Blending Technology in EFL Writing Instruction

By

[1]Mohammad Sadegh Bagheri, [2]Mortaza Yamini & [3]Fatemeh Behjat
[1]bagheries@gmail.com, [2]yaminimortaza@yahoo.com & [3]fb_304@yahoo.com

Abstract

In the history of language teaching, the delivery of instructional materials has been subject to two major fluctuations (traditional face-to-face instruction and Web-Based Instruction). There has been a long debate recently on the preference of the integration of the Internet in language classes with traditional face-to-face instruction. The main objective of the present study was to find out if blending Web 1.0 and Web 2.0 tools could help the Iranian EFL learners improve their writing abilities. To this end, 202 male and female students studying at university were selected. For the pre-test, they were required to write essays. Then, they were divided into five groups using e-mails, weblogs, wikis, traditional instruction and a special social network called Doreh for their writing practices. After the treatment, all the participants took a writing post-test. The comparison of the writing pre- and post-test scores revealed that firstly, Web 2.0 tools, especially social networks, could help the Iranian EFL learners improve in their writing skill. Moreover, the results of the study indicated that using Web 2.0 tools, female students performed equally well compared to the male students.

Keywords: *E-mail, social networks, wiki, weblog, writing instruction, Foreign Language Learning*

1. Introduction

Looking into the history of the Internet, one can find the time lapse for the use of the Web as a network for connections is divided into three intervals: Web1.0, Web 2.0, and the newly-suggested Web 3.0 (Seng & Choo, 2008). During the Web 1.0 era, known as dot-com period, there were a limited number of webmasters who fed the web with information and millions of users who used the materials generated by experts. In the Web 2.0 era, however, new facilities were at hand so that users started creating the content themselves. The well-known tools of this period were Wikis, Weblogs, Facebook, YouTube, and Podcasts. Through these tools, huge amounts of information were generated, and thus the total volume of digital information reached an amazing degree. These tools began to appear in social communications and attracted the attention of educators and language experts as language learning has long been considered a social act. E-learning is a good manifestation of this. Instead of spending a lot of time sitting in classrooms, learners can simply enjoy their learning experience anywhere at any time. Web 3.0, known as semantic web, is intended to enable computers to analyze the data on the Web whether it is people's communications or any other kind of data which is fed into the computer. According to Gylfason (2010), the application of Web 3.0 in reality, of course, is still a dream for computer engineers and experts, and it needs a lot of work and study. The main focus of the present study is to see whether Web 1.0 or Web 2.0 tools can better serve instructional purposes in an EFL writing classroom. This study also aims at finding out the possible difference in the male and female students' writing performances. The next objective of the present study is to compare students' writing performances in a face-to-face and blended instructional environment.

2. Review of Literature

The impact of technology in language teaching is a tangible phenomenon. The rapid development of ICT (Information Communications Technology) has prompted changes in the ways and methods of teaching a foreign language. It equips students with tools for continuous learning and effective use of the language

to communicate with people. There are some main requirements for the use of ICT in language learning. ICT is used for written and oral presentations, for seeking information, developing and testing linguistic competences, and it is to be used by teachers in their instruction.

ICT is now being used to assist students to learn more effectively, and to help teachers to do their teaching tasks more efficiently. ICT in education in general and language learning in particular has made it possible for students, teachers, specialists and researchers to collaborate with each other in diverse ways. Moreover, ICT can also play various instructional roles such as making learners feel more relaxed to learn a language, and also make learners active because they learn by using technology rather than by being directly 'instructed' by it (Grabe & Grabe, 2005).

Since the beginning of the 1990s, the use of computers connected to the Web for language learning has increased explosively. The birth of the World Wide Web and its applications led to Web-based learning with its distinctive features (Wu, 2011). According to Leidner and Jarvenpaa (1995), one of the fundamental premises of the technology for language learning is the degree to which it supports a particular model of learning. Computer-Assisted Instruction (CAI), for example, supports an objectivist model in which learning is instructor centered and the aim is to transfer knowledge from the instructor to the student. Other theoretical frameworks are proposed by Picolli, Rami, and Ives (2001) who developed an initial conceptualization of the determinants of learning effectiveness in a virtual environment. Factors affecting learning effectiveness such as performance, self-efficacy and satisfaction are classified according to human characteristics -- reflecting students' attributes like maturity and motivation and instructor attribute as teaching style and availability, and a design -- reflecting the choice of underlying learning model and design attributes related to technology, course content, learner control and the level of interaction.

When computers were taken to language classrooms around the 1960s, nobody might have imagined that in less than half a century later, these tools would take a permanent position in foreign language learning environments and education. Computer-Assisted Language Learning (CALL) which was developed to use offline computers in the enhancement of language learning has now been evolved into using computers connected to a network. This in turn has influenced the role of language learners who were once considered as passive consumers of teacher's materials in the classroom. Focusing on both student-centered learning and working in collaboration with others, today's technology is moving toward using the Internet as a personal tool to increase one's knowledge autonomously as well as a social networking platform to give the opportunity to individuals to enjoy learning collaboratively with a group of other people and share their interests and knowledge (Donaldson & Haggstrom, 2006).

As the traditional language classes did not meet the basic requirement of language learning which was 'being life-long' and were actually bound to time and space restrictions, Web-based education appeared on the scene to overcome the limitations of the traditional face-to-face instruction. In Web-based instruction, students can take control of their studying pace. They are delivered materials according to their own needs and time independent of the others (Jackson & Constante, 2001).

The history of the web is divided into three eras: Web 1.0, Web 2.0, and the future Web 3.0. The difference between the first and second generations of the Web has implications for education and language learning. Pegrum (2009) maintained that Web 1.0 referred to the initial information-oriented web, authored by a small number of people for a very large number of users. Consisting mainly of static webpages, it offered little room for interactivity. By contrast, he stated, Web 2.0, refers to a group of Web-based applications such as blogs, wikis, podcasting, and multimedia sharing sites based on greater degrees of interactivity, inclusion, collaboration, authentic materials and digital literacy skills (Lankshear & Knobel, 2007).

Warschauer and Grimes (2007) described the shift from Web 1.0 to Web 2.0 as "changes in the communicative uses of the underlying web platform" (p. 2) rather than a new version of web technology. Web 2.0 is the second generation of the Internet that can facilitate collaboration and sharing between users particularly teachers and learners (*Getting Wired with Web 2.0*, n.d.).

Though computers and the Internet have taken a strong position in language classes, the positive role of teachers in traditional classrooms cannot be overlooked at all (Wright, 2000). Accordingly, a new line of thought has now emerged to facilitate learning in language classes, integrating face-to-face classroom instruction with online activities so that the learners can take the advantage of both e-learning and face-to-face instruction. This is the philosophy of what is known as blended, mixed or hybrid learning (Can, 2009). It can be viewed as an approach that combines the usefulness of opportunities offered in traditional classrooms and active learning through technologically-empowered online environment (Garrison & Vaughan, 2008).

Following a learner-centered approach toward learning, hybrid or blended learning seems to be a new concept in language teaching. Yet, it has been in use for almost 20 years. The use of the term is increasing and developing. Blended, hybrid or mixed learning, is an approach that has developed with tenacity in education, and is by no means a new term or methodology. It focuses on the use of different media and modes of working (Neumeier, 2005, cited in Stracke, 2007).

Blended learning combines the best elements of online and face-to-face education, and it is supposed to be the predominant teaching model of the future. It is now conceptualized as "a combination of real world plus in-world" (Claypole, 2010, p. 36), where a teacher delivers a face-to-face lesson and then arranges to meet his or her students for a follow-up class in a virtual world. As Graham (2007) put it, hybrid learning can be described as combining face-to-face instruction with computer-mediated instruction. It is now partly for economic and partly due to pedagogic reasons as well as the availability of the Internet that online educational activities (out of the classroom) have played a great role in learning foreign languages. The integration of e-learning materials with the traditional classroom instruction has strengthened both individualized as well as interactive learning developments. The notion of hybrid learning has been suggested to denote this kind of learning.

Blended learning incorporates all technologies available to be used along with common classroom teaching. Hybrid learning takes place where teachers and learners come together face-to-face on the one hand and use e-learning elements in the form of computer-based training and web-based training on the other hand. Kim and Bonk (2006) stated that in recent years the classroom delivery has been moving from a simple delivery of materials to an interactive and problem-solving model.

While some believe that blended learning is not a new concept and it means the synthesis of approaches and methods to make best out of one's language teaching, others use the term blended learning more restrictively stating that it is the combination of 'real world plus in-world' as the teacher delivers a lesson face-to-face and then gives the follow-up activities through virtual environments (Claypole, 2010). Whatever it may be, hybrid learning seems to be an interesting line of thought in the area of language teaching as its main focus is a search for the best practice to improve language learning in both real and virtual worlds (Billigmeier, n.d.).

Redford (2006) stated that face-to-face instruction revealed the advantages of in-class teaching for trainers very well. They help the teacher not to lose his temper even if it is all for right reasons. That is why teachers are usually so patient. It helps a teacher never use inappropriate language; teachers are more familiar with kind and formal academic language than others. They learn how to handle unexpected situations and not assume that their lesson plan and activities do not need to be followed exactly. The last benefit for the teachers in traditional face-to-face classes is that they can make friends with their students.

Based on what Sanchez-Villalon and Ortega (2004) mentioned, the major disadvantage of conventional language learning classes was that they offered limited access to additional information besides those given inside the classroom or within students' textbooks. Teachers made use of textbooks, the blackboard, pen and paper for instruction, and students seldom used them outside the classroom. As for productive skills like speaking and writing, the conventional environment of the classroom seemed appropriate for speaking since there was pair work and role playing. However, interactive communication in a face-to-face classroom is often neglected.

Social Networking sites appeared with Web 2.0 technologies, which came to widespread prominence around 2003-2004. Web 2.0 brought into life a social many-to-many forms of communication, and that is why its tools are called social networks. Social dimensions of the Internet are exemplified in interactive tools such as blogs and wikis. Social networking is both an instructive and a popular entertainment for many people including students (Wheeler & Whitton, 2007). The World Wide Web now is driving users to discover more sophisticated uses for communication and social networking.

All in all, the synthesis of classroom teaching and online practice is what is known as 'making the best of both worlds' (*Hybrid Courses: The Best of Both Worlds,* 2011). On the other hand, one of the big challenges is whether the materials actually suited the varied needs and interests of learners. There are some possible problems in bringing Web-based materials into the classroom environment:

    (1) Preparing the students for success: The materials should meet the demanding standards of face-to-face instruction;

    (2) Preparing teachers for success: Teachers are not born technology-wise individuals. They need to have enough knowledge about the Web facilities and how they can be used to be at the disposal of learners;

    (3) Offering interactive and flexible course design: Since the common approach based on which online materials are designed is constructivism, collaboration and interactivity are the major criteria to be observed in any materials prepared for hybrid learning purposes;

    (4) Monitoring and supporting teachers: There need to be some technology experts to help teachers in designing their online materials;

    (5) Monitoring and supporting students: Learners also need support in order to make use of technologically-provided materials. This can be done either by their teachers or any other tutor familiar with both language teaching and the Internet technology (*Hybrid Learning Model,* 2011).

Rastegarpour (2010) confirmed that blended learning is a good idea, but a part of the affective domain would be missing in such mixed instruction. Following the proponents of using blended instruction for language teaching, the following research questions were posed:

Q1-   Could Web 1.0 or Web 2.0 tools better serve instructional purposes in an EFL writing classroom?

Q2-   Are there any differences in the male and female students' writing performances using web 1.0 and web 2.0 tools?

Q3-   Could face-to-face or blended instruction help the Iranian EFL students improve their writing?

3. Method

Participants
The participants of the present study were 202 male and female sophomore students majoring in English at Islamic Azad Universities, Shiraz and Abadeh branches and Zand Institute of Higher Education. They had all passed their Grammar and Writing courses (I) and (II) at university and were therefore assumed to be at the same level as far as their English writing ability was concerned. They were at the age range of 20 to 24 years old.

Instrumentation

The tool used to answer research questions included two tests of writing one administered at the beginning and one at the end of the instruction as pre- and post-tests. The students were required to write a three-paragraph essay on assigned topics for the pre and post tests. The tests were checked for reliability through test-retest formula, and it turned out that the tests enjoyed a good level of reliability. Moreover, two language experts were asked to see if the tests had content validity, and the content validity of the tests was confirmed.

Procedures

In order to answer the research questions, the following procedure was done: 202 sophomore female and male students at Islamic Azad Universities, Abadeh and Shiraz branches and Zand Institute of Higher Education were selected as the participants. Then, they were divided into five groups. In order to see if they were homogeneous regarding their writing abilities, they all took a writing test before the instruction, in which they were assigned a topic to write a three-paragraph essay. The results of the one-way ANOVA on the participants' writing scores showed that they were at the same level of writing ability. Therefore, their scores were kept as the pre-test data for further comparisons.

The treatment started right after the pre-test and took about three months. Every week the participants took part in a two-hour writing class for instruction. The participants in each group, however, enjoyed a different kind of writing activity for out-of-class assignments. Out of all five available groups, one group handed in their homework when they met the teacher the following session. This group was considered as the one who used traditional face-to-face instruction.

The other four groups were instructed for one session on the use of the Internet for their writing activities. The first group students were given an e-mail address and were required to send their assignments to the teacher. They actually used a web 1.0 tool and sent their word-processed assignments electronically. Figure 1 shows a sample of the students' writing assignmnets sent to the teacher's mailbox.
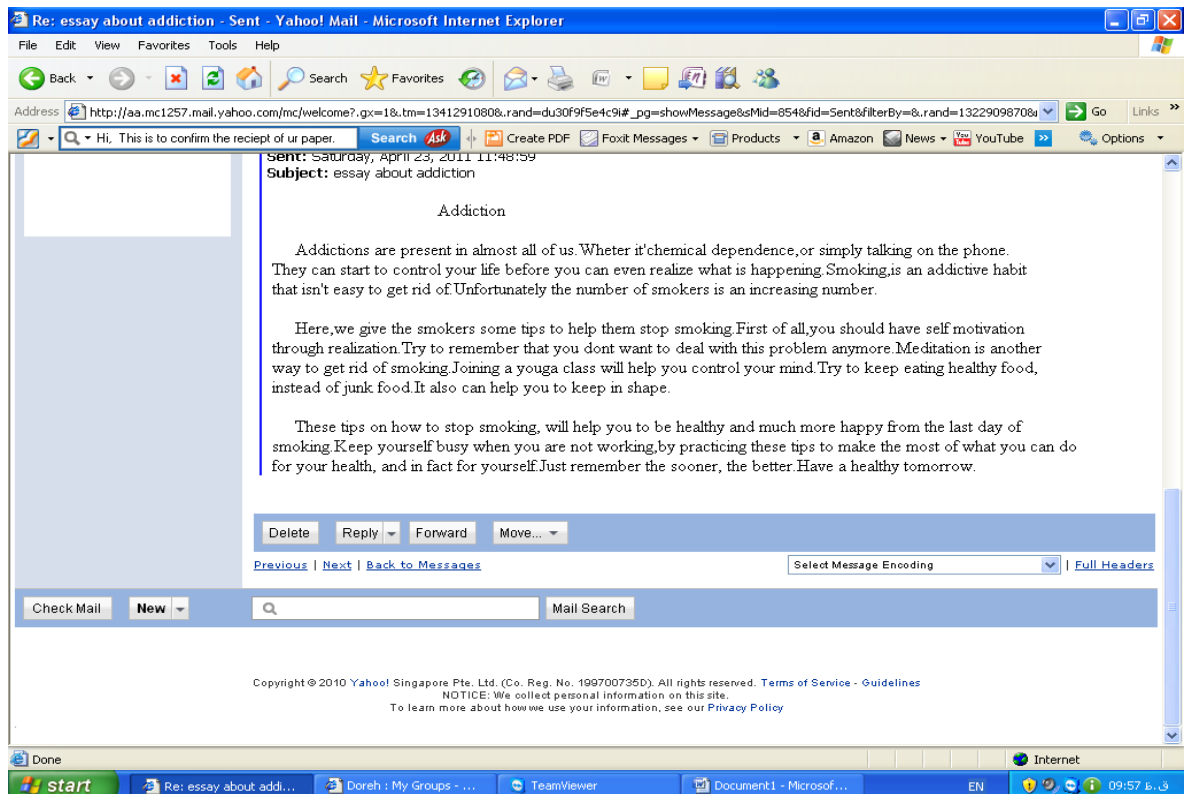
Figure 1- A Sample of Writing Assignment Sent through E-mails as a Web 1.0 Tool

The second group logged in a special social network designed for Iranian university students called Doreh (www.Doreh.com) and posted their assignments on that website. Figure 2 is the homepage of Doreh website.

Figure 2- The Social Network "Doreh" Homepage

There, the participants had the opportunity to share their ideas, talk about the topic and check each other's assignments before being handed in to the teacher. Being given a username and password, they also had access to the assignments students had posed on the website the preceding sessions.

Figure 3- Students' Access to the Materials Posted on the Website in the Preceding Sessions

The next two groups were introduced a weblog (www.hybridlearning.blogfa.com) and were required to deliver their writing assignments through that weblog. The difference between these two groups, however, was that while one group had access to wiki-based reading materials and were assigned to edit the wiki pages, the other group posted their writings on the weblog page. Figure 4 shows a sample of a wiki page the students in the fourth group used for their writing practice.
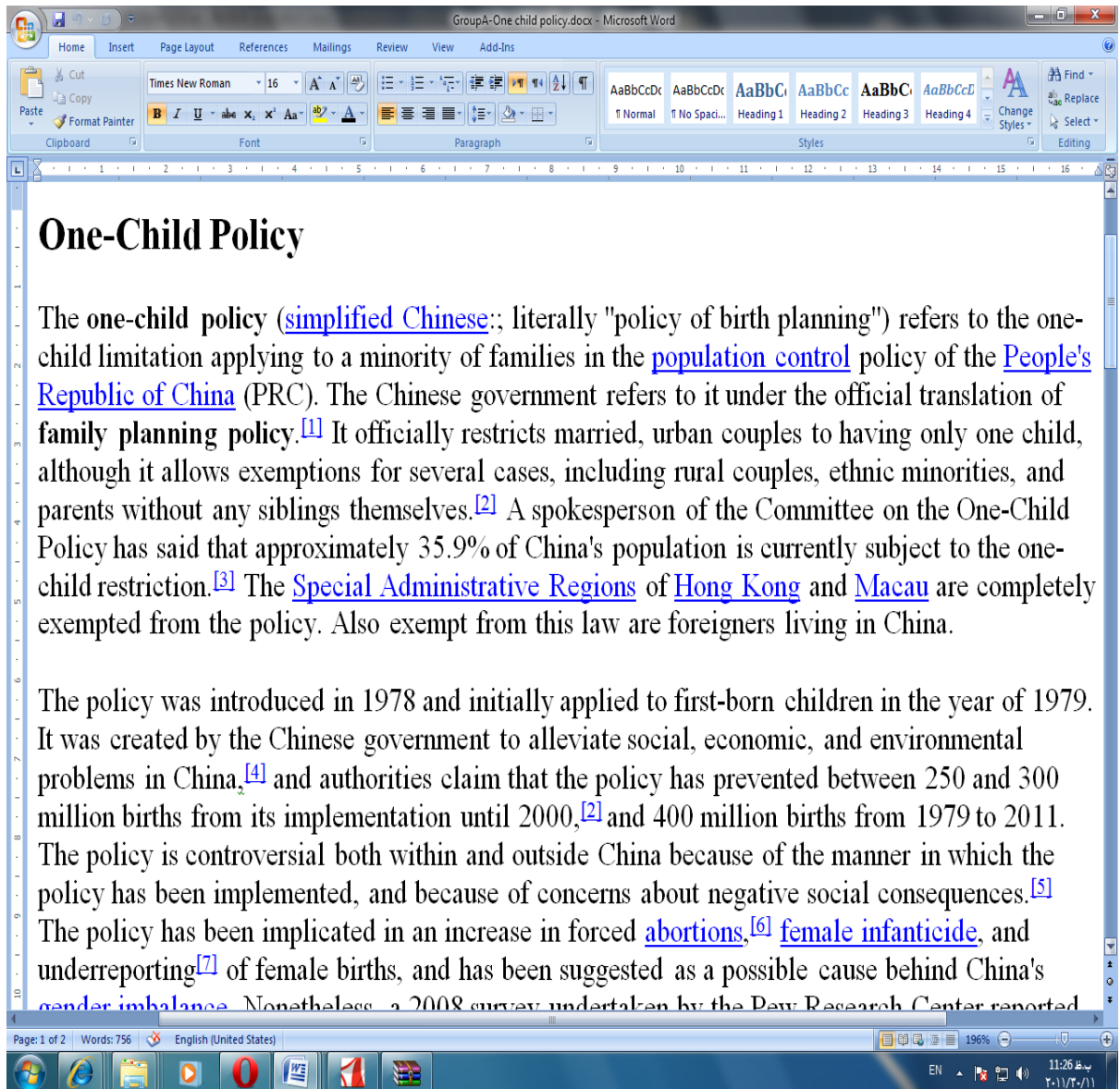
Figure 4- A Sample of a Wikipage Students Edited for their Writing Assignment

The students who used wikipages had the opportunity to have access to the related hypertexts through links. In fact, as they clicked on the underlined words in the text, they could read more related materials and therefore get more ideas on how to edit the wikipage. But for the students who used the weblog, the texts they could read were the only ones the teacher had posted on the weblog. They were like any text typed by Microsoft Word and saved as a .doc text. The following figure is a sample of the text posted on the blog.

A world map showing countries by fertility rate. Period 2005-2010. (See *List of countries and territories by fertility rate.*)

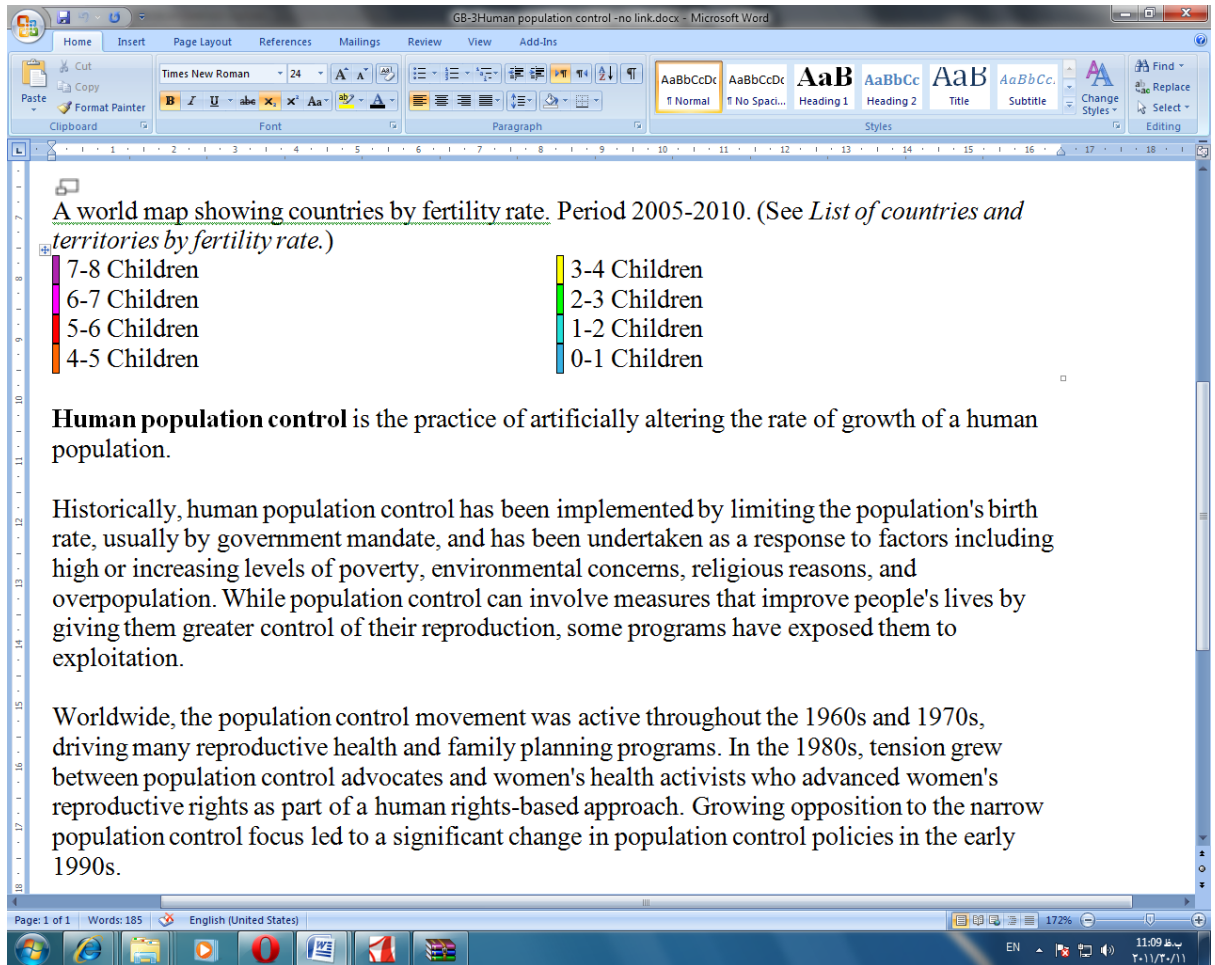| 7-8 Children | 3-4 Children |
6-7 Children	2-3 Children
5-6 Children	1-2 Children
4-5 Children	0-1 Children

Human population control is the practice of artificially altering the rate of growth of a human population.

Historically, human population control has been implemented by limiting the population's birth rate, usually by government mandate, and has been undertaken as a response to factors including high or increasing levels of poverty, environmental concerns, religious reasons, and overpopulation. While population control can involve measures that improve people's lives by giving them greater control of their reproduction, some programs have exposed them to exploitation.

Worldwide, the population control movement was active throughout the 1960s and 1970s, driving many reproductive health and family planning programs. In the 1980s, tension grew between population control advocates and women's health activists who advanced women's reproductive rights as part of a human rights-based approach. Growing opposition to the narrow population control focus led to a significant change in population control policies in the early 1990s.

Figure 5- A Sample Text Posted for the Blog Group

In order to control the time spent on the net for the students who used either web 1.0 tools, i.e., e-mails and those who used web 2.0 tools, namely Doreh social network, weblog, or wiki for their assignments, the students were required to do their writing activities in not more than three hours including their writing, editing, interaction with each other and surfing the net using the hyperlinks. Then, they attended the class the following week and took a new lesson on how to write English paragraphs and essays.

After the instruction which took about one semester, all the participants in the five groups took another writing test considered as their post-test. Again, they were assigned a topic and were required to write a three-paragraph essay on it. Then, the students' scores in the pre- and post-tests were considered as the data of the study.

4. Results and Discussion

In order to see if the participants in all five groups were homogeneous or not, a one-way ANOVA was run on the students' writing pre-test scores. Table 1 indicates the results.

Table 1- One-way ANOVA for the Homogeneity of Participants

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.899	4	1.975	.458	.766
Within Groups	848.695	197	4.308		
Total	856.594	201			

As Table 1 indicates, the F value is .458, which is lower than the significance level (sig. = .766). This implies that there was not a significant difference in the writing performances of participants in the pre-test. Thus, the participants were homogeneous regarding their writing abilities and were at the same level.

After the administration of the post-test of writing at the end of the instruction, the participants' gain scores were computed by subtracting the post-test from the pre-test scores. Then, a one-way ANOVA was run on the students' gain scores. Table 2 reveals the results:

Table 2- One-way ANOVA on the participants' Gain Scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	377.772	4	94.443	2.807	.000
Within Groups	6.629	197	0.034		
Total	384.401	201			

According to Table 2, the value of *F* was higher than the significance level (sig. = .000). It indicates that the performances of the participants in different groups were significantly different. In order to see where exactly the area of difference was, a *Post Hoc* analysis was run. The results are in Table 3 as follows:

Table 3- Scheffe Test for the Comparison of the Participants' Scores

Group	N	Subset for alpha = 0.05				
		1	**2**	**3**	**4**	**5**
Face-to-face	42	1.0714				
e-mail	44		2.0227			
weblog	39			3.0256		
wiki	40				4.0570	
social network	37					4.9459

According to Table 3, the lowest mean score of the participants' gain scores belonged to the group who used traditional face-to-face instruction (mean score = 1.0714). The best mean score belonged to the social network group who used Doreh to interact with their peers (mean score = 4.9459). The wiki group was ranked as the second best group since the mean of gain scores was 4.0570. The third best performance belonged to the group who used weblogs with the mean score of 3.0256. The next group which performed better than the traditional group was the one who used web 1.0 tools or e-mails with the mean score of 2.0227.

Thus, it can be concluded that the first research hypothesis stating that there is not a significant difference in the writing performance of the students who use web 1.0 and 2.0 is rejected here as the three groups who used web 2.0 tools including those who used Doreh social network, wikis and weblogs performed much better than those who used e-mails.

Table 3 also reveals that the four groups who used different web 1.0 and 2.0 tools had better mean scores compared to the group who used traditional face-to-face instruction. Therefore, the third research null hypothesis stating that there is not a significant difference in the writing performance of the group who use face-to-face instruction and those who use blended instruction is rejected here since the lowest writing gain scores belonged to the group who used face-to-face instruction.

In order to compare the male and female participants' writing performances in all five groups, another one-way ANOVA was run. Table 4 shows the results:

Table 4- One-way ANOVA on the Male and Female participants' Gain Scores

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	0.197	1	.197	.103	.749
Within Groups	384.204	200	1.921		
Total	384.401	201			

Table 4 indicates that the value of F (F= .103) was lower than the significance level (sig. = .749). It can be concluded that there was not a significance difference between the writing performances of male and female students in different groups. Therefore, the second research null hypothesis stating that there aren't any differences in the male and female students' writing performances using web 1.0 and web 2.0 tools is retained here.

Therefore, the results of the present study supported Neumeier (2005), Donaldson and Haggstrom (2006), and Garrison and Vaughan (2008) who all agreed on the positive role of technology on language learning particularly using a blended learning program. This study was also in line with Warschauer and Grimes (2007) and Pegrum (2009) who confirmed that web 2.0 tools can well serve language learning purposes.

4. Conclusion

The present study aimed at finding out whether web 1.0 or web 2.0 tools could better help the Iranian EFL students in their writing performance. This study also was an attempt to compare the improvement of EFL students' writing skill in case they use a blended environment and a traditional face-to-face one. The results of the study revealed that comparing blended and traditional instructional environments, class instruction supplemented with the Internet can better help the Iranian EFL students improve their writing tests. Thus, a blended environment enhances EFL students' writing ability much better than traditional instruction. As for the comparison between web 1.0 and web 2.0 tools, this study indicated that web 2.0 tools specially social networks like Doreh, wikis and blogs foster Iranian EFL students' writing much better than e-mails, which are considered as the major web 1.0 tool. Moreover, the present study indicated that gender is not a determining factor in the out-performance of the participants in different groups implying that both male and female students performed equally well in their writing tests, and that they had the same degree of improvement in their writing abilities.

References

Billigmeier, G. M. (n.d.). Blended learning: Design and implementation. Retrieved from *imet.csus.edu/imet10/portfolio/billigmeier_g/.../ROLFinal.pdf on* March, 12, 2011.

Can, T. (2009). Learning and teaching languages online: A constructivist approach. *Novitas-ROYAL, 3*(1), 60-74.

Claypole, (2010). *Controversies in ELT: What you always wanted to know about teaching English but were afraid to ask.* Norderstedt: Lingua Books.

Donaldson, R. P. & Haggstrom, M. A. (2006). *Changing language education through CALL.* New York: Routledge.

Garrison, D. R. & Vaughan, N. D. (2008). *Blended learning in higher education: framework, principles, and guidelines.*San Fransisco: John Wileys and Sons Inc.

Getting wired with Web 2.0: An information sharing. (n.d.). Retrieved from www.larkin.net.au/resources/web2_Info_sharing.pdf on June, 20, 2011.

Grabe, M. & Grabe, C. (2005). *Integrating technology for meaningful learning.* USA: Houghton Mifflin.

Graham, C.R. (2007). *Blended learning systems: Definition, current trends and future directions*. NY: Brigham Young University Press.

Gylfason, B. P. (2010). The future of the Web: The semantic Web. Retrieved from www.olafurandri.com/nyti/papers2010/Semantic%20Web.pdf on January, 23, 2011.

Hybrid courses: The best of both worlds. (2011). Pottruck Technology Resource Center, Simmons College. Retrieved on June, 12, 2011, from www.jmu.edu/cfi/maysymposium/ resources/ maysymposium2011.pdf

Hybrid Learning Model (HLM) (2011). CETL(NI): Institutional E-learning Services. University of Ulster. Retrieved from cetl.ulster.ac.uk/ on April, 22, 2011.

Jackson, G. B. & Constante, G. (2001, November/December). Web-mediated second language instruction: Will it actually work? *Tech-Know Journal, 15-17.* Retrieved from www.techknowlogia.org/TKL_Articles/PDF/337.pdf on June, 3, 2011

Kim, K. G. & Bonk, C. J. (2006). The future of online teaching and learning in higher education: The survey say. *Edu-cause Quarterly, 4,* 22-30.

Lankshear, C., Knobel, M., Bigum, C., & Peters, M. (eds.) (2007). *New literacies sampler* (Vol.9). New York: Peter Lang.

Leidner, D. E. & Jarvenpaa, S. L. (1995). The use of information technology to enhance management school education: A theoretical view. *MIS Quarterly, 19*(3), 265.

Neumeier, P. (2005). A closer look at blended learning: Parameters for designing a blended learning environment for language teaching and learning. *ReCALL, 17,* 163-178. In E. Stracke (2007). Spotlight on blended language learning: A frontier beyond learner Autonomy and computer assisted language learning. *Proceedings of the Independent Learning Association 2007 Japan Conference: Exploring theory, enhancing practice: Autonomy across the disciplines. Kanda University of International Studies, Chiba, Japan, 1-13.*

Pegrum, M. (2009). *From blogs to bombs: The future of digital technologies in education.* Crawley: UWA Publications.

Piccoli, G., Rami, A., & Ives, B. (2001). Web-based virtual learning environments: A research framework and a preliminary assessment of effectiveness in basic IT skills training. *MIS Quarterly, 25*(4), 401.

Rastegarpour, H. (2010). What is the hoola about blended learning: Something old is new again. *In proceedings of the Second International Conference on E-learning and E-teaching (ICELET), Amir Kabir University, Tehran.*

Redford, M. (2006). Is teaching a new career for you? Retrieved from www.face2.net/pdfs/ TeachingAsACareer. pdf on February, 3, 2011.

Sanchez-Villalon, P. P. & Ortega, M. (2004). Writing on the Web: A web-appliance in a ubiquitous e-learning environment. *Proceedings of the First International Online Conference on Second and Foreign Language Teaching and Research: Beyond Borders, New Jersey, US.*

Seng, K. T. & Choo, L. S. (Eds.) (2008). *Information communication technology in Education Singapore's ICT master plans 1997-2008.*Singapore: World Scientific Publishing Co., Ltd.

Stracke, E. (2007). Autonomy across the disciplines. Kanda University of International Studies, Chiba, Japan, October 2. *Proceedings of the Independent Learning Association Japan Conference: Exploring theory, enhancing practice: Spotlight on Blended Language Learning: A Frontier Beyond Learner Autonomy and Computer Assisted Language Learning University of Canberra, Australia.*

Warschauer, M. & Grimes, D. (2007). Audience, authorship, and artifact: The emergent semiotics of Web 2.0. *Annual Review of Applied Linguistics, 27*, 1-23.

Wheeler, S. & Whitton, N. (Eds) (2007). Beyond control: Social software for the network generation. *Research Proceedings of the Association for Learning Technology Conference (ALT-C 2007) held at the University of Nottingham, September 4-6.*

Wright, C. (Ed.)(2000) *Issues in education and technology: policy guidelines and strategies.* London: Commonwealth publications.

Wu, W. (2011). Web-based English teaching in Taiwan: possibilities and challenges. Retrieved from www.chu.edu.tw/~wswu/publications/papers/conferences/05.pdf on March, 13, 2011