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The Relationship between Iranian EFL Young Learner's Critical Thinking Skills and their Performance in the Activities of EFL Textbooks

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ABSTRACT

As an attempt to shed more light on the relationship between critical thinking skills and the students' performance on EFL learning activities, the present study investigated the relationship between critical thinking skills of Iranian EFL young learners and their performance on textbook activities. To this end, 120 female students between 9 to 12 years old filled out the Persian version of critical thinking skills questionnaire (Naieni, 2005). Besides, the participants answered the selected activities from second language English series such as Family and Friends, Let's go, and Hip Hip Hooray textbook series. The findings of the study revealed that critical thinking skills and EFL young learners' performance on the activities were significantly correlated for the students of various groups of language proficiencies. More specifically, it was revealed that there was not any statistically significant relationship between beginner and intermediate learners' critical thinking skills and their performances on the textbook activities, while there was a significant correlation between advanced learners' performances and their critical thinking skills. In addition, there was a significant difference between the performances of high and low critical thinkers in the advanced group. However, there was not any significant difference between high and low critical thinkers in beginner and intermediate groups. Finally, the discussion of the findings and implications ensues.

Keywords: *EFL Learners, Critical Thinking, Textbook Activities, Iranian, Second Language*

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1. Introduction

As Halpern (2003) puts it, critical thinking is one of the psychological and cognitive abilities that "increase[s] the probability of a desirable outcome, ... the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions" (p.6). Fisher (2001) expresses that critical thinking has become essential in education circles. He states that the focus of education has changed through the recent years from focusing on the content, like history and geography, to teaching how to think, which is preferred to be taught in a direct way. According to Lipman (2003), "critical thinking is applied thinking. Therefore, it is not just a process, it seeks to develop a product" (p. 32). He states that a critical thinker applies critical thinking skills to the process of producing something said, made, or done. This process involves the use

of knowledge to reach the product, which could be a judgment, on the one hand, and putting that judgment into practice, on the other hand. He likewise refers to critical thinking skills as a skillful, responsible thinking which contributes to decent judgment; it is context bound and depends on certain criteria, and requires self-correcting.

Although becoming a critical thinker is a complex process, Schafersman (1991) affirms that there are methods for teaching critical thinking skills. He further mentions two methods; the first one, which is also the easiest, is to simply modify one's teaching and testing slightly to enhance critical thinking skills among one's students. This method can be materialized through lectures, laboratories, homework, quantitative exercises, term papers, and exams. The second method makes use of formal critical thinking skills exercises, programs, and



materials that have been prepared by specialists and that can be purchased for immediate use by the teacher or instructor. Auerbach and McGrail (as cited in Benesch, 1993) assert that critical thinking skills could be reflected by the learners in the classroom, and discuss the probable ways “in classrooms that feature critical thinking skills, students are encouraged to participate actively, raising issues of concern in their lives such as work, school, housing and marriage, as topics for class scrutiny” (p. 574).

Given the significance of critical thinking in learning in general, numerous foreign language educators have stressed the significance of fostering critical thinking skills in foreign language classrooms (Chamot, 1995; Chapple & Curtis, 2000; Davidson, 1994, 1995; Liaw, 2007; Tarvin & Al-Arishi, 1991). Moreover, as far as the relationship between critical thinking skills and second language performance is concerned, numerous empirical studies have been previously conducted. For instance, Mirzaie (2008) examined the relationship between critical thinking and lexical inferencing of EFL learners. He found that there was a relationship between these two variables. The results showed that confronting with unknown words while perusing, those learners who had larger amounts of critical thinking showed higher ability of lexical inferencing. Also, another study conducted by Sheikhy Behdani (2009) on the relationship among autonomy, critical thinking ability, and reading comprehension of Iranian EFL learners revealed that there was a strong relationship between critical thinking skills of learners and their reading comprehension performance.

Komijani (2010) also carried out a study on the relationship between critical thinking ability and vocabulary learning strategies of the learners. He conducted vocabulary test and critical thinking questionnaire which revealed that “critical thinking has positive correlation with determination, memorization, cognitive and meta-cognitive strategies of L2 vocabulary learning, but not with social strategies” (p. 108). Also, Kamali and Fahim (2011) studied the relationship between critical thinking ability, resilience, and reading comprehension of texts which contained unknown vocabulary items. They studied 63 intermediate EFL learners. Like the current study, they divided the subjects into two groups of high and low critical thinking and

resilience groups. The findings revealed that (a) the levels of critical thinking had a statistically significant effect on the scores of the subjects on resilience scale. Moreover, (b) the levels of critical thinking had significant impact on the subjects' reading ability of texts which contained unfamiliar vocabulary. In the same vein, Nour Mohammadi, Heidari, and Dehghan Niri (2012) investigated the relationship between critical thinking and the reading strategies used by Iranian EFL learners. They gave two questionnaires of critical thinking and reading strategies to the participants of their study. According to the findings of their study, a low positive significant correlation was found between learners' critical thinking ability and their overall use of reading strategies. They also found that there was a significant difference between male and female participants, where males outperformed females in their critical thinking.

Concerning the effect of critical thinking on the students' performance on writing, Harirchi (2010) studied the relationship between critical thinking and process oriented approach to writing. She indicated that critical thinking has positive effect in the first stages of writing process, which are brainstorming, outlining, and drafting; but it's less effectiveness in the editing stage. She found that after the treatment sessions, the students were capable to write longer and more organized essays. Saatchi (2010) investigated the impact of applying semantic mapping as a direct learning strategy on the Iranian EFL learners' vocabulary improvement and critical thinking ability based on their learning styles. She found that learning style had no impact on critical thinking ability, however semantic mapping improved critical thinking ability and vocabulary learning of the learners significantly.

In spite of the above-discussed studies on the relation between critical thinking and L2 performance, to the best of the researchers' knowledge, no study has ever investigated how Iranian EFL young learners with high and low critical thinking skills perform on textbook activities. As a result, the purpose of the present study was set to investigate whether there is any statistically significant relationship between critical thinking skills of Iranian EFL young learners and their performances on textbooks activities.

[2. Methodology](#)

2.1 Participants

To accomplish the objective of the present study, a sample of 120 female students participated in this research. The participants were between 9 to 12 years old. They were all students at Avicenna Primary School in Tehran, Iran. The level of the participants' language proficiency was determined using Starters, Flyers, and Movers proficiency tests, which were administered by the school Language Department before the beginning of the school year. The used proficiency tests are offered by *Cambridge English: Young Learners* which is a series of English Language Tests, aimed at primary students. Starters, Flyers, and Movers tests provide the young learners with the opportunity to improve their English and to get ready for future Cambridge Qualifications.

According to the result of the proficiency tests, the participants of the study were divided into three groups of beginner, intermediate, and advanced. According to the results of the conducted interview with the learners, almost none of them studied English at any other private institutions because they all thought that the English program at school was sufficient. All the participants attended English classes three times a week and each session lasted for 90 minutes. After administering Critical Thinking Skills Questionnaire to the participants, the high and low groups were determined according to the obtained data. However, due to the principles of the school, the researchers had to give the test to the whole class sample. At the end, just the scores of high and low groups were considered for the purpose of the study.

2.2 Instruments

For the purpose of this study, two sets of instruments were used: firstly, a Critical Thinking questionnaire adapted from Naieni (2005) (see Appendix) was used for the purpose of measuring the participants' critical thinking skills. The questionnaire was originally developed and validated by Honey (2004). This scale was fine-tuned for Iranian EFL learners. The scale consists of 30 items using a 5-point Likert scale.

Secondly, English textbooks series which were Family and Friends series, Hip Hip Hooray series, and Let's Go (new edition), and, finally, in order to analyze the textbook series based on critical thinking skills, a checklist was provided by the researchers based on Bloom's taxonomy of higher thinking. Bloom (1956) has categorized thinking into six stages:

knowledge, comprehension, application, analysis, synthesis, and evaluation.

2.3 Procedure

The purpose of the present study was to investigate whether there is any significant relationship between Iranian EFL young learners' critical thinking skills and their performance on the activities of EFL textbooks. In order to accomplish this purpose, the following steps were taken. First, the participants were requested to fill out the critical thinking questionnaire, then, they were given 36 activities in the form of a booklet to accomplish. The purpose was to examine the relationship between young learners' critical thinking and their performance. Also, the difference between high and low critical thinkers' performances in each proficiency group was assessed. The details of the procedure are as follows:

First, learners' level of proficiency was determined by administering Starters, Flyers, and Movers Cambridge proficiency tests. The mentioned tests were administered at the beginning of school year by Avicenna English Department. In this regard, the subjects were divided into beginner, intermediate, and advanced group.

Afterwards, the critical thinking questionnaire was piloted with 60 students of the same age, 9 to 12, at Iranmehr Language Institution, Qolhak Branch, Tehran, Iran. The third researcher herself was present in the administration sessions to give further explanation wherever it was needed. Before conducting the main study, to assure the reliability of the critical thinking questionnaire, a pilot study was run with 80 participants who were learners with different proficiency levels (beginner, intermediate, and advanced) like the study' target population. The result of Cronbach alpha analysis showed that the reliability index for this questionnaire was 0.84. Hence, it can be concluded that this questionnaire enjoyed high degree of reliability and can be used for conducting the main study. After calculating the reliability of the questionnaire, it was given to the target sample. The research was initiated with 120 female students. Then, the data obtained from the questionnaires were analyzed and high critical thinker and low critical thinker groups were determined.

Moreover, as it was mentioned before, the textbook series were designed for three levels of proficiency, namely as beginner, intermediate, and advanced levels. Each series contained 6 textbooks, which were divided two by two into beginner,



intermediate, and advanced level. The researchers numbered all the activities of the mentioned textbook series. Then 100 activities were randomly selected from each level, using rand random numbers website. Then, the researchers rated the randomly selected activities based on the self-developed critical thinking checklist. In addition to the researchers, another rater rated the randomly selected activities based on the same checklist. Afterwards, 36 final activities were selected. In other words, 36 activities were selected for each level; two activities for each skill of critical thinking skills from each series. For instance, Family and Friends 1 and 2 were for the beginner level, from which 12 activities were randomly selected. The activities were put in the form of a booklet.

In the next step, the third researcher took the booklets containing 36 activities to the class. The administration sessions for each level took three sessions, each lasted for 90 minutes. The third researcher herself was the teacher of all classes. She taught the activities to the students, the same as the class routine, and, then asked the participants to do the activities in their booklets.

The last step was to analyze the data obtained from the booklets to see whether young learners' critical thinking skills had any effect on their performances on the activities of the before mentioned textbooks.

3. Results

3.1 Investigation of the First Research Question

The first research question investigated whether there was any significant relationship between the use of critical thinking skills and Iranian EFL young learners' performance on selected textbook activities. As there were three groups of young learners including beginners, intermediate- level learners, and advanced ones, the researchers used three Pearson correlations to analyze the collected data.

Concerning the relationship between beginner EFL young learners' critical thinking skills and their performance on the selected textbook activities, the results from Pearson correlation ($r(30) = 0.16$, $P > .05$, see Table 1), indicated that there was not any statistically significant relationship between the two variables.

Table 1: Pearson Correlation, Critical thinking and Beginner Learners' Performance

	Beginner learner performance	
Critical thinking	Pearson Correlation	.16
	Sig. (2-tailed)	.38
	N	30

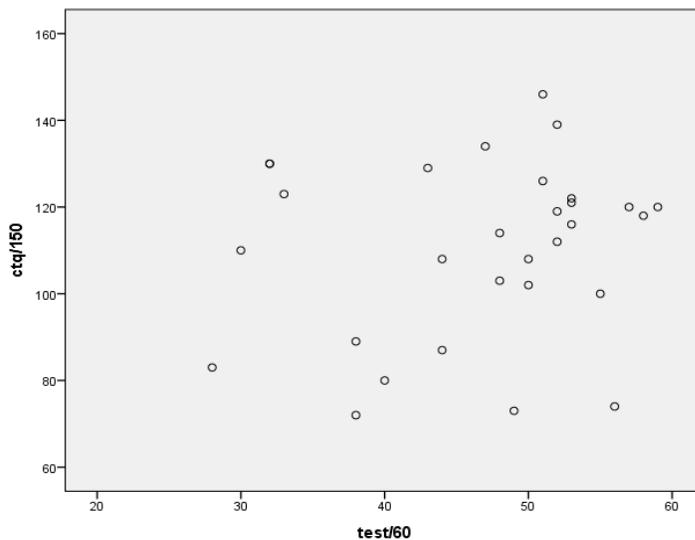


Figure 1: Scatter Plot Showing Beginner Level Learners' Critical Thinking Skills and their Performance

Figure 1 shows that the assumption of linearity was supported. However, it seems that the assumption of homoscedasticity was not met due to pile of dots on the upper right part of the plot.

Moreover, with regard to the relationship between intermediate Iranian EFL young learners' critical thinking skills and their performance on the selected textbook activities, the results ($r(30) = .28$, $P > 0.05$, see Table 2), indicated that there was not any statistically significant relationship between Iranian EFL young learners and their performance on the activities of EFL textbooks.

Table 2: Pearson Correlation, Critical Thinking and Intermediate Learners' Performance

	Intermediate leame	
Critical thinking	Pearson Correlation	.28
	Sig. (2-tailed)	.13
	N	30

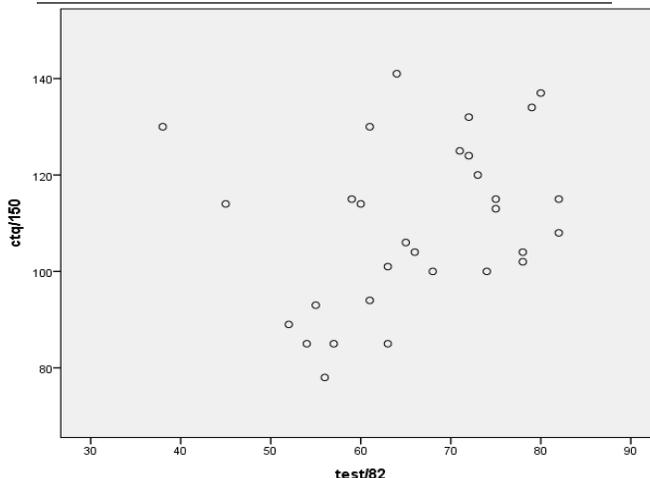


Figure 2: Scatter Plot Indicating Intermediate Level Learners' Critical Thinking and their Performance

Figure 2 shows that the assumptions of linearity and homoscedasticity were met. The spread of dots showed neither a rise and fall nor a funnel pattern.

Finally, regarding the relationship between advanced EFL learners' critical thinking skills and their performance on the activities of EFL textbook activities, the results ($r(30) = .89, P < .05$, see Table 3) demonstrated that there was statistically significant relationship between the two variables.

Table 3: Pearson correlation, Critical Thinking and Advanced Learners' Performance

		Advanced learner performance
Critical thinking	Pearson Correlation	.89**
	Sig. (2-tailed)	.00
	N	30

** Correlation is significant at the 0.01 level (2-tailed).

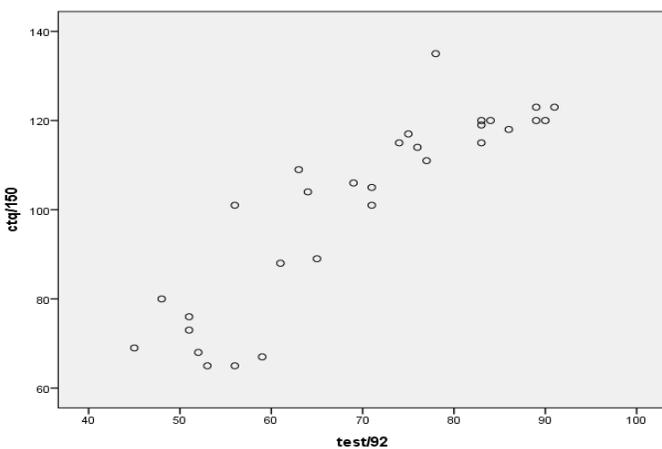


Figure 3: Scatter Plot Illustrating Advanced Level Learners' Critical Thinking and their Performance

Figure 3 illustrates that the assumption of linearity was met. The wide spread of dots were along the diagonal with no discernable pattern of non-linearity nor homoscedasticity. It should be mentioned that non-linearity shows a rising-and-falling pattern of dots and lack of homoscedasticity happens when the dots form a funnel shape (narrow on one tail and wide on the opposite tail).

3.2 Results Regarding the Second Research Question

The second research question investigated whether there is any statistically significant difference between the performances of Iranian EFL young learners with high and low critical thinking skills on textbook activities.

To answer this research question, three groups of learners as beginner, intermediate, and advanced learners were considered.

Furthermore, each group was divided into two categories of low and high critical thinking abilities. To answer this research question, which aimed to investigate the probable differences between high and low critical thinkers' performance on the activities, a series of independent-samples *t*-tests were run.

More specifically, in order to investigate whether there was any statistically significant difference between the performances of beginner Iranian EFL young learners with high and low critical thinking skills on textbook activities, the beginner learners were divided into two groups with low and high critical thinking abilities. Then an independent-samples *t*-test was run to investigate the probable differences in the performance of beginner learners with high and low critical thinking abilities.

As displayed in Table 4, beginners' high critical thinkers ($M = 48.40, SD = 9.21$) showed higher mean than that of beginners with low critical thinking ability ($M = 44.66, SD = 8.41$) on their performance on the selected activities.

As shown in Table 4, there was a small difference between the mean scores of beginner learners with low and high critical thinking. To test whether this difference was statistically significant or not, an independent-samples *t*-test was run.

The results of the independent-samples *t*-test ($t(28) = 1.159, P > .05$) (Table 4) indicated that there was not any significant difference between the two groups' mean scores on their performance regarding the selected activities. Thus, it can be concluded that the group with high critical thinking abilities did not show any improvement in their performance comparing with their low critical counterparts.

Table 4: Results of t-test and Descriptive Statistics for Beginner Groups

	Sex						t	df
	Low			High				
	M	SD	n	M	SD	n		
Beginner Groups	44.66	8.41	15	48.40	9.21	15	0.25	28

Additionally, to investigate whether there was any statistically significant difference between the performances of Iranian intermediate EFL young learners with high and low critical thinking skills on textbook activities, an independent-samples *t*-test was run to measure the probable differences in the performance of



intermediate learners with high and low critical thinking.

As shown in Table 5, high critical thinkers' group mean score ($M=67.06$, $SD=12.67$) showed a slightly higher mean than that of low critical thinkers' group ($M=64.80$, $SD=9.54$).

The results of the independent-samples t -test ($t(28) = .55$, $P > .05$) (Table 5) indicated that there was not any significant difference between the two groups' mean scores on their performance regarding the selected activities. In other words, the group with high critical thinking ability did not show any statistically significant difference in their performance comparing with that of low critical thinkers' group.

Table 5: Results of t-test and Descriptive Statistics for Intermediate Groups

	Sex						t	df
	Low			High				
	M	SD	n	M	SD	n		
Intermediate Groups	64.80	9.54	15	67.06	12.67	15	0.58	28

Similarly, another independent-samples t -test was run to examine the probable differences in the performance of advanced learners with high and low critical thinking abilities.

As shown in Table 6, the high group mean ($M=81.40$, $SD=7.61$) showed a slightly higher mean than advanced low critical group ($M=58.13$, $SD=8.40$). The results of the independent-samples t -test ($t(28) = 7.94$, $P < .05$) (Table 6) indicated that there was a significant difference between the two groups' mean scores on their performance regarding the selected activities. Therefore, it can be argued that the group with high critical thinking abilities showed a statistically significant difference in their performance in comparison with that of low critical thinkers' counterparts.

Table 6: Results of t-test and Descriptive Statistics for Advanced Learners

	Sex						t	df
	Low			High				
	M	SD	n	M	SD	n		
Advanced Learners	58.13	8.40	15	81.40	7.61	15	7.94	28

4. Discussion and Conclusion

The purpose of the present study was set to investigate the relationship between critical thinking skills of Iranian EFL young learners and their performance on textbook activities. The results of the correlational analyses showed that there was not any statistically significant relationship between beginner and intermediate learners' critical

thinking and their performance on the activities while there was a significant correlation between advanced learners' performance and their critical thinking. A plausible justification for such a positive correlation between the two variables may lie in the fact that, in comparison to beginner and intermediate-level students, advanced learners enjoy higher amount of metacognition and maturity due to their age difference. It is likely that as one matures and passes special stages of cognitive development, his/her mind system becomes more complex and the power of reasoning and analysis will increase, a situation which will pave the way for the individuals to become more critical while encountering problems.

This finding is consistent with that of Dam and Volman (2004), suggesting that at different ages, students' abilities to understand and master critical thinking skills would vary. Therefore, teaching should be tailored to the cognitive development of students. Dam and Volman (2004) believed that even it is possible to teach children to think critically. From this perspective, the type of teaching activities and tasks should be tailored to children's need and capabilities at every stage. In addition, the results regarding the existence of relationship between advanced learners' critical thinking and their performance on the activities of EFL textbooks are in line with the findings of Facione's (2007), highlighting that there is a significant correlation between critical thinking and learners' reading comprehension. In other words; learners' improvement in critical thinking led to their advancement in reading comprehension. Overall, the findings of the present study supports the accumulated body of literature underscoring the importance of enhancing critical thinking skills in foreign language classrooms (e.g., Chamot, 1995; Chapple & Curtis, 2000; Davidson, 1994, 1995; Liaw, 2007; Tarvin & Al-Arishi, 1991). The findings are also consistent with those of previous, similar studies conducted in the Iranian context (e.g., Alizamani., Khodabandehlou, & Mobashernia, 2013; Barjesteh & Vaseghi, 2012; Fahim & Haghghi, 2014; Kamali & Fahim, 2011; Komijani, 2010).

Furthermore, the findings of the present study revealed that there was a significant difference between the performances of high and low critical thinkers in the advanced group. However,

there was not any significant difference between high and low critical thinkers in beginner and intermediate groups. The reason behind the findings regarding lack of difference among high and low critical thinkers in beginner and intermediate groups may be justified in the light of their lack of self-regulation and less meta-cognitive ability. This supports the findings of studies like Facione (2007) and Wilkinson (2001) who considered self-regulation as the most remarkable cognitive skill of critical thinking because "it allows strong critical thinkers to improve their own thinking" (Facione, 2007, p. 7). From this perspective, critical thinking is a disciplined and self-directed skill, which makes use of metacognitive skills. As critical thinking is a self-directed skill, it can be stated that high critical thinkers are self-regulated individuals who make use of meta-cognitive skills. In this study, it was found that high critical thinker advanced learners outperformed their low critical peers. It can be implied that high critical thinkers are more self-regulated, a situation which may be due to their age, experience, or level of education.

Overall, the findings of the present study revealed that there was not a significant correlation between critical thinking skills and students' performance in beginner and intermediate-level groups, while the study manifested that advanced learners' critical thinking was directly related to their performance. Given the obtained findings, it is argued that critical thinking is a necessity which should be given more attention within the educational system, as it is proved that critical thinking skills significantly affect learners' performance. Therefore, theoreticians, policy makers, teacher educators and teachers should pay more attention to intensify this kind of thinking among their students.

As far as pedagogical implications are concerned, material developers should pay attention to the importance of critical thinking skills and include activities which foster students' critical thinking and pave the way for being a highly competent critical thinker. With respect to Bloom's (1956) classification of higher thinking, every teaching course or course book with the purpose of teaching critical thinking skills must take into account theory of critical thinking skills by giving students some practice on the lower critical thinking skills and slowly moving them toward the higher

critical thinking processes. In this regard, studies should be done to assess the manifestation of critical thinking skills in different books, as what was done by Birjandi and Alizadeh (2012) who examined three textbooks namely Top Notch, American English File, and Interchange for assessing the amount and types of critical thinking skills within each textbook series. These kinds of studies may raise materials developers' awareness regarding this issue and give them hints and suggestion on how to include critical thinking skills in textbooks.

Moreover, Benesch (1999) expresses that type of teaching creates and inculcates a particular state of mind within students. He believes that critical thinking should be taught through encouragement of awareness raising regarding the issues. As Razak, Darmawan, and Keeves (2009) state "Teachers play an important role in educating the future members of society through their work in schools" (p. 343). They added that the role of teachers is also highlighted in institutions of higher education and in technical training colleges. Particularly, the effects and responsibilities of language teachers in foreign language education have significantly increased after the demise of the method and with the rise of postmethod pedagogy (Fathi, & Behzadpour, 2011; Fathi, Ghaslani, & Parsa, 2015; Kumaravadivelu, 1994).

Hence, teachers can contribute to advancing economic and technological development and sustaining the well-being of the societies to which they work. Therefore, the role of the teacher is both critical and influencing in the learners' success. Focusing on the significant role of teachers in education, this study may also render implications for teacher education courses. As teachers' attitudes and beliefs can exert influence on the students' way of thinking and of course their worldview, teacher training courses should take into account teachers' critical thinking skills and help them to improve such skills. Being a critically competent teacher may lead to teacher improvement in their way of teaching, reflective thinking, and classroom management, and can also help teachers to transfer these skills to their students.

Being informed of teachers' critical thinking and the ways they use to deal with classroom issues may create more realistic expectations about teachers. To train critical teachers, teacher's trainers should first assess pre-service teachers' critical thinking



skills based on questionnaires, observation, or interviews. Then, manifesting the advantages of critical thinking with regard to teachers' own performance and students' achievement, teacher educators may increase the quality of the performances of low critical teachers or teachers who lack critical thinking by planning appropriate training courses to make teachers become familiar with critical thinking skills, their potential abilities, as well as the benefits of being a critical thinker.

References

- Alizamani, H., Khodabandehlou, M., & Mobashernia, R. (2013). The effects of teaching critical thinking strategies on Iranian EFL learner are reading comprehension ability: The case of Padideh Language Center. *Indian Journal of Fundamental and Applied Life Sciences*, 3(3), 133-141.
- Barjesteh, H., & Vaseghi, R. (2012). Critical Thinking: A Reading Strategy in Developing English Reading Comprehension Performance. *Sheikhbahae EFL Journal*, 1(2), 21-34.
- Benesch, S. (1993). Critical thinking: a learning process for democracy. *TESOL Quarterly*, 27(3), 545-548.
- Benesch, S. (1999). Thinking critically, thinking dialogically. *TESOL Quarterly*, 33(3), 573-580.
- Birjandi, P., & Alizadeh, I. (2013). Manifestation of critical thinking skills in the English textbooks employed by language institutes in Iran. *International Journal of Research Studies in Language Learning*, 2(1), 27-38.
- Bloom, B. (1956). *A Taxonomy of Educational Objectives. Handbook I: Cognitive Domain*. New York: McKay.
- Chamot, A. (1995). Creating a community of thinkers in the ESL/EFL classroom. *TESOL Matters*, 5(5), 1-16.
- Chapple, L., & Curtis, A. (2000). Content-based instruction in Hong Kong: Student responses to film. *System*, 28, 419-433.
- Dam, G., & Volman, M. (2004). Critical thinking as citizenship competence: Teaching strategies. *Learning and Instruction*, 14, 359-379. Retrieved October 16, 2014, from <http://llt.msu.edu/vol14/article1.pdf>
- Davidson, B. (1994). Critical thinking: A perspective and prescriptions for language teachers. *The Language Teacher*, 18(4), 20-26.
- Davidson, B. (1995). Critical thinking education faces the challenge of Japan. *Inquiry: Critical Thinking Across the Disciplines*, 14(3), 41-53.
- Facione, P. A. (2007). Critical thinking: What it is and why it counts. *Insight Assessment*, 1-23.
- Fahim, M., & Haghghi, M. (2014). The relationship between critical thinking ability of Iranian EFL learners and their academic self-regulation. *International Journal of Language Learning and Applied Linguistics World*, 5(3), 390-400.
- Fathi, J., & Behzadpour, F. (2011). Beyond Method: The Rise of Reflective Teaching. *International Journal of English Linguistics*, 1(2), 241-252.
- Fathi, J., Ghaslani, R., & Parsa, K. (2015). The relationship between post-method pedagogy and teacher reflection: A case of Iranian EFL teachers. *Journal of Applied Linguistics and Language Research*, 2(4), 305-321.
- Fisher, R. (2001). Philosophy in primary schools: Fostering thinking skills and literacy. *Reading*, 35(2), 67-73.
- Halpern, D. F. (2003). The "how" and "why" of critical thinking assessment. *Critical thinking and reasoning: Current research, theory, and practice*, 355-366.
- Harrirchi, Sh. (2010). *The relationship between critical thinking and process oriented approach to writing in Iranian EFL learners* (Unpublished master's thesis). Islamic Azad University, Science and Research branch, Tehran, Iran.
- Honey, P. (2004). Critical thinking questionnaire. Retrieved January 10, 2014, from: <http://www.peterhoney.com>
- Kamali, Z., & Fahim, M. (2011). The relationship between critical thinking ability of Iranian EFL learners and their resilience level facing unfamiliar vocabulary items in reading. *Journal of Language Teaching and Research*, 2(1), 104-111.
- Komijani, A. (2010). *A study of the relationship between critical thinking ability and L2 vocabulary learning strategies of the Iranian EFL learners* (Unpublished master's thesis). Islamic Azad University, Science and Research branch, Tehran, Iran.
- Kumaravadivelu, B. (1994). The postmethod condition: (E)merging strategies for second/foreign language teaching. *TESOL Quarterly*, 28(1), 27-48.
- Liaw, M. (2007). Content-based reading and writing for critical thinking skills in an EFL context. *English Teaching and Learning*, 31(2), 45-87.
- Lipman, M. (2003). *Thinking in education* (2nd ed.). Cambridge: Cambridge University Press.
- Mirzaie, Z. (2008). *The relationship between critical thinking and lexical inferences of Iranian EFL learners* (Unpublished master's thesis). Islamic Azad University, Science and Research Campus, Tehran, Iran.
- Naeini, J. (2005). The effects of collaborative learning on critical thinking of Iranian EFL learners. *Unpublished M.A. Thesis, Islamic Azad University, Central branch, Tehran, Iran*.
- Nour Mohammadi, E., Heidari, F., & Dehghan Niri, N. (2012). The relationship between critical thinking ability and reading strategies used by Iranian EFL learners.

English Language Teaching, 5(10), 192–201.

Razak, N. A., Darmawan, I. G. N., & Keeves, J. P. (2009). Teacher commitment. *International Handbook of Research on Teachers and Teaching*, 343-360.

Saatchi, A. (2010). *The impact of applying semantic-mapping as a direct learning strategy on the Iranian EFL learners' vocabulary improvement and critical thinking ability based on their learning styles* (Unpublished master's thesis). Islamic Azad University, Science and Research Branch, Tehran, Iran.

Schafersman, S. D. (1991). *An introduction to critical thinking*. Retrieved October 8, 2014, from: <http://www.freeinquiry.com/critical-thinking.html>

Sheikhy Behdani, R. (2009). *The relationship between autonomy, critical thinking ability, and reading comprehension of the Iranian EFL learners* (Unpublished master's thesis). Islamic Azad University, Science and Research Campus, Tehran, Iran.

Tarvin, W., & Al-Arishi, A. (1991). Rethinking communicative language teaching: Reflection and the EFL classroom. *TESOL Quarterly*, 25(1), 9-27.

Wilkinson, J. M. (2001). *Nursing process & critical thinking* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Appendix A: Critical Thinking Questionnaire

به نام خدا			
نام و نام خانوادگی:			
لطفاً جملات زیر را به دقت مطالعه کرده و گزینه مورد نظر خود را انتخاب نمایید.			
1. وقتی فردی مطلب یا نظری را مطرح میکند قسمتهای مهم آنرا یادداشت میکنم.	هرگز	بسیار	همیشه
2. مسحت فرجه ها و مباحث را مورد بررسی قرار میدهم.	هرگز	بسیار	همیشه
3. دلائل خود را برای رد یا پذیرفتن مباحث بیان میکنم.	هرگز	بسیار	همیشه
4. مطالبی را که میخوانم یا میشنوم برای درک و فهم بهتر به زبان خود بیان میکنم.	هرگز	بسیار	همیشه
5. حقایق و عقاید را از هم تشخیص میدهم.	هرگز	بسیار	همیشه
6. مسحت حقایق و عقاید را دوباره بررسی میکنم.	هرگز	بسیار	همیشه
7. درک دیگران از موضوعات را مورد بررسی قرار میدهم.	هرگز	بسیار	همیشه
8. سعی میکنم نکات مشترک بین موضوعات مختلف را پیدا کنم.	هرگز	بسیار	همیشه
9. برای ارزیابی مباحث و موضوعات از یک سری معیارهای خاصی استفاده میکنم.	هرگز	بسیار	همیشه
10. هر آنچه را که میخوانم یا میشنوم خلاصه میکنم تا مطمئن شوم مطلب را درست فهمیده ام.	هرگز	بسیار	همیشه
11. برای اینکه دردم نظرات چگونگی شکل میگیرند آنها را تجزیه و تحلیل میکنم.	هرگز	بسیار	همیشه
12. احتمال کسی که موضوع مورد نظر مرا بیان میکند میسجم.	هرگز	بسیار	همیشه
13. برای بالا بردن درک خود از مطلب و مباحث حاضر به انجام هرکاری هستم.	هرگز	بسیار	همیشه
14. برای اجتناب از موضع گیری و اظهار نظرهایی جهت دار، احساسات و زبان احساسی را کنار میگذارم.	هرگز	بسیار	همیشه
15. شاید مربوط به مباحث مورد نظر را ارزیابی میکنم تا ببینم آیا به اندازه کافی برای تصدیق آنها قوی هستند یا خیر.	هرگز	بسیار	همیشه
16. برای رفع ابهام، اظهارات را بررسی میکنم تا مطمئن شوم معنای آنها را بد تمیز نکرده ام.	هرگز	بسیار	همیشه
17. مطالب و پیشنهاداتی که بسیار دقیق نیستند را به چالش میکشیم.	هرگز	بسیار	همیشه
18. ثبات عقاید مردم را میسنجم.	هرگز	بسیار	همیشه
19. برای بالا بردن درک خود از مباحث سوال میکنم.	هرگز	بسیار	همیشه
20. سعی میکنم فرضیاتی را که مباحث مختلف بر آنها استوار هستند را مشخص کنم.	هرگز	بسیار	همیشه
21. از اطلاعاتی که تجزیه و تحلیل کرده ام نتیجه گیری میکنم که آیا میتوانم مطلبی را بپذیرم یا رد کنم.	هرگز	بسیار	همیشه
22. برای بالا بردن درک خود از یک موضوع در مورد آن از دیگران اطلاعات جمع آوری میکنم.	هرگز	بسیار	همیشه
23. مباحث را تجزیه و تحلیل میکنم تا ببینم آیا منطقی هستند.	هرگز	بسیار	همیشه
24. با کنار گذاشتن تعصبات، مباحث را به روش غیر احساسی و منطقی ارزیابی میکنم.	هرگز	بسیار	همیشه
25. نکات با اهمیت و کم اهمیت را از هم تشخیص میدهم.	هرگز	بسیار	همیشه
26. ذهن خود را تنها به اطلاعات موجود محدود نمیکم بلکه به دنبال اطلاعاتی فراتر از اطلاعات موجود هستم.	هرگز	بسیار	همیشه
27. تحت تاثیر دیگران قرار نمیگیرم و خود نتیجه گیری میکنم.	هرگز	بسیار	همیشه
28. برای بالا بردن درک خود از موضوع تحقیق میکنم.	هرگز	بسیار	همیشه
29. سعی میکنم هدف اصلی هر مبحثی را مشخص کنم.	هرگز	بسیار	همیشه
30. اطلاعات جدید را مورد بررسی قرار میدهم تا ببینم آیا نتیجه گیری های کلی نیاز به ارزیابی مجدد دارد یا خیر.	هرگز	بسیار	همیشه