

THE IMPACT OF COMPUTER-ASSISTED FEEDBACK ON THE IRANIAN EFL LEARNERS' TRANSLATION ABILITY AT INTERMEDIATE LEVEL

***Shayeste Shahmoradi¹ and Babak Niasti²**

Graduated Master of TEFL, Department of Education Office, Tonekabon

University of Medical Sciences, Babol

**Author for Correspondence*

ABSTRACT

The current study was done to see the effectiveness of applying computer-assisted feedback on the Iranian EFL learners' translation ability at intermediate level. To see if any change has occurred for both groups between their pretest and posttest separately, two ANCOVA were calculated. The results of the ANCOVA calculation showed that the EG group benefitted from computer-assisted feedback. Finally, in order to compare the performance of experimental and control groups in the post-test, first their gain scores were calculated, then the gain scores of experimental as well as control groups were compared using an Independent T-Test. The average of the scores in the Experimental group was meaningfully higher than the control group ($p < 0.00$). Thus, the outcome of this study is that applying computer-assisted feedback has positive effect on the Iranian EFL learners' translation ability at intermediate level.

Keywords: *Computer-Assisted Feedback, Translation Ability, EFL Learner*

INTRODUCTION

CALL takes place in many different places in addition to classrooms; in fact, it may happen more in homes, libraries, and computer cafés than informal education contexts. It happens at different times and in different economic, cultural, political, social, and linguistic realms that embody different understandings, goals, and standards. CALL research currently does not address these differences in context well. CALL learners and teachers can be involved in all kinds of different tasks, from writing essays to communicating in distance courses. Task content, structure, and organization can have a major impact on learner achievement, as can the instructions given for how to carry out the task, the structure and make up of learner groupings to carry out the task, and the expected task outcomes. As technology develops and computer facilities become more widely available, the role of the computer in both delivering and mediating feedback has become more visible in practice and research. Partly driven by the rapid advance of educational technologies and partly by a marked increase in the provision of distance courses and on-line research supervision, students now often find themselves reading feedback on their electronically submitted paragraph essays which has been produced by an unseen tutor, by their peers, or by the computer itself. Nor is computer feedback restricted to distance students, as learners increasingly exchange texts and comments with each other and with teachers through computer networks in writing workshops. Precisely how computers are used, however, largely depends on the underlying assumptions that teachers hold about literacy and language learning (Warschauer, 2002), and we must always bear in mind that computers are tools and not a single instructional method. In feedback and the research which explores its diversity and effectiveness.

Theoretical Framework

Warschauer (1996) pointed out CALL had existed for about 40 years and undergone a series of stages that were directly connected to both the levels of advancement of the technological means and the type of methodology prevalent at each stage. He mentioned that CALL advances have affected language teaching and learning at various points in the computer history. CALL stages are categorized into four distinct phases: Behaviouristic CALL, Communicative CALL, Integrative CALL, and Interactive CALL. First, Warschauer & Healey (1998) stated that Behaviouristic CALL was based upon behaviouristic theories of learning dominant in the 1960s. The authors argued that Learning was based upon observation and

Research Article

abstraction of input entering the brain and on the resulting output. They mentioned that CALL in that phase focused on repetitive language exercises like drill-and-practice for which the computer was used as a vehicle for delivering instructional materials to learners (Warschauer, 1996). Communicative CALL was based on cognitive theories, as learning was a creative process of expression and development. According to Warschauer, this stage was identified as personal computers existed allowing greater possibilities for individual work. By the end of the 1980s, many educators felt that the computer was not living up to its potential. That is, the computer was seen as marginal and used in a disconnected manner (Kenning & Kenning, 1990). However, researcher analysed the capabilities of communication environments brought about by new computer technology and Computer-mediated Communication (CMC). According to Warschauer (1996) the Integrative CALL, the third phase, emerged in the last decade from two important technological developments, multimedia computer technology and the Internet. Multimedia technology includes text, graphics, sound, animation, and video. It also utilizes hypermedia (i.e., electronic links) that allows multimedia resources to be linked together, enabling learners to navigate their own path by pointing and clicking a mouse. There are many advantages to using hypermedia for language learning such as the creation of a more authentic learning environment because listening is combined with seeing (Warschauer, 1996) and the ability of hypermedia to address varying degrees of students' ability (Blake, 1998). Language skills were easily integrated because the four skills – listening, speaking, reading, and writing – can be combined into a single activity. A major advantage of hypermedia is that it facilitates focusing on content or meaning without sacrificing a focus on language form or learning strategies (Warschauer, 1996). The use of multimedia may involve an integration of skills such as reading and writing, but it does not always involve what Warschauer considered a more important type of integration – meaningful and authentic communication in all aspects of the language learning curriculum. Levy (1997) described the two models of CALL teachers presented by Ahmad, Corbett, Rogers, and Sussex (1985). Ahmad ['s] approach focuses on developing an accurate model of the individual learner, whereas in Farrington's example the whole class is interacting with the computer, thus subordinating the goal of accommodating the needs of the individual learner" (p. 101). In addition, the emergence of the Internet created a new role for the teacher. This role requires the teacher to know and do more in order to select appropriate materials, and to design tasks for which the learners will use the computer. In this context, the teacher is a facilitator and an organizer of language learning projects assigned to the students.

Statement of the Problem

The process of translation has aroused much discussion and debate and continues to do so. Many linguists as well as translation theorists have attempted to describe and explain the process of translation. In seeking to achieve this, many models of translation have been proposed, their common denominator being the translator as a mediator between a source language writer and a target language reader. However, although these models represent a treatment which surpasses the traditional approaches to translation, they are either too theoretical or limited in their scope. Moreover, they tend to be inclined toward one or the other of the main approaches to translation: SL-oriented, or TL-oriented translation. Translation, in this study, will be considered as a complex process of communication. Hence, we shall attempt to present and analyze each phase of the process of translation and describe the various interactive operations involved in it. The representation of the process will be set up on the basis that translation is a multidisciplinary activity. The aim is to arrive at a comprehensive understanding of the process of translation. Most definitions of translation describe an aim being sought from translation. Others are instructions on how to translate, or a list of factors that should be taken in to consideration when translating. Mounin (1976), for example, suggests that to translate is not only to respect the structural or linguistic meaning of a text but also the global meaning of the message including the environment, the period, the culture, etc. In brief, it seems that definitions differ from one another in certain aspects. While some definitions present the aim of translation, others describe the profession itself, the translator as a mediator in a communication process, or consider the general aspect of interlingual transfer. The present study is concerned more with the process of translation itself. Hence, we shall consider translation as a

Research Article

mediation and as a complex interlingual transfer. We do not intend to give a new definition to translation, for any definition is bound to be limited in its scope. The researcher in this study seeks to find the effectiveness of applying CALL on translation of Iranian Intermediate EFL learners.

Significance of the Study

This study attempts to investigate the effect of computer-assisted feedback on Iranian EFL learners' translation ability at intermediate level as a supplementary tool, on teaching translation to learners. This may be beneficial for Iranian EFL learners for different reasons. Firstly, the study would be useful for Iranian translation studies learners as the different applications of the computer-assisted feedback help them improve their translation skills. Students can be exposed to various technical functions that may help them check and correct their translation errors by themselves, which motivates them to practice their translation in flexible learner-centered environments whenever and wherever they want. Instead of learning translation skills from a textbook, such a technical-instructional aid may enhance students' motivation in developing their skills. Secondly, the findings of this study may be helpful for translation teachers in Iran in understanding the real supportive roles of the CALL method experienced in this study in the teaching translation process.

Research Question and Null Hypothesis

The study aims to answer the following major research question:

Q1: Does Computer-assisted feedback affect Iranian EFL learners' translation ability at intermediate level?

H₀₁: Computer-assisted feedback does not affect Iranian EFL learners' translation ability at the intermediate level.

Research Design

This study adopted a Qusi-experimental design. A pretest of translation was administered to both EG (Experimental Group) and CG (Control Group). Then the EG participants had the advantage of computer-assisted feedback whereas the participants in the CG could only benefited their English to English dictionary and the English to Persian Dictionary. At the end of the semester a posttest was administered to both EG and CG.

Subjects

The researchers' total population was Translation students in Ramsar Islamic Azad University. By an SPT (solution Placement Test) the researcher selects 30 intermediate learners who were homogeneous based on the SPT scales. The researcher then randomly divided them into two EG and CG groups. Each group consisted of 15 participants.

Materials

ISPT (Solution Placement Test)

SPT (solution Placement Test) was employed in this study for homogenizing the participants groups. For the purpose of this study the researcher needed 30 homogeneous intermediate EFL learners at Ramsar Islamic Azad University.

Translation Pretest and Posttest

The researcher with the help of two assistant professors constructed two parallel translation tests which functioned as pretest and posttest. These two tests were made reliable before they were administered to the participant groups.

Procedures

Applying SPT (solution Placement Test) the researcher of this study selected 30 intermediate homogeneous participants. These participants were then randomly divided into two EG and CG groups. A pretest of Translation was administered to both EG (Experimental Group) and CG (Control Group). Then the EG participants had the advantage of being treated by computer assisted feedback whereas the participants in the CG could only benefited English to English dictionary and the English to Persian Dictionary. At the end of the semester a posttest was administered to both EG and CG. To see if any change has occurred for both groups between their pretest and posttest separately, two Ancovas were calculated. Finally, in order to compare the performance of experimental and control groups in the post-

Research Article

test, first their gain scores were calculated, then the gain scores of experimental as well as control groups were compared using an *Independent T-Test*.

Procedure

The data obtained from hypothesis testing of the study would be analyzed via calculating a t-test between the post – tests of Translation scores of the experimental and the control groups of the study and two ANCOVAS (Analysis of covariance) between the pre – tests and post – tests of the experimental and control group of the study to see any progress happened from pre – test to the post – test or in fact during the treatment period.

RESULTS AND DISCUSSION

Data Analysis and Findings

Descriptive Analysis of the Data

This section presented the descriptive analysis of the obtained data of this research. So, the researcher used the SPSS (Statistical Package for Social Science) Software. Table (4.1) showed the descriptive analysis for the pre and pos of the control group of this study.

Table 4.1: Descriptive Analysis of the Data of the Control Group of the Study

	N	Range	Min	Max	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Preco	15	11.00	7.00	18.00	13.0000	.76842	2.97610	8.857
Postco	15	9.00	9.00	18.00	15.2000	.64881	2.51282	6.314
Valid N (list wise)	15							

According to table (4.1), the total number of participants (N) was 15 in the pretest and posttest of the control group. The minimum score or the smallest score for pretest was 7.00 but the minimum score for posttest was 9.00 but the maximum score or the largest score for the pretest and posttest of the control group was 18.00. The mean score for the pretest and posttest of the control group has been shown as 13.0000 and 15.2000 respectively. The Standard Deviation has been calculated as 2.97610 for the pretest and 2.51282 for the posttest, that is the average deviation of all scores from the mean score of the pretest and posttest was 2.97610, and 2.51282 respectively. The variance for the pretest scores was 8.857 and for the posttest scores, 6.314. The valid N has been shown as 15 which referred to the number of non-missing values of the control group, that is, all the participants in the control group participated in the research. The descriptive analysis of the pretest and the posttest of the experimental group have been shown in table (4.2): Table 4.2 Descriptive analysis of the data of the Experimental group of the study:

Table 4.2: Descriptive Statistics

	N	Range	Min	Max	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
PreEx	15	10.00	7.00	17.00	11.9333	.78962	3.05817	9.352
PostEx	15	7.00	13.00	20.00	15.8000	.62640	2.42605	5.886
Valid N (listwise)	15							

Research Article

According to table (4.2), the total number of participants (N) has been 15 in the pretest and posttest of the Experimental group. The minimum score or the smallest score for the pretest was 7.00 but this value was 13.00 for the posttest. Also, the maximum score for posttest was 20.00 while this value for pretest was 17.00.

For the standard deviation obtained for the experimental group, there sounds to be more variability among the pretest of Translation scores than the scores in the posttest of the Translation. This may be present that the participants' posttest scores being more homogenous after presenting the treatment of the study. There were 15 participants and there has been no missing value which means that all participants participated in the experiment of this study.

Inferential Analysis of the Data:

This section focused on the inferential analysis was conducted through using SPSS (Statistical Package for Social Sciences) Software from which the independent Sample-t-test and also two ANCOVAs were calculated and indicated in tables (4.3) , (4.4) ,(4,5) respectively.

Table 4.3: The T-Test Result of the Study

t-Test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Translation	Equal Variances Assumed	3.004	28	.006	2.40000	.79881

According to the table (4.3) indicates that the t-test results of the study between the posttest scores of the both experimental and control groups of the study. The observed t value was calculated to be 3.004. The degree of freedom (df) was 28.

The level of significance (sig.2-tailed) was calculated as to be .006 which has been used in calculating the data for the rejection or support of the hypothesis of the study. The mean difference was shown as 2.40000, that is, the difference between the mean scores of the post-tests of the control group and the experimental group of this study was calculated as 2.40000.

The next inferential analysis of data in this study was indicated to be the degree of covariance between the pretest and the posttest of Translation in both the experimental and control groups of the study:

Table 4.4: Covariance Analysis of the Control Group of the Study
Tests of Between-Subjects Effects (Dependent Variable: Posttest Score)

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	69.750(a)	1	69.750	48.619	.000
Intercept	20.777	1	20.777	14.483	.002
pretestco	69.750	1	69.750	48.619	.000
Error	18.650	13	1.435		
Total	3554.000	15			
Corrected Total	88.400	14			

a R Squared = .789 (Adjusted R Squared = .773)

Research Article

Table 4.5: Covariance Analysis of the Experimental Group of the Study
Tests of Between-Subjects Effects (Dependent Variable: Posttest EX)

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	62.968(a)	1	62.968	42.126	.000
Intercept	49.050	1	49.050	32.815	.000
pretestEX	62.968	1	62.968	42.126	.000
Error	19.432	13	1.495		
Total	3827.000	15			
Corrected Total	82.400	14			

a R Squared = .764 (Adjusted R Squared = .746)

According to table (4.4 & 4.5), the covariance between the two sets of pretest and posttest scores in the experimental group is 48.619 and 42.126 in the control group of the study. This means that the scores of experimental group is higher than the control, so the experimental group has undergone a progress compared to the control group whose score is lower than the experimental group. Thus, it can be concluded that the experimental group worked better than the control group because of being treated with traditional method of teaching.

Results of Hypothesis Testing

In this part, the results of testing the hypothesis of the study have been presented and explained in detail the rejection or support of the hypothesis. Before the hypothesis of the study was rejected or supported, it was repeated below:

H₀: Computer-assisted feedback does not affect Iranian EFL learners' translation ability at the intermediate level.

First of all, according to the Descriptive analysis of the given data and based on the table (4.1), (4.2), the mean scores of the pretest and posttest of the control group was 13.0000 and 15.2000 and for the experimental group was 11.9333 and 15.8000 respectively. So, these two tables showed that there was no significant change in the mean scores of the Control group, but this change was very significant in the mean scores of the experimental group and it is an evidence for rejection of the hypothesis. In addition to, the results of the T-Test, table (4.3), showed that the observed t value was calculated by the SPSS was 3.004 (t observed = 3.004) while the critical t value determined on the basis of considering df and the 2-tailed significance level of 0.05 (p=0.05) (Appendix f) was 2.048. So, the observed t value was higher than the critical t value and high enough to reject the null hypothesis of the study. Also, it was presented in the table (4.3), the level of significance for two-tailed value calculated by the SPSS to be .006. This value was less than 0.05 (based on the SPSS regulations) and it confirmed the rejection of the hypothesis. It could be concluded that there was a statistically significant difference between the mean scores of the posttests of the control group and experimental group. There is no chance for calculating the difference between the means of the posttests of the study, so it shows that computer assisted feedback affected on Iranian EFL learners' Translation. According to the table (4.4 & 4.5), it was shown that the rejection of the hypothesis of the study by indicating the experimental group participants' progress from pretest to the posttest of the study. The covariance value between the pretest and posttest scores in the experimental was higher than of the control group this meant that computer assisted feedback has affected the Iranian EFL learners' Translation. Also, the covariance value between the pretest to the posttest scores in the control group was lower than that of experimental group. This meant that posttest scores of Iranian EFL learners' Translation were close to the pretest scores in the control group.

Discussion and Conclusion

At first it was hypothesized that applying computer assisted feedback in teaching Translations does not affect Iranian intermediate EFL learners' knowledge of Translations but the current study represented that applying computer assisted feedback could have a positive impact on Translation learning and as a result the Null hypothesis was rejected. This result received support from the data analysis represented in

Research Article

chapter 4. Results indicated that Translation significantly improved following this intervention. The initial proposition supporting CALL research was that inherent in technology was the ability to change tasks, environments, and outcomes, so CALL needed to be investigated differently. A more recent and more theoretically grounded view is that computer tools, particularly Internet support for computer-mediated communication (CMC), give us different opportunities than afforded by other tools, and we need to approach them as something that we do not currently understand.

The result of this study is basically in line with some studies on CALL. According to Williams (2005), if the use of the computer software is carefully modeled, it can offer students both assistance and autonomy in the writing process. Furthermore, Milton (1997) suggested the use of computer programs to serve the aim of the autonomous development of writing skills, particularly for EFL writers. According to the Pennington (2004), much research concerning the relationship between CALL and L2 writing focuses on specific technology, mainly word processors for composing and/or revising text, spell checkers and grammar checkers for correcting text, and e-mail and the Internet for sending text electronically. Applications have been developed to promote collaborative writing and computer has been co-opted by language instructors for this purpose. Recognizing that authentic writing requires an audience, language instructors use a variety of computer-based options for publishing student work. Initially, this was done using word processing and dedicated publishing software to create and format print publications. According to the BLake (2008), In present learning environments, marked by an increasing use of technology, many ESL instructors can be wary of the computers, smart Boards, and other similar pieces of technology that are making their way into second language (L2) classrooms. However, research has shown that computer-assisted language learning (CALL) is beneficial to L2 learners, especially when it comes to their written productions.

REFERENCES

- Al-Seghayer K (2001).** The effect of multimedia annotation modes on L2 vocabulary acquisition: A comparative study. *Language Learning and Technology* **5**(1) 202–232.
- Beauvois M (1997).** High-tech, high touch: From discussion to composition in the networked classroom. *Computer Assisted Language Learning* **10**(1) 57–69.
- Biesenbach-Lucas S & Weasenforth D (2001).** E-mail and word processing in the classroom: How the medium affects the message. *Language Learning and Technology* **5**(1) 135–165.
- Blake R (2000).** Computer mediated communication: A window on L2 Spanish Inter language. *Language Learning and Technology* **4**(1) 120–136.
- Bogdan RC & Biklen SK (1998).** *Qualitative Research for Education: An Introduction to Theory and Methods* (3rd edition), (US, Boston: Allyn & Bacon).
- Chapelle C & Jamieson J (1989).** Research trends in computer assisted language learning. In M. C. Pennington (edition), *Teaching Language with Computers* 48–59 (LaJolla, CA: Athelstan).
- Cifuentes L & Shin YC (2001).** Teaching and learning online: A collaboration between U.S. and Taiwanese students. *Journal of Research on Technology in Education* **33**(4) 456–474.
- Clark RE (1983).** Reconsidering research on learning from media. *Review of Educational Research* **53**(4) 139–153.
- Daedalus Group, Inc. (1988).** *Daedalus Integrated Writing Environment* [Computer software], (Austin, TX).
- Erdner R, Guy R & Bush A (1998).** The impact of a year of computer assisted instruction on the development of first grade learning skills. *Educational Computing Research* **18**(4) 369–386.
- Handle C & Corl K (1998).** Extending the dialogue: Using electronic mail and the Internet to promote conversation and writing in intermediate level German language. *CALICO Journal* **15**(1–3) 129–141.
- Kern R (1995).** Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *Modern Language Journal* **79** 457–476.
- Künzel S (1995).** Processors processing: Learning theory and CALL. *CALICO Journal* **12**(4) 106–113.
- Lewin C (2000).** Exploring the effects of talking book software in UK primary classrooms. *Journal of*

Research Article

Research in Reading **23**(2) 149–157.

Li Y (2000). Linguistic characteristics of ESL writing in task-based e-mail activities. *System* **28**(2) 229–245.

Liu M, Moore Z, Graham L & Lee S (2002). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990–2000. *Journal of Research on Technology in Education* **34**(3) 250–273.

Long M & Robinson P (1998). Focus on form: Theory, research, and practice. In C. Doughty & J. Williams (edition), *Focus on Form in Classroom Second Language Acquisition* 15–41, (Cambridge, UK: Cambridge University Press).

Lynch L, Fawcett AJ & Nicolson RI (2000). Computer-assisted reading intervention in a secondary school: An evaluation study. *British Journal of Educational Technology* **31**(4) 333–348.

Mellon CA (1999). Technology and the great pendulum of education. *Journal of Research on Computing in Education* **32**(2) 28–35.

Meskill C, Mossop J & Bates R (1999). *Electronic Texts and Learners of English as a Second Language*, (Albany, NY: National Research Center on English Learning and Achievement). (ERIC Document Reproduction Service No. ED436965).

Motiwalla L & Tello S (2000). Distance learning on the Internet: An exploratory study. *Internet and Higher Education* **2**(4) 253–264.

Postman N (1990). *Informing Ourselves to Death*. Paper presented at the meeting of the German Informatics Society. Stuttgart. Available: <http://world.std.com/~jimf/informing.html> [Accessed November 8, 2002].

Rudestam KE & Newton RR (2001). *Surviving your Dissertation: A Comprehensive Guide to Content and Process* (2nd edition), (Newbury Park, CA: Sage).

Salaberry R (1996). A theoretical foundation for the development of pedagogical tasks in computer mediated communication. *CALICO Journal* **14**(1) 5–34.

Salomon G (2000). *It is not just the Tool, but the Educational Rationale that Counts*. Invited keynote address at the 2000 Ed-Media Meeting. Montreal, Canada. Available: <http://construct.haifa.ac.il/~gsalomon/edMedia2000.html> [Accessed July, 2002].

Sengupta S (2001). Exchanging ideas with peers in network-based classrooms: An aid or a pain? *Language Learning and Technology* **5**(1) 103–134.

Stoll C (1995). *Silicon Snake Oil: Second Thoughts on the Information Highway*, (New York: Doubleday).

Strauss AL & Corbin J (1998). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, (Newbury Park, CA: Sage).

Sullivan N & Pratt E (1996). A comparative study of two ESL writing environments: A computer-assisted classroom, and a traditional oral classroom. *System* **24**(4) 491–501.

Surry DW & Ensminger D (2001). What's wrong with media comparison studies? *Educational Technology* **31**(4) 32–35.

Swain M (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In C. Madden & S. Gass (edition), *Input in Second Language Acquisition* 235–253, (Rowley, MA: Newbury House).

Talbott LS (1995). *The Future does not Compute: Transcending the Machines in our Midst*, (Sebastopol, CA: O'Reilly & Associates).

Underwood JD (2000). A comparison of two types of computer support for reading development. *Journal of Research in Reading* **23**(2) 136–148.

Wolcott HF (1994). *Transforming Qualitative Data: Description, Analysis, and Interpretation*, (Thousand Oaks, CA: Sage).