

## Effects of Word Processing Tools on Improving Writing Skills in the Process of Learning a Foreign Language

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### Abstract

The current study aims to display descriptive information on using word processing tools to enhance writing skills in the process of learning the English language. Writing is an important skill that includes creative thinking, refining, organizing, and editing ideas to have effective communication. However, due to its artificial nature, writing is a skill that should be enhanced by means of constant practice. Therefore, it can be challenging for both native speakers and second language learners to produce a proper writing task. With the development of technology, many programs have emerged, like Ms. Word processor, Grammarly, and Google Docs which can be used to create and edit writing. Many studies discussed the advantages and disadvantages of pen-and-paper writing and computer-assisted writing. Pen-and-paper writing can positively affect the students' motor skills and cognitive development, while computer-assisted writing can improve the writing quality and skills of the learners. However, these results could be affected by, for instance, the incompetence of students using word processors.

**Keywords:** English as a foreign language writing; computer-assisted word-processing; pen-and-paper; handwriting

### Introduction

According to Wikipedia, "Writing is a medium of human communication that involves the representation of a language through a system of physically inscribed, mechanically transferred, or digitally represented symbols". In line with this definition, Dastjerdi and Samien (2011) emphasize the authenticity and interactivity functions of writing as a way to import thoughts and ideas to people. In addition, Applebee (1984) states that it is a way to collect, maintain and transfer knowledge and information Writing is one of the most required skills for effective communication which needs creative thinking, refining, and organizing ideas (Johnson, 1998; Graham et al., 2013). Assuming that writing is one of the productive skills and is considered to be unnatural compared to the other productive skill, which is speaking, it even poses a struggle to native speakers of English as it does in any language. Celce-Murcia (2001) indicates the importance of mastering writing in a second language where even many native speakers of English have problems.

Time has changed with technological improvements, and eventually, computers and machines with computing functions have become more available in the 21st century. However, writing has not changed immensely so far in this era (Stanley, 2013, p.99), as Friedman (2005) emphasizes the inevitability of information technologies' involvement in schools and in students' education life (as cited in Pamuk et al., 2013). In many countries, computers, tablets, and smartphones have become part of school equipment (Wollscheid et al., 2016; Liabo et al., 2014). Seeing the advantages of technology brought into play, many countries, including Türkiye have been studying the issue and

implemented projects such as the FATIH project which aims to revolutionize the education system in Türkiye (Pamuk et al., 2013; Kulik, 1983 as cited in Dalton & Hannafin, 2015).

Computer-assisted writing has captured the attention of language educators. Hence, the advantages, disadvantages, and restrictions of pen and paper traditional methods and computer-assisted writing with word processors have been discussed by many researchers. (Johnson, 1998; Dastjerdi & Samien, 2011; Fidaoui et al., 2010; Fox, 2014; Hadi, 2013; Notash & Mahmoodi, 2015; Russel & Plati, 2000; Sullivan & Pratt, 1996; Van Leeuwen & Gabriel, 2007; Yilmaz & Erkol, 2015). Due to the fact that technological reforms are one of the fundamental improvements in the education system in the 21st century, most countries introduced technology integration programs in their education systems. (Cakiroglu et al., 2012; Wu et al., 2008). In coordination with this integration, technological changes drive the use of word processing to monitor accuracy in writing with the help of word processors (Hetzroni & Shrieber, 2015). Thus, the importance of using technology in English language classrooms, especially using word processors become inevitable and necessary in today's language classrooms.

In tune with Ms Word, Grammarly as one of the Computer-Aided Error Analysis programs is regarded as the most effective solution for assisting teachers and students in conducting Error Analysis. Grammarly helps language learners in checking sentences that include grammatical errors. The study conducted by Vidhiasi and Haryani revealed the result that Grammarly does not function equally in finding semantic errors, although it is easy to detect errors like spelling and punctuation (Vidhiasi & Haryani, H. 2021).

Zhou et al. (2012) stated that Google Docs is also an effective tool through which Language learners are able to work on a text in collaboration. Users of this application can simultaneously edit a task they are working on. As is constantly highlighted the importance of collaborative work among students, students should be directed to use Google Docs which creates an enjoyable atmosphere where each student can express their ideas or thoughts about the structure of the text.

Karyuatry et al. (2018) implemented three-cycle action research with 40 students to observe whether the tool, Grammarly, has an effect on improving the students' writing skills. The research data were collected by three instruments, i.e., interviews, students' essays, and questionnaires. At the end of the implementation, 32 students out of 40 students achieved passing grades. In light of these results, the researchers concluded that Grammarly could be used as an appropriate tool to minimize errors and improve students' writing quality.

### ***Literature review***

Fidaoui et al. (2010) intended to find the effectiveness of using a computer to develop writing. Their aim was also to find out if computer usage would positively affect the motivation of students. The study involved 48 students from a Lebanese elementary school, whose ages ranged between 9 to 10 years old. All of the participants' families gave consent for their children to take part in the study. The study lasted three months. Data were collected through interviews, observations, group interviews, and questionnaires. Observations indicated that these students were motivated by the use of a computer while performing certain tasks. Both group and individual interviews showed that the use

of computers and word-processing tools to help students complete their writing tasks was positive. In fact, questionnaires found that 68% of the students had a positive view of technology assistance. While students' computer skills and inadequate resources were considered to be drawbacks in classrooms, the research indicated that the use of computers facilitated the writing process noticeably.

In addition, a study led by Collins et al. (2013) examined the writing of scientific papers with a computer. Accepting the use of digital media could improve writing abilities; this research was a large-scale study. It involved 538 native English speakers, English-speaking subjects who were fluent in English, and limited English-proficient students from 4 different experiment schools and also 3 control schools. They were assigned to write a scientific essay at the beginning of the school year and one towards the end of the school year. Despite the fact that the analysis included students with diverse proficiency levels, the results indicated that the use of laptops for writing has its advantages in all skills that are required to write a scientific essay, which was grammar accuracy, spelling, length of the essay, and better organization. Additionally, the research showed that improvement could not occur in a short time. All things considered, the results showed that the advantages of writing with a computer could not be ignored even in elementary school students whose English proficiency level differs from one another.

While Fidaoui et al. (2010) mentioned the significant limitations of computer-assisted writing in their research, Kohler (2015) focused his research on the advantages of computer-assisted writing versus pen-and-paper writing, which proved advantageous to mention. Kohler (2015) in his study emphasized that computers, mobile technologies, and the web are changing the manner in which individuals write these days. Through this perspective, he needed to see whether students' performance differed when they wrote on a computer. The study involved eight students from a college in the Midwestern United States. Essay examinations and four unique questionnaires were utilized to gather information. Students were prepared for both traditional writing (pen-and-paper) and computer-assisted writing. Researchers found an unexpected outcome in comparison to different studies which were mentioned previously. He discovered that articles that were written on paper had got higher scores than papers that were written with the assistance of computers. He bases this outcome on students' lack of information about computer-assisted writing programs. He accentuates that the more they found out about the program that was utilized in the study, the higher scores they received. Researchers recommend changing from computer-assisted writing to customary paper-based writing because of the absence of capability in writing in computer-assisted writing programs.

Another study conducted by White et al. (2015) intended to find whether fourth-grade students use computers effectively for their writing tasks. Participants were mainly from high-minority in the USA who are Black and Hispanic. The study was administered to 10,400 students in total. Students were randomly assigned two writing tasks and given 30 minutes to finish the task. Students were required to use laptops and word-processing software. After that, the papers were scored according to a certain rubric. The results showed that students got higher scores from papers that were written using word processor software than the ones written without it.

As mentioned previously, computers have been widely used in classrooms. Computers began to be utilized in classrooms around the 1980s in the USA. In America, schools were acquainted with word processing to upgrade students' writing capacities as early as the 1980s (Yaghouni-Notash, & Mahmoodi, 2015). A study conducted by Yaghouni-Notash and Mahmoodi (2015) attempted to discover the impact of computer-assisted writing in classrooms as part of students' daily life. He pointed out the importance of using digital tools, regarding computers and computer-assisted writing programs, in writing classrooms. The study was conducted with 20 students whose ages ranged from 20 to 32. They were all advanced-level students whose levels were determined by the Oxford Placement Test. Hence, the students were chosen purposively out of 100 students who were studying at an institution in Shabestar in Azerbaijan. Twenty students were first given the assignment to write a paper in a conventional technique in 60 minutes. After two weeks, students were requested to perform the same task on a computer using word processing programs for 60 minutes. Grammar and the length of the articles were analyzed. Data were gathered through these analyses and surveys. Results showed that the grammatical accuracy of the papers which were typed on computers was drastically higher than the ones that were written in the traditional way. Nonetheless, it indicated that pen and paper-created papers were longer regarding word characters. These findings showed that computer and computer-assisted writing could be of considerable assistance in improving students' writing skills.

Another study conducted to find out the advantages of computer-assisted writing was done by Yılmaz and Erkol (2015). Yılmaz and Erkol (2015) pointed out in their research that writing is one of the most challenging tasks among most of the students who are studying at the English language department at Çanakkale 18 Mart University. In their study, they expected to find the effectiveness of word processors against the conventional method, basically pen-and-paper. The experimental study which included 44 preparatory class students, who were considering studying English language teaching or English literature, was led during the 2012-2013 academic year. Data were gathered through questionnaires and analyses of writing texts which were produced both by experimental and control groups. Yılmaz and Erkol's (2015) study showed that 91% of the members indicated that a word processor was a decent assistant to making a correction on the computer, and also, students stated that computers helped them to improve their writing skills greatly. The papers' outcomes indicated that the products of the experimental group outperformed the products of the control group. To sum up, the findings indicated that by using a computer and computer-assisted writing programs, writing skills can radically be improved. Researchers suggested that educators utilize word-processing tools to expand learning in writing classrooms.

Sullivan and part (1996) also indicated that network computer technology has spread widely and has started to be used in higher education. However, there were no significant and adequate studies on the issue. Therefore, against the conventional methods, pen and paper, they wanted to find out network computer-assisted writing, writing quality, and writing performance. The study took place at the University of Puerto Rico at Mayaguez. Spanish native students who were intermediate ESL learners took part in the study. The software which was specifically designed to assist writing was chosen because it outperformed standard word processors with the capability of offering an additional message system and a chat program, which is thought to foster collaboration and interaction in the classroom. Thirty-eight students produced essays throughout the fifteen-week period. Questionnaires, discussion group recordings, and observations were implemented to collect

data. Each class finished four different writings in the study. Although the outcomes indicated that writing conditions had no impact on the advancement of writing skills, it was obvious that writing quality improved remarkably in computer-assisted classrooms. Accordingly, researchers demonstrated that utilizing computer-assisted writing in classrooms affects the writing command of students in certain aspects.

Motivation itself and motivational tools such as computers and other types of technology are important to foster writing. Van Leeuwen and Gabriel (2007) mentioned an event that they witnessed in one of their classrooms. They talked about students getting into writing class, and taking their notebooks and pencils out to write. Then, a student asked the teacher whose turn it was to use the computer; she found out that it was one of his classmate's turn, Alex, so she went and gave the good news to him. Encouraged by the good news, Alex moved to the computer and started working willingly on the writing assignment.

As in the example of Van Leeuwen and Gabriel (2007), Hadi (2013) also mentioned motivation as an indicator in writing classrooms. They found that there were a few issues regarding writing skills; low motivation to write, minimum interaction in writing, and poor writing skills are some of them. He accentuated that those issues make students tentative in writing classrooms. Along these lines, he observed his own class to perceive how computers can be beneficial to raise the enthusiasm of students. The observation took place at several Indonesian secondary schools. The researcher underlined the advantages of utilizing a computer in ESL classrooms by demonstrating that students have various chances to make a decision while writing. This research indicated that students did not only feel free to explore and develop new ideas but also wrote them flexibly on the computer. Hadi (2013) additionally expressed that writing on a computer created a more pleasant environment. Changing tasks and utilizing different properties of word processors can make writing increasingly appealing to students. He summarized it by expressing that students who were hesitant to write could profit significantly from computer assistant programs. Moreover, students can become more confident and motivated, and writing can be joyful instead of monotonous tasks for students.

Biesenbech-Lucas and Weasenforth (2001) investigated if electronic mail writing which does not have word assistance without word correction features improved academic writing skills compared to word processors. The study was conducted throughout the semester at George Washington University. Students who were placed in intermediate ESL classes were asked to write an assignment using e-mail and one using a word processor. The topics that were chosen were similar to the topics that were covered in the classroom. Students were provided with an authentic text and asked to write a reflection in class. Students then sent their products to the teachers. Hereafter, the students received another text three days later, and they were asked to use a word processor to write it. The data were collected through the analysis of the written work using a rubric. Even though the results did not indicate a significant difference between e-mail and word processors, they showed that texts written by e-mail were shorter than the text that was written on the word processor. This is an indicator that word processors are highly beneficial for the improvement of students writing skills.

## Conclusion

In spite of the reality that there are numerous studies about computer-assisted writing, there are as yet certain concerns about whether the use of computer assistance or word processors would help or damage the writing skills of English language learners (Collins et al., 2014). In this manner, it is early to make a precise assumption about the usage of computer assistance in writing. In addition, it should be emphasized that pen-and-paper writing poses advantages, especially for young learners, not only in cognitive development but also in the development of basic motor skills.

Google, as a most widely used technological tool, continues to update, improve and enhance new applications. By means of google documents, students are able to monitor themselves and their peers when working on a shared text (Vallance et al., 2010). They both learn from each other and express their own perceptions of how to edit a task.

In some research, it has been found that online collaborative writing task is undeniably encouraging since peer feedback is inevitable and has a scaffolding role. Moreover, students feel more relaxed with their peers and learn without feeling anxious. When all these pros and cons are evaluated, it can be deduced that technology is an influential tool in the process of improving writing skills (Kessler et al., 2012; Shang, 2013).

The observed problem at this point is quite a large number of teachers lack such technological knowledge. Therefore, it is highly recommended that teachers should also gain the necessary skills to be able to re-examine their courses and integrate them with technology (Morales & Collins, 2007). Integration with technology will unquestionably help their students meet their specific learning outcomes.

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