the post-test for both groups of the study. The results were as stated in Table 4.

Table 4
Means and standard deviations in the post-test for the year of study (freshman, sophomore, junior, senior)

Year	Means	Groups Means	Std. Deviation	Number
Freshman	24.3	24.7	2.52	39
Sophomore	25.2		2.23	40
Junior	26.4	26.8	3.26	42
Senior	27.2		3.83	39

Table 4 revealed that the [freshman, sophomore] group mean scores was (24.7) and the [junior, senior] group mean scores is (26.8). The difference was (2.1) in favor of the second group. To elaborate, table 4 also showed that there was a significant difference between the mean scores of both freshman group and sophomore group in the post-test. The difference was (0.9) in favor of the sophomore students. Similarly, the mean scores of the sophomore students was (25.2) while it was (26.4) for the junior students. The difference was (1.2) in favor of the junior students. Additionally, the

mean scores of the junior students was (26.4) whereas it was (27.2) for the senior students. The difference was (.8) in favor of the senior students. To find out the statistical significance of these differences, the researcher employed the 3-Way Analysis of Covariance to the results of the post-test in terms of the variables of the study (method, gender, and year of study).

Table 2 showed that there were statistically significant differences ($\alpha < 0.05$) between the mean scores of both [freshman, sophomore] students and [junior, senior] students in the post-test. The calculated (F) value was (15.953) which was a statistically significant value at the significance level ($\alpha < 0.05$). This implied that there was an effect on students' achievement attributed to the year of study ([freshman, sophomore], [junior, senior]). This effect is in favor of the [junior, senior] students.

Discussion , Recommendations and Implications:

Discussion of the Findings Related to the First Question:

ANCOVA findings revealed that there were statistically significant differences in the achievement mean scores of the subjects of the experimental groups who studied the passive voice through the computer and the control groups who studied the same grammatical item using the traditional method. This difference was in favor of the experimental groups.

Meanwhile, a quick glance at the students' scores on the pre-test, maintained that there were no statistically significant differences between the mean scores of the experimental groups and the control groups. The scores were (21.07) and (20.45) respectively. This result implied that the subjects had almost the same background concerning their previous knowledge of the passive voice before implementing the experiment. This also indicated that both groups were equivalent in this respect. The figures also postulate that any gain in the academic achievement in the field of the passive voice could be attributed to the method employed. The total mean scores of the experimental groups in the post-test was (27.31), while it was (24.38) for the control groups. This means that the achievement in the post-test for both the experimental and control groups was attributed to the treatment. It can be easily noticed that the extra gain in the experimental group's mean scores (6.86) is higher than the extra gain in the control

group's mean scores (3.31) . This improvement was attributed to the method employed. This implied that the implementation of the software program has inevitably enhanced the abilities of the students of the experimental group concerning the passive voice.

One possible interpretation for the effect of using the computer for teaching English grammar is that the utilization of the computer enables each individual to work according to his own pace. The user may move freely from one component to another as he wishes and according to his needs. This characteristic makes CALL programs cater for individual differences. (Jonita, 2002; Traynor , 2003 ; Noemi, 2007).

Another possible explanation for the considerable differences in the above findings is that CALL method makes it possible for the learner to use the program whenever he wants at any place. The computer method, unlike the traditional method, enables the learner to get feedback easily, which develops self-reliance skills.

Using the computer gives the student the chance to use many senses during the learning process. The use of the computer screen which is accompanied by animation, pictures, colors, music and sounds attracts students' attention and empowers faculties of retention to them. The researcher believes that students can learn more efficiently and effectively on their own with additional resources which technology makes available. Using software programs applies "Learning by Doing" method, since learners use the keyboard and the mouse to click or to print their answers. Computer instructional programs are interactive. Learners can easily go forward or backward according to their needs and requirements.

When comparing the results of this study with the results of the previous related literature, we find that this study is consistent with many empirical studies which were conducted before. It is consistent with (Nutta, 2001; Robert 2002; Berlin and White 2002; Zint 2002; Shaalan 2005; Almekhlafi 2006; Bani Hani, 2009) who proved experimentally that computer-based instruction can be an effective method of teaching the grammar of a second language. It is also consistent with (Abu-Seileek, 2004) who maintained that the processing group performed significantly better than the traditional group. The study is also consistent with Al-Qomoul, (2005) who emphasized

that the computerized method is more beneficial for students than the traditional method.

However, the results of the present study in this regard were different from the results reported by Salaberry (1999) who found no significant differences between the computerized group and the traditional one. Also, this study is inconsistent with Joshi, Parmar & Rana (2012) who found that the computer based grammar instruction (materials) could be more effective than traditional instruction (materials). Perhaps the difference in these results may be due to the differences in culture.

Discussion of the Results Related to the Second Question:

The results of the ANCOVA for the scores of the subjects in the achievement test revealed that there were statistically significant differences attributed to the gender variable in favor of the males over the females. The mean scores of the female students in the post-test was (24.32) while it was (26.21) for the males in the same test. This meant that male students had higher scores than female students in the post-test regardless of the method of teaching used. One possible explanation for this finding is the fact that male students are more serious in their learning process. They do their best to seize every possible opportunity to increase their knowledge.

Another possible explanation for this finding is that male students are incredibly interested in computers and multi-media programs. They got bored of the traditional method that is why they showed a high level of interest and curiosity when they were being taught via computer. Singhal (2004) is not in line with the above view. He found no statistically significant differences between students' mean scores attributed to gender in their comparative studies. Moreover, the above view is inconsistent with Al-Qomoul, 2005; Abu-Seileek, 2004) who reported that female students were superior to male students in their academic achievement.

Discussion of the Findings Related to the Third Question:

The results of the ANCOVA for the scores of the subjects in the achievement post-test showed that there were statistically significant differences attributed to the year of study variable. This difference was

in favor of junior & senior group students over [freshman & sophomore] groups. A look at the findings of the analysis of covariance for the students' scores in the post-test proves this viewpoint. The mean scores of the junior & senior students in the post-test was (26.8) whereas the mean scores of the [freshman & sophomore] students in the post-test was (24.7). This means that the first group students has higher marks than the second group students regardless of the gender or method of teaching.

One possible interpretation for the above point of view is that the [junior & senior] students, generally speaking, have relatively higher competence in English than [freshman & sophomore] group students. This is shown by the fact that they have taken more English courses at the university. Another possible explanation is that the [junior & senior] students are much more interested in studying and learning the language and totally convinced with their major; otherwise they would have changed it. A third possible justification for the results in this study may be the fact that the [junior & senior] students have, at least, finished two compulsory courses in computer which indicates that their level in computer helped them utilize it properly in their learning.

The findings of this study were consistent with (Nutta, (2001); Noriko, (2002); Shang, (2007); Joshi, Parmar & Rana (2012); Bani Hani (2009)) who statistically proved that the utilization of the computer in teaching grammar is more effective than the traditional method.

Recommendations and Implications:

Depending on the results discussed above, the researchers put forth the following recommendations and implications:

- (1) Researchers should conduct other studies on the impact of computerized programs on the students' achievement in English grammar, concentrating on other grammatical aspects in other regions in Jordan to generate a more comprehensive view about the effect of CALL method on teaching English grammar in Jordan.
 - (2) Researchers should conduct further studies pertaining to the utilization of computer software programs in teaching other aspect of English Language.
 - (3) Teachers are urged to vary their methods and teaching techniques
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according to their students' needs and interests. They are also recommended to utilize the computerized method more intensively and more frequently.

(4) An obligatory course on CALL should be provided at Jordanian University students to equip them with the necessary instructional knowledge.

(5) CALL could be a very useful tool in TEFL, provided that it supplements face- to-face language instruction, not replaces it.

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