Eğitimde Kuram ve Uygulama
Journal of Theory and Practice in Education
ISSN: 1304-9496

Articles /Makaleler
2015, 11(1), 346-358

USING WORD PROCESSOR AS A TOOL TO ENHANCE THE TEACHING OF WRITING IN A TURKISH EFL CONTEXT: AN ACTION RESEARCH*

(TÜRK EFL BAĞLAMINDA YAZMA ÖĞRETİMİNİ İYİLEŞTİRME ARACI OLARAK KELİME İŞLEMCİ KULLANIMI: BİR EYLEM ARAŞTIRMASI)

Cevdet YILMAZ[1]
Kemal ERKOL [2]

ABSTRACT
The present study attempted to explore the effects of using word processor as opposed to the traditional paper and pencil on the development of Turkish EFL learners' performance in essay writing. Being an action research in nature, the main task in this study was to identify the progressive changes on writing brought about by the introduction of word processing. The sample of the study consisted of two groups: the experimental group which engaged in writing via word processor, and the control group which studied the same skill through the handwritten method. Several computer-based activities included checking errors, checking grammar and using word count to facilitate student writing in the experimental group. It was found that the participants in the experimental group outperformed those in the control group, suggesting that the implementation of word processor in writing helped improve students' performance in writing in comparison with that of the handwritten method. Moreover, the results derived from the questionnaire indicated that word processing served as a tool for assisting learners in developing positive attitudes towards writing. The pedagogical implications for the study suggest that tailoring the writing instruction with computer to students' writing needs will lead to better learning outcomes in writing.

Keywords: Writing, action research, word processors. process writing

ÖZET
Bu çalışma İngilizceyi yabancı dil olarak öğrenen Türk öğrencilerin kompozisyon yazma konusundaki performanslarını değerlendirmede geleneksel kağıt kaleme karşın kelime işlemci kullanımının etkilerini araştırmayı amaçlamaktadır. Bir eylem araştırması olarak, çalışmanın ana amacı kelime işlemci programlarının beraberinde getirdiği değişiklikleri tanımlamaktır. Çalışmanın örneklemi iki gruptan oluşmaktadır. Deney grubu çalışmalarını kelime işlemci ile kontrol grubu ise çalışmalarını el yazısı metodu ile yapmıştır. Hata kontrolü, dilbilgisi kontrolü, kelime sayısı belirleme gibi bilgisayar temelli aktiviteler deney grubundaki öğrencilerinin yazılarını desteklemiştir. Deney grubundaki öğrencilerin kontrol grubundakilerden daha başarılı oldukları ve kelime işlemci kullanımının elle yazmaya göre öğrencilerin performansını arttırmaya yardımcı olduğu bulunmuştur. Ayrıca anketten alınan sonuçlar öğrencilerinin kelime işlemci kullanımına karşı olumlu bir tutuma sahip olduğunu göstermektedir. Çalışmanın pedagojik etkileri olarak, öğrencilerin ihtiyaçları doğrultusunda yazma öğretiminde düzenlemeler yapmanın daha iyi sonuçlar elde edileceğini göstermektedir.

Anahtar Kelimeler: Yazma, eylem araştırması, kelime işlemci, yazma süreci

---

* Bu makale 15-17 Mayıs 2014 tarihlerinde Çanakkale'de gerçekleştirilen 8. Uluslararası İngiliz Dili Eğitimi Araştırmaları konferansında sözlü bildiri olarak sunulmuş ancak konferans bildiri kitabında yer almamıştır.

[1] Doç. Dr., Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi, cyilmaz@comu.edu.tr
[2] Okutman, Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi, kerkol@gmail.com

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

INTRODUCTION

Writing is mostly characterized as a basic communication skill and a unique asset in the process of acquiring a second language. It would be mistaken to assume that writing is a one-way process. In addition to improving the underlying skills inherent in writing, it facilitates general English proficiency. Certainly there is more to the critical role of writing in foreign language teaching and learning. Hedge (2000) views writing as a process of thinking and discovery. Potentially, this process involves a number of activities: setting goals, generating ideas, organizing information, selecting appropriate language, making a draft, reviewing it, then revising and editing. According to Raimes (1987), writing has also a variety of certain pedagogical purposes such as reinforcement, training, imitation, communication, fluency and learning. As Scarcella and Oxford

(1995) point out, writing in a foreign language provides room for the learners thereby improving their grammatical, strategic, sociolinguistic, and discourse competences in target language.

Much of the debate on the teaching of writing has largely focused on the issue of whether to adopt a product writing style or a process writing style in the process of teaching writing. In traditional writing classes the focus is on the end product whereasprocess writing classes value developing a text gradually from beginning to the end. According to Raimes (1983) the teaching of writing has moved away from a concentration on the written product to an emphasis on the process of writing. Maybin (1999) expresses that process writing shifts the focus from the finished product to the process which pupils need to go through as writers. According to Nunan (1999) the process approach concentrates on the creation of the text, rather than on the end product. To make it clear Nunan (1999) also mentions that one can get closer to perfection through producing, reflecting on, discussing, and reworking successive drafts of a text. Ur (1996) states that the process writing is to study how people write, how a writer thinks, feels and acts at the various stages of composing a text.According to White and Arndt (1991), the process approach is aimed at helping the learner to develop a set of skills. Zamel (1983) states that writing involves the exploration of ideas and thought in the process of putting them on paper and the selection of the most appropriate words to express exactly what one wishes to say.

In the writing process learners do not move on a straight line. At some point on the process writing route students can go back and check and revise their ideas. So process writing is a recursive way. The writers can circumnavigate around their texts and do the necessary changes. Learners should organize their ideas in order to create a well-balanced text.

On the other hand, as Hedge (2000: 302) puts it, this is a complex process which is neither easy nor spontaneous for many second language writers. Given the requirements of academic courses taught in ELT Department at Çanakkale Onsekiz Mart University, tackling EFL writing at advanced level appears to be one of most challenging areas for the majority of students who have to pass most of the courses

in English. A study (Aydın, 2010) conducted in Turkish ELT context sought to investigate students' attitudes towards writing in English. The results of the study revealed students' dissatisfaction with their writing competences. The study found that the negative attitudes towards writing were mainly attributed to the writing instruction which is neglected during the language processes at primary and secondary schools. Among the other factors were exam-oriented classes and grammar- and reading-based textbooks.

In an effort to cope with the problems facing the majority of ELT students in writing, utilizing computer, especially word processor in student writing becomes increasingly commonplace. According to Darus and Ismail (2008), students rely on computer technology to complete their writing assignments and word processor helps them to revise their composition very easily so that they do not have to rewrite the entire composition to revise it. The word processor is one type of software that is introduced by computer assisted language learning (CALL). Brierly and Kemble (1991) describe it as the most enabling and beneficial of all the computer software which can be used for editing texts, and checking and correcting writing errors. Practically, seven major applications for the word processor in writing are indicated: formatting, cutting and pasting, insertion and deletion, search, editing up, editing down, editing across.

Over the last decade, research on word processing by native and non-native writers has been growing. The body of research that has been undertaken pinpoints word processing's potential to produce positive effects in students' writing. Pennington (1993) classified the positive effects into the areas of quality of written work, writing activity, revision behavior, and affective/social outcomes. Evidence of positive effects that word processing has on the quality of written work comes from studies reporting higher holistic ratings of student compositions (Sommers, 1985; Williamson & Pence, 1989). It follows that the research on word processing demonstrates positive effects related to revision behavior of student writers. Moreover, the studies on the use of word processing demonstrate a variety of affective/social outcomes with regard to computer use. These involve holding positive attitudes towards writing and reduced writing apprehension (Akyel&Kamıslı, 1999; Bruce & Chadwick, 1989; Neu&Scarcella, 1991).

In a study conducted by Owston, Murphy &Wideman (1992) some possible effects of word processing on students' writing quality and revision strategies were examined. At the outset, students were asked to compose two expository papers on similar topics, one paper using the computer and the other by hand. When students were writing on the computer, electronic videos were taken of a subsample of students. Papers written on computers were rated significantly higher by raters on all four dimensions of a holistic/analytic writing assessment scale. Analysis of the screen recording data revealed that students continuously revised at all stages of their writing.

Alternatively, action research among the other research methods turns out to be an effective means of examining how word processing actually works in classroom setting. Being an action research in nature, the main task in this study

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

was to identify the progressive changes on writing brought about by the introduction of word processing. To this end, we need to frame the process of action research as well as its accompanyingsteps.

Action research is becoming increasingly prominent in the literature of research methodology. It was adapted by many educators such as Carr and Kemmis (1986), who described it as follows:

> Action research is simply a form of self-reflective enquiry undertaken by participants in order to improve the rationality and justice of their own practices, their understanding of those practices and the situations in which the practices are carried out. (p. 162)

As a type of classroom-based research, it is aimed at identifying, recognizing and solving the specific problems in an academic context by bridging the gap between theory and practice. Action research commonly orients towards making changes involving certain phenomena, situation, case or programs. Most writers using action research agree that it is "cyclical process" rather than a onetime event (Nunan& Bailey, 2009).

PURPOSE AND RESEARCH QUESTIONS

The purpose of this study is to investigate the impact of word processor on the improvement of Turkish EFL learners' performance in writing. The following two research questions were addressed:

1. Do the students who use word processor during process writing in their writing classes outperform those who use traditional paper and pencil?
2. What are the subjects' attitudes in the experimental group towards employing computer-aided writing?

METHODOLOGY

Setting

This study was conducted at Çanakkale Onsekiz Mart University at the school of foreign languages prep classes. Students who will study English teaching or English literature are required to pass an English proficiency exam after they are enrolling in university. If the students are successful they do not have to attend the prep class. If not, students have to attend the prep class to improve their English knowledge and skills. These skills cover reading, listening and speaking, basic English (grammar) and writing.

At the university entrance exam, students' grammar, vocabulary and reading are tested, but listening, speaking and writing are not tested. In preparing for exam, it is thought that students do not allocate time for acquiring these skills as they presumably consider it as a waste of time. For this very reason students who are willing to study at ELT or ELL departments appear to lack these skills. At the prep class students take 26 hours a week 4 hours of which are writing. The other skills are composed of 8 hour-basic English, 7 hour-reading and 7 hour-speaking and listening.

Participants

The participants of this study are 44 prep class students at the school of foreign languages. 23 of them are studying ELT and 21 of them are studying ELL. All the participants were computer literate and they knew how to use computer. It is acknowledged that they were familiar with computers and word processors as they had already taken a computer lesson during high school. For this reason, prior to the study no training on how to use word processor is given.

Design

The study was primarily designed as an action research. Nunan (1992) proposed a well-established action research cycle which is quite simple and clear. For the purposes of the current research, the underlying steps of the action research in the study were adapted from Nunan's (1992, p. 19) action research cycle as follows:

Table 1. Action Research Cycle

Stages of AR	Description
Problem identification	The researcher observed the problem involved in the use of writing skills effectively by asking them write a simple essay.
Preliminary Investigation	Interviews with students confirmed the researcher's observations
Hypothesis	The researcher designed activities to overcome the problem concerning essay writing and postulated a hypothesis that the emerging writing problems can be reduced and thus the quality of writing can be enhanced
Plan intervention:	The ongoing regular classroom activities were interrupted and a new treatment which is word processing in this case was introduced
Take action and observe outcomes	The researcher evaluated the change brought about by the implementation of word processing in the process of writing composition.
Reflect on outcomes	As part of the post research activity, the researcher shares ideas about the findings of the study which mark a considerable progress of students' writing skills in writing composition.

The study aims to address the question "Do the students who use word processor during process writing in their writing classes outperform those who use traditional pencil and paper?" An experimental design was constructed in order to explore this research question. Participating students coming from different classes were randomly assigned to either control or experimental group. The data for this study were collected during 2012-13 academic year in the spring term. This study lasted for three weeks.

Prior to the study, each group was given a pre-test as to find out whether there were significant differences between experimental group and the control group with regard to the level of proficiency in writing skills. In the pre-test the

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

participants were asked to produce a paragraph which contains 150- 200 words. The investigators trained two teachers to rate the students' writing using the scoring profile developed by Jacobs et al. (1981). This is an analytic instrument that has four-point scales for assessing five dimensions of writing-*content, organization, vocabulary, language use and mechanics.* In order to check the test reliability, it was repeated on the same groups after two weeks. It was found that the reliability correlation coefficient of the pre-test was .78 which is considered high statistically.

Following the pre-test, while the experimental group made the greater use of computer in writing paragraphs, the control group relied solely on traditional pencil and paper style. During the data collection period the experimental group carried out all the tasks in process writing with the help of computer.

At the beginning of the writing process, the participants in the experimental group engaged in the pre writing in which they gathered ideas by using listing (brain storming) technique. Following that, they produced an outline of their papers. In the outline part they determined their topic sentence and worked on major and minor supporting details. Next step was writing down the rough draft. When they finished it they sent it to their peers through internet for peer check. The peers checked each other's rough drafts in accordance with the "peer check list" on their course books and supplied feedback. After getting feedback from their peers participants wrote a second draft. Participants sent their second drafts to their teacher through e-mail. These soft copy second drafts were checked by the teacher by using analytic scale and necessary feedback was provided. Following the teachers feedback, participants revised, edited and polished their papers and handed in to their teachers electronically. The same process writing steps were taken by the control group when writing with traditional pencil and paper. As the post-test, participants were asked to write 150-200 word compare and contrast paragraph The post tests were scored by using the same marking scale used for pre-tests and the papers were marked out of 100.

To answer second research question of the study which is aimed at examining students' attitudes towards writing with computers, a questionnaire was designed. The questionnaire consisted of 22 items. Most of the items in the questionnaire were adopted from various sources (Cunnigham: 2000; AbuSeileek: 2006), but they were modified to suit the present study. A pilot study was conducted to check the suitability of the items in the questionnaire. To ensure the reliability of the questionnaire, Cronbach's alpha was found to be .82 which is statistically high.

FINDINGS AND DISCUSSIONS

RQ1. Do the students who use word processor during process writing in their writing classes outperform those who use traditional paper and pencil?

Quantitative Analysis on Pretest and Posttest Results

The pretest scores of the two groups were compared using the independent *t*-test. From the data below (Table 2), the Levene's Test for equality of variances shows F = .518 and p = .47, proving that the variance of the groups was equivalent. Moreover, the result also reveals *t* = .792 ,df = 90, and p = .43, demonstrating that the two groups did not differ significantly, but were homogenous.

Table 2. Results of the Levene's Test for Equality of Variances

	F	Sig	*T*	Df	Sig (2-tailed)	95% CI lower	upper
Equal variance assumed	.518	.476	.792	90	.433	-.21092	.4831
Equal variance Not assumed			.792	73.558	.433	-.2112	.4838

Significant at a confidence level of p<0.05 (2-tailed)

Based on the results above, it can be assumed that the samples of both groups were equal in their reading proficiency levels prior to the intervention. To answer the first research question, the means of the pretest and posttest scores were compared. Afterwards, independent *t*-test was employed to provide statistical verification.

Table 3. Posttest Scores between the Experimental and Control Groups

	Group	N	Mean	SD	SE	*t*	df	Sig (2-tailed)
Posttest	Experimental	22	42.72	.455	.097	3.334		42
	Control	22	38.60	.351	.074	.002		

Significant at a confidence level of p<0.05 (2-tailed)

These independent *t*-test results show that the mean for the posttest scores for the control group was 38.60, and the mean for the experimental group was 42.72, with a difference of 4.12 (Table 3). The result in Table 3 (*t* = -3.334, df = 42, and p = .002) shows that there was a significant difference in the mean for the posttest scores between the control group and the experimental group.

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

Table 4. Independent Sample Test Results on Posttest Scores

Levene's Test for Equality of Variances			*t*-test for Equality of Means				
Post test	F	Sig.	t	df	Sig	95% CI	
						lower	Upper
Equal variance assumed	5.281	.027	3.334	42	.002	.16149	5.8284
Equal variance Not assumed			3.334	39.438	.002	.16101	5.8779

Significant at a confidence level of $p<0.05$ (2-tailed)

To this effect, as can be seen from the table above, with the help of the word-processor-based facilities, the subjects in the experimental group achieved higher scores on the writing test (mean=42.72) than their counterparts in the control group did (mean=38.60). These findings appear to be consistent with the previous studies which reported that the computer was an effective tool for promoting the skills of writing (Cohen and Riel, 1989; Mills, Cononelos and Oliva, 1993; Hulstijn, 2000).

R.Q2. What are the subjects' attitudes in the experimental group towards employing computer-aided writing?

Table 5. Percentages and Mean Scores of the Questionnaire

NO	ITEMS	PERCENTAGES					MEAN
		TOTALLAY DISAGREE	DIGAGREE	NEUTRAL	AGREE	TOTALLAY AGREE	
20	I can see the total amount word I wrote with "word count" on computer	x	x	x	22,7	77,3	4,7727
22	I can send my paper to my teacher online and get feedback.	x	x	x	34,1	65,9	4,6591
18	It is easier to make corrections on the computer	x	2,3	6,8	22,7	68,2	4,5682
21	I can check my papers with "spelling and grammar checker" on the computer.	x	4,5	x	29,5	65,9	4,5682
19	My paper is more organized when I write on the computer.	x	6,8	4,5	27,3	61,4	4,4318
11	I can make my changes very easily when I write on the computer.	x	11,8	6,8	22,7	59,1	4,2955

8	I pay more attention to spelling when I write on the computer.	4,5	6,8	11,4	40,9	36,4	3,9773
12	I pay more attention to organization of my paper when I write on the computer.	4,5	13,6	6,8	31,8	43,2	3,9545
14	Writing on the computer is fun	2,3	11,4	13,6	34,1	38,6	3,9545
1	Computer helps me to write better	9,1	9,1	13,6	22,7	45,5	3,8636
16	Writing on the computer is better than hand writing.	11,4	9,1	15,9	11,4	52,3	3,8409
6	I can compare my work with my friends when I write on the computer.	4,5	11,4	13,6	38,6	31,8	3,8182
5	I pay more attention when I write on the computer.	4,5	13,6	13,6	36,4	31,8	3,7727
15	I pay more attention to mechanics when I write on the computer.	4,5	18,2	6,8	38,6	31,8	3,7500
17	Writing on the computer motivates me	4,5	22,7	15,9	20,5	36,4	3,6136
3	I am careful with my grammar when I write on the computer.	9,1	15,9	15,9	31,8	27,3	3,5227
7	I pay more attention to word choice when I write on the computer.	9,1	13,6	18,2	45,5	13,6	3,4091
9	I am less worried when I write on the computer.	6,8	15,9	34,1	22,7	20,5	3,3409
10	I can write longer when I write on the computer.	4,5	31,8	18,2	25	20,5	3,2500
4	A lot of ideas come into my mind when I write with computers.	11,4	25,0	34,1	20,5	9,1	2,9091
2	I spend more time on computer compared to hand writing	29,5	34,1	11,4	18,2	6,8	2,3864
13	I am worried when I write on the computer.	31,8	43,2	15,9	6,8	2,3	2,0455

x=not answered

As a follow-up to the findings in the experimental study, the questionnaire above was administered to explore the attitudes of the participants in the experimental group. Statistically, mean scores and percentages of each item were calculated and listed from the lowest to the highest. Since all the participants are computer literate and make extensive use of computer outside of the classroom, as is taken for granted, this previous experience with the use of computer facilitated the works in writing class. The overall scores illustrated in table 5 above reveal that nearly most of the students in the experimental group reported to hold positive attitudes towards computer use in the classroom. Below are the data of the selected items from the questionnaire which are intended to account for the participants' general attitudes towards writing with computers.

Given the statistical ordering of the items in the questionnaire regarding their mean scores, the item 20 has the highest mean score with 4.77. In the writing assignments students are required to produce paragraphs which necessitate the use of certain amount of words. Imposing constraints on the number of words in writing is likely to inhibit the students' potential to extend the existing ideas that they want to convey through writing. In response to the role of computers in displaying the exact number of written words, most of the students agreed that "word count" helps them a lot in writing as they can actually see how many words they have written.

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

The second highest score of the questionnaire is the item 22 involving the statement "I can send my paper to my teacher online and get feedback" with mean score of 4,65. 65 % of the participants totally agreed and 34.1 % agreed with this item. Students felt that they can get valuable feedback from their teachers online, which is likely to be a convenient way of providing teacher supervision. As such, the provision of feedback for student writing may help create a sense of co-operation between teacher and students as well as among the subjects in a non-threatening atmosphere. Such an atmosphere, as Gu (2002) asserted, would enhance motivation for working and willingness to learn collaboratively.

Most of the participants in the study (91 %) believed that the word processor was an effective device which helped them make corrections on the computer. None of the participants strongly objected to this view and only 2.3 % of the participants disagreed. The findings prove that computer enables students to gain an easy access to their work when they engage in making immediate corrections in their writings. As such, the item 21 in the questionnaire sought to determine a further function of computer serving as "spelling and grammar checker" in writing.65.9 % of the participants stated that they can check their papers with "spelling and grammar checker" on the computer and only 4.5 % of the participants stated that they do not make use of "spelling and grammar checker. "This makes it clear that writing with computers assists students in having an easy access to a huge amount of linguistic information thereby incorporating the sub-skills of writing such as grammar, spelling and punctuation. George, Bourret, and Nelson (1992) found that students were amazed at the amount of linguistic information made available to them by the computer, and were happy about the ease of finding and incorporating information, using computer-aided facilities.

In the case of making changes on the computer, it was found that 81.8 % of the participants held positive attitudes towards the use of computer as it helped them make changes very easily while writing on the computer. When these outcomes are considered in conjunction with the previous findings it should be pointed out that, as Owston, Murphy and Wideman (1992) expressed, writing on computers seems to foster an ongoing process of revision of previously-written material (p. 270).

On the other hand, the lowest scores in the data underline negative polarity items which are in fact indicative of positive attitudes. Regarding the item 13, 75 % of the subjects agreed that they were not worried when writing on the computer. Only 2.35 % reported to get worried while writing on the computer. With 63.6 %, subjects pointed out that they did not spend more time on computer compared to hand writing. This makes it clear that computers can ideally replace hand writing with a view to making effective use of time in the process of writing composition.

For the item 4 with mean score of 2.9, participants expressed that computer did not make much difference in generating ideas. Interestingly, 70 % of the participants agreed that a lot of ideas did not come into their minds when writing with computers while almost 30 % reported making gains in producing ideas through writing instruction with computers. This leads us to focus not only on the

advantage of using computers to handwritten methods but also on the quality and quantity of students' writing.

It must be pointed out that the results of the present study are compatible with many studies (Abuseileek, 2006; Cunningham, 2000; Pennington, 1993) which demonstrated that writing with computer is conducive to the development of writing skills, and learners have a strong tendency towards using computer in writing.

CONCLUSION

The present study attempted to explore the effects of using word processor as opposed to the traditional paper and pencil on EFL learners' essay writing. The study was designed as an action research as it proved suited for the study the main objective of which was to bring about improvements in student writing. The findings of the study revealed that word processor had a considerable effect on the process of the teaching and the learning of writing. It was found that the participants in the experimental group outperformed those in the control group, suggesting that the implementation of word processor in writing helped improve students' performance in writing in comparison with that of the handwritten method. Moreover, the results derived from the study indicated that word processing served as a tool for assisting learners in developing positive attitudes toward writing.

Throughout the action research cycles, it is observed that using computers with the writing lessened the workload of the students by means of word processors' word count and grammar checker features. In addition, it became noticeable that given the effective use of computer with writing, a growing sense of co-operation was built up between teacher to students and students to students in classroom setting.

Finally, it can be concluded that the findings suggest considerable pedagogical implications for the ELT classroom in Turkish context, as the results illustrated that the applications of word processing in writing course led to a noteworthy improvement in students' writing skills. To maximize the learning outcomes in writing, teachers should come to grips with word processing techniques in their own writing classes where the students in some writing classes are still subject to the constraints of handwritten method.

REFERENCES

Akyel, A., & Kamisli, S. (1999). Word processing in the EFL classroom: effects on writing strategies, attitudes, and products. In M. C. Pennington (ed.), Writing in an electronic medium: research with language learners (pp. 27-60). Houston, TX: Athelstan.

AbuSeilek, A.F., (2006) The use of word processor for teaching writing to EFL learners in King Saud University. *Journal of eductional Sciences and ıslamicstudies, 19, 1-15.*

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.

Brierley, B., & Kemble, I. (1991). *Computers as a tool in language teaching.* New York: Ellis Horwood.

Carr, W., & Kemmis, S. (1986). *Becoming critical. education, knowledge and action research*. Lewes: Falmer.

Cononelos, T., & Oliva, M. (1993). Using computer network to enhance foreign language/culture education. *Foreign Language Annals, 26,* 234-252.

Cohen, M., & Riel, M. (1989). The effect of distance audiences on students. *American Educational Research Journal, 26*(2), 143-159.

Cunningham, K. (2000). Integrating CALL into the Writing Curriculum. *The Internet TESL Journal (http://iteslj.org/Articles/Cunningham-CALLWriting), 6* (5).

George, N., Bourret, R., & Nelson, R. (1992). Computer-aided writing: An emerging field. *T.H.E. Journal (Technological Horizons in Education), 20*(1), 73-80.

Gu, P. (2002). Effects of project-based CALL on Chinese EFL learners. *Asian Journal of English Language Teaching, 12,* 195-210.

Hedge, T. (2000). *Teaching and learning in the language classroom*. Oxford: Oxford University Press.

Hulstijn, J. (2000). The use of computer technology in experimental studies of second language acquisition: A survey of some techniques and ongoing studies. *Language Learning & Technology, 3*(2), 32-43.

Jacobs, H. L., Zinkgraf, S.A., Wormouth, D.R., Hartfiel, V. F., & Hughey, J. B. (1981). *Testing ESL composition: A practical approach.* Rowely, MA: Newbury House.

Maybin , J. (1999). Teaching writing process or genre. In Bridley, S. (1999). (ed) Teaching English. New York: Open University press.

Neu, J., & Scarcella, R. (1991). Word Processing in the EFL Writing Classroom. In P. Dunkel (Ed.), Computer-assisted Language Learning and Testing: Research Issues and Practices. New York: Newbury House.

Nunan, D., & Bailey, K.M. (2009). *Exploring second language classroom research.* Boston: Heinle.

Nunan, D. (1999). *Second language teaching and learning.* Boston Massachusetts: Heinle&Heinle.

Nunan, D. (1992). *Research methods in language learning.* Cambridge, CUP.

Pennington, M. (1993). Exploring the potential of word processing for non-native writers. *Journal of Computers and the Humanities, 27* (3), 149-163.

Raimes, A. (1983). *Techniques in teaching writing.* Oxford: Oxford University press.

Owston, R.D., Murphy, S., & Wideman, H.H. (1992). The effects of word processing on students' writing quality and revision strategies. *Research in the Teaching of English, 26*(3), 249-276.

Sommers, N. (1982). Responding to student writing. *College Composition and Communication, 33,* 148-156.

Ur, P. (1996). *A course in language teaching: Practice and theory.* Cambridge University Press

White, R., & Arndt, V. (1991). *Process writing.* Longman

Williamson, M. M., & Pence, P. (1989). Word processing and student writers. In B. K. Britton & S. M. Glynn (Eds.) (1989). *Computer writing environments: Theory, research, and design.* (pp.93-127). Hillsdale, NJ: Lawrence Erlbaum.

Zamel, V. (1983). The composing processes of ESL students: Six case studies. *TESOL Quarterly, 17,* 165-87.

© Çanakkale Onsekiz Mart University, Faculty of Education. All rights reserved.
© Çanakkale Onsekiz Mart Üniversitesi, Eğitim Fakültesi. Bütün hakları saklıdır.