

Analysis of Iranians' Writing Performances in Virtual and Real Environments

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Abstract

Writing has always been considered an important literacy skill for foreign/second language learners. The Internet provides such unique applications for the writing skill as weblogs, wikis, and social networking websites. Up to now researchers have put their focus on the learners' performances in the traditional paper and pencil environment or wikis and blogs; it is time to also consider learners' performances in the social networking websites. In this respect the purposes of the present study were to (a) to identify the most frequent Iranian learners' errors in the virtual environment of social networking websites, and (b) compare the learners' performances in the traditional and virtual environments. With respect to the requirements of the research questions, this study had two phases of data collection. For the first phase, the researchers selected 30 Iranians, male and female, aged 18 to 21 from one of the social networking websites and collected a 3200-word corpus from among their comments and wall posts. All of the learners were students of Computer Engineering and IT. For the second phase of the study, another 3200-word corpus were collected from 30 Iranians, male and female, aged 18 to 21, who were studying Computer Engineering and IT at Sheikhabaee University. They were asked to write an essay on an assigned topic. The analysis of the results revealed that three most Iranian participants' errors were verb forms, diction, and prepositions in the virtual environment. Based on the results of the t-test, Mann-Whitney, and Chi-square tests interesting similarities and differences were observed within and between error groups in each corpus.

Keywords: Writing Performance; Social Networking Website; Virtual Environment; Real Environment.

1. Introduction

Writing has always been considered an important literacy skill for foreign/second language learners. Therefore, there is no wonder why learning to write is one of the

most highly valued concerns of education. However, as highly as it is valued, it is also one of the last skills that learners have control over (Haley & Austin, 2004). Since it is an active and productive skill, students

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learning to write in a foreign/second language face multiple challenges. It requires thinking strategies that allow individuals to express themselves in another language. It is a complex activity that requires a certain level of linguistic knowledge, writing conventions, vocabulary, and grammar (Erkan&Saban, 2011).

Not surprisingly, with the advent of new technologies such as computer and the Internet some of the ways teachers and students function inside and outside classroom have changed. It can be said that the offered opportunities by the new technologies, the Internet in particular, are indeed unique in contemporary education. The world is changing and as Eaton (2010) contends, our learning styles are changing, and consequently our teaching and assessment styles are also changing. Students have the opportunity to have the world at their fingertips; they are experiencing the world through technology in a way that their parents and teachers never did. In fact, technology has become part of our lives, and in its light our ways of written communication have changed.

What has to be noticed is that computer technology provides a variety of tools that can be helpful for developing writing (Haley & Austin, 2004). And obviously as Bloch (2008) states, the Internet has clearly become the prevalent technology for facilitating interactions among learners. Hence, it can be implied that the development and spread of the personal computer and the Internet have brought the most significant changes in the writing skill since the popularity of the printing press.

The Internet may provide an opportunity to write with freedom. The Internet also provides a linguistic freedom that may not exist in the classroom (Bloch, 2004). As Warschauer (1992, as cited by Bloch, 2004) argues, the Internet provides the opportunity for learners to take risks with the language they are learning without the fear of correction. For these reasons, writers

in the Internet may produce a different type of writing than that found in the classroom due to the convenience they are provided with in the Internet environment.

Indeed, computer-based writing can affect the writing process and writing. Several researchers have found that the Internet provides a different context for writing than does the print medium or the classroom (Bloch, 2008). Notably, there is some evidence that the language produced while engaged in CALL is qualitatively more coherent, cohesive, and expressive than the language learners produce in classroom (Leloup, Poterio, & Cortland, 2003; Miller, 2008). Along these findings, it is important to note that the quality of writing has improved as it has changed from traditional classes to writing with real audience around the world on the Internet (Muangsamai, 2003; Warschauer, 2007).

In fact, the Internet provides such unique applications for writing skill as weblogs, wikis, and social networking websites. In addition to posting in these applications, members also can comment on other members' posts. In this manner, a number of written dialogues may be initiated between members. These interactions as Ellis (2008) mentions not only provide opportunities for learners to receive input, but also provide opportunities for them to produce output and to receive feedback. Therefore, the ease of writing and publishing on these applications makes them an appealing media to students and thus enhances the quantity and quality of students' writing (Warschauer, 2010).

Considering the above mentioned points, the Internet provides a new and different kind of environment for its users. So many studies have been done considering writing in blogs and wikis but not the social networking websites. Since the prevalent language of the Internet is English, users participate in the interactions by writing in English. However, users and learners who use English as the medium of communication

in the Internet commit errors as they do in traditional paper and pencil environment. Thus analyzing their errors in this new environment is of great importance. In this respect, the present study (a) attempted to identify and analyze Iranian learners' errors in one of the virtual environment of the social networking websites, and (b) the researchers compared Iranian writing performances in the virtual and traditional paper and pencil environments.

2. Methodology

2.1. Participants

Thirty male and female, Iranian language learners, aged 18 to 21 who were active users of the Internet, especially the social networking websites, were selected for the first phase of the study. They commented and wrote wall posts in the English pages of the selected social networking website. They were students of Computer Engineering and Information Technology (IT). For the second phase of the study, thirty male and female Iranian language learners, aged 18 to 21 studying Computer Engineering and IT at Sheikhbahae University were selected from among three General English classes.

English together', 'Learn real English', 'Learn English as the second language', 'English conversation club'. They have many users who write wall posts and make comments on others' wall posts or the administrations' statuses. For the purpose of the study, the researchers collected the needed data from these pages.

For the first phase of the study the researchers collected a 3200-word written corpus from Iranian language learners' wall posts and comments. They wrote such wall posts as:

- a) Hello all. I have a problem. I'm very weak in listening because I understand English very good when read it but I don't understand when listen it. Is solvency my problem? If yes, help me please
- b) Hi all! I'm a new comer; I hope can have the nice time with u all.
- c) I'm looking for some detail about "street talk" book. Can anybody help me? Please!
- d) I wanna translate some news but I cannot true please guide me.

It is remarkable that each web page has an administration that controls the page. Every now and then s/he writes a status and then the members write comments below it.

Table 1. Description of Participants

Group	Environment	Number	Age	Field of study	Nationality
1	Internet	30	18-21	Computer Engineering and IT	Iranian
2	Paper & pencil	30	18-21	Computer Engineering and IT	Iranian

2.2. Instrument

Recently a number of social networking websites have become popular among people, especially youngsters. Users of these social networking websites participate in these websites and actively communicate in English in some of the pages. The selected social networking website has members from all around the world, and has such English pages as 'Let's learn

Examples of the Iranian member's comments on statuses of administrations and other members which were used as data for the first phase of the study are as follow:

- a) Hey guys, tell us about your activities on weekends. What do you do on weekends?
- 1) With friends, we share the recent news at first and then we try to develop an idea and make it actual and take care of it as a

potential project. We make jokes and try to relax as deeply as possible.

2) I personally like something different in my weekends. From staying longer in kitchen to long walk in the nature, watch movies and so on...

b) What was the worst thing you hated most about "traditional" English classes in school?

1) One of a great limitations in traditional way is: Still they focus on the grammars than the dialog. That's make it very difficult and dry. So usually everyone goes for other systems outside. The other thing is they try separate the language from the English culture which makes it more complicated.

2) In my country the teacher translates English to Persian for the students and I think it can be the worst method for teaching English I think you have to learn English only with English and nothing more.

For the second phase of the study, the participants were asked to write on a topic and the data were collected from their written works. The topic chosen by the researchers was '*In your opinion how does technology affect Iranian students' lives?*'. Then, they were given 20 minutes to write their compositions. The time limit was set to create homogeneity of the setting for all the participants. They were asked to write at least 250 words. A 3200-word corpus was collected from the Iranian participants' compositions and then examined for their errors.

2.3. Procedures

This study consisted of two phases of data collection. In each phase, the researchers collected a 3200-word written corpus. The data for the first phase were collected from the Iranian participants within two weeks. For collecting a fairly homogeneous data utmost attempt was made to make the data collection period as short as possible. After

collecting the data of the first phase of the study, the researchers studied them for grammatical and diction errors that the participants had made in their writing performances, and seven most frequent errors namely; verb forms, dictions, prepositions, articles, plural's', quantifiers, and relative pronouns were identified. The same errors were brought under scrutiny in the phase two as well.

For the second phase of the study, a time was set with general English instructors at Sheikhbahae University in order to collect the data. The researchers assigned a topic and asked the participants to write a composition (at least 250 words) in 20 minutes. Another 3200-word corpus was gathered from the participants' compositions, from which the above mentioned list was then collected, categorized, and analyzed.

The data were analyzed for errors and their categorization. The procedure of error analysis consisted of identification, classification, tabulation, and calculation of errors. Once the errors were counted and arranged in order, they were tabulated for analysis.

One of the objectives of the present study was to figure out whether there were significant differences between the Iranian writing performances in the virtual environment of social networking websites and traditional paper and pencil environment; therefore T-test, Mann-Whitney, and Chi-square tests were needed. Indeed, each participant's errors related to the seven types were counted and arranged, and the means of the phase one and phase two of the study were calculated, then t-test and Mann-Whitney test were applied to assess the significance of the differences in the means of the two groups. Moreover, in order to find out whether there were any significant differences in each type of errors in the participants' performances, the frequency of each type of errors were compared by applying seven Chi-square tests.

3. Data Analysis and Results

Regarding the research questions, first each and every participants' sentences were examined and the total frequency of participants' usage of verb forms, prepositions, articles, plural 's', quantifiers, and relative pronouns in all two phases were identified and counted. The result of which is presented in Table 2.

Table 2. Total Participants' Usage of Each Type

Type	Internet	Paper & pencil
	Iranian	Iranian
Verb forms	514	475
Prepositions	258	391
Articles	159	139
Plural 's'	102	166
Quantifiers	79	87
Relative pronouns	43	49

Then the erroneous forms were identified from the correct ones, and the total frequencies of errors committed by the participants in all the phases related to the seven types were counted (Table 3).

Table 3. Participants' Errors in Their Performances

Error type	Internet	Paper & pencil
	Iranian	Iranian
Verb forms	89	106
Dictions	88	173
Prepositions	62	108
Articles	52	98
Plural 's'	37	117
Quantifiers	20	34
Relative	15	14
Total	363	650

Once the errors were counted and arranged, the relative frequencies and the percentages of errors were calculated. The results of which are presented in Table 4 and Table 5, respectively.

Table 4. Relative Frequency of Errors in the Participants' Performances

Error type	Interne	Paper & pencil
	Iranian	Iranian
Verb forms	0.17	0.22
Prepositions	0.24	0.27
Articles	0.32	0.70
Plural 's'	0.36	0.70
Quantifiers	0.25	0.39
Relative pronouns	0.34	0.29

Table 5. Relative Frequency of Participants' Errors in Percentage

Error type	Interne	Paper & pencil
	Iranian	Iranian
Verb forms	17	22
Prepositions	24	27
Articles	32	70
Plural 's'	36	70
Quantifiers	25	39
Relative pronouns	34	29

The primary aim of this study was to discover the most frequent Iranian errors in the virtual environment of social networking websites. The most frequent errors in each phase of the study were as follows:

(Phase 1): verb forms (24.51%), dictions (24.24%), prepositions (17.07%), articles (14.32%), plural 's' (10.19%), quantifiers (5.5%), relative pronouns (4.13%).

(Phase 2): dictions (26.61%), plural 's' (18%), prepositions (16.61%), verb forms (16.30%), articles (15.07%), quantifiers (5.23%), relative pronouns (2.15%).

Table 6. *Results of Mann-Whitney Test between Iranian Participants in the Virtual and Traditional Environments*

Group	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	Sig.
Iranian-Internet pages	30	20.68	620.50	155.5	4.326	0.000
Iranian-Paper	30	40.32	1209.50			
Total	60					

Table 7. *Result of the T-test between Iranian Participants in the Virtual and Traditional Environments*

Group	N	Mean	Std. Deviation	T	Sig.
Iranian-Internet pages	30	12.10	4.475	-5.271	0.000
Iranian-Paper	30	21.67	8.876		

In the next step, an attempt was made to unravel whether there were significant differences between Iranian writing performances in the virtual and traditional paper and pencil environments; therefore t-test, Mann-Whitney, and Chi-square tests were needed.

Considering the point that participants were not selected randomly, the process of data collection was nonparametric; therefore, in the first step Mann-Whitney test ($\alpha = 0.05$) was applied between the means of the total frequency of Iranian errors in the virtual environment of social networking websites and traditional paper and pencil environment (Table 6).

Since the normality tests performed on the participants revealed that doing a t-test was permeated, therefore a t-test also was conducted between the means of the total frequency of Iranian errors in the virtual environment of social networking websites and traditional paper and pencil environment. Table 7 shows the result of this t-test.

Taking the information of the Tables 6 and 7 into consideration, both tests demonstrate that the participants performed differently

in these two environments; in other words they were significantly different.

With regard to the statistical difference between the means of the two groups, in order to find out whether there were any significant differences in each type of errors in the participants' performances, the frequency of each type of errors were compared by applying seven Chi-square tests at $\alpha = 0.05$. The results of the Chi-square tests between the writing performances of Iranian participants in the virtual and traditional paper and pencil environments are presented in Table 8.

Results obtained from the Chi-square tests uncovered that the difference between the values of Chi-square tests related to verb forms, prepositions, and relative pronouns were not statistically significant. However, Table 8 demonstrates that participants performed differently in diction, article, plural's, and quantifiers because their levels of significant were lower than $\alpha = 0.05$.

4. Discussion and Conclusion

Errors in using verb forms were the most frequent ones made by the participants in

Table 8. *The Results of the Chi-square Tests on the Writing Performances of Iranian Participants in the Virtual and Traditional Environments*

	Internet	Paper & pencil		
Error type	Iranian	Iranian	χ^2	Sig.
Verb forms	89	106	.231	.636
Diction	88	173	27.68	.000
Prepositions	62	108	1.036	.317
Articles	52	98	42.38	.000
Plural's'	37	117	30.245	.000
Quantifiers	20	34	6.88	.01
Relative pronouns	15	14	.423	.653

phase one. In using verb forms, there are such rules to consider while writing as: the voice of the sentence whether it is active or passive, the tense of the sentence, whether to use infinitive or gerund after the main verb, and etc. Due to the complexity of the rules, learners often make errors in this area.

Moreover, one aspect which needs special attention while developing the writing skill is the choice of words. To express the meaning and to convey the message, one needs to have an appropriate store of words and sufficient information about them. As the obtained results show, diction was the second most frequent error type in the virtual environment of social networking websites, and it was the first most frequent error type in the paper and pencil environment. It can be implied from these results that mastering English verb form system and diction are the most daunting tasks that Iranian face in these two environments. These findings suggest that teachers must pay special attention to errors of verb form and diction.

The third most frequent error both in the virtual environment of social networking websites and in the traditional paper and pencil environment was prepositions. The improper use of prepositions was also prominent among Iranian participants. Prepositions which commonly precede by nouns (or pronouns), are connective words that show the relationship between the nouns that follow them and one of the basic

sentence elements such as subject, verb, object, or complement. They usually indicate relationships, such as position, place, direction, time, manner, agent, possession, and condition, between their objects and other parts of the sentence. Choosing a preposition is difficult because of their rules. One has to determine which preposition should be used based on each context. Considering the findings it can be suggested that it is not sufficient merely to teach prepositions in isolation and out of context.

The second most frequent error in the traditional paper and pencil environment was plural's'. One kind of pluralization is a process of adding the plural morpheme (*s/es*) to pluralize nouns. When learners do not have enough information about words, they fail to determine whether a word requires the plural morpheme. To take a simple example, if learners do not know whether the word is countable or not, they may fail to use the correct form of the word, and consequently they fail to use the correct form of the verb form as well. This high frequency of errors in plural's' may be due to differences that exist between the Iranian's mother tongue and English system of pluralization.

Moreover, an attempt was made to unravel whether there were significant differences between the Iranian writing performances in the virtual environment of social networking websites and traditional paper and pencil environment. To this end,

Mann-Whitney, t-test, and Chi-square tests were applied. The results of the Mann-Whitney test, and the t-test showed that the Iranian participants performed significantly better in the virtual environment. Looking back at the available literature, several researchers have found that this is because the Internet provides a different context for writing than does the print medium or the classroom (Bloch, 2008). Moreover, there is evidence that the language produced while engaged in CALL is qualitatively more coherent, cohesive, and expressive than the language learners produce in classroom (Leloup, et al., 2003; Miller, 2008). Along these findings, it is worth mentioning that the quality of writing improved as it changed from traditional classes to writing with real audience on the internet (Muangsamai, 2003; Warschauer, 2007). In fact, wikis, blogs, and social networking websites have become appealing media to students and thus enhance the quantity and quality of students' writing (Warschauer, 2010).

The obtained results from the Chi-square tests provide grounds for the above mentioned points. Based on the results of the Chi-square tests the Iranian participants performed significantly different in the virtual environment in terms of the frequency of diction, article, plural's', and quantifiers.

It can be concluded that error analysis is of high value because it can help learners' error recognition and thus help them in writing better paragraphs after they have learned how to correct these errors through practice. Analysis of errors in virtual and real environments not only gives insight to teachers, but also plays an important role in pedagogical strategies.

The overall findings of the present study revealed that the virtual environment of social networking websites provides a different context for writing. This new context provides opportunities for learners to enhance the quality of their writing. Indeed, the nature of writing is changing, therefore; teachers need to prepare themselves for tackling new writing requirements that is emerging in the virtual environment.

It is important to note that English language teachers can consider the findings of this study in their classes. Meanwhile, because the Internet and especially social networking websites have many users, the results of the present study are beneficiary for them as well. The findings of the present study can also be used for material designers that want to integrate the Internet and its unique applications in their materials.

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