



A Comparative Study of Writing Quality in Online and Conventional Writing

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Abstract

This study explored the differences which exist between online writing and conventional pen-and-paper writing with regard to writing quality. To this end, the traditional in-class compositions of 30 university students majoring in English and their online compositions in the online forum specifically designed for the purpose of this study were gathered and compared. The texts were scored based on Vicki Spandel's Six Traits Paragraph Writing Rubric (2009). The six traits under study were idea, organization, voice, word choice, sentence fluency, and conventions. Data was analyzed through paired-samples t-test. Results revealed that conventional and online writing are different mostly with regard to organization, word choice and writing conventions.

Keywords: online writing, modern writing, writing quality, computer-mediated communication

INTRODUCTION

The quick development of technology has affected almost every aspect of our lives. It has influenced the efficiency of communication between people as well. As a result, the ability to speak and write a second language is becoming widely recognized as an important skill for educational, business, and personal reasons.

Writing has a special status among the four language skills. The ability to write effectively is becoming increasingly important in our global community. According to Olshtain (2001):

It is via writing that a person can communicate a variety of messages to a close or distant, known or unknown reader or readers. Such communication is extremely important in the modern world, whether the interaction takes the form of traditional paper-and-pencil writing or the most technologically advanced electronic mail (p. 207).

Today, a great deal of our communication is done by means of writing which, in addition to traditional pen and paper, is mediated by computer, the internet and devices such as the mobile phone.

These two forms of writing, i.e. traditional pen-and-paper and modern digital writing are used nowadays for different purposes such as language instruction, transferring knowledge, communication, etc., as well as in various occasions such as news texts, academia, advertising, etc.

Traditionally, writing emphasized the expression of ideas and relaying information. Writers searched for just the right word that would get their point across, having paid close attention to varying their word choices and sentence structures. Long, complex sentences and obscure vocabulary was a measure of the writer's knowledge and proficiency.

On the other hand, the role of written language has clearly changed in the past few decades due to the emergence of new information and communication technologies. By enabling electronic writing, computers significantly altered traditional concepts of writing. The application of computers in writing brings the ease of reviewing, revising and editing to the writing process. As the format of the written text can be modified as desired with text-editing programs, the need for improved handwriting or caring about the appearance of the written text is eliminated.

Computers also enable networking and connecting to the Internet, which has given rise to new uses, and as a result new forms of language with specific characteristics. Writing for the Internet involves a more abbreviated style, with grammar and punctuation being important for that professional look.

While writing through the electronic medium, people undermine or abandon traditional conventions of grammar and punctuation. Also, the text rarely follows a specific outline which is common in traditional writing; the focus is on communicating and conveying the intended message rather than structuring the text as to have an introduction and a conclusion. In addition, to convey meaning, users apply cues which are only recognized by users of computer-mediated communication. Some examples are acronyms like ASAP (as soon as possible), and specialized use of typography, for example, the use of nonverbal icons or emoticons like a smiley face :-).

Communication via the Internet, or online communication, occurs in different forms. Electronically-mediated communication (EMC) is an umbrella term that encompasses both computer-mediated communication (CMC), the study of the style of online communication and the information it conveyed, and ICTs (information communication technologies), the machines themselves, the computers, PDAs, and mobile phones. Thus, computer mediated communication (CMC) is defined as "human interaction via computer networks and in online environments" (Shulman, 2000, Introduction section, ¶ 1). In the 1980s the term 'computer-mediated communication', commonly known as CMC, emerged. CMC included a range of platforms used for conversing online, such as e-mail, chat, or instant messaging (Baron, 2008).

An Internet forum, also called a message board, discussion group, bulletin board or web forum, is an online discussion site where people can hold conversations in the form of posted messages. In a forum people have the ability to start communication by posting messages and replying to other members' already posted messages. A member of the forum posts a message, which is visible to every other member. Once read, there is the option to post a reply, which can also be visible to other members. Thus, a discussion can build up without all users having to be online at the same time. Depending on the forum set-up, users can be anonymous or have to register with the forum and then subsequently log in, in order to post messages.

This study is theoretically framed by Social Constructivism which has been developed from the theories of Bakhtin (1981), Bruner (1966) and Vygotsky (1978). According to the Constructivist theory, knowledge is not a fixed object but rather fluid; learners construct their knowledge through engagements in intercollaborative learning activities with other students, with the instructor, and with the learning environment.

In Online Collaborative Learning, the process of building knowledge societies and the process of sharing ideas and feedback among members who work together across cultural boundaries is considered to be one of the highest levels of construction. In addition, Hayes (1996) suggested that writing is a communicative act that requires a social context and a medium. A writing environment should include a social context, audience, and other texts the writers may read while writing. Writing is mainly a social activity because it is not only used for communicative purposes but it is also a social artifact that is carried out in a social setting (Hayes, 1996). In other words, the genres in which we write were invented by other writers, and the phrases we write reflect phrases earlier writers have written.

The study intends to compare the two presently existing forms of writing, i.e. traditional pen-and-paper and modern online writing. The study aims at finding the features of each and comparing them. Therefore, it seeks to answer the following research question:

Is there any difference between the writing quality of texts written in the traditional form and those written online?

LITERATURE REVIEW

Online writing, which is the dominant language of the modern communication, is focused in recent research. It is compared and contrasted to the conventional pen-and-paper writing in various studies.

A majority of the studies focused on comparing the quality of writing composition on computer versus pen and paper with often-inconsistent results (Daiunte, 1986; Hawisher, 1989). However, between 1992 and 2002, a meta-analysis of research on computers and writing showed that the use of computers significantly improved the quality and quantity of student writing (Goldberg, Russell, & Cook, 2003).

Nielsen (2013) examined the effect of asynchronous online discussions as a learning strategy for Japanese EFL students from various perspectives. Findings from his study designated that although there was a marked decrease in the quality and quantity of written language produced in the online setting, there has been an increase in levels of participation and interactivity.

Braine (2001) studied 87 Cantonese-speaking EFL undergraduate students enrolled in six sections of a course titled Effective Communication in Writing. They wrote on a LAN (Local Area Network) and in traditional writing classes at a bilingual university in Hong Kong. The results showed that first drafts in LAN classes were qualitatively higher than in traditional classes and also it was found out that drafts in traditional classes improved more.

Ghaleb (1993) in a study compared two ESL writing classes, one of which wrote on a LAN and the other wrote in a traditional setting. Writing quality was determined by the holistic scores awarded by three raters on a scoring guide designed by the author. First drafts in the LAN class were considered to be a higher quality than those in the traditional class. Final drafts in traditional classes were better than final drafts in LAN classes. Papers in traditional classes showed more improvement than did papers in LAN classes from first draft to final version.

Sullivan and Pratt (1996) also compared two groups of ESL student writers, one writing on a LAN and the other in a traditional setting. In the LAN class, the mean scores of papers increased by 0.07, which the authors attributed to the LAN. Traditional class papers actually decreased in quality while papers in the LAN class improved; nevertheless, first drafts in the traditional class were of a higher quality (3.41) than both first (3.19) and final drafts (3.26) in the LAN class. Further, even the final drafts in the LAN class (3.26) were of a lower quality than the first drafts in the traditional class (3.41), thereby bringing into question Sullivan and Pratt's (1996) claim that the LAN was responsible for the improvement in writing quality.

In a study, Braine (1997) compared four first-year ESL writing classes, two writing on a LAN and the others in a traditional class, over two academic quarters. The mean scores of first and final drafts in LAN classes were of a higher quality than the papers in the traditional class, although papers in the LAN classes improved less (0.3) than papers in the traditional classes (0.4). Final drafts in LAN classes were better. Papers in traditional classes showed more improvement than did papers in LAN classes from first draft to final version.

Yagelski and Grabill (1998) employed both qualitative and quantitative techniques to collect a variety of data related to the in-class and online discourse of two undergraduate writing courses. The results suggested that the nature of in-class discourse in these two courses may have had some influence on the online discussions, but clearly no cause-and-effect relationship existed between in-class and online discourse. Qualitative data suggest that a variety of factors related to course context and to students' and instructors'

perceptions of CMC may have played significant roles in shaping online discourse in these two mixed mode courses.

Kuteeva's (2001) study focused on the use of wikis in the course of Effective Communication in English. The results indicate that using the wiki for writing activities made students pay close attention to grammatical correctness and structural coherence. Nearly 60% of the students reported that writing on the wiki made them consider their audience. The extent of the writer-reader interaction was further confirmed by a high use of engagement markers in the argumentative texts. Thus, writing on the wiki can contribute to raising awareness of the audience and to increasing the use of interpersonal metadiscourse.

METHOD

This study was conducted with 30 senior students studying English Language and Literature, 4 males and 26 females. Their age ranged from 20 to 28 with a mean of 22.34. They were enrolled in an essay writing course, where they learned how to write well-organized argumentative and expository essays. These participants were selected from among a group of 70 students based on their willingness and interest to work with the computer and the Internet, and their eagerness to write on the Internet in addition to their normal class assignments.

The materials used in this study included the participants' in-class written essays as well as the online texts produced in the online forum. The topics about which the students wrote all included argumentative issues on education-related grounds.

Two instruments were utilized in the study. The first one was an online forum specifically designed for the purpose of this study. It was named NeoEFL and could be accessed via the following link: <http://www.neofl.forumotion.com>. The second one was Spandel's Six Traits Paragraph Writing Rubric (2009) used for assessing writing quality. The six traits included in this rubric were idea, organization, voice, word choice, sentence fluency, and conventions. They were graded from 1 (Beginning level of writing proficiency) to 6 (Exemplary writing proficiency).

Texts written by students both online and on paper were marked using Spandel's (2009) writing rubric. The total score a student would get was equal to sum of his/her scores on different traits measured by the rubric. As a result, both the total scores and scores on each of the traits were compared. Paired-samples t-test was performed to see if there was a significant difference between the quality of texts written conventionally and online. To ensure reliability of scores, a third of the texts were re-scored by the researcher, and a Pearson correlation coefficient of .89 was obtained, stating intra-rater reliability. Also, another rater scored 40 out of 120 texts produced both conventionally and online. The scores were re-examined until a coefficient of 0.8 was obtained which showed inter-rater reliability in scoring.

RESULTS

In order to examine the quality of the texts written online and conventionally, they were scored using the six-trait rubric introduced in the previous chapter. The scores were first subjected to descriptive statistics, using mean and standard deviation. Table 1 shows the results of descriptive statistics for writing quality of both conventional and online texts.

As Table 1 shows, the students were scored higher in conventional writing than in online writing; the mean for the overall writing quality of conventional writing being 27.12 and that of online writing 24.95. In addition, as far as writing components are concerned, the mean for the efficiency and unity of the theme and supporting ideas stated for conventional writing is 4.37 and that of online writing 2.28. Also, for conventional writing, the mean for organization and structure of the text is 4.42 and 3.9 for online writing. The mean for the voice component, including personality and sense of audience, is 4.8 for conventional writing and 4.62 for online writing. Regarding the precision and effectiveness of word choice as well as imagery, the mean for conventional writing is 4.5 and for online writing 3.9. The mean for sentence fluency, which is the rhythm, flow and variety of sentences, is 4.41 for conventional writing and 4.27 for online writing. Finally, the mean for conventions of writing which include age appropriateness of spelling, caps, punctuation and grammar is 4.58 for conventional writing and 3.98 for online writing.

Table1. Descriptive Statistics for Writing Quality

	Conventional Writing		Online Writing	
	Mean	SD	Mean	SD
Overall Writing Quality	27.12	2.64	24.95	2.35
Idea	4.37	0.63	2.28	0.55
Organization	4.42	0.44	3.9	0.52
Voice	4.8	0.47	4.62	.059
Word Choice	4.5	0.45	3.9	0.46
Sentence Fluency	4.41	0.54	4.27	0.52
Conventions	4.58	0.71	3.98	0.66

According to the results, the overall writing quality of texts written online was lower ($M = 24.95$) than that of the conventional texts ($M = 27.01$). In addition, when comparing writing quality of online and conventional texts considering each trait separately, the mean scores for all the traits in conventional writing were more than those in online writing. To conclude, writing quality was higher in conventional texts than in online ones.

Furthermore, to find out whether the differences between the means of scores related to writing quality of both conventional and online texts, in general and with regard to different aspects of writing, is statistically significant or not, a paired-samples t-test was run for each category. The results are presented in Table 2.

Table 2. Paired-Samples T-test for Writing Quality of Conventional and Online Texts Regarding Individual Writing Components.

	Mean	Std. Deviation	t	Sig.
Overall Writing Quality	2.166	2.640	4.495	0.000
Idea	-0.083	0.670	-.0681	0.502
Organization	-0.516	0.636	-4.447	0.000

Voice	-0.183	0.594	-1.690	0.102
Word Choice	-0.633	.0524	-6.618	0.000
Sentence Fluency	-0.150	0.696	-1.179	0.248
Conventions of Writing	-0.600	0.770	-4.267	0.000
P < 0.05				

According to the results in Table 2, there was a significant difference between the mean of the overall writing quality of conventional and online texts ($t = 4.495$, $p < 0.001$). Also, the differences between the means of scores in organization ($t = -4.447$, $p < 0.001$), word choice ($t = -6.618$, $p < 0.001$) and conventions of writing ($t = -4.267$, $p < 0.001$) were statistically significant. In contrast, there was no statistically significant difference between the mean of scores in conventional and online writing regarding idea ($t = -0.681$, $p > 0.05$), voice ($t = -1.690$, $p > 0.05$) and sentence fluency ($t = -1.179$, $p > 0.05$).

DISCUSSION

The descriptive statistics as well as the results of the t-test for writing online and on paper showed that the mean of overall writing quality of traditional texts ($M = 27.12$) was more than that of online texts ($M = 24.95$). Thus we can conclude that overall, conventional texts were of higher quality than online texts.

To see what factors contributed to such a difference between writing quality of the two forms of writing, different components of writing measured when evaluating writing quality were examined individually. These components included idea, organization, voice, word choice, sentence fluency and conventions of writing. The results showed that the way students developed and united ideas in conventional and online writing was not different. Also, in both forms of writing the way the students considered the audience and the writer's personality were more or less the same. Furthermore, sentence fluency and effectiveness, as well as variety in length and structure of sentences were the same in conventional and online writing. Therefore, we can claim that these were not the determining factors in the existing difference between the quality of online and conventional texts.

However, significant differences were observed between online and conventional writing with regard to the other components. Significant difference was found between organization of online and conventional texts. Sentence structure was not seen to be as complicated in online writing as in conventional writing. Also, online written texts did not include introductory and concluding sections as frequently and exactly as conventionally written texts. As Rahimi and Mehrpour (2010) introduce conventional writing, it includes "an introduction, a body, and a conclusion", while these parts might be totally or partially absent in online writing. Besides, as Crystal (2006) claims, some features of spoken language, such as its being loosely structures, is present in Netspeak. Below is a sample of conventional writing extracted from an in-class written essay:

"Virtual education has made life much easier for those who cannot attend classes. Some people who have the dream of higher education in mind always complain about attending classes. Most of them have full-time

jobs and do not have time for being present at classes. In fact, presence at classes is an obstacle for them to reach their goals. In addition, for some other students who cannot move to another city or country to study the major which they do not have in their region, virtual education is a gift. Finally, we can also mention those students who are paralyzed or maimed and do not have the ability to move from one place to another. As you see, virtual education is the solution to limitations in education.”

As you can see, the paragraph has a topic sentence, i.e., “Virtual education has made life much easier for those who....” Then, as you can see, the student has tried to provide reasons to support his topic sentence. At the end, the paragraph contains a concluding sentence, that is, “As you see, virtual....” As the sentence structure is concerned, the paragraph includes longer and more complex sentences, and more formal vocabulary.

Nonetheless, look at this example extracted from the same student’s online writing:

“Although offering the written material in typed form seems more polished and formal, I prefer the handwritten ones. I think there is something in it, something like the character and spirits of its writer. it is unique, like the writer is unique. everyone can type, but it is only me who can write the way I do.”

Although this paragraph, too, includes a topic sentence, it is not stated as clearly and straightforward as the one in conventional writing. In addition, the topic sentence is very personal. As the sentence structure is concerned, the sentences are much shorter and simpler than what the same student has written in his conventional writing.

In online writing the students did not follow a certain outline. They just presented their ideas for the sake of communication. As in the last example, only a list of ideas which were to be conveyed is presented.

One reason for such a difference might be that while writing in class, the students were asked to follow a certain framework, in which they had to write well-formed paragraphs or essays starting with an introduction and ending with a conclusion; whereas for online writing, they were free to write in whatever way they thought would best convey their intended message. Also, their conventional writings were to be evaluated and scored by their teacher which made them pay closer attention to its structure and organization, while their online writings were not to be evaluated and scored and even observed by their teachers.

Another component which was different in conventional and online writing is word choice. Whereas in conventional texts words were chosen precisely and effectively and obscure vocabulary was considered as a measure of writer’s knowledge, in online writing there are features, i.e. emoticons, which facilitate conveying of the message without even using words. Moreover, since according to Crystal (2006) language of the Internet is somehow a mixture of written and spoken languages, it lacks the formality of written language in some aspects such as word choice. Samples of conventional writing are presented below:

"Moreover, the adherents of virtual education claim that it can reduce the stress in students as there is no competition, specially a destructive one, between them. This argument is quite misplaced and unfounded."

"Furthermore, virtual education is of high quality. First, for those who have family commits and responsibilities or have to work, attending classes is a hurdle."

"Children will bear much physical and mental pressure since working for long hours during the day consumes their energy without having any time for themselves. ... There will be a monotonous and hectic schedule for these children that gradually affect them mentally."

Below are some excerpts of sample online written texts produced in the forum:

"Why do we study? ^{???}🤔 To waste our time? 😡 No! To learn sth & to increase our knowledge... is knowledge sth that exists today but not tommorrow? Definitely not! In fact, knowledge must be permenanat and applicable to the life. So, this being the purpose of education, students must be estimated based on their creativity & learning abilities impling the use of questions which challange the students' minds & require them to think. 📖"

"most of the students in our country go to university. because they want to work in the future.a few of them want to improve their knowledge or maybe they had to go to university because most of parents think that their children should go to university and if he or she go to university will be successful in the future. 😞"

"just think a lil bit! u'll realize how serious is the case(hopefully) ofcourse for those who r used to saying "what????!?!?!?!?!?" many many things are naturally not tangible!!!! 😊"

"Ummmmmm, so in the case of e-books: we should study the books online => our eyesights becomes weaker => we should pay a lot of money to go to doctor and buy glasses 😓=> every year our eyesight becomes weaker and weaker => after years doctor tells us not to work with computers => we return to the traditional way of studying 📖!!!!!!!!!!!!!! Ha Ha Ha..... 😊"

In the above text samples, we can see that vocabulary used in online writing is not as formal as those used on conventional writing. Transcription of words may also be different. Examples are writing words as we use them in speech, such as "lil" for "little" and using "u" instead of "you". In addition, the use of emoticons in online writing, instead of words is a vivid feature of the Internet language. Besides, the use of interjections, and short forms like "sth", and the use of symbol "&" instead of the word "and" are among the features which differentiate word choice in the two forms of writing.

Finally, writing conventions are perhaps the most observable of all the differences that exist between conventional and online writing. According to Baron (2008) and Crystal

(2006), since many areas of the Internet are not case sensitive, capitalization does not matter to a great extent. Also, punctuation is minimalist or even absent in many Internet situations. Here are some examples of online texts:

“🤔...hmmmm!! Agree! they are not real representation of students but most of the time not because of teachers favoritism; Although I strongly believe the phenomena of teacher's pet and teacher's favoritism exists 😊 they are not creditable because one exam or two, midterm and final ,regardless of paying real attention to class activity (I repeat paying REAL attention) cant give a good evaluation of a student. Moreover, the exams usually don't test students understanding from the stuff,and most of the time they test student's memory.so I think grades are not a legitimate presentation of students ...”

“Oh E-BOOKS!!!!!!!!!!!!!!!!!!!!!! THE MAGIC OF THE THIRD MILLENNIUM 🤖 These wonderful, small books are saviors of human beings since they do not have to carry a heavy loads of books with themselves any more. they can be used everywhere, from subways to the bed. with the rapid advancement of technology, every day new brands of these books with more facilities are produced.”

“just think a lil bit! u'll realize how serious is the case(hopefully) ofcourse for those who r used to saying "what????!?!?!?!?!?" many many things are naturally not tangible!!!! 😊”

As in the above samples, in online writing, the writers have used a variety of tools to effectively express their ideas or their attitudes toward a matter. In some cases, they have used multiple exclamation or question marks, capital letters, different font size and even color for instance, “Oh E-BOOKS!!!!!!!!!!” or “what????!?!?!?!?”. Also, punctuation, for example letter and word spacing, is not paid attention to. In Internet writing these are not penalized as being wrong, rather considered as a mistake in typing or just a mere result of not being careful.

To sum up, this study concluded that conventional and online writing are different mostly with regard to organization, word choice and writing conventions. Besides what we discussed above as resulting in such differences, which is due to the nature of the traditional and modern media, there are also other factors which might have influenced the results.

One factor is the audience which was different in the two contexts. The texts they wrote in class were read by the teacher and the students thought they might be judged according to what they had written by their teacher. However, while writing on the forum, they could log in with a user name they had chosen, which could keep them anonymous to the audience. Besides, the teacher was their audience in online writing. This might have lead students not to pay close attention to what they had written online, while they were more careful while writing in class.

Another factor was the purpose for which they were writing. In class, they wrote texts to be evaluated and scored as part of their obligatory assignment. In contrast, in the forum

they just wrote voluntarily and for the sake of presenting their ideas and communicating with their classmates.

All in all, the findings of the present study are analogous to those of Ghaleb's (1993) and Nielsen (2013) studies which found out that traditional texts were of higher quality than online texts; however, the results are in contrast with those of Cohen and Riel (1989), William and Pence (1989), Owston (1991), Bangert-Drowns (1993) and Braine's (1997) studies that claimed that the quality of computer or online texts was better than traditional texts.

CONCLUSION

This study compared conventionally written texts with online ones written by 30 senior English Language and Literature students at Shiraz University. The samples of traditional writing were selected from among the texts they wrote in an advanced writing course they were taking, and the online texts through their participation in an online Internet forum communication. Writing quality was assessed applying the rubric developed by Spandel (2009). Data was analyzed using SPSS.

Regarding writing quality, it was found that the quality of texts written conventionally was significantly higher than that of online texts. This was more observable with regard to some writing components such as text organization, word choice and conventions of writing.

In sum, the findings of the study revealed that there are differences between conventional and online writing with regard to writing quality (organization, word choice, conventions of writing). Although some of these differences are due to the nature of online writing and are indispensable features of Internet language, it is important to examine its various features and focus on the differences that exist between this new form and the traditional forms of writing. Also, attempt must be made to get more into the features of this newly emerged genre to best recognize its potentials in different areas.

According to previous research, the online medium offers great potentials to the teaching and learning of languages and also has immense motivating power. Since online writing has become a dominant mode of communication and is substituting the conventional form in some areas, those responsible in the educational grounds have to consider this new genre as important as the conventional writing and try to integrate it within the programs which aim at teaching writing skill.

This study has implications for individuals who write on the Internet, language learners, language instructors and researchers.

Getting aware of the fact that writing online requires different skills and includes different features from those related to conventional writing, those who write on the Internet can maximize communication efficiency through the internet and save time and energy by writing what suits in the new medium rather than applying the conventions of traditional writing in online contexts which is a mere waste of time. Language learners

should consider online writing as a distinct genre of the writing skill and learn its regulations as well as its potentials.

Moreover, language teachers should introduce online writing to their students, emphasizing the differences between online and conventional writing to empower them to be able to communicate through the online media more effectively. According to Burton (2015), in spite of its imperfection, online and digital composition has a significant role in the writing classroom; however, to integrate it into our teaching, these practices should be situated within the appropriate discussions “not *for* our students, but *with them*” (p. 66).

Furthermore, researchers in the area of language and linguistics can study various textual and linguistic features of online texts to further develop the newly emerged area of linguistics called Internet linguistics. Also, those researchers who focus on the instructional and pedagogical aspects of language can expand the area of knowledge related to online writing and its similarities and differences with conventional writing.

Further research can be done focusing on areas not tapped in this study. They can be categorized as follows:

First, various linguistic and discourse features of online and conventional writing can be compared and contrasted. Various types of cohesion, coherence, text difficulty, ease of comprehension, text formats, etc. are among the various examples. Second, different variables related to the writer and the audience, who are involved in the writing process, can be studied as having influence on both the writing process and the final product of writing. For instance, affective factors such as the writers’ attitudes toward online writing, the online audience, motivation, etc. can be examined. Also the nature of writer-reader interaction in online written communication can be studied. Third, the instructional matters related to the use of computers in teaching writing as well as the application of online writing in teaching of other language skills can be studied.

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