The Effect of Question-Generation Strategy on Iranian EFL Learners' Reading Comprehension Development

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Received: December 16, 2013 Accepted: January 20, 2014 Online Published: March 6, 2014

doi:10.5539/elt.v7n4p38 URL: http://dx.doi.org/10.5539/elt.v7n4p38

Abstract

The main aim of the study was to investigate the effect of question-generation strategy on Iranian EFL third grade high school students' ability in reading comprehension passages via multiple-choice question. In this research, the total number of one hundred and twenty male and female students participated. For homogeneity of the students, a proficiency test including a multiple—choice reading comprehension test (Hill, 1980) was ascertained in the twenty selected questions. Eight multiple—choice reading comprehension passages (Hill, 1980) used based on the target of pre-test and post-test in the forty selected questions. In this research, the students were divided into two experimental groups; each group consisting of 30 homogeneous students (i.e., EMG as Experimental Male Group and EFG as Experimental Female Group) and two control groups (i.e., CMG as Control Male Group and CFG as Control Female Group). In the treatment time, the two experimental groups of the students were instructed for 10 weeks. Outcome of the study showed that question-generation strategy had significantly impact on the Iranian EFL third grade high school learners' in reading comprehension passages.

Keywords: EFL learners, reading comprehension, question-generation strategy, conventional reading activities, meta-cognitive processing, schema processing

1. Introduction

The purpose of the study was to examine the effect of question—generation strategy on Iranian EFL third grade high school learners' ability in reading comprehension passages via only multiple-choice question. Linse (2005, p. 69) indicated that "reading is a set of skills that involves making sense and deriving meaning from the printed word". Anderson (2003) mentioned that the aim of reading is comprehension. Reading comprehension is one of the major English classroom activities in EFL settings. In Iran English language as a subject is taught as a foreign language from middle (Guidance) school. Though it was introduced as a subject from middle school, the Iranian students accepted it as language to pass in the examination. Reading comprehension has always played a crucial role in Iranian EFL classroom. Reading skill is one of the skills used for Iranian high school and pre-university learners to pass entrance examination to get seat in Iranian universities, which is one of the reasons why the researchers have researched this subject. However, reading comprehension is used in EFL materials, textbooks and courses at several levels (school and university) and almost in all number of areas, both general and particular. Linse (2005, p. 71) mentioned that reading comprehension refers to reading for meaning, understanding, and entertainment. He added that there are two main reasons that people read: "the first is for pleasure and the second is for information".

Question-generation processes can be used to improve the reading comprehension ability. Question-generation strategy is designed to help students effectively understand complex reading demands (Schumacher et al., 1994). Belainch, Wisher, & Orvis (2005) defined Question-generation strategy as an activity in which students generate exam questions based on the reading content, using multiple-choice, matching, short answer, true-false, and fill-in-the-blank formats or word puzzles. Grasser & Mahen (1993) argued that students can more actively comprehend a text, and monitor their comprehension through the process of question-generation strategy. Through question- generation, teachers can identify students' reading problems and thus provide adaptive instruction (Lan & Lin, 2011). There are two significant points of Question-generation strategy: the first significant point of the Question-generation strategy is the quality of questions which stimulate development of

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cognitive abilities beyond memorization and the second one is equivalent of the effects of teaching question-generation on subsequent reading comprehension tasks, especially its influence on the recognition tests.

There are three essential elements in question-generation strategy such as Active Processing, Meta-Cognitive Processing, and Schema Processing will be discussed as following:

The first essential element in question-generation strategy is Active Processing, Wong (1985) believed that in the viewpoint of active processing, students become active readers and independent thinkers via generating questions in order to understand the text. In relation to Active Processing, Clark et al. (1984) mentioned that disabled students can increase their reading comprehension by means of question-generation strategy because it can allow students to remember more information from reading passages and to perform better on comprehension tests.

The second essential factor in question-generation strategy is Meta-Cognitive Processing. Meta-cognitive strategy is the ability to think about your thinking. It is the ability to make your thinking visible. It is the ability to reflect on what you do. It is a term used in information processing theory to indicate an "executive" function, strategies that involve planning for learning, thinking about the learning process, monitoring of one's production and comprehension, and evaluating learning after an activity is completed (Strangman & Hall, 2000). Meta-cognitive-theory used based on question-generation strategy can be more effective because students can be aware of their lack of reading comprehension through question-generation strategy. In other words, the use of question-generation strategy can enhance learners' meta-cognition to promote reading comprehension (Andre & Anderson, 1978, 1979; Haller et al., 1988; Wong & Jones, 1982).

The third essential factor in question-generation strategy is Schema Processing. Smith (1977) proposed that schema has crucial affected on interpreting new information such as a set of expectations, hence, the good readers tend to use their prior knowledge to interpret the coming information to aid their reading comprehension. Nunan (2003, p. 257) maintained that "schema theory suggests that our knowledge expectations about the world will strongly effect on our ability to understand new information by providing a framework within which that new information might fit". According to this view, schema theory considers reading comprehension as an interactive process between readers' previous knowledge and the text which they read. It explains that sometimes a reader may reach a different founding based on his or her total prior knowledge and experience. Therefore, a reader who owns a rich background will comprehend the text than those readers with weak prior background.

In discussion of statement of problem, it is felt that Iranian students need more information about reading comprehension to get knowledge of English Language in order to use it in their real life situation. It seems worth mentioning that reading comprehension passages are considered as an important method in foreign language setting, especially in Iran. According to this study, the researchers have taught reading comprehension passages at the Iranian high schools and good experienced to manage the classes. Thought, for got more information on their project, they tried to discuss with the other teachers. They followed many questions as follows:

- 1) Is there a significant improvement in Iranian male EFL learners' reading comprehension via question-generation strategy?
- 2) Is there a significant enhancement in Iranian female EFL learners' reading comprehension with respect to using question-generation strategy?
- 3) Is there a significant difference between scores attained in reading comprehension tests with the help of question-generation strategy by males and females?

The following hypotheses are formulated:

H₁: There is a significant improvement in Iranian male EFL learners' reading comprehension via question-generation strategy.

H₂: there is a significant enhancement in Iranian female EFL learners' reading comprehension with respect to using question-generation strategy.

H₃: There is a significant difference between scores attained in reading comprehension tests with the help of question-generation strategy by males and females.

2. Literature Review

In this study, the researchers have only tried to use of multiple choice question to check students' reading ability in English reading comprehension passages. The use of multiple choice reading comprehension passages has been used as a part of English tests in order to check students' global language proficiency, including the ability of the use of reading skills and strategies for dealing with passages with information gaps. Reading

comprehension tests have been used as an important part of English tests in many countries, especially in Iran. In addition, reading comprehension tests used in all level of the intermediate, upper intermediate and advanced in order to help teachers to get information from their students in learning English language.

Pertinent studies related to reading comprehension skills by researchers in reading compression studies are discussed below:

Davey and McBride (1986) investigated question-generation strategy of English second language learners. They found that effective question generation strategy can provide readers with a metacognitive strategy as well as a cognitive strategy. This study showed that concentrating can be used as the key factor in order to increase inferential comprehension via question-generation strategy. Thus, question-generation training is useful to enhance students' reading comprehension because students are able to pay more attention to the text actively.

King (1989) indicated that focus on question-generation strategy is that allow readers' attention fully on major concepts of the texts, then analyze the content with the prior knowledge and do evaluation during the process of question and answering. If the readers cannot correctly answer the questions which they generate, it means that readers do not understand the content of the text clearly and deeply. Therefore, through question-generation strategy use, reader will be aware what they have already known. With respect to the role of question-generation strategy, Yeh and Yang (2011) studied the effect of online question generation on reading comprehension. The aim of their study was to examine how the question-generation processes improve students' reading comprehension, through the use of an online question-generation system including the organization, composition and peer assessment modules. The participants of the research were non-English students. They were required to complete question-generation tasks in the organization, composition and peer assessment modules. The results of this study indicated that the students who showed more their progress in reading comprehension demonstrated similar question-generation patterns. In organization module, those who made more their progress, they had a higher frequency of added new vocabulary, sentences, main ideas and editing their previously organized information. In the comprehension module, they had a higher frequency in reviewing the previously organized information from a text to generate questions and in editing the organized information. Miciano (2002) used self-questioning as a reading strategy to help Filipinos second language learners improve their comprehension of prose texts in English, (English used as second language for Filipinos learners). Therefore, he designed a pretest and post-test to compare two groups of the students participated in the study. The two groups of the students divided in to control and experimental groups and both of the groups administered the same test in the pre-test and post-test and their performances were compared. Outcome of the study showed that self-questioning did not have a significant effect on comprehension of a prose text in English. In this study, the researchers concluded that self-questioning as a strategy in ESL reading may not significantly effect on text comprehension despite the number and type of questions asked. In addition, for the limitations of the study, the researchers selected third grade high school students as the participants of the study. However, due to educational constrains, regarding question-generation strategy, there are different rhetorical organizations that can be used as suitable instruments in administration, in which the researchers had to employ just a limited number of them. The type text of studied in the present study tilted toward cause and effect, comparison-contrast, and problem-solution. In sum, investigating other types text and using larger samples should be cited as important element in collecting valuable data. Also, because of the inadequate word knowledge of the learners, the researchers was obliged to make use of just a few rhetorical texts which were familiar to them structurally.

3. Method

3.1 Participants

In this research, the total number of one hundred and twenty male and female students participated. The participants were divided in two major groups of Experimental and Control. Experimental group was divided into subgroups of Experimental Male and Experimental Female. Control group was divided into subgroups of Control Male and Control Female. The students were divided into subgroups of Experimental Male and Experimental Female was sixty and the rest of them were belonged to subgroups of Control Male and Control Female was sixty. The Participants were studying in high schools of Khurmooj, city of Bushehr state in Iran. They were engaged in the three majors: Natural sciences, Human Sciences and Math & Physics. They had passed English as an EFL subject in their high schools and had ability to participate in this research. In addition; English language used as foreign language for Iranian students.

3.2 Instrument

In this research, the instruments used such as multiple-choice reading comprehension tests developed by Hill (1980). For homogeneity of the students, a proficiency test including a multiple—choice reading comprehension

test (Hill, 1980) was selected in the twenty selected questions; in addition, 40 students in the two groups of Experimental and Control with the same level to participants of this study selected in this pilot study. The reliability of proficiency test turned out to be .76 for the pre-test and .78 for the post-test was analyzed through the K-R 21 Formula. The questionnaire consisted of eight multiple—choice reading comprehension passages (Hill, 1980) used based on the target of pre-test and post-test in the forty selected questions for the subjects in this research.

3.3 Procedure

In order to achieve the purpose of the research, these procedures were used: Administration of the proficiency test, including a multiple—choice reading comprehension test (Hill, 1980) was selected in the twenty selected questions and administration of the pre and post-tests including of eight multiple—choice reading comprehension passages (Hill, 1980) Was selected in the forty selected questions. To collect the data, first, the proficiency test was administered to the participants in the first stage of the study, to measure the participants' proficiency knowledge in English language; second, before the treatment time, pre-test was administered to the selected participants to measure the participants' knowledge in this process; third, after the treatment period, the two experimental groups of the students were instructed for 10 weeks. In addition, the post-test was the same as the pre-test in order to appraise participants' reading comprehension development. The collection of data of the students (i.e., the scores on reading comprehension tests) were used through both descriptive statistics and inferential statistic by the use of SPSS (Statistical Package for Social Sciences).

4. Discussion and Conclusion

In this research, both descriptive statistics and inferential statistics are discussed. As mentioned before; the participants who selected in the present study were 120 students. So for homogeneity of the students, 40 students participated as pilot of this study and all 120 learners in terms of the learners' language proficiency and educational background selected in this research. The researchers made use of multiple-choice reading comprehension test developed by Hill (1980). The results of the multiple-choice reading comprehension test for EFL learners are presented in Table 1.

Table 1. The reading comprehension results for EFL learners

Group	Mean	N	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
EMG	12.07	30	1.596	10	16	.484	213
CMG	12.33	30	1.953	9	16	.001	-1.230
EFG	14.07	30	2.559	8	18	847	.415
CFG	13.90	30	2.339	7	17	893	1.271
Total	13.09	120	2.301	7	18	127	502

Note: EMG= Experimental male group, CMG= Control male group, EFG= Experimental female group, CFG = Control female group.

As mentioned in Table 1, the learners were divided into four subgroups of Experimental Male and Experimental Female was sixty and Control Male and Control Female was sixty. The test indicates mean made by the EMG group was 12.07 whereas mean made by the CMG group was 12.3. Mean made by the EFG was 14.07 whereas mean made by CFG was 13.90. T- Test showed that there is a significance difference between the experimental and control groups in this study.

The results of the multiple-choice reading comprehension test for EFL Male learners are presented in Table 2.

Table 2. The reading comprehension results for EFL male learners

Test	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental	30	22.347	4.745	0.866
Fietest	Control	30	22.27	4.291	0.783
Dogttogt	Experimental	30	24.83	5.2	0.949
Posttest	Control	30	21.83	4.308	0.788

In the above table, the subjects were divided into two subgroups of Experimental Male and Control Male. The test shows mean made by the EMG group was 22.347whereas mean made by the CMG group was 22.27 in pre-test exam. Mean made by the EMG was 24.83 whereas mean made by the CMG was 21.83 in post-test exam. In this test, t-test revealed a significant difference between the mean scores of the experimental and control groups of Male in this study.

Descriptive statistics of the Results of the Reading Comprehension test for Female learners are presented as follows:

Table 3. The reading comprehension results for EFL female learners

Test	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental	30	27.1	5.85	1.068
	Control	30	25.73	4.86	0.877
Posttest	Experimental	30	30.4	6.123	1.118
	Control	30	25.7	4.655	0.85

In the table 3, the participants were divided into two subgroups of Experimental Female and Control Female. The test shows mean made by the EFG group was 27.1whereas mean made by the CFG group was 25.73 in pre-test exam. Mean made by the EFG was 30.4 whereas mean made by the CFG was 25.7 in post-test exam. In this test, t-test revealed a significant difference between the mean scores of the experimental and control groups of Female in this study.

4.1 Hypotheses of the Study

The present hypotheses were made in order to identify the results of the various analyses regarding to the subjects of this research. The three hypotheses were formulated that are considered as follows:

 $\mathbf{H_1}$: There is a significant improvement in Iranian Male EFL learners' reading comprehension via question-generation strategy.

Table 4. The mean and standard deviation of Iranian male EFL learners' reading comprehension

Tests	Variables	Groups	Means	Std. Deviation	df	T	Sig
Pretest	Males	Experimental	22.37	4.745	58	0.860	0.932
		Control	22.27	4.291		0.800	
Posttest	Males	Experimental	24.83	5.2	58 2.43	2.433	0.018
		Control	21.83	4.308	50	2.433	0.018

The treatment period of this research was for 10 weeks. The results presented in Table 4 revealed that the treatment (i.e. question-generation strategy use) has been effective for the male learners, because the results from the pre-test and post-test scores showed that there is a significant difference between the learners' performances in their pre-test means and post-test. Outcome of this table shows that the male students significantly improved their reading comprehension after the question-generation strategy training. Also, the magnitude of the differences in the means between both experimental and control groups was medium (eta squared = .09). Accordingly, the above hypothesis is accepted.

H2: There is a significant enhancement in female Iranian EFL learners' reading comprehension with respect to using question-generation strategy.

Table 5. The mean and standard deviation of Iranian female EFL learners' reading comprehension

Tests	Variables	Groups	Means	Std. Deviation	df	T	Sig
Pretest	Females	Experimental	27.1	5.85	58	0.989	0.327
		Control	25.73	4.806			
Posttest	Females	Experimental	30.4	6.123	58	2 247	0.001
		Control	25.70	6.655		3.347	

Table 5 showed that the treatment has been useful for female students , because the results from the pretest and posttest reading comprehension test scores of the female learners reveal that There is a significant difference between the female learners performances in their pre-test experimental and control groups and post-test experimental and control groups. Thus, the result of the table shows that the female students significantly improved their reading comprehension after the question-generation strategy training. Therefore, the magnitude of the differences in the means between both experimental and control group was very large (eta squared= .18). Accordingly, by closely looking at Table 5, the above hypothesis is accepted.

H₃: There is a difference between scores attained in reading comprehension tests with the help of question-generation strategy by males and females.

Table 6. The mean and standard deviation of Iranian female and Male EFL learners' reading comprehension

Groups	Mean	N	Std. Deviation	df	T	Sig
Males	24.83	30	5.2		-3.796	0.000
Females	30.4	30	6.123	58	-3.790	0.000

In the third hypothesis, t-test revealed that there is significant difference between the males and females' scores in their pre-test and post-test regarding to experimental and control groups in this research. It can be concluded from table of six is that mean of the females was higher than mean of the male learners. Outcome of this table shows that the female learners attained more scores in reading comprehension tests than their peers. Accordingly, the above hypothesis is accepted. The researchers believed that attitude of the EFL females' learners toward English language are more effective than their male peers in this research. Many researchers support the claims as follows:

Powell and Batters (1985) argued that the ability of female and male to learn language are not same ,therefore, they indicated that females are more favorably inclined not only to the language, but also to the speakers and the culture. Females' positive attitude towards language learning and also towards the speakers and culture of the L2 are connected with language proficiency. It is generally concluded that females' favorable attitude and high motivation are determining variables in their success. Allred (1990) revealed that Girls' internal motivation is stronger than boys' in the foreign language and most of aim of the girls is to get English knowledge. Francis (2000) showed that sex differences have been spotted while studying linguistic self-confidence. He mentioned that in general, girls show more confidence in their linguistic competence for language learning and also tend to evaluate themselves more positively. He noticed that boys do not seem so self-assured concerning their abilities to master the second language. McCormick and Jacqueline (1998) argued that the ability of male and female in learning language is different; in addition, they said that there are many reasons behind this theory, first reason, physiology condition, female's pronunciation organ development and maturation is made earlier than male, which leads to the ability of the schoolgirls at listening and expressing, so the ability of the schoolgirls are better than the ability of boys in their expressing and listening language. Second reason is that females' students are patient and careful in nature. They are interested in reading; thus, their ability in reading language passages is faster than male students in this area. The last reason can be ideation, female is also is better than boy in this area; so, there is no wonder that female student's ability to express herself is better than male. Xinong (2010) indicated that in the process of English learning, the female's observation is more keen, precise and thorough. He added that they are more interested in English and their motivations in learning English are stronger than boys.

4.2 Implication of Reading Comprehension in Teaching and Learning EFL/ESL Learners

The results of any skills such as reading comprehension in foreign and second language learning are very

important and have vital role for educational policy makers, EFL teaching administrators, educators, and teachers. Policy makers are assumed to have major responsibility toward the national policy for education in general, and for foreign language teaching in particular. For instance, the outcome of this research would help policy makers to implement programs in changing of the strategies of the participants and teachers toward learning and teaching English. Educators, who have the responsibility for implementing the decisions made by policy makers, can utilize the findings of this research in order to improve the quality of teacher training and in-service training programs in manipulating of affective factors in helping the participants in EFL/ ESL settings.

This study can help EFL learners improve their reading proficiency through this reading comprehension strategy use and they do much more their language activities. This reading comprehension strategy helps the teachers promote their participants' reading comprehension ability and find the most important points that help participants enhance their performance in using reading comprehension tests. Moreover, it would prove pedagogical value of the question-generation strategy in EFL classrooms and lead EFL instructors provide the learners with enough information to utilize this strategy in reading comprehension to take reading comprehension tests. In this case, the significance of the present study is to make teachers familiar with the construction of multiple-choice reading comprehension tests. Teachers should give more demonstrations regarding how to generate higher order questions before using the question-generation strategy. During the instruction time, teachers should be a facilitator to help participants individually. The results of the present study can be used as a basis for syllabus designers, textbook writers, and EFL teachers at pre-intermediate level. At a pedagogical level, the study can help language teachers to discover the learner's knowledge of the foreign and second language in language settings.

5. Conclusion

The analysis of data revealed that question-generation strategy led to significantly better performances of the participants. Furthermore, experimental groups, males and females, who received the treatment in during instruction, had better performance in this study. This research revealed that female participants had better performances than male participants in high schools of Khurmooj, city of Bushehr state in Iran through the question-generation strategy.

Outcome of this research showed that the question-generation strategy has had positive effects on participants' learning through teachers' instruction. The awareness of question-generation strategy can enhance participants' reading comprehension because it can help participants pay more attention to the content of the text, generate higher order questions, enhance meta-cognition, and activate prior knowledge and in other hand, the question-generation strategy can be used as an effective method to promote EFL participants' reading comprehension in order to help the participants become active and independent readers in their performances. This research can be used as a positive learning experience for both learners and teachers in reading comprehension in EFL and ESL settings.

References

- Allred, R. A. (1990). Gender differences in spelling achievement in grades 1 through 6. *Journal of Educational Research*, 83(4), 187-193.
- Anderson, N. (2003). Reading. In D. Nunan (Ed.), *Practical English Language Teaching* (pp. 67-86). New York, NY: McGraw-Hill.
- Andre, M. E. D. A., & Anderson, T. H. (1978, 1979). The development and evaluation of a self-questioning study technique. *Reading Research Quarterly*, *14*(4), 605-623.
- Belanich, J., Wisher, R. A., & Orvis, K. L. (2005). *Using a question generation approach to improve web-based collaborative learning*. Retrieved June 8, 2010, from http://www.uwex.edu/disted/Resource/conference library/proceedings/03 51.pdf
- Clark, F. L., Deshler, D. D., Schumaker, J. B., Alley, G. R., & Warner, M. M. (1984). Visual imagery and self-questioning: Strategies to improve comprehension or written material. *Journal of Learning Disabilities*, 17(3), 145-149.
- Davey, B., & McBride, S. (1986). Generating self-questions after reading: A comprehension assist for elementary students. *Journal of Education Research*, 80(1), 43-46.
- Francis, B. (2000). Boys, Girls and Achievement: Addressing the Classroom Issues. London: Rout ledge.
- Haller, E. P., Chid, D. A., & Walberg, H. J. (1988). Can comprehension be taught? A quantitative synthesis of "metacognitive" studies. *Educational Researcher*, 17(9), 5-8.

- Hill, L. A. (1980). Advanced Steps to Understanding. Tokyo: Oxford University Press.
- King, A. (1989). Effects of self-questioning training on college comprehension of lectures. *Contemporary Educational Psychology*, *14*(4), 1-16.
- Graesser, A. C., & McMahen, C. L. (1993). Anomalous information triggers questions which adults solve quantitative problems and comprehend stories. *Journal of Educational Psychology*, 85(1), 136-151. Retrieved from http://psycnet.ahttp://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1993-20263-001
- Lan, Y. F., & Lin, P. C. (2011). Evaluation and improvement of student's question-posing ability in a web-based learning environment. *Australasian Journal of Educational Technology*, *27*(4), 581-599.
- Linse, T. C. (2005). Practical English Language Teaching, Young Learners. New York: McGraw-Hill.
- McCormick, T. W., & Jacqueline, S. J. (1988). *Theories of reading in dialogue: An interdisciplinary study*. New York: University Press of America.
- Miciano, R. Z. (2002). Self-questioning and prose comprehension: A sample case of ESL reading. Retrieved July 29, 2008, from http://www.ascilite.org.au/ajet/ajet27/lan.html
- Nunan, D. (2003). Second language teaching and learning. Massachusetts: Heinle, Boston.
- Powell, R. C., & Batters, J. D. (1985). "Pupils perceptions of foreign language learning at 12+: Some gender differences". *Educational Studies*, 11(1), 12-23.
- Schumaker, J. B., Deshler, D. D., Nolan, S. M., & Alley, G. R. (1994). *The self-questioning strategy*. Lawrence, KS: The University of Kansas. Retrieved April 27, 2008, from http://onlineacademy.org/modules/a306/support/xpages/a306b0 20200.html
- Smith, F. (1977). Reading without nonsense (3rd ed.). New York: Teachers College Press.
- Strangman, N., & Hall, T. (2000). *Background knowledge*. Retrieved July 3, 2011, from http://www.cast.org/system/galleries/download/ncac/ncac BK.pdf
- Wong, B. Y. L. (1985). Self-questioning instructional research: A review. *Review of Educational Research*, 55(2), 227-268.
- Wong, B. Y. L., & Jones, W. (1982). Increasing meta comprehension in learning disabled and normally achieving students through self-questioning training. *Learning Disability Quarterly*, 5(3), 228-240.
- Xinong, X. (2010). A comparative study of boy's and girl's English study differences. *Journal of Language Teaching and Research*, *I*(3), 309-312. http://dx.doi.org/10.4304/jltr.1.3.309-312
- Yeh, H. C., & Yang, Y. F. (2011). Metacognitive process in online text construction. *Educational Technology and Society*, 14(3), 82-101.

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