

## The Effect of Using CALL-Based Paragraph Writing Tasks on Iranian Upper-Intermediate EFL Learners' Writing Skill

<sup>1</sup> Safdar Rostami, <sup>2</sup> Ali Seidi, <sup>3</sup> Seyedeh Fatemeh Najafi Amree, <sup>4</sup> Hassan Fallahi

<sup>1</sup> Department of Computer Engineering, Gilan-E-gharb Branch, Islamic Azad University, Gilan-E-gharb, Iran

<sup>2</sup> Department of Foreign Languages, Gilan-E-gharb Branch, Islamic Azad University, Gilan-E-gharb, Iran

<sup>3</sup> Department of Foreign Languages, Sari Branch, Islamic Azad University, Sari, Iran

<sup>4</sup> Department of Foreign Languages, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran

**Corresponding email address**

[ali.seidi@yahoo.com](mailto:ali.seidi@yahoo.com)

### Article reference:

Rostami, S., Seidi, A., Najafi Amree, S. F., & Fallahi, H. (2017). The effect of using CALL-based paragraph writing tasks on Iranian upper-intermediate EFL learners' writing skill. *Language Education Studies*, 3 (1), 1-8.

---

**Abstract:** Writing is generally evaluated as a significant and hard skill to master. Developing the writing skill is a critical issue locally as well as internationally. Few studies have investigated the effect of practicing the writing tasks of the language institute textbooks through computer assisted language learning on the EFL learners' writing ability. Hence, the present study was an attempt to investigate whether using computer assisted language learning could have any significant impact on Iranian EFL learners' writing skill. A sample of 60 participants was selected from among 100 upper-intermediate EFL learners in 3 language institutes in Gilanegharb, and the homogenized members were divided into an experimental group (30 learners) and a control group (30 learners). Two instruments were used: An OPT test as language proficiency test and a writing task used both as the pretest and posttest. Independent-samples t-test was used to determine the difference between the writing ability of the experimental and the control group. SPSS version 21 was used for the data analysis. Results of the study showed that using computer assisted language learning had a significant impact on Iranian EFL learners' writing ability. The study had implications for language teachers, learners, materials developers and policy makers.

**Key words:** Automatic, CALL, Microsoft Word Office, word processor, writing Proficiency, writing tasks.

---

### 1. Introduction

Writing is generally evaluated as a significant and hard skill to master. According to Unzueta (2009), even language teachers in America complain about it since their students "have restricted written work capacities and battle to compose organizations that pass on their musings and thoughts" (p.1). Writing appears to have various definitions for various individuals keeping to suit their distinctive needs and purposes for writing. Graham (1997) distinguished four indispensable areas in the process of writing including: (1) knowledge of writing and writing topics, (2) ability for producing and crafting text, (3) forms for stimulating and motivating learners to write with enthusiasm, and (4) guiding thought and actions by strategies to archive writing objectives.

Although technology has proved to be a useful tool in motivating the students and helping them in the process of language learning, teachers and students hesitate to use it in classroom setting (Maftoon, Hamidi, & Sarem, 2012). In the recent decades, computer assisted language learning materials have benefited a quick development in from extremely basic text gap-filling tasks and programming activities to very complicated interactive tools and multimedia applications (Hamilton, 2015). New technology has tended to also find a way in language teaching like other fields of educations (Lu, 2008; Thornton & Houser, 2005). Changes in technology and society have altered and will continue to alter the ways in which we use language to communicate and to think. Students must be prepared to meet these demands.

Writing is considered as a problematic area for many language learners including native speakers of English. Developing the writing skill is a critical issue locally as well as internationally. One of the reasons Iranian EFL learners' have a low accomplishment in writing is not using appropriate procedures and reasonable strategies to teach this skill. The utilization of poor instructing approaches has negative effect on the learners English proficiency generally and their writing ability specifically. According to Graham (2006), language learners who do not learn to write efficiently are at a disadvantage during their education. To avoid such undesirable outcome, English language teachers and educators are urgently required to look into this issue and use writing teaching techniques and methods that may help Iranian EFL learners improve their writing skill. Few studies have investigated the effect of practicing the writing tasks of the language institute textbooks through computer assisted language learning on the EFL learners' writing ability. Hence, the present study was an attempt to find an answer to the following research question:

- Does using computer assisted language learning have any statistically significant impact on Iranian EFL learners' writing skill?

The significance of conducting this study was enhancing opportunities for language learners to practice and develop writing across the curriculum through CALL. Students cannot develop the skills and knowledge required for efficient writing unless they have the opportunity to write frequently. As noted by Zelman and Daniels (1988), lack of writing practice is "probably the single greatest reason for American students' dismal performance in writing" (p. 21).

## **2. Review of the Related Literature**

### **2.1 Computer Assisted Language Learning**

Computer Assisted Language Learning (CALL) is one of the approaches that has been beneficial in the field of language teaching. According to Levy (1997, p. 1), computer-assisted language learning is "the search for and study of applications of the computer in language teaching and learning". It is a novel method to language learning and teaching in which materials are presented and practiced by through the computer technology. As a language teaching and learning approach, computer technology is used in CALL to present, practice, reinforce, and assess learning materials (Richards & Schmidt, 2010). It should be noticed that CALL software are all used to help facilitate language teaching and learning and they cannot be a replaced with the teacher. Davies (2012) asserts "technology has to be treated as an aid and not as a panacea". Anyway, teacher presence is yet vital in language learning environments and a CALL program can be used as a teacher aid. According to Slattery and Kowalski (1998), there are two movements in Computer Assisted Language Learning. The first movement began in 1980s and early 1990s regarding using word processors to improve writing quality and even motivation which learners faced with the new writing and typing system. The second one refers to computer-mediated communication (CMC) appearing with the arrival of Internet and the hypertext role which connected a related text to numerous texts so that

learners can electronically communicate with each other.

## 2.2 Related Studies

Al- Haq and Al- Sobh (2010) assert that writing is “an important communicative language skill” (p.189). In their idea, “it is an activity that requires a mental effort to ‘think out’ the sentences and the ways of joining them to be meaningful and communicative” (p.189). Actually, “writing development involves changes that occur in children’s strategic behavior, knowledge, and motivation” (Harris, Graham, & Mason, 2006, p. 295). This skill is often taught with the objective of helping students use writing in higher education or for occupation purposes. “There is no doubt that writing is the most difficult skill for second language learners to master” (Aminzadeh & Molaesmaeli, 2009, p.59). Additionally, according to Yunus, Salehi, and Nordin (2012), “of all the four language skills, ESL learners often find writing a daunting task owing to its complexity” (p.138). Additionally, “since effective writing instruction involves providing individual feedback on multiple drafts per student, it is extraordinary time-consuming” (Warschauer & Ware, 2006, p.2).

Less recent studies on writing through using CALL focused on two aspects: development of word processing skills in learners and using text-based followed by graphic organizers for supporting the writing process. Pennington (2004) holds that in word processing studies indicated positive effects regarding writer attitudes, text quality, text length, and quantity and quality of revisions in some cases and word processing is currently used by everyone virtually for composing. Spell checkers and grammar checkers were proposed in as beneficial tools for improving second language writing.

Several studies have covered the effect of CALL or technology on different aspects of language learning and teaching. Al- Haq and Al- Sobh (2010) also indicated that “writing through CALL should not be thought of as only a productive skill. It is rather a three-stage process (pre-writing, writing, and rewriting)” (p.190). Kargozari and Ghaeme (2010) studied the effect of using online courses through websites and results showed a significant difference between the writing ability of the experimental and the control groups. As a result of web-based instruction, the experimental group made more achievements. Biria and Jafari (2013) mentioned that a significant progress in the experimental group working in CALL pairs in comparison with the control group practicing individually.

Li (2006) studied the effect of word processing on the writing of students of English as a second language (ESL) as well as writing assessment. Advanced English proficiency Chinese speakers living in Toronto participated in the study. The results of the study showed that participants noted more to higher order thinking activities during assessing their written texts in the computer session and they significantly revised more at most computer levels. Their computer-generated essays gained higher scores in argumentation compared with the hand-written ones.

## 3. Method

### 3.1 Design of Study

The design of the present study was quasi-experimental with pre-test and post-test design. In this study, the participants were divided into two groups of experimental and control. In other words, the researchers tried to control the primary differences between the two groups by the randomly selecting and assigning the participants. The researchers aimed to study the impact of using computer assisted language learning on Iranian upper-intermediate EFL learners’ writing skill. The control group included 30 male and female learners taught through traditional writing approaches while the experimental group involved 30 male and female learners taught by Computer Assisted Language Learning using Microsoft Word Office software.

### 3.2 Participants

The participants were from 100 upper-intermediate EFL learners in 3 language institutes in Gilanegharb. They had been studying English as foreign language for 2 to 5 years. They were randomly selected and were exposed to the Oxford Placement Test (OPT) as the language proficiency test. In general, the OPT test was administered to the 100 EFL language learners out of whom 60 were selected as the homogeneous members. Those learners whose scores were measured one

standard deviation above and below the mean were selected as the sample participants. The sample covered both male and female EFL language learners aging from 17 to 27. There were 40 female and 20 male learners. The 60 participants were divided into an experimental group (30 learners) and a control group (30 learners).

### 3.3 Instrumentation

In order to meet the objective of the study and collect reliable data, three instruments were used for this research. The Oxford Proficiency Test was used in order to determine language learners' level of language proficiency in order to have homogenized participants. All parts were in the form of multiple choice questions. The test is developed to assess the use of language in real life. OPT is based on the communicative approach to learning English while considering the need for accuracy. As for content, the test requires understanding public notices and signs, reading and understanding of short written texts incorporating factual information, understanding of grammar as utilized to express language notions such as time, space, possession, etc. The test has proved to be quite reliable in an Iranian context (Hamidi, 2015). It included 60 items and the time allotted was 30 minutes. It was given to 100 language learners in three language institutes. Learners with the highest and lowest scores were discarded, but learners whose marks were at the same level (based on the guideline of the test) were chosen.

To assess the language learners' writing progress and ability, a series of writing tasks were required. The researchers use the writing tasks of the New Interchange book series. In both the experimental and the control group, they were provided with tasks and assignments to write paragraphs having at least 150 words. Students were given topics and tested on their ability to respond by giving and justifying an opinion, discussing the topic, summarizing details, outlining problems, identifying possible solutions and supporting what they write with reasons.

### 3.4 Procedure

The OPT was first administered to 100 upper-intermediate EFL learners in three language institute and 60 EFL learners were selected as the homogeneous learners. Those learners whose scores were measured one standard deviation above and below the mean were selected as the study sample. Next, the sample was divided into an experimental group (30 learners) and a control group (30 learners). The subjects in the experimental group received the treatment while the control group did not have the treatment. Both groups were given a writing task as the pre-test. They were asked to write a paragraph containing 100 words and the number of errors was estimated.

Throughout the term, the learners in both the experimental and control groups received teaching on writing issue including writing paragraphs by covering areas such as justifying an opinion, discussing the topic, summarizing details, outlining problems, identifying possible solutions and supporting what they write with reasons. Furthermore, learners had to write a paragraph in the class and another one as homework. The students in the control group did their writing assignments through pen and paper while the learners in the experimental group did their assignment on computer.

The control group learners were assigned to write one paragraph in the class each session. After finishing the paragraph, the teacher examined them and mentioned the problems such as inappropriate word choice, tense, article, verb form pluralization, word order, and so on. He underlined them and mentioned the correct form on the margin or somewhere on the paper. Also, learners did a paragraph at home and the teacher provided corrective feedback later.

Meanwhile, the experimental group learners used computers for writing the paragraphs. Microsoft Word Office as a word processor software gave automatic feedback to the learners while practicing for aspects such as grammatical structures, vocabulary, tense, verbs, etc. Also, the learners prepared one paragraph in class and one as assignment at home. The teacher provided feedback considering grammar, diction, organization, content on the learners' writings. The assignments done at home were also corrected by the teacher in the class next session. At the end of the semester, the same writing task used as a pretest was used as the post-test. Independent-samples t-test was used to determine the difference between the writing ability of the experimental and the control group. SPSS version21 was used for the data analysis.

## 4. Results and Discussion

The initial participants were given the OPT test in order to have homogenized members based on their general English language proficiency. The descriptive statistics of the OPT is shown in Table 1.

Table 1

*The Descriptive Statistics of the OPT Test*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
OPT	100	40.00	60.00	50.2943	4.73241	21.956
Valid N (listwise)	100					

Table 1 shows the descriptive statistics for the OPT. According to Table 1, the mean and the standard deviation of the participants were 50.29 and 4.73 respectively. Out of 100 participants, 60 were considered as homogenous upper-intermediate level members based on their scores of OPT ranging from 47 to 57. The 60 homogenized participants were randomly assigned into 2 groups of experimental and control each having 30 learners. In the next step, the researcher proves that the two groups were homogeneous before the treatment begins.

The research hypothesis of the present study was as follows:

H0: Using computer assisted language learning does not have any significant impact on Iranian EFL learners' writing skill.

The two experimental and control groups were compared on their writing pretest task in order to prove their homogeneity. Table 2 below indicates the test of normality.

Table 2

*The Test of Normality for the Writing Pretest of the Two Groups*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cont-Pretest	.196	30	.011	.879	30	.002
Exp-Pretest	.204	30	.002	.883	30	.003

The Shapiro-Wilk normality test result indicates a non-normal distribution of the data for the two sets of scores (Sig<.05). Hence, Mann-Whitney U test would be the suitable test for mean comparison. Table 3 shows the descriptive statistics of the two groups.

Table 3

*Descriptive Statistics for the Pretest of Control and Experimental groups*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
ContPretest	30	2.00	5.00	3.5610	1.03724	1.067
ExpPretest	30	2.00	5.00	3.5944	.95321	.920
Valid N (listwise)	30					

The mean scores of the control and the experimental groups are 3.56 and 3.59 respectively.

Table 4

*The Result of the Mann-Whitney U Test for the Comparison of the Control and the Experimental Groups*

	Pretest-Scores
Mann-Whitney U	434.000
Wilcoxon W	915.000
Asymp. Sig. (2-tailed)	.898

Table 4 demonstrates the homogeneity of the two groups in terms of their writing ability before starting the treatment ( $sig = .898, P > .05$ ). Next, the posttests writing scores of both the control and the experimental groups were compared. Table 5 below shows the result of test of normality.

Table 5

*The Test of Normality for the Writing Posttest*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cont-Posttest	.196	30	.005	.904	30	.012
Exp-Posttest	.196	30	.005	.904	30	.015

The analysis by the Shapiro-Wilk's test of normality indicates a non-normal distribution of the data for the two sets of scores ( $Sig < .05$ ). Thus, the proper test to be used for mean comparison was the Mann-Whitney U test.

Table 6

*The Descriptive Statistics for the Writing Posttest of the Control and the Experimental groups*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Cont-Posttest	30	2.00	6.00	4.2441	1.07670	1.168
Exp-Posttest	30	3.00	8.00	5.3374	1.267991	1.541
Valid N (listwise)	30					

The mean and standard deviation of the control and the experimental groups are 4.24, 1.16 and 5.33, 1.54 respectively.

Table 7

*The Result of the Mann-Whitney U Test for the Comparison of the Writing Posttest Scores*

	Posttest-Scores
Mann-Whitney U	261.000
Wilcoxon W	732.000
Z	-2.839
Asymp. Sig. (2-tailed)	.002

As the result of the above Table shows on the posttest, the experimental group had significantly higher writing performance than the control group,  $Sig = .002, P < .05$ . Therefore, we reject the null hypothesis and conclude that using computer assisted language learning has a significant impact on Iranian EFL learners' writing ability.

The present study was an attempt to investigate whether using computer assisted language learning could have any significant impact on Iranian EFL learners' writing skill. 60 participants were randomly divided into an experimental group and a control group and the experimental group received the treatment that was practicing writing through computer assisted language learning. After the post-test, the results of the data analysis showed that the experimental group had significantly higher writing performance than the control group. Language learners using CAL corrected more errors and gained more knowledge on how to write more efficiently than those learners that use paper and pen for writing.

The results of our study was consistent with [Ziani and Mazdayasna \(2014\)](#) who examined the impact of Computer Assisted Language Learning (CALL) on the development of EFL learners' writing abilities and found that computer based instruction help students to improve their writing skills. Their received automatic feedback through Microsoft Word Office along with the teacher's comments and suggestions on writing tasks activated their linguistic competence, common sense, and logic to correct their own errors. Also, our results are supported by [Niazi and Pourgharib \(2013\)](#) who studied the effects of E-mail on improving EFL learners' writing skill and found using E-mail beneficial for improving learners writing skill.

Our findings were also in line with the findings of the following studies. Carter (1997) stated that the emergence of faxes, e-mail communications, and word-processed texts has changed the ways in which written language can be used to keep interpersonal interaction among different interlocutors in their cultural, social, and learning context. Quan-Hasse et al. (2005) asserted that the introduction of computer technologies including the Internet, e-mail, chat, into educational environments has helped learners to communicate information, ideas, and their feelings without any time or space limitation. Likewise, Zhao (2006) noted the application of the Internet and stated that internet provides people with novel social contacts outside the real context.

## 5. Conclusion

In our study, the use of CALL for improving EFL learners' writing ability provided some benefits for both teachers and learners. For instance, teacher burn-out decreased as the computer automatically corrected some of the errors. Language learners gained more autonomy and self-efficacy since they were less dependent upon their teacher and working with the computer did not have the affective filters hindering their language achievement.

The findings of the present study would be useful for language teachers to use CALL learning and teaching strategies as an alternative approach in teaching writing to EFL learners. Teachers can provide their learners with tasks to practice writing through CALL. Additionally, policy makers can provide CALL-based discourse programs with more opportunities and guidelines for both teachers and learners to achieve higher efficiency in their teaching and learning through CALL. The result of this study provides insights for material developers and syllabus designers for using CALL in language teaching programs.

The present study had some limitations which can be investigated by further research. For instance, it only concentrated on upper-intermediate proficiency level. The number of the participants was limited to 60 due to time limitations for collecting data and carrying out the treatment. Thus, the generalizations made in the study may not be applied to all proficiency levels and larger populations.

## References

- Al-Haq, F. A., & Al-Sobh, M. A. (2010). The effect of a web-based writing instructional EFL program on enhancing the performance of Jordanian secondary students. *The JALTCALL Journal*, 6(3), 189-218.
- Aminzadeh, R., & Molaesmaeli, E. (2009). Writing improvement through collaborative e-mailing. *Journal of Teaching English as a Foreign Language and Literature*, 1(2), 59-73.
- Biria, R., & Jafari, S. (2013). The impact of collaborative writing on the writing fluency of Iranian EFL learners. *Journal of Language Teaching and Research*, 4(1), 164-175.
- Carter, R. (1997). *Investigating English discourse*. London: Routledge.
- Davies, G., Rendall, H., Walker, R., & Hewer, S. (2012). *ICT4LT Module 1.4, Introduction to Computer Assisted Language Learning (CALL)*. Retrieved from [www.ict4lt.org/en/index.htm](http://www.ict4lt.org/en/index.htm).
- Graham, S. (2006) Writing. In A. Alexander & P. Wine (Eds.), *Handbook of educational psychology* (pp. 457-477). Mahwah, NJ: Erlbaum.
- Hamidi, H. (2015). *Research in applied linguistics*. Retrieved from <http://www.iranelt.com/index.php/introduction-to-research-methods>.
- Hamilton-Cobb, F. D. (2015). *I wanna text, too! Examining how low-literate adults use new communication technologies and applications* (Unpublished doctoral dissertation). North Carolina State University.

- Harris, K.R., Graham, S., & Mason, L.H. (2006). Improving the writing, knowledge, and motivation of struggling young writers: Effect of self-regulated strategy development with and without peer support. *American Education Research Journal*, 43(2), 295-340.
- Kargozari, H. R., & Ghaemi, H. (2010). Web-based writing instruction and enhancing EFL learners' writing quality. *Turkish Online Journal of Distance Education-TOJDE*, 12(3), 23-35.
- Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford: Oxford University Press.
- Li, J. (2006). The mediation of technology in ESL writing and its implication for writing assessment. *Assessing Writing*, 11(1), 5-21.
- Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Learning*, 24, 515-25.
- Maftoon, P., Hamidi, H., & Sarem, S. N. (2012). The effect of CALL on vocabulary learning: A case of Iranian intermediate EFL learners. *Broad Research in Artificial Intelligence and Neuroscience*, 3 (4), 19-30.
- Niazi, F., & Pourgharib, B. (2013). The effect of using email on enhancing Iranian intermediate EFL learners writing proficiency. *International Research Journal of Applied and Basic Sciences*, 4(11), 3531-3539.
- Pennington, M. (2004). Electronic media in second language writing: an overview of tools and research findings. In S. Fotos & C. M. Browne (Eds.), *New perspectives on CALL for second language classrooms* (pp. 69-92). Mahwah, NJ: Lawrence Erlbaum.
- Quan-Hasse, A., Cothrel, J., & Wellman, B. (2005). Instant messaging for collaboration: A case study of a high-tech firm. *Journal of Computer Mediated Communications*, 10(4), 120-121.
- Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). Britain: Pearson Education Limited.
- Slattery, P. J., & Kowalski, R. (1998). On screen: The composing processes of first-year and upper-level college students. *Computers and Composition*, 15, 61-81.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, 21(3), 217-228.
- Unzeta, C. (2009). *The use of computer graphic organizer for persuasive composition writing* (Unpublished doctoral dissertation). Florida International University.
- Warschauer, M., & Ware, P. (2006). Automated writing evaluation: Defining the classroom research agenda. *Language Teaching Research*, 10(2), 1-24.
- Yunus, M. M., Salehi, H., & Nordin, N. (2012). ESL pre-service teachers' perceptions on the use of paragraph punch in teaching writing. *English Language Teaching*, 5(10), 138-147.
- Zemelman, S., & Daniels, H. (1988). *A community of writers: Teaching writing in the junior and senior high school*. Portsmouth, NH: Heinemann.
- Zhao, S. (2006). Do internet users have more social ties? A call for differentiated analyses of internet use. *Journal of Computer Mediated Communications*, 11(3), 844-862.
- Ziani, A., & Mazdayasna, G. (2014). The effect of Computer Assisted Language Learning (CALL) on the development of EFL learners' writing skills. *Procedia-Social and Behavioral Sciences*, 98, 1975-1982.