ISSN: 2278-4012, Volume:6, Issue:2, April 2017

Use of web 2.0 Technologies on Enhancing Writing Performance: A Perception Study

Mohammad Basir Bakhtyari
Faculty of Education, Bamyan University

Abstract

Technology plays an important role in higher education to assist teaching and learning. Use of web 2.0 tools can assist students to have effective learning activities. Afghanistan Ministry of Higher Education encourages university English instructors to utilize technology in order to facilitate language learning and teaching. Use of technology for English language and literature students was encouraged by MoHE. This study, therefore, tries to measure students' perceptions on the effects of using web 2.0 technologies in enhancing writing performance. A researcher developed questionnaire was distributed to 303 tertiary students of English and literature, and 40 of them were volunteered to be interviewed. The results generally show positive effects of online tools utilization on enhancing writing performance. However, the participants indicated a number of barriers faced by the universities in using web 2.0 tools. The results suggests to the MoHE and university authorities in providing training programs for both teachers and students in order to familiarize with the effective use of online tools in language learning.
Key Words: *web 2.0 tools, writing performance, perception*

1. Introduction

Proficiency in English, as international language of communication and the language of the Internet, is becoming increasingly significant to the growth and development of higher education in Afghanistan. Introduction of English as a foreign language should be started in early primary school as a main subject. Ministry of higher education encourages the universities to facilitate and provide students with opportunities to study English in the first year and continue throughout their course of study if they are not already familiar it (MoHE, 2010-2014). English is one of the fundamental principles that can improve education and to build capacity of educational institution in Afghanistan.

In order to bring broad changes in all parts of education such as curriculum, content, administration and instructional design, it is essential that educators have access to new resources, computers, the Internet, and other technologies that can assist in the educational process. It seems that English is the language of science and technologies, therefore Afghan students need training that will prepare them for the globalized world. Based on this, it is essential for both teachers and students to know English. Furthermore, understanding English rise the opportunities for Afghan students and educators to attend in global exchange programs which will assist them to bring new ideas back to Afghanistan. To meet this important need,

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

Afghan educators should search and find ways to enhance English language capacity of students (Hikmat, 2009). In addition to the Ministry of Higher Education (MoHE) and a number of Afghan scholars such as Miri (2016) indicated that the current teaching and learning process in Afghanistan higher education is ineffective, and Afghan English language learners need a lot of opportunities to practice the language skills. In relation to this, the use of technology as an effective tool emphasized by the MoHE (2010-2014) where students can have various learning activities. Therefore, it is important to investigate how students perceive the use of web 2.0 tools on enhancing their writing performance.

2. Literature Review

▪ 2.1 Technology in Afghanistan Universities

Afghanistan education system was affected harshly by three decades of civil war and conflicts. As a result of this war, infrastructure, government, social services, economy and education system have destroyed. Many schools were demolished and because of this, thousands of students were not able to go to school. The higher education system was also affected, may professional instructors left the country. Teaching and learning materials were burnt and damaged (Habibyar, 2009; Ministry of Higher Education, 2012). Over the past 14 years, Afghanistan Ministry of Higher Education (MoHE) and international communities tried to improve higher education. As a result of this cooperation, MoHE developed a new strategic plan. In the new strategic plan applying technology and improving teaching and learning has been emphasized.

As a priority of the strategic plan, the Ministry of Higher Education of Afghanistan (MoHE) encourages the use of technology to facilitate teaching and learning and states that the future of teaching and learning should be more technologically driven. Based on MoHE strategic plan, it seems that using technology for teaching and learning has a lot of benefits than applying conventional approaches. MoHE tries to work closely with private sectors in order to find out the benefits of technology and then introduce them to the universities (MoHE, 2010-2014). Barikzi (2009) indicated in his thesis, universities in Afghanistan must use new and modern technologies for teaching and learning instead of using conventional approaches.

▪ 2.2 Importance of Web 2.0 Tools on English Language Learning

The effect of utilization of technology on education has been studied by a number of researchers in different environment and contexts. Most of those investigations and studies shared a common finding that is connected to the impact and effectiveness of the use of technology in education and how it help in improving teaching methods and students'

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

knowledge. Technology-improved education is getting an important part of higher education. Technology not only provide learners the opportunity to control their own learning process, but also offer them with prepared access to huge amount of information over which the teacher has no control (Ismail, Almekhlafi & Al-Mekhlafy, 2010). Students will have active and collaborative learning environment.

In the area of foreign language education, web 2.0 technologies put onward new environment for both teachers and students. Among these technologies, blogs, and wikis have an important place to offer teachers and learners of foreign language with new horizons (İnceçay, 2014; Rahman Sidek and Md Yunus, 2012). Web 2.0 technologies have been shown to possess abundant potential for EFL, as do wikis. They enhance collaboration and interaction among students that not possible elsewhere. Blog is defined as online journal that is naturally a synchronous, let its users to publish, write and share their writing without any space, place and time constraints. In this regard, blogs are indicated to be advantageous in the sense that they develop learners' critical thinking before and while the posting process. Even after posting and sharing on the blog, learners give feedback and evaluate each other's writing. Blogging has been famous because of its contribution to learners' knowledge and skills improvement by assisting students and teachers search and digest new ideas, construct links between known and unknown. Therefore, blogging permits both parties in language education to increase their language knowledge, stay in touch with others in a virtual learning environment. The importance and role of blogs in study skills, specifically, reading, writing, listening and speaking, have also been addressed in the literature (İnceçay, 2014). Yang (2009) proposed the combination of blogging into reading and writing classes because of its collaborative nature. As a result, students can have the opportunity to read their peer's language and provide/ obtain feedback interactively.

Purpose of the study

This paper discusses and reports a study which look at the use of technology especially web 2.0 tools on enhancing students' writing performance. The purpose of this study was to investigate Afghanistan public university students' perceptions of utilizing web 2.0 tools on enhancing their writing performance. Use of technology in Afghanistan higher education contexts is new and in its initial step, and as a result it is important to find how the students perceive the effects of using web 2.0 tools on their writing enhancement.

3. Methodology

3.1 Participants of the study

The study carried out with 303 tertiary students from four public universities in Afghanistan namely, Kabul University, Kabul Education University, Bamayn University, and Balkh University. The participants were from English Language and Literature faculty and department.

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

41 of the participants were from Kabul University (KU) whereas 65 of the participants were from Kabul Education University (KEU). 104 of the participants were from Balkh University, and 93 of the participants were from Bamyan University. 53.1 % of the participants were female, and 46.9% were male. These four public universities were selected because they can be a good sample to other universities across the country. Furthermore, the universities in Kabul and Balkh University are better equipped with present teaching and learning facilities, compared to other universities.

3.2 Research Instrument

In this study, Bloom's digital taxonomy was used a reference to develop the questionnaire, and five items were established for every of cognitive domain. Totally, the questionnaire consists of 30 items. A pilot test was carried out to check the validity and reliability of the questionnaire, and this was implemented before data collection. To support the quantitative findings, a semi-structured interview was employed with 40 volunteer participants from all the four universities.

3.3 Procedure

The researcher started data collection during the first and second semester of 2016 academic sessions. The data collection in each university took about 20 days and started in April and finished in end of Jun 2016. Before asking students to take part in the study, the permission was received by meeting dean of faculty and head of department. For data collection, students were asked to come to the library, classroom or inside the university campus. The participants agreed to take part in the study. The questionnaires were distributed in the class, and the interview was done face to face. The findings of the questionnaire were analyzed using SPSS in means, standard deviation and percentage. The interview data were kept and recorded in Mp4, and the findings of the interview were transcribed and analyzed based on Bloom's taxonomy. The data collection started from Bamyan University, Kabul universities and moved to Mazer-e-Sharif University.

5. Results

5.1 Questionnaire results

The SPSS was used to find the validity and reliability of the questionnaire. The result shows that the Crnobach's alpha was .898, which states that the questionnaire was valid and reliable. The findings of the questionnaire are depicted in table 1.

Table 1: Students' perceptions on the effects of using web 2.0 tools on writing performance

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

Domain	Items	*M*	*SD*
Remembering	Web 2.0 tools help me to search the web for more information regarding the lesson	4.52	.88
	Web 2.0 tools assist me to socialize with classmates	3.90	1.07
	Web 2.0 tools help me to select a topic for discussion	3.99	1.08
	Web 2.0 tools help me to give examples on other's information posted	4.19	.89
	Web 2.0 tools help me to explain a topic on social network	4.13	.95
Understanding	Web 2.0 tools assist me to define terms and concept	3.93	1.02
	Web 2.0 tools help me to state my opinions about a text posted.	4.01	1.03
	Web 2.0 tools help me to compare similarities and difference of information	4.10	1.00
	Web 2.0 tools assist me to classify examples to others proposed task	3.72	1.07
	Web 2.0 tools assist me to match the given questions with answers	3.90	1.00
Applying	Web 2.0 tools assist me to write and post my work	4.03	1.06
	Web 2.0 tools help me to edit an academic written works posted by others	3.83	1.10
	Web 2.0 tools help me to run an academic discussion related to the lesson	4.11	.96
	Web 2.0 tools assist me to carry out a survey related to the lesson	4.00	.93
	Web 2.0 tools assist me to share my information about academic issue	4.19	.98
Analyzing	Web 2.0 tools help me to reorganize the shared information in academic manner.	3.98	1.04
	Web 2.0 tools assist me to mind-map my ideas into graphical form	3.81	1.05
	Web 2.0 tools help me to ask questions related to the lesson	4.00	1.01
	Web 2.0 tools assist me to discuss possible solutions to a problem	4.03	1.07
	Web 2.0 tools help me to outline my ideas in a structured manner	3.94	1.06
Evaluating	Web 2.0 tools help me to moderate discussion in online forum	**3.59**	1.09
	Online tools allow me to collaborate with friends on a given project	4.08	.98
	Web 2.0 tools help me provide constructive feedback and comments in blogs	3.82	1.06
	Web 2.0 tools help me to argue on how to apply a theory	3.87	.95
	Web 2.0 tools help me to defend my ideas that I have shared on wikis or blogs	3.65	1.13
Creating	Web 2.0 tools help me to design a weblog in order to discuss academic issues related to my studies	3.92	1.06
	Web 2.0 tools assist me to create multimedia presentation to present my ideas	4.05	1.03
	Web 2.0 tools help me produce YouTube video to share my ideas	3.80	1.16
	Web 2.0 tools assist me to develop a discussion by adding more information and examples	4.28	.88
	Web 2.0 tools help me to criticize on other's ideas, and information	3.95	1.02

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

The participants were asked to state their level of agreement or disagreement based on 5-point Likert type scale, in relation to the effect of using web 2.0 tools on their writing performance. Table 1 reports students' perceptions on the impact of utilizing web 2.0 tools on enhancing their writing. The mean score of each item is ranged from 3.59 to 4.52, with an overall mean of 3.97, which shows that students agreed on the positive effects of using web 2.0 tools in enhancing their writing performance.

As Table 1 shows in the remembering domain the mean score for every item is raged from 3.90 to 4.52. This indicates that use of web 2.0 tools helped students to search the web for addition information, and give examples on others shared information. The remembering domain got the highest mean scores in compared with the rest of domains. The lowest item reported by the participants is "web 2.0 tools help me to socialize with my classmates" with the mean score of 3.90 (*M=3.90)*. This indicates that the participants agreed on the effects of web 2.0 tools where they can socialize with their classmates for language learning purposes.

In the understanding domain, the mean score is ordered from 3.72 to 4.10, with general mean score of 3.93. This shows the participants agreed in using web 2.0 tools to compare similarities and differences of information, and state their opinion about a text posted. The highest mean score is "web 2.0 tools assist me to compare similarities and differences of information", (*M=4.10).* It seems they were strongly agreed that use of web 2.0 tools help them to do compare and contrast activities. Conversely, the lowest mean score is "to classify examples to others proposed task", (*M=3.72).* The participants agreed that web 2.0 tools utilization facilitate activities where they can classify information and examples.

As presented in Table 1, the second highest mean score is shown in the applying domain. In this domain the main score is range from 3.83 to 4.19 with a total mean of 4.03, which illustrates that the participants agreed utilization of web 2.0 tools could help them to share their information about academic issues, run academic discussion, and post information. This item "web 2.0 tools assist me to share my information about academic issue" got the highest mean score (*M=4.19).* This indicates that participants agreed use of web 2.0 tools help them to share their experience and information. On the other hand, the lowest mean score is refereed to item "web 2.0 tools help me to edit others' writing", (M=3.83). This shows that the participants agreed on the effects of using web 2.0 tools to edit others' writing task.

In the analyzing domain, Table 1 illustrates the overall mean score (*M=3.95)* indicates that the participants agreed utilization of web 2.0 tools helped them to "discuss possible solutions to a problem, ask questions related to the lesson, and mind map an activity. This item "web 2.0 tools help me to discuss possible solutions to a problem" got the highest mean score (*M=4.3).* This states that utilization of web 2.0 tools could help the students to suggest solutions to a

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

problem reported by their classmates. On the other hand, the item with the lowest mean score is "web 2.0 tools help me to mind-map an activity into a graphical form".

As shown in Table 1, the overall mean score (*M=3.8)* for the evaluating domain shows that the participants generally agreed in using web 2.0 tools to moderate discussion in online forum, collaborate, and argue on how to use a theory. The item with the highest mean score "web 2.0 tools help me to collaborate friends on a given project", (*M=4.08).* This indicates that the students agreed in utilizing web 2.0 tools to collaborate with their classmates for language learning purposes. The lowest mean score (*M=3.65)* is "web 2.0 tools help me to defend my ideas that already shared. It seems that students are not really sure of utilizing web 2.0 tools to defend their ideas.

In the creating domain, as depicted in Table 1, the general mean score (*M=4)* indicates that the participants agreed use of web 2.0 tools help them to design a weblog to run academic discussion, produce YouTube video to share their ideas, develop a discussion, and criticize on other's ideas. The item with the highest mean score is "web 2.0 tools assist me to develop a discussion by adding more examples and information", (*M=4.28).* This shows that the participants strongly agreed to develop academic discussion. On the other hand, the item with the lowest mean score is "to produce YouTube video to share their ideas", (*M=3.80).* This also indicates that the participants agreed use of web 2.0 tools helped them to produce YouTube video in order to share their ideas.

Interview Results

In addition to the questionnaire, a semi – structured interview was conducted with 40 volunteer students to obtain a comprehensive understanding from the participants on the effects of utilizing web 2.0 tools to enhance writing performance. The data of interview were coded like: S= student, 1= student's number, BU= the university that a student belongs to. As a result, S1BU refers to student 1 from Bamyan University; S2KEU refers to student 2 from Kabul Education University; S3KU refers to student 3 from Kabul University; and S4BALU refers to student 4 from Balkh University. The interview data are important to support the findings of the questionnaire on the impact of utilizing web 2.0 tools on enhancing students' writing. All the participants confirmed the positive effects of using web 2.0 tools on writing. They indicated that they can have various learning activities to enhance their writing abilities. The findings of the interview are discussed based on the classification of important. First, most of the participants indicated that they can have different learning activities, and hence they are able to enhance their writing performance as indicated by these students: *SIBU "I use web 2.0 tools such as social networking sites for language learning purposes. In particular, using and creating blogs can help me to improve my writing skills. I can post comments and share information". S22KAU "I mostly use YouTube, wiki, and online encyclopedia for language learning. I use them to prepare*

ISSN: 2278-4012, Volume:6, Issue:2, April 2017

my presentation and prepare my assignments. I also use Social Networking Sites for entertainment and relationships. Use of these tools helps me to exchanges ideas and be more active". S32KU "I use web 2.0 tools to do my homework, search information, and improve my knowledge. The teacher asks students to watch the video on YouTube, and then write the summary and present in the class. I also use Viber, and what's up for communication. Web 2.0 tools help me to practice and remember the lesson. I get sources for my final project or monograph, and I should synthesis and paraphrase information. There are several sources available like academic writing, journal writing, and all these help me to improve my writing abilities". S38KEU "I use web 2.0 tools to find sources for my project, and solve problems. I can improve my English language skills. Web 2.0 tools help me to collaborate with my classmates". The participants also indicated that the use of web 2.0 tools helps them to create new information and edit other's writing. *S5BU "use of web 2.0 tools, in particular blogs can assist me to edit other's writing, and I am also able to criticize on other's writing". S22BALU "Web 2.0 tools help me give comments and others can criticize. Giving comments and receiving feedback can help me to correct my mistakes".* Furthermore, use of web 2.0 tools assist them to have collaborative learning. *S38KEU "I can have a collaborative learning environment where ideas can be shared or exchanged. Moreover I can get sources for my project and assignment".* Therefore, the interview findings show the positive impact of using web 2.0 tools to enhance students' writing in the language learning process.

6. Discussion

The findings of both questionnaire and interview with related literature and findings of other relevant studies are discussed below.

6.1 Can web 2.0 tools assist students to enhance their writing performance?

In this study, a questionnaire was developed based on Bloom's digital taxonomy and then distributed to the participants in order for them to indicate their level of agreement or disagreement on the scale provided. Bloom's cognitive domain was applied in developing the questionnaire. There are six sub domains in the cognitive domain namely remembering, understanding, applying, analyzing, evaluating, and creating. In the language learning process considering at these stages are important. Students should not only post and share information but rather they should be able to analyze. The findings revealed that the participants agreed on the positive impact of using web 2.0 tools on enhancing their writing performance. As depicted in the table, the remembering domain got the highest mean score which indicates use of web 2.0 tools helped students to search information, socialize, and give examples on other's writing. Furthermore, the participants believed use of web 2.0 tools helped them in the applying domain. They were able to post and share their written work, edit other's writing and run an academic discussion where everyone can take part to give and receive comments. The participants also believed that use of web 2.0 tools helped them in the creation domain where they can design a

weblog in order to share their ideas, develop a discussion by giving more examples and supporting details, and criticize on other's ideas and information. These findings are supported with previous studies. Oye et al. (2012) found that most of the students are engaged and interested in the utilization of social networking sites basically to socialize with their friends and classmates rather than to utilize for academic purposes. However, they believe and fell that SNSs can be used for academic activities and have a lot of positive impact on their learning process. Hence, students can use SNSs to communicate with their classmates, faculty and teachers for academic purposes. Hurt (2012) stated that Facebook assisted students to exchange information, and to be in touch with their classmates, and discuss academic issues. In addition, several web 2.0 technologies are accessible to support language learning. For instance, blog has the potential in improving the process of writing (Said et al., 2013), and can be used by students and teachers as a forum to explain ideas, collaborate, and share interesting information in order to interact in a setting of English as a second language. Experimental studies also confirmed the positive effects of blogs on developing writing skills, assist students to become more critical and thoughtful in their writing. Therefore, the findings of this study may recommend to MoHE, university authorities and language teachers of possible use of web 2.0 technologies in language learning and teaching. Preparing students for the 21st century knowledge and skills, language learning and teaching activities should be more student-centered, creativity and problem solving.

6. Conclusion

The study attempts to investigate Afghanistan public university students' perceptions on the effects of using web 2.0 technologies to improve their writing performance. The results showed that majority of the participants agreed on the positive effects of using web 2.0 tools to enhance their writing performance in the language learning process. They utilized web 2.0 technologies not only for searching information but rather creating and producing new ideas and information. The findings also revealed that in Afghanistan context, there was not much difference among the four public universities in terms of using web 2.0 technologies and their positive impacts in the language learning process.

Acknowledgement

The author of this paper is thankful to Afghanistan Ministry of Higher Education (MoHE), and Higher Education Development Project (HEDP) for financial funding.

References

Barikzai, S. (2009). *The role of an educational website in providing better opportunities for Kabul Education University.* (Master's thesis). University of Massachusetts, Amherst.

Habibyar, M.T. (2009). *Civics and Citizenship Education in Schools in Afghanistan*. (Master's thesis), University of Massachusetts, Amherts.

Hurt, N. E., Moss, G. S.,Bradley, C. L., Larson, L.R., Lovelace, M., Prevost, L.B., & Camus, M.S. (2012). The 'Facebook' effect : college studnets' pereception of online discussions in the age of social networking. *International Journal for the Scholarship of Teaching and Learning, 6(2),1-24.*

Hikmat C, A. (2009). *The Effects of English Teaching Methods Course on The English Department of Kabul Education University on Secondary School English Teachers*. (Master's thesis). University of Massachusetts ,Amherst.

İnceçay, G., & Genç, E. (2014). University level EFL students' self blogging to enhance writing efficacy. *Procedia-Social and Behavioral Sciences*, *116*, 2640-2644.

Ismail, S., Almekhlafi, A., & Al-Mekhlafy, M. (2010). Teachers' perceptions of the use of technology in teaching languages in United Arab Emirates' schools. *International Journal for Research in Education*, *27*(1), 37-56.

Ministry of Higher Education. (2012). Guideline for curriculum review and development. Afghanistan Ministry of Higher Education. Retrieved from http://hep.glp.net/home

Ministry of Higher Education. (2010-2014). Afghanistan Ministry of Higher Education Strategic Plan. Retrieved from http://mohe.gov.af/?lang=en&p=plan

Miri, M. A. (2016). *Integrating Writing Activities in the English Department Literature Courses at an Afghan University* (Doctoral dissertation, Indiana University of Pennsylvania).

Oye, N., Helou, A.M., & Rahim, Z. Z. A. (2012). Students' perceptions on social networking sites influence on academic performance. *International Journal of Social Networking and Virtual Communities, 1*(1),7-15.

Rahman Sidek, E. A., & Md Yunus, M. (2012). Students' experiences on using Blog as learning journals. *Procedia-Social and Behavioral Sciences, 67,* 135-143.

Said, N. E. M., Yunus, M., Doring, L. K., Asmi, A., Aqilah, F., & Li, L. K. S. (2013). Blogging to enhance writing skills: A survey of students' perception and attitude. *Asian Social Science*, *9*(16), 95.

Yang, S. H. (2009). Using blogs to enhance critical reflection and community of practice. *Educational Technology & Society*, *12*(2), 11-21.