

How Grammarly® Website Influences the Iranian EFL Learners' Writing Performance

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Abstract

The current investigation was conducted to uncover the influences of the Grammarly® online website on correcting the Iranian EFL learners' writing flaws and, in consequence, improving their writing performance. The participants of this research were 30 learners studying English at the intermediate level in a private language institute, Bojnurd, North Khorasan, Iran. Being divided into two groups, the experimental group received ten sessions of treatment employing the Grammarly® website in their writing instruction, whereas the control group was given a traditional paradigm concerning teaching writing skills. In addition, two raters evaluated the writers' performances contingent upon five writing criteria: the band, writing achievement, cohesion-coherence, lexical resource, and grammatical measures. MANOVA, run as to the quantitative data, indicated a significant out-performance of the experimental group over the control group regarding the aspects of writing performance, yielding support to the effectiveness of the Grammarly® online web-based instruction. Furthermore, participants in the experimental group showed more positive attitudes than those in the control group towards the innovative instruction.

Keywords: *Grammarly® Website, Traditional Method, Web-based Method, Writing Measures*

Introduction

Language acquisition is one of the vital facets of human life (Friederici, 2011). As an English learner, individuals need to acquire the capacity to perceive and comprehend language and, at the same time, produce words, clauses, phrases, and sentences to engage in various speech communications on different occasions. By this means, all language skills, including listening, speaking, reading, and writing, are required to be learned and internalized so that language learners can build fluency and use language properly (Han, 2016; Liu, 2014; Zheng, 2010).

According to Nunan (2003), “Writing can be defined by a series of contrast: it is both a physical and mental act, its purpose is both to express and impress, and it is both process and product. The writer must imagine, organize, draft, edit, read, and reread” (p.88). In this regard, writing seems a difficult skill for most students at various levels. In a composition, writers have to follow some instructions using a range of appropriate vocabularies, paying enough attention to the spelling, punctuation, and coherence. Therefore, students still have many problems with writing, especially EFL learners. Al-Farraaq (2020) believes that “Punctuation is a symbol for writers use to make their writing easily to write. Sometimes, students are confused about where they have to put a comma, quotation, or parentheses. However, students can correct their spelling. Spelling for foreign language learners is sometimes difficult. These happen because students as foreign language learners rarely write in English” (p.38). According to Kim and Kim (2005), learning the writing process is crucial for students to evolve and learn, especially in an EFL context.

Recently, several English websites have been emerged, focusing on online language teaching. It must be noted that e-learning has got some advantages over the traditional ways of learning. As per Ghufroon and Rosyida (2018), the quick improvement of technology has led to critical changes in human existence. For example, the delivery of material can happen via any electronic media. According to Cole (2000), the delivery method of online learning enables the user to access materials from anywhere at any time. Likewise, as a form of technology, the computer has been viewed as an invention that influences all zones of human existence, including instruction, since the beginning. Nowadays, the rapid development of computer and internet technologies has made e-learning an effective learning method (Cited in Talafian & Davoudi, 2014, p. 237-238).

According to Warschauer (2007), the rapid diffusion of information and communication technology (ICT) is having a significant effect on various aspects of modern life, including writing, read-time chatting, electronic mail, and the World Wide Web, which are all contributing to new forms of written communication in the 21st century. Generally, students have faced difficulties in using a foreign language, especially in writing. The findings show that students still have problems improving their writing skills, especially employing the traditional techniques. According to Mc Donough, Shaw, and Masuhara (2013), findings regarding writing ability are generally diverse; however, numerous variables influence outcomes, such as word processing familiarity, individual writing ability, technology provision, and curriculum constraints. The latter is a crucial challenge, and teachers often analyze challenges regarding time allocation to implement a process-oriented approach in writing development with or without the aid of technology (pp.92-93). Considering the EFL context, whenever learners need language structure precision, instructors need to give either additional guidance or in-class exercises that help learners to react properly to erroneous comments (Yang, 2018). This study also emphasized how teachers could integrate technology in the classroom for developing writing performance. Nowadays, there are different approaches like the traditional method and the online one to teach writing (Boumová, 2008). By employing online web teaching, teachers can assist students in becoming autonomous writers and even successful readers. Broadly, in writing classes, students’ compositions are considered by the teachers; therefore, students can have meaningful interactions with their teacher and their classmates. Often, teachers find difficulties with students not coping with a new method or technique in the classroom; however, students can gradually adapt themselves to this issue. Do online websites have any relevance to the process of becoming a skilled writer? Many college instructors believe that it does. Therefore, the purpose of the study was to examine the possible effects of the online Grammarly® website on the writing proficiency of Iranian EFL learners. In this case, the instructor worked on two classes; the

traditional and web-based classes were both provided with paragraph-writing. The examiner provided pre-test and post-test for these two classes separately to understand how students develop their writing proficiency.

The Conceptual Framework of the Study

In order to investigate the effect of the Grammarly® website, as one of the instances of innovative educational technology, on the written performance of EFL learners, the researcher first tried to determine the conceptual framework of the present inquiry by studying computer-oriented language learning (CALL) and related theories. Before technology, learning/ teaching a language with old techniques could not address the students' issues and what they anticipated from language for a powerful correspondence (Derakhshan, Salehi & Rahimzadeh, 2015). However, with the advent of technology, students have more access to great educational resources, and teachers, using new instructional methods, have improved teaching quality. That being the case, it could be claimed that computer-assisted language learning (CALL) has made a drastic change in language teaching and learning.

According to Emeagwali (2011), students born after the 1980s are called the Internet generation since they have grown up encircled by technology and are seen to be technologically proficient in and out of the classroom (Black, 2010). Thus, teachers and educational planners should apply techniques that take advantage of this strength of modern students to raise their academic level. In this regard, Egbert and Petrie (2005) assert that "A technology use continues to expand both inside and outside the classroom can help guide learners in language use and acquisition" (pp.46-47). Similarly, Chapelle (1998) has pointed that "It is useful to view the multimedia design from the perspective of the input it can provide to learners, the output it allows them to produce, the interactions they can engage in, and the L2 tasks it supports. Because CALL software can play a role in input and interaction, it is useful to consider it as a participant in L2 tasks" (p.7). All related studies conducted up to now have acknowledged the impacts of online teaching on different aspects of English language learning. Therefore, in this study, the researcher, following in the footsteps of previous researchers, has investigated the impact of the Grammarly® website as one of the types of new technology on Iranian EFL learners' writing skills and performance.

The Literature Review

As one of the four considerable language skills, writing plays a key role in the evolution of the learning process. Although this skill is not considered seriously enough in foreign language learning institutes, learning how to express your feelings and ideas through words and expressions seems to be quite complex, challenging, and crucial. According to Graham (1982), writing is a fundamental part of the educational programs in language learning. He maintains that composed expression is an underlying medium; primary school learners need to exhibit what they have perceived and share their considerations, emotions, and convictions with others (Graham, 1982). One reason for writing complexity and difficulty could be the necessity of learning many other subskills in this process. It is noteworthy that EFL writing seems to be much more challenging than the one in ESL or native language. That is because native speakers and second language learners acquire a greater deal of vocabulary than EFL learners.

Additionally, following grammatical and punctuation rules in all phases of writing is assumed as a demand which needs to be practised and repeated a lot. In this regard, Cavaleri and Dianati (2016) accepted that many EFL learners' writings require to be grammatically edited since they

have difficulties writing English. In such cases, according to Cavaleri and Dianati (2016), utilizing materials such as online grammar checkers can be helpful. Indeed, paper-based activities mostly miss the immediate collaboration with students, but this flaw has been fixed in online grammar checkers (Cavaleri & Dianati, 2016). “ In the EFL context, where students relatively lack grammar accuracy, teachers need to provide extra instruction or in-class activities that guide students to respond appropriately to inaccurate feedback from grammar checkers” (Yang, 2018, p. 343). Writing is not an inborn ability; it is generally learned or socially transmitted as exercises in formal settings like classes or any other location. Therefore, individuals have to learn writing skills through constant practice (Myles, 2002). According to Maftoon, Birjandi, and Pahlavani (2014), learners apply word processing methods regularly. This is regarded as one of the drastic changes in writing procedures.

Intriguingly, computer appearance has changed writing to an enjoyable skill to learn and improve. Both teachers and learners can profit from this technology promotion. Learners could use computers in order to specify new materials and modern techniques. Accordingly, recent studies displayed that most learners have positive attitudes toward writing via computers networks and less apprehension-anxiety about it (Warschauer, 2007). Naturally, in learning writing skills, learners must write papers that must be checked by the teacher separately. Applying Blogger and Grammarly® Keyboard, both teachers and learners can fulfil their responsibilities more effectively (Al-Farraaq, 2020).

Meanwhile, Yang and Tang (2003) assert that the only promising point is that teachers are using web-based applications to complement their teaching process to enhance students' proficiency and maximize their participation in the learning process. Accordingly, various websites are created to help learners through the process of e-learning. For example, Grammarly® is one of the reliable websites applied for checking the accuracy of grammatical points in a piece of writing. There are many studies regarding e-learning and CALL-based education; however, except for Qasemzadeh and Soleimani (2016), there is no investigation on this topic. For instance, Alsouki (2001) checked the impact of employing computers to teach L2 composition on students' writing performance. The results showed that computer is significantly influential on learners' achievement. Accordingly, due to the continuous evolution of technology and the integration of the digital world with the physical world, students should also know more about their computerized media and its advanced content (Al-Farraaq, 2020).

In another study, Nutta (2001) researched the differences between teacher-centred grammar learning and computer-based grammar acquisition. He found the computerized method a more influential one, as learners provided more positive feedback than traditional methods. Finally, Parsa (2012) conducted a case study about the effect of Web-based discussions on Iranian female English learners' speaking skills. It was concluded that there is a significant difference between the students' performances in the experimental group who received Web-Based Instruction with those in the control group.

On the whole, it could be induced that feedback provision by both methods, namely Grammarly® Software, and teachers could significantly influence the amount of learning that happens on the part of students. As Karyuatry, Rizqan, and Darayani (2018) claimed, the use of Grammarly® can influence both learners and teachers. They add that the use of Grammarly® helped them reduce giving correction on learners' essays, and learners, as well, were deeply involved in the learning procedure. According to O'Neill and Russell (2019), Grammarly® users upload their writing tasks and obtain two scores. The first score is based on percentage accuracy, and the second is the total number of errors that the program has recognized. Then, Grammarly®

classifies the errors based on six categories: contextual spelling, grammar, punctuation, sentence structure, style, and vocabulary enhancement. As maintained by Karyuatry, Rizqan and Darayani (2018), when data were analyzed, the researchers maintained that the use of Grammarly® helps enhance students' writing quality. Those are seen from the students' writing scores, which were amended using Grammarly®, the results achieved from the questionnaires that showed the students' positive feedback using Grammarly®, and the lecturers' responses on utilizing Grammarly® for the students' writing errors. Besides, learners are more satisfied applying such a method not to receive direct feedback regularly. Instead, checking the possible mistakes via the website and then providing a correct piece of writing to the class could gain learners' confidence and add to their knowledge and experience. In order to employ all mentioned methods for improving writing skills, one needs to possess extra knowledge in addition to basic ones. One will be able to manage this new lifestyle if he/she is literate enough.

As a crucial part of the learning and teaching process, materials play an influential role in learners' understanding and performance. According to Allwright (1990), materials should be regarded as sources of teaching and learning, and they could justify the methods, ideas, and activities the teachers apply in their classrooms. He believes that materials control the teaching and learning process to a broad extent. On the other hand, O'Neill (1990) claims that materials are generally helpful for teachers and learners. Students mostly rely on their textbooks and workbooks as examples of accessible materials applied by most teachers. Students pursue the books and learn the points as they are presented in them. He also believes that materials are the central point of any teaching or learning process, and students follow the frameworks provided in the materials.

Respectively, writing is considered one of the critical language skills by almost all scholars. Researchers have constantly been looking for new ways to extend learners' knowledge and interest in this area. In this regard, finding new and modern methods such as employing computers and the Internet have been much accepted by both instructors and language learners. Finally, writing could be concluded as one of the essential forms of literacies. In the past, a person was assumed literate if he/ she was able to read and write. However, nowadays, some newer points are added to the literacy definition. For instance, technology, including a computer, CALL, the Internet, modern software, and hardware, is assumed to be part of multiple literacies. Al-Farraaq (2020) claimed that learners must be aware more of their digital media and digital content. It is vital because digital life is fast developed.

According to Chapman and Mahlck (2004), technology was first applied to share various instructions directly via radio or television. This strategy was mostly employed in developing countries in audiotaped lessons, duplicated learning aids, and broadcasts. However, technology is recently used to provide learning through the Internet or World Wide Web (WWW). This is happening to increase the means of communication and modern resources for learning. Additionally, this change has led to a drastic evolution in teachers' roles. Teachers are no more responsible for the whole learning process. They are rather assumed as a means of facilitating learning. In other words, classes are more student-centred nowadays. Learners are directly responsible for what and how they grasp the instructional procedure. Face to face instruction is not the only way anymore. Learners and teachers may need to look for some newer methods and techniques online. Books are not assumed as the only sources for them. Chapman and Mahlck (2004, p. 23) have also introduced seven ways, including "Direct instruction, online searches, especially with regards to using the web to access the curriculum and instructional guides by teachers and using the web to find and retrieve information by learners, web-based chat rooms

and online communication technology, broadcast to multiple classrooms simultaneously, and technology-based instruction as a means of delivering in-service teacher education, through which online resources are employed.” Bueno (2020), similarly, maintains that many online courses have recently employed social networking to improve students’ interactions.

In some cases, social networking platforms have been integrated into the course module to make the connection between companions and teachers trouble-free (Bueno, 2020). According to Bueno (2020), these days, due to the spread of the Coronavirus and the threat to human life, many educational institutions, such as schools and universities, are indecisive about holding classes because they do not want to endanger the health of the teachers and learners. A few colleges have decided to drop all vis-à-vis classes and have made the teachers hold online courses so that the COVID-19 does not spread more than before.

CALL is a new method of learning and teaching through which both instructors and students benefit from the modern forms of acquiring knowledge. Collis and Muir (1986) have expressed that there are fundamentally three situations regarding language instructors and CALL. Firstly, for some people, CALL is assumed a focal part in which lessons spin around computer utilization. CALL could be considered an extra material to be employed in regular classes in some others’ opinions. In conclusion, some instructors believe that modern technology does not prove to have any significant effects on language learning and teaching. They also assert that CALL is not a panacea to remedy all language learning sicknesses. CALL has its place in the classroom; however, its correct position and utilization rely on various classes’ goals and teaching methods. There are many studies regarding e-learning and CALL-based education; however, except for Qasemzadeh and Soleimani (2016), no other scholar has conducted such a search utilizing this topic. For instance, Alsouki (2001) checked the impact of employing computers in teaching L2 composition on students’ writing performance. The results showed that computer could be regarded as significantly influential in learners’ achievement. Rao, Gain and Bhat (2019) consider the university library as the body of research and education and point to its importance and influence on the development of both students and teachers. Accordingly, they assert that many online and offline resources and other educational services are supplied by the university library for learners and faculty members (Rao, Gain & Bhat, 2019). Therefore, these resources do not require any further evaluation (Rao, Gain & Bhat, 2019). Cavaleri and Dianati (2016) stated that the results of the students’ evaluations of the Grammarly® website indicate its practicality and ease of use. In the same vein, many students expressed that with the help of Grammarly®, their self-trust has increased, and they have learned more grammatical points. The discoveries show that learners can profit from Grammarly® and its instructions (Cavaleri & Dianati, 2016).

As per Ghuftron and Rosyida (2018), this examination is proposed to inquire into the viability of the Grammarly® website in decreasing the errors learners make regarding language structure, punctuation, vocabulary, and spelling. Compared with Grammarly®, teachers correct learners’ errors through their papers. This way, the instructor provides a few remarks concerning the students’ writing. This investigation would empower teachers to recognize and grasp how computerized materials like Grammarly® could add to the English language knowledge of the learners (Ghuftron & Rosyida, 2018). Besides, individuals could better comprehend how EFL students improve their language proficiency with the help of computerized materials.

Moreover, experts could foster new academic ideas or propose techniques to use Grammarly® for language learners (Ghuftron & Rosyida, 2018). According to Ghuftron and Rosyida (2018), it may be surmised that Grammarly® is more successful in decreasing the

number of errors the students make in English writing than the traditional technique, i.e. teachers' corrective feedback. Likewise, Ghufon and Rosyida (2018) assert that some EFL learners are not highly competent in utilizing Grammarly®. For instance, they get mistaken for how the system provides feedback, so they cannot correct their writings well. However, Such problems often occur when long sentences are corrected (Ghufon & Rosyida, 2018).

As Ventayen and Ventayen (2018) reported, after conducting a study on its users, Grammarly® announced that most of the users were satisfied with the use of Grammarly®. Furthermore, given the outcome, the more the learners utilize Grammarly®, the more confident they concern about their writing skills, the more time they save on their compositions, and the higher scores they achieve. Furthermore, based on the results achieved from the interview, it was discovered that the learners mostly have a positive attitude toward both the use of the computerized technique (Grammarly®) and the traditional method (teachers' corrective feedback). In this regard, when the learners utilize Grammarly®, they can autonomously check their writings and track their grammatical, spelling, vocabulary, and punctuation errors. Therefore, the use of Grammarly® can be deeply motivating for learners.

On the contrary, when learners apply the teacher's corrective feedback, they are truly inquisitive with the instructor's feedback given through certain notes (Ghufon, 2019). Similarly, Ghufon (2019) referenced that the results of an interview with English writing teachers show that when teachers' corrective feedback and Grammarly® were used simultaneously, the learners were more inspired, and their EFL writing was noticeably improved. As indicated by Ghufon (2019), these outcomes uphold that teachers' feedback and computerized feedback are critical in terms of the ESL/EFL learners' writing skills and motivation. On the one hand, teachers' corrective feedback is an effective teaching strategy for ESL/EFL learners (Ghufon, 2019). On the other hand, receiving effective feedbacks from computerized materials such as Grammarly® could build up students' writing skills and their perceptions toward Computer Assisted Language Learning (CALL). In another study, Nutta (2001) searched for the difference between teacher-centred grammar learning and computer-based grammar acquisition. He found the computerized method a more influential one, as learners provided more positive feedback than traditional methods.

The Study

This research aimed to investigate the teachability of the web-based method and its impact on Iranian EFL learners' writing skills. Another purpose of this study was to investigate the influence of the Grammarly® website on Iranian EFL learners' self-efficacy. Likewise, a further pursuit resulted in realizing how students' writing proficiencies were correlated with their self-regulation. In order to conduct the present research, two main research questions were designed. Then, using the method mentioned below, the researcher examined the effect of the Grammarly® website on Iranian EFL learners' writing skills.

Research Questions

RQ₁: Is there any significant relationship between using the Grammarly® website and Iranian EFL learners' writing performance concerning the use of cohesive ties, grammar, and lexical resources, and writing achievement?

RQ₂: How do the participants reflect upon using the Grammarly® website?

Methodology

Participants

In order to fulfil the purpose of this study, first, 50 students were given a Quick Placement Test for their homogeneity. The results showed that the student's language ability was almost intermediate. Then, a sample of 30 students was selected; 15 students were regarded as a control group taught based on the traditional writing model, and 15 students took part in a web-based class. The participants were selected and assigned to two groups with the same age range. They had the same age range. The participants included both males and females. Also, two raters took part in the study. One of the raters was a university instructor of TEFL with a PhD degree, and the other one was a PhD candidate of TEFL. In this study, a control group and an experimental one were selected to be taught by different writing systems. Thus, intact groups were chosen to participate in this study.

Instrumentation

Quick Placement Test (QPT)

The Quick Placement Test (QPT) (<https://www.vhs-aschaffenburg.de/>) was employed in this study to determine the level of the student's English proficiency. The QPT is an alterable test of English language proficiency evolved by Oxford University Press and Cambridge ESOL to contribute to teachers a reliable and time-saving approach to find learners' English level. It is quick and proceeds directly forward to allocate and is ideal for placement testing and examination screening. As QPT is assumed an official test, the reliability and validity of this test are proved. There are two versions accessible, a computer-based (CB) version and a paper and pen (P&P) version.

IELTS Writing Test

Paragraph writing measures of IELTS were applied to the student's writing ability. The topics for the pre-test and post-test were the same in both groups of control and experimental. The theme for the pre-test was: "Computers can easily do all basic and advanced calculations. Do you think your children should allocate more time learning primary mathematics or advanced computer technology?" (<http://ielts.studyhorror.com/writings/ielts-writing-sample-task-2-basic-mathematics-advanced-computer-technology/62>). Moreover, the post-test as the parallel form of the pre-test was held as: "With the increasing popularity of computers and calculators, student literacy is decreasing dramatically. What are the positive and negative effects on the process of science and technology has brought about?" (https://www.ielts-exam.net/ielts_writing_samples_task_2/147/).

Compositions were scored based on the IELTS writing scale as it was tangible for both raters and students. Five aspects of writing, such as Writing Achievement, Coherence and Cohesion, lexical resource, grammatical range, and accuracy, were considered based on the IELTS writing scale. Paragraphs were finally scored out of 9.

Grammarly® Website

It is a website that reviews grammar. It checks different types of writing. It helps writers to correct a wide range of errors. According to Schraudner (2014), Grammarly® is assumed as a web-based editing site that can be utilized to report any possible errors in the text. In this regard, Lee (2016) asserted that typical syntactic errors and redundancies, such as wrong punctuations, are often addressed by the Grammarly® website. Besides, he claimed false performances in word order, sentence structure such as prepositions, negative sentences, questions, and word spellings like capitalizations are also recognized by Grammarly®'s spelling and structure checkers. This is

an online proofreading website that can be used to scan documents for grammatical mistakes. According to this website, “Grammarly® scans your text for proper use of more than 250 advanced grammatical rules, spanning everything from subject-verb agreement to article use of modifier placement” (Grammarly® website, 2016).

As Lee mentioned (2016), Grammarly® is one of the three online grammar check services that offer all the accuracy tools. Another feature provided by Grammarly® includes a contextual spelling checker. This instrument contains a spelling checker that checks for misspelt terms and correctly spelt ones applied in the considered context. Besides, Grammarly® lets users choose between British English or American English, and it has an integrated dictionary and thesaurus. Another distinguishing feature of Grammarly® is checking for plagiarism. Grammarly® is a perfect online grammar check service that also checks for plagiarism (Grammarly® website, 2016). Another feature of this website includes editing. Meanwhile, it should be mentioned that the trial version was used in this study.

Not many studies have been done on the effect of Grammarly® software on language learning skills. Schraudner (2014) is one of the few researchers who conducted a study in this case. Accordingly, he did a study on correction programs such as Grammarly® software on learning and lesson planning. His study was conducted on seventeen students who presented 135 book summaries comprising 4,830 words. In light of the outcomes, the instructor can customize lesson plans to address the more typical blunders of a designated class. The data also helps the teacher revise entries and help learners independently screen and enhance their writing ability. He stated that such software could spare teachers time and assets as it rapidly evaluates and distinguishes the errors. As reported by Rao, Gain and Bhat (2019), “Grammarly® is used by researchers, scholars, authors, bloggers, students, business professional’s, etc., to ensure that their article is impeccably correct in Form, Style, Structure” (p.3).

Writing Measures

Writing Measures that were used in this study were: band, writing achievement, cohesion-coherence, lexical resource, and grammatical range. The difficulty of the writing measures was a lexical resource, band, grammatical range, cohesion- coherence, and writing achievement.

Procedure

The two writing classes were taught by the same instructor experienced in teaching writing for EFL students. She shared similar features in their writing directions. The classes lasted for five weeks and four hours per week. First, the Quick Placement Test determined the performance of the individual to homogenize the students. Also, writing the IELTS Test for the pre-test had been designed to measure the learners’ proficiency level. The learners had ten sessions during the semester. Every session lasted 2 hours. In every session, learners received treatment for about 30 minutes. The experimental (web-based) group and control (traditional) group had the same treatment.

One topic was given to the learners in the experimental group every session. Thus, the students had time to write some paragraphs. In the control group, the learners were given the same topic for the students in the experimental group every session. The traditional method offered little opportunity for interaction with the instructor and almost no interaction among the learners, but access to the online teaching, the range of interactions with other participants in the class, was expanded. Therefore, this method was applied properly as it engaged the learners in the learning process during the course. In agreement with Ahmad (2016), “The ESL/ EFL teachers can combine language and technology to revolutionize the whole language process”

(p.119). Integrating technology, as an impact of globalization, into English language classes is one of the challenges that teachers face these days. Additionally, the instructors should make the learners interested in this universal written English-language culture (Ghufron & Rosyida, 2018).

In the online class, the researcher acquainted the students with online teaching and using the Grammarly® website. In this study, the participants' responses trended towards online teaching, demonstrated the differences. Directly, the researcher used technology to make rich feedback among the students and between the students and the teacher. The students had a positive reaction when the teacher had a slide show while giving treatment and teaching paragraph writing. The teacher monitored students' involvement with instruments (laptop, tablet computer, and a TV set to show the slides). The instructor required all of the students to bring their own devices to the classroom. The learners were enthusiastic about the content in the online class. Hence, the novelty of the ideas was beneficial to change the isolated students' beliefs who were taught in traditional teaching. At the beginning of the course, some students were not comfortable with using devices. However, for novice learners in the online environment could be confusing, and step by step, self-regulation was increasingly being seen as a refinement and development of students' success. However, in the online class, arranging an effective and collaborative environment was troublesome, but gradually pupils were recognized to transfer their orientation from the teacher to the website or the learners. In doing so, it was excellent attainment.

The result compared the different types of teaching. In comparison, traditional teaching produced a good point of view of group working. At the end of the term, participants were interviewed and asked about their perceptions and experiences, which were engaged during the term in the class. They developed their writing skill, and they felt the method helped them a lot. In the online classroom, simultaneously, the learners utilized some techniques to remove barriers in the learning process, provide class interaction opportunities, and share their knowledge; on the other hand, the instructor mentioned teaching and learning. During data collection, the teacher had an observation, teacher interview, and document analysis. In addition, the teacher and participants took part in a face-to-face interview. Finally, the mentor and mentees shared their experiences in the new learning individually.

Furthermore, they illustrated the difficulties and successes that they experienced in term duration. Moreover, the learners had to equip themselves with electronic devices such as laptops or tablet computers to be online during the class. After treatment, learners were evaluated by the post-test. As a final assignment, the instructor asked the students to have a Parallel form of writing to compare the students' proficiency writing for both the experimental and the control group.

Results

The purpose of this study was to assess the possible differences between traditional and online teaching methods on the progression of the EFL learners' writing performances. The results of the MANOVA demonstrated significant differences between the two groups' overall means across the writing achievement. Also, the SPSS extracted that the writing achievement measured their underlying construct with an accuracy of 58.27 per cent. Similarly, the results of the Pearson correlations specified that there were significant agreements between the two raters who rated the subjects' writings.

Table 1
Tests of Normality for Proficiency Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
The Quick Placement Test	.101	50	.200*	.964	50	.134

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

As displayed in Table 1, the results of the Kolmogorov-Smirnov statistic confirmed the normality of the distribution of scores. A non-significant result (Sig value of more than .05) indicates normality. In this case, the Sig. Value, obtained from Kolmogorov-Smirnov, was .200 for the data, suggesting no violation of normality assumption.

Table 2
Descriptive Statistics for Proficiency Test

	N	Minimum	Maximum	Mean	SD
The Quick Placement Test	50	18	34	24.70	4.032
Valid N (listwise)	50				

The mean scores were 24.70, and the standard deviation was 4.03 (see table 2). Therefore, given one standard deviation above and below the mean, students whose scores obtained from the test were between 28 and 20 were selected to take part in the study (since $24+4=28$ and $24-4=20$). Therefore, out of 50 students, 30 students were remained to participate in the study. The data were analyzed through multivariate ANOVA; that was why the normality of the data was checked through the ratios of skewness and kurtosis over their respective standard errors. Based on these results, it can be claimed that the present data enjoyed normal distribution. However, the absolute values of the computed ratios were lower than 1.96 (Table 3).

Table 3
Descriptive Statistics: Testing Normality Assumption

Group		N	Skewness			Kurtosis		
			Statistic	Statistic	Std. Error	Ratio	Statistic	Std. Error
Experimental	Band	150	.297	.198	1.50	.651	.394	1.65
	Writ-Ach	150	.332	.198	1.68	.181	.394	0.46
	Coh-Coh	150	.242	.198	1.22	-.306	.394	-0.78
	Lexical-Re	150	-.023	.198	-0.12	-.022	.394	-0.06
	Gram-Ra	150	-.213	.198	-1.08	-.270	.394	-0.69
Control	Band	150	-.071	.198	-0.36	-.081	.394	-0.21
	Writ-Ach	150	.310	.198	1.57	-.246	.394	-0.62
	Coh-Coh	150	-.183	.198	-0.92	-.706	.394	-1.79
	Lexical-Re	150	-.263	.198	-1.33	-.107	.394	-0.27
	Gram-Ra	150	-.124	.198	-0.63	-.442	.394	-1.12

Note. Writing-Ach = writing achievement, Coh-Coh = cohesion and Coherence, Lexical-Re = Lexical resources, and Gram-Ra = Grammatical Range and Accuracy

MANOVA has two specific assumptions; homogeneity of variances and covariance matrices, which can be ignored when sample sizes are equal, as is the case in this study (Bachman, 2005; Field, 2013; Tabachnick & Fidell, 2013; Pallant, 2011). Based on the results displayed in Table 4 it can be claimed that the experimental and control groups had almost the same means on writing band ($M = 6.70$ vs. $M = 6.59$), writing achievement ($M = 2.15$ vs. $M = 2.15$), cohesion and coherence ($M = 1.38$ vs. $M = 1.29$), lexical resources ($M = 1.54$ vs. $M = 1.58$) and grammatical range and accuracy ($M = 1.56$ vs. $M = 1.57$).

Table 4
Descriptive Statistics: Writing Measures by Groups

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Band	Experimental	6.703	.068	6.570	6.836
	Control	6.598	.068	6.465	6.731
Writing Achievement	Experimental	2.158	.024	2.111	2.205
	Control	2.153	.024	2.106	2.200
Cohesion Coherence	Experimental	1.385	.020	1.346	1.424
	Control	1.298	.020	1.259	1.338
Lexical Resources	Experimental	1.547	.019	1.508	1.585
	Control	1.582	.019	1.543	1.620
Grammatical Range &	Experimental	1.565	.022	1.522	1.608
	Control	1.558	.022	1.515	1.602

The results of MANOVA ($F(5, 294) = 3.40$, $p = .005$, partial $\eta^2 = .055$ representing an almost moderate effect size) indicated that there were significant differences between the two groups' overall means across the five writing measures.

Table 5
Multivariate Tests: Writing Measures by Groups

Effect	Value	F	Error df	Sig.	Partial Eta Squared	
Intercept	Pillai's Trace	.989	5167.709	294	.000	.989
	Wilks' Lambda	.011	5167.709	294	.000	.989
	Hotelling's Trace	87.886	5167.709	294	.000	.989
	Roy's Largest Root	87.886	5167.709	294	.000	.989
Group	Pillai's Trace	.055	3.407	294	.005	.055
	Wilks' Lambda	.945	3.407	294	.005	.055
	Hotelling's Trace	.058	3.407	294	.005	.055
	Roy's Largest Root	.058	3.407	294	.005	.055

Based on the results displayed in Table 4 and Table 6, it can be concluded that there was not any significant difference ($F(1, 298) = 1.20$, $p = .273$, partial $\eta^2 = .004$ representing a weak effect size) between the experimental ($M = 6.70$) and control ($M = 6.59$) groups' means on the writing band. There was not any significant difference ($F(1, 298) = .022$, $p = .883$, partial $\eta^2 = .000$ representing a weak effect size) between the experimental ($M = 2.158$) and control ($M = 2.153$) groups' means on the writing achievement. The experimental group ($M = 1.38$) had a significantly higher mean on the cohesion and coherence than the control group ($M = 1.29$), ($F(1, 298) = 9.43$, $p = .002$, partial $\eta^2 = .031$ representing a weak to moderate effect size).

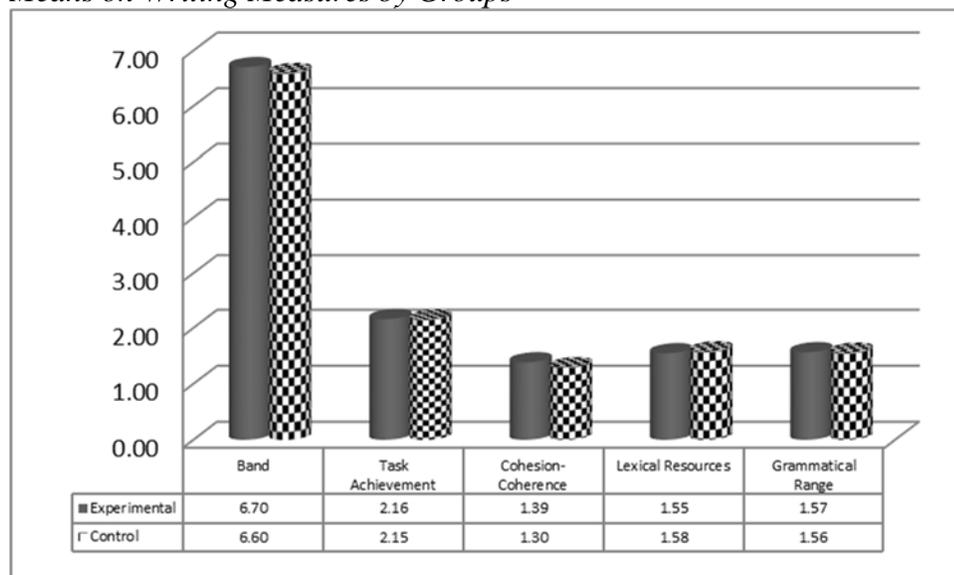
Table 6

Tests of Between-Subjects Effects: Writing Measures by Groups

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	Band	.827	1	.827	1.205	.273	.004
	WritAch	.002	1	.002	.022	.883	.000
	CohCoh	.563	1	.563	9.436	.002	.031
	LexicalRe	.092	1	.092	1.624	.204	.005
	GramRA	.003	1	.003	.046	.831	.000
Error	Band	204.410	298	.686			
	WritAch	25.650	298	.086			
	CohCoh	17.791	298	.060			
	LexicalRe	16.860	298	.057			
	GramRA	21.731	298	.073			
Total	Band	13475.312	300				
	WritAch	1419.938	300				
	CohCoh	558.375	300				
	LexicalRe	750.938	300				
	GramRA	753.375	300				

There was not any significant difference ($F(1, 298) = 1.62, p = .204$, partial $\eta^2 = .005$ representing a weak effect size) between the experimental ($M = 1.54$) and control ($M = 1.56$) groups' means on the lexical resources. Moreover, There was not any significant difference ($F(1, 298) = .046, p = .831$, partial $\eta^2 = .000$ representing a weak effect size) between the experimental ($M = 1.56$) and control ($M = 1.55$) groups' means on the grammatical range and accuracy.

Figure 1

Means on Writing Measures by Groups

A factor analysis through the varimax rotation was run to probe the underlying constructs of the five writing measures. Before discussing the results, it should be mentioned that the present sample size was adequate for running the factor analysis ($KMO = .640 > .50$) (Table7), the

correlation matrix used to run the factor analysis was significantly different from an identity one, i.e., a matrix with zero correlations among all variables ($\chi^2(10) = 712.83$, $p = .000$), and the correlation matrix did not have perfect correlations (singularity) among all variables (determinant = .090 > .00001).

Table 7

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.640
	Approx. Chi-Square	712.830
Bartlett's Test of Sphericity	Df	10
	Sig.	.000

The SPSS extracted one factor, which accounted for 58.27 per cent of the variance. In other words, the five writing measures measured their underlying construct with an accuracy of 58.27 per cent.

Table 8

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.914	58.279	58.279	2.914	58.279	58.279
2	.817	16.338	74.616			
3	.649	12.984	87.600			
4	.504	10.080	97.680			
5	.116	2.320	100.000			

Moreover, as displayed in Table 9, all writing measures loaded on the only extracted factor. All of the loadings were higher than .50, indicating that the five measures had significant contributions to their latent variable.

Table 9

Component Matrix

	Component
	1
Band	.958
GramRA	.807
CohCoh	.757
LexicalRe	.665
WritAch	.575

Table 10

Pearson Correlations: Inter-Rater Reliability Indices

		BandR2	WritAchR2	CohCohR2	LexicalReR2	GramRAR2
BandR1	Pearson Correlation	.997**				
	Sig. (2-tailed)	.000				
	N	300				
WritAchR1	Pearson Correlation		1.000**			
	Sig. (2-tailed)		.000			
	N		300			
CohCohR1	Pearson Correlation			.993**		
	Sig. (2-tailed)			.000		
	N			300		
LexicalReR1	Pearson Correlation				.984**	
	Sig. (2-tailed)				.000	
	N				300	
GramRAR1	Pearson Correlation					.989**
	Sig. (2-tailed)					.000
	N					300

** . Correlation is significant at the 0.01 level (2-tailed).

The results of the Pearson correlations indicated that there were significant agreements between the two raters who rated the subjects' writings in terms of; Band ($r(298) = .997$, $p = .000$, representing a large effect size), Writing achievement ($r(298) = 1$, $p = .000$, representing a large effect size), Cohesion and coherence ($r(298) = .993$, $p = .000$, representing a large effect size), lexical resources ($r(298) = .984$, $p = .000$, representing a large effect size), and Grammatical range and accuracy ($r(298) = .989$, $p = .000$, representing a large effect size).

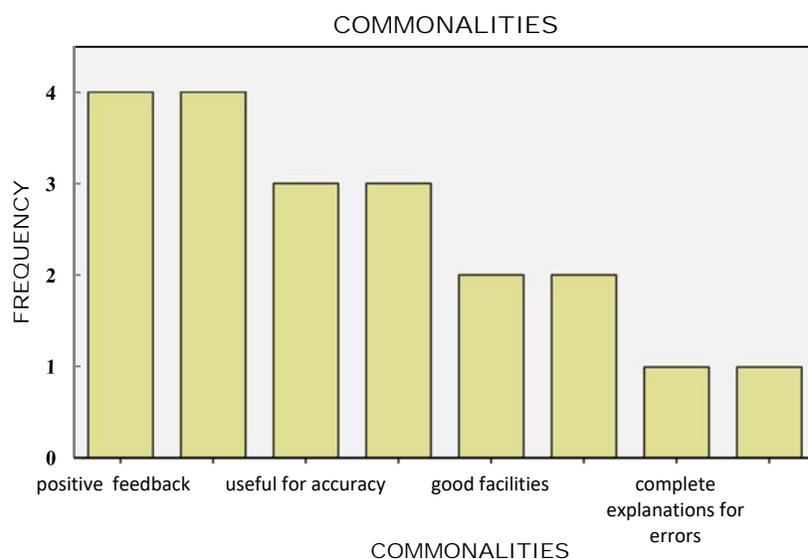
Table 11

Commonalities Obtained from Interviews

		Frequen cy	Perce nt	Valid Percent	Cumulative Percent
Valid	positive feedback	4	20.0	20.0	20.0
	good experience	4	20.0	20.0	40.0
	useful for writing accuracy	3	15.0	15.0	55.0
	careful grammar checker	3	15.0	15.0	70.0
	good facilities	2	10.0	10.0	80.0
	motivating for on-line learning	2	10.0	10.0	90.0
	complete explanations for errors	1	5.0	5.0	95.0
	improving writing ability	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

The researcher listed the common factors in the English language, as displayed in Table 11. The most commonly cited factors from the most to the least included: 1) positive feedback (20%), 2) good experience (20%), 3) useful for writing accuracy (15%), 4) careful grammar checker (15%), 5) good facilities (10%), 6) motivating for online learning (10%), 7) complete explanation for errors (5%), 8) improving writing ability (5%). The results are also depicted in the bar graph (see figure 2).

Figure 2
Commonalities of Students' Reflections on Grammarly® Website



Discussion

This study aimed to determine the differences between traditional and web-based instructions on improving the writing skills of the Iranian EFL intermediate learners and promoting language learning and teaching in general. Besides, the researcher intended to increase the teachers' awareness regarding the great influence of modern educational resources on the learners' achievements and interests. Therefore, this investigation was done through triangulation to prove more accurate results. In order to address the first research question, a multivariate ANOVA, generally known as MANOVA, was applied, which is proved to have two specific assumptions; homogeneity of variances and covariance matrices, which can be ignored when sample sizes are equal. Regarding the first research question, a significant positive relationship was observed between the use of the Grammarly® website and the students' writing performance concerning their use of cohesive ties. In other words, those Iranian EFL intermediate learners who applied the Grammarly® website were more successful in employing cohesive ties. Nevertheless, Regarding the other three factors raised in the first question of the research, namely the use of grammar, use of lexical sources, and written achievement, no significant differences were observed between the participants in the control and experimental groups.

In order to enrich the study, the researcher did an unstructured interview to check the participant's attitudes regarding the application of the Grammarly® website. In this regard, the participants were asked questions such as the extent to which they were satisfied with the web-based instruction, their feedback towards the Grammarly® website, and its usability. The results displayed that a high percentage, approximately 80 per cent of the participants who were trained in the online class, made pleasant reflections upon web-based instruction. They asserted that the website was easy to access as an online grammar checker. The additional advantage of using this method was that it reviewed and corrected the participants' grammar and spelling mistakes and made suggestions to replace them. Some participants mentioned that the website provided them with short or long explanations of the errors and a range of replacements.

To put it another way, learners who enjoyed web-based instruction seemed more satisfied with their learning process and its results, explaining that this method was user-friendly, practical and thoroughly effectual. Similarly, Masumi (2012, pp. 23-24) agrees that “Grammar books and paper-printed exercises are portable, but they lack the direct interactivity with learners, that is, the prominent aspect of online grammar resources. It is important to notice that direct interactions can more actively involve language learners in the process of working with the target language.” Even though most participants agreed with face-to-face student-student and student-teacher interactions to acknowledge or disprove their classmates’ ideas, they stated that the method had one specific limitation. In some sessions, the low-speed Internet connection was time-consuming.

On the other hand, the findings of this study could be quite fruitful for further evaluative assessments in this area. Besides, in this technology-oriented century, teachers need to apply similar digital-based educational instruments to attract students’ attention and keep them motivated in the classrooms. At the same time, it could be assumed beneficial for novice teachers to become more familiar with various types of writing exercises. According to Alsouki (2001), computer technology could have special effects on learners’ achievements. Similarly, Nutta (2001) states that the computerized method provides more beneficial feedback than traditional methods. Some teachers who have used modern and traditional teaching methods have acknowledged that students who have been trained with modern teaching methods have received more acceptable results. For instance, Parsa (2012) highlights a significant difference between the presentations of the students in the experimental group who obtained Web-Based instruction with those who were taught with traditional techniques. Likewise, Karyuatry, Rizqan, and Darayani (2018) claim that the use of Grammarly® helped them decrease giving correction on learners’ compositions. Also, many researchers have concluded that using websites such as Grammarly® has greatly helped improve students’ writing skills in particular. For example, Cavaleri and Dianati (2016) affirmed that the use of the Grammarly® website expanded the learners’ confidence in writing and their understanding of grammatical concepts.

On the other hand, some researchers approved some negative findings with the use of technological resources. In this regard, Ghuftron and Rosyida (2018) claim that some of the students are not experienced enough in using the Grammarly® website. They can just check their grammatical constructions, mechanics, spelling, and of course, the organization and subject of their writing directly. Therefore, they maintain that both written feedback, such as teacher corrective feedback, and computer-mediated feedback, such as ‘Grammarly®’, are vital for encouraging and strengthening learning in terms of EFL/ESL writing (Ghuftron, 2019), while the findings of the present study indicate that the web-based methods are more helpful for the EFL learners than the traditional ones. It must be noted that teachers should be aware of the responsibilities and provide the necessary support and make the learners familiar with the unknowns.

This investigation has also provided some suggestions for further studies. First, the age and gender of the participants were not taken into account in the present research. Consequently, further studies can take the possible effects of these variables into account. Second, the researcher only investigated the relationships between web-based instruction and traditional instruction on the writing ability of Iranian EFL intermediate learners. More specifically, the Grammarly® website was under research. It would be advantageous to conduct research investigating the possible effects of similar websites as well. Next, the context of this study was chosen out of Iranian EFL intermediate learners. It is recommended that the replication of this

study be done in other countries, schools, and language institutes as well, even with a larger population. Finally, other levels of EFL learners could similarly be examined and compared. It is likely that conducting this study at other levels, such as intermediate and advanced, will yield different results.

Conclusion

The 21st century seems to be technology-oriented. In order to live healthily and successfully in this century, we need to go beyond basic human needs. The research questions in this study were concerned with the effectiveness of applying the Grammarly® website on Iranian EFL intermediate learners' writing performance. They were also concerned with identifying learners' attitudes towards traditional methods and modern ones. Findings showed that web-based instruction is more effective than the traditional writing format, although they could both promote learners' writing achievement. In this regard, the benefits of web-based instruction that have been generally perceived include broader compatibility and more approachability (Lee, Cheung & Chen, 2005), improved academic achievement (Alavi, 1994), and more computer skills (Piccoli, Ahmad & Ives, 2001). The researcher also found some other websites like Grammarly®, which other researchers applied. Gerngross and Puchta (2009) believe that "The content of what learners are offered in the new language is of crucial importance in motivating them to work out the meaning of what they achieve" (as cited in Hemmati, Teimoori & Jafarigohar, 2013, p. 176).

Moreover, since Farsi is the only dominant language in Iran, Iranians are EFL learners rather than SLA ones; therefore, it is not easy for Iranian language learners to directly contact the English language in daily life. The classroom used to be the main context for students to apply English for meaningful communication. However, the Internet and computer could also be assumed as new environments for practising a language. Although language teachers should facilitate and improve students' interest in learning English in the class, it is imperative to extend learning English even outside the classrooms. Teaching materials and activities that could increase students' interests and identifications with English are better to encourage learners to use and practise English outside the classes. To this end, teachers can use the Internet or other online tools provided on many foreign websites in a high-quality format to provide much more opportunities for learners to practice learning English outside the classroom. As this study displayed, learners were much more motivated in the experimental group as they provided a more positive attitude than members in the control one.

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Competing Interests

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