

# Instructors' Attitudes towards the Reflection of Critical Thinking in Course Syllabi: Evidence from an Expanding Circle

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**Abstract**—This study investigated Iranian EFL university instructors' familiarity with critical thinking, and its use in their course syllabi. To this end, 103 instructors completed an attitude questionnaire. The results revealed that the differences between EFL instructors were significant across their level of education in terms of their preparation of course syllabi, and their familiarity with CT and official syllabi. Besides, TEFL instructors were significantly superior to their linguistics and literature colleagues in terms of their familiarity with CT and its perceived importance. The results revealed that the relationships between the participants' teaching experience on the one hand and their preparation of syllabi, their familiarity with CT and official syllabi and the consideration of CT in their course syllabi on the other hand were statistically significant. The study suggests that teacher training programs and in-service training courses should aim at educating instructors continually and systematically and help them keep abreast of the recent pedagogical innovations to enhance learning outcomes.

**Index Terms**—critical thinking, attitude, course syllabus, instructors, expanding circle

## I. INTRODUCTION

Critical thinking (CT) has attracted increasing attention in recent decades. Numerous scholars and educators across the world (e.g., Brookfield, 2009; Watson & Glaser, 2002) have called for a shift of focus from knowledge transmission to knowledge transformation through which learners would be led towards autonomy.

Although CT skills are extremely valued and are considered as “a necessary outcome of higher education” (Tsui, 2002, p. 740), the existing literature reveals that due to the perceived and experienced obstacles, higher education does not promote students' CT skills in Iranian context (Aliakbari & Sadeghdaghghi, 2013). As students' ability to assess, analyze, interpret, evaluate, and create is not an inherent trait but a learned skill (Halx & Reybold, 2005), and it is developed through education and practice as well as experience, instructors play an important role in fostering students' ability to think critically. As Mangena and Chabeli (2005) rightly stated, “one cannot teach critical thinking if one is not a critical thinker oneself” (p. 292). As such, instructors play a significant role in the process of familiarizing students with CT and cultivating the relevant skills.

To this end, the present study sought to find out EFL instructors' perceived level of familiarity with the concept of CT and the level of importance they place on the use and incorporation of CT in their course syllabi.

## II. LITERATURE REVIEW

In educational settings, CT is judged to be a crucial concept since it helps students “to connect knowledge as they use information from many different sources and experiences to gain broader perspectives and deeper understanding” (Kanik, 2010, p. 20). Critical thinkers raise seminal questions, verbalize them clearly, gather and assess pertinent information, use influential ideas, reflect liberally, and communicate effectively with others (Duron, Limbach, & Waugh, 2006). Researchers emphasize the importance of developing students' CT believing that one major goal of education is “to create men who are capable of doing new things rather than repeating what the previous generations have already done, and to form minds which can think critically, and verify rather than passively accepting everything offered” (Fisher, 1995, p. 22).

CT has always been a topic of much dispute because it does not unfold itself easily to a clear-cut definition (Castle, 2009; Raymond & Profetto-McGrath, 2005). A glance through the literature reveals that the concept has been defined inconsistently and even the existing definitions tap various aspects of CT. For example, following Delphi method, Facione (1990) conducted a research through a panel of 46 experts and defined CT as “a purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, and conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based” (p. 2). On the other hand, Scheffer and Rubinfeld (2000) described it as “a component of professional accountability in which students practice the cognitive skills of analyzing, applying standards, discriminating, information seeking, logical reasoning, predicting, and transforming knowledge” (p. 25). Paul (1992) also conceived CT as “the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (p. 38).

Although there has been no consensus on the definition of CT and the true meaning of this concept has been a topic of much debate (Bloom, 1956; Ennis, 2004; Halpern, 2007; Paul, 1995), it is considered as an important factor in education (Allington, 2009; Ennis, 2004; Hofreiter, Monroe, & Stein, 2007; Watson & Glaser, 2002). As such, that education is to be CT-inspired seems to be far from being controversial. In fact, the debate is over how such skills should be operationalized, implemented, and evaluated effectively. This process requires a shift of focus from the traditional view towards education to a more active and dynamic one. Training students to think critically and helping them go beyond the realm of mere accumulation of knowledge is considered a desirable outcome of education. As Synder and Synder (2008) stated, “critical thinking is not an innate ability,” and should be developed by instructors through education, practice, and experience (Kowalczyk, Hackworth, & Case-Smith, 2012). This highlights the critical role of instructors in the improvement of their teaching practice.

Instructors who have conceptualized and apprehended CT clearly are eager enough to implement CT skills in their teaching and more successful in incorporating them in their practice (Newman, 1991). Seidman (2006) carried out a multiple-case study to investigate the effect of instructors’ beliefs about CT on students. Following a descriptive method, four college instructors teaching business, education, and computer courses were selected for an in-depth investigation. The findings revealed that the instructors’ beliefs about CT were compatible with their instructional methods. For examples, some of the common beliefs about CT that were reflected in their practice were: First, CT developed over time as practices and experiences increased. Second, in-class arguments and in-depth discussion were essential to developing CT. Third, developing CT skills was as important as content coverage and finally, personal discipline was highly encouraging and helpful to the development of CT.

Instructors’ perceptions of CT and understanding the importance of developing it underlie their classroom practices (Onosko, 1990). They play an essential role in familiarizing students with the concept and cultivating them in the class. Therefore, the degree of their familiarity with CT and how to implement the related skills inspire further development. In a study, Stapleton (2011) studied instructors’ views on CT. The result unveiled that they were not much aware of those definitions and there was no precise understanding among teachers of what CT really meant. Stapleton interviewed 72 high school teachers in Hong Kong on their opinions about the meaning of CT. Results indicated that although the teachers had some conception of the term, it was rather narrow and vague. Nevertheless, they expressed strong support for the inclusion of CT in the curriculum as well as holding some classes for training teachers on how to teach it. The findings suggested that more precise definitions of CT are required for educational practitioners and in overall educational documents.

According to Allington (2009), CT is regarded as an indispensable component of education, a trait of an educated person. The goal of teaching CT is to develop people who are fair-minded, objective and committed to clarity (Chabeli, 2007). Ever-changing and increasingly complex state of knowledge development is demanding higher-order thinking skills in students of all disciplines.

An important point is that teachers should be critical thinkers to promote CT skills. This highlights the role of instructors in flourishing CT skills in students because if they are not familiar with CT, it will be difficult for them to facilitate CT; if they do not perceive the significance of CT, they will not be able to cultivate it in their own practice.

### III. RESEARCH QUESTIONS

This study sought to answer the following research questions:

1. Are there any significant differences between EFL instructors in terms of their familiarity with CT and its importance across their level of education?
2. Are there any significant differences between EFL instructors in terms of their preparation of course syllabi and use of official syllabi across their level of education?
3. Are there any significant differences between EFL instructors in terms of their familiarity with CT and its importance across their field of study?
4. Are there any significant differences between EFL instructors in terms of their preparation of course syllabi and use of official syllabi across their field of study?

5. Are there any relationships between EFL instructors' teaching experience and their familiarity with CT and its importance?
6. Are there any relationships between EFL instructors' teaching experience and their preparation of course syllabi and use of official syllabi?

#### IV. METHOD

This study utilized a quantitative design to collect the data. To this end, a survey method was used. As such, a questionnaire with closed items was administered to elicit the data.

##### A. Participants

Initially, about 600 Iranian university instructors were randomly selected to take part in this study. One hundred and three EFL instructors (45 male and 58 female) participated in the study and completed the attitude questionnaire. The age of the participants ranged from 25 to 61 years of age ( $M = 35.64$ ,  $SD = 6.93$ ). In addition, the average teaching experience of the participants, which was considered as a moderator variable in this study, ranged from 1 to 27 years ( $M = 9.36$ ,  $SD = 5.96$ ). In terms of the field of study, 65 (63.1%) of the participants, 18 (17.5%) of them and 20 (19.4%) of them majored in TEFL, English Literature, and Linguistics, respectively. In addition, 66 (64.1%) of the participants held MA and 37 (35.9%) of them held PhD.

##### B. Instrument

Based on the existing literature, an attitude questionnaire which consisted of three sections was developed. The sections included an introduction, biographical information, and the attitude items. Through a short explanation, the participants were debriefed about the purpose of the study in the introductory section and the participants' biographical information including their age, gender, teaching experience, and field of study were elicited as well. The attitude items consisted of seven five-point Likert-scale items dealing with the issues related to the instructors' preparation of course syllabi, their adherence to the macro policies, and familiarity with CT as well as its importance.

The content validity of the questionnaire was established by a panel of four university instructors. The panel commented on the survey content to ensure the instrument measured the desired affective constructs and provided suggestions for improvement. The reliability of the items was calculated through Cronbach alpha. The reliability coefficient was found to be .73 suggesting that the items had relatively high internal consistency. It is to be noted that a reliability coefficient of .70 or higher is considered to be good in most social science research (Dörnyei, 2007).

##### C. Data Collection and Analysis

Based on the purpose of the present study and the existing literature on CT, a set of items were extracted and sent to four experts to be evaluated. Before administering the questionnaire to the target group, it was piloted with 10 EFL instructors to make sure it covered the required issues and the items were not ambiguous. Based on this preliminary pilot phase, some items were developed and modified to meet the objectives of the study. The revised questionnaire was sent to those instructors whose contact information was accessible through their affiliated universities. One hundred and three instructors returned the questionnaires. The anonymity of the participants was guaranteed and the confidentiality of the responses was ensured too. After the data were collected, they were subjected to statistical analysis.

To analyze the data, descriptive and inferential statistics were both run. Descriptive statistics were reported for each item which had an ordinal scale. As Mackey and Gass (2005) stated, one of the main assumptions for parametric test is that the data should be interval. Dörnyei (2007) also stated that "if we have ... ordinal data ..., parametric tests are not appropriate and we need to use non-parametric procedures" (p. 227). As such, to investigate the role of the participants' degree, Mann Whitney U tests were run. To explore the role of their field of study (TEFL, Literature, & Linguistics) in their familiarity and use of CT, Kruskal Wallis test was run. In addition, the relationships between the participants' teaching experience and their responses to the questionnaire items were computed through Kendall tau which is a non-parametric correlation test used when there are tied ranks in the data (Mackey & Gass, 2005).

#### V. RESULTS AND DISCUSSION

##### A. Descriptive Statistics

Table 1 summarizes the descriptive statistics of the respondents' responses:

TABLE 1  
DESCRIPTIVE STATISTICS OF THE RESPONSES TO THE CLOSED ITEMS OF THE QUESTIONNAIRE

	<i>N</i>	<i>M</i>	<i>SD</i>
1. Preparing syllabi	103	2.50	1.23
2. Familiarity with CT	103	2.72	1.19
3. Importance of CT	103	3.03	1.19
4. Familiarity with official syllabi	103	2.73	1.24
5. Use of official syllabi	103	2.31	1.15
6. Syllabi's match with the official ones	103	2.06	1.01
7. Considering CT in syllabi	103	2.19	1.31

With respect to the first item that scrutinized the participants' preparation of written course syllabi for the courses they taught, the mean was found to be 2.5 ( $SD = 1.23$ ). The second item explored whether participants were familiar with the concept of CT. The mean rank of item two ( $M = 2.72$ ,  $SD = 1.19$ ) showed that the participants were not completely familiar with CT as the mean was between 'disagree' (2) and 'agree' (3). The third item was also concerned with the importance of CT from the instructors' views ( $M = 3.03$ ,  $SD = 1.19$ ). The mean rank of the importance was between 'agree' and 'strongly agree'. In addition, the mean rank of this item was the highest among all items. Item four explored whether the participants were familiar with the syllabi officially announced by the Ministry of Science, Research, and Technology as far as the courses they taught were concerned. This item had the highest dispersion among all items ( $M = 2.73$ ,  $SD = 1.24$ ). Item five investigated if the instructors used the syllabi of the Ministry in the preparation of their course syllabi. The mean rank of this item was not high ( $M = 2.31$ ,  $SD = 1.15$ ). Item six examined if the the instructors' course syllabi were in accordance with those suggested by the Ministry. This item had the lowest mean and SD ( $M = 2.06$ ,  $SD = 1.01$ ). As it appeared to be the case, the instructors did not find the official syllabi quite appropriate. As such, they preferred to make some modifications in the syllabi. The lowest SD showed the lowest degree of dissimilarity among the responses given by the participants. The last item dealt with whether they would consider CT in their syllabi even if they did not have any written syllabi. The mean was found not to be high enough ( $M = 2.19$ ,  $SD = 1.31$ ).

### B. Inferential Statistics

To explore the significance of the differences, non-parametric tests were used. The results are presented in the following sections.

*Differences between instructors in terms of their level of education.* A Mann-Whitney U test was run to determine the role of the instructors' level of education. Table 2 reports the mean ranks and sum of ranks for each item and Table 3 represents the result of Mann-Whitney U test.

TABLE 2  
MEAN RANKS AND SUM OF RANKS ACROSS LEVEL OF EDUCATION

Items	Level	N	Mean Rank	Sum of Ranks
Item 1	MA	66	45.90	3029.50
	PhD	37	62.88	2326.50
	Total	103		
Item 2	MA	66	44.63	2945.50
	PhD	37	65.15	2410.50
	Total	103		
Item 3	MA	66	48.95	3230.50
	PhD	37	57.45	2125.50
	Total	103		
Item 4	MA	66	46.16	3046.50
	PhD	37	62.42	2309.50
	Total	103		
Item 5	MA	66	48.02	3169.50
	PhD	37	59.09	2186.50
	Total	103		
Item 6	MA	66	51.24	3382.00
	PhD	37	53.35	1974.00
	Total	103		
Item 7	MA	66	48.80	3220.50
	PhD	37	57.72	2135.50
	Total	103		

Note. Item 1 = Preparing syllabi; Item 2 = Familiarity with CT; Item 3 = Importance of CT; Item 4 = Familiarity with official syllabi; Item 5 = Use of official syllabi; Item 6 = Syllabi's match with the official syllabi; Item 7 = Considering CT in syllabi

As revealed in Table 2, in all items, instructors with PhD had a higher mean rank indicating their further familiarity with CT and the use of syllabi to foster CT in their courses. The highest difference related to item two that dealt with the familiarity of the participants with the concept of CT. Interestingly enough, PhD holders indicated that they were by far more familiar with CT (mean rank of PhDs = 65.15; mean rank of MAs = 44.63). Item six revealed the lowest mean rank difference (mean rank difference= 2.11). These findings coincided with those of Hackworth (2009) who discovered that the confidence and skill level showed a significant difference when comparing the educational level of the program director, particularly between those with a master's degree and a doctoral degree.

TABLE 3  
TEST STATISTICS A (DIFFERENCES ACROSS LEVEL OF EDUCATION)

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Mann-Whitney U	818.5	734.5	1019.5	835.5	958.5	1171	1009.5
Wilcoxon W	3029.5	2945.5	3230.5	3046.5	3169.5	3382	3220.5
Z	-2.852	-3.716	-1.518	-2.907	-1.912	-.362	-1.495
Asymp. Sig. (2-tailed)	.004	.000	.129	.004	.056	.717	.135

a. Grouping Variable: Level of education

Based on Table 3, the  $p$  values for items one, two, and four were found to be statistically significant across level of education ( $p < .05$ ).

Item one asked if the respondents prepared written course syllabi for the courses they taught. The mean rank of PhD holders was significantly higher than that of MA holders (mean rank of PhDs = 62.88; mean rank of MAs = 45.90). It was shown that instructors with PhD prepared written course syllabi more frequently. This is possibly indicative of the further attention paid to syllabus design at PhD level. In fact, MA students need to be trained further to prepare course syllabi through which the fulfillment of course objectives could be enhanced.

As for item two, the participants' familiarity with CT, the mean rank of the PhD holders was higher than that of the MA holders (mean rank of PhDs = 65.15; mean rank of MAs = 44.63). This difference was found to be statistically significant which is indicative of the higher familiarity of PhD holders with CT.

Item four revealed that PhD holders were significantly more familiar with the official syllabi (mean rank of PhDs = 62.42; mean rank of MAs = 46.16). In line with item one, familiarity with official syllabi seemed to increase the preparation of course syllabi. As instructors with a PhD expressed to be more familiar with the official syllabi, this appears to be one potential reason why they prepared course syllabi more frequently.

As Allington (2009) regarded CT as an indispensable component of education, a case in point is that policy-makers in general and syllabus designers in particular need to incorporate the concept of CT in the MA courses to familiarize students further with this concept and the way it can be implemented in the EFL classes. Lack of due familiarity with CT on the part of MA holders requires a consideration of curriculum renewal to keep them abreast of CT related issues. In fact, this might bring about positive changes in the educational system to train critical thinkers. This finding supported those of Hackworth (2009), Ironside (2004), Choy and Cheah (2009), and Stedman and Adams (2012) which found doctoral degree educators had experienced the higher level education courses that consequently improved both their skill level and their confidence in their use of CT strategies.

Typically, one might presume the doctoral degree influences the instructors to be better prepared in methods and strategies of CT as well as their familiarity with the concept of CT and the level of importance they place on it. The results partially supported those of Stadt and Ruhland's (1995) which found that there was a significant difference between the baccalaureate and the associate degree students.

*Differences among instructors in terms of their field of study.* Table 4 presents the results of the participants' responses across their field of study:

TABLE 4  
MEAN RANKS ACROSS FIELD OF STUDY

Items	Field	N	Mean Rank
Item 1	TEFL	65	55.94
	Literature	18	43.83
	Linguistics	20	46.55
	Total	103	
Item 2	TEFL	65	57.51
	Literature	18	31.39
	Linguistics	20	52.65
	Total	103	
Item 3	TEFL	65	56.55
	Literature	18	34.56
	Linguistics	20	52.93
	Total	103	
Item 4	TEFL	65	54.69
	Literature	18	49.83
	Linguistics	20	45.20
	Total	103	
Item 5	TEFL	65	53.64
	Literature	18	45.47
	Linguistics	20	52.55
	Total	103	
Item 6	TEFL	65	54.98
	Literature	18	45.97
	Linguistics	20	47.75
	Total	103	
Item 7	TEFL	65	57.38
	Literature	18	42.81
	Linguistics	20	42.80
	Total	103	

Note. Item 1= Preparing syllabi; Item 2 = Familiarity with CT; Item 3 = Importance of CT; Item 4 = Familiarity with official syllabi; Item 5 = Use of official syllabi; Item 6 = Syllabi's match with the official syllabi; Item 7 = Considering CT in syllabi

As Table 4 shows, whereas the mean rank of TEFL instructors was higher than that of Literature and Linguistics instructors across all items, the Literature instructors had the lowest mean rank on all items except item four (familiarity with official syllabi) and item seven (considering CT in syllabi). Overall, TEFL instructors were followed by Linguistics instructors and Literature instructors, respectively. In fact, in TEFL program, there is a further concern for syllabus design and instruction of CT. In such programs, students learn to prepare syllabi in their methodology courses. In addition, they get familiarized with the new trends in EFL instruction such as CT-tailored instruction. It seems viable to fill the gap in Literature in particular and train the instructors the ways syllabi can be designed.

To check the statistical significance of the differences, a Kruskal Wallis test was run on all considering field of study as the moderator (grouping) variable. The result is presented in Table 5.

TABLE 5  
TEST STATISTICS A,B (DIFFERENCES ACROSS FIELD OF STUDY)

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Chi-Square	3.335	13.317	9.200	1.996	1.192	1.982	6.037
Df	2	2	2	2	2	2	2
Asymp. Sig.	.189	.001	.010	.369	.551	.371	.049

a. Kruskal Wallis Test

b. Grouping Variable: Field of Study

As Table 5 shows, in item two (familiarity with CT), item three (importance of CT), and item seven (considering CT in syllabi), the  $p$  values were lower than the alpha level ( $p < .05$ ). As such, the differences among the three fields of study under investigation were statistically significant. However, for item seven, based on pairwise comparison, the adjusted alpha level showed no significant difference among the three groups. To locate the difference, pairwise comparisons were made.

TABLE 6  
PAIRWISE COMPARISONS (ITEM TWO: FAMILIARITY WITH CT)

Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Literature – Linguistics	-21.261	8.735	-2.434	.015	.045
Linguistics – TEFL	4.858	6.875	.707	.480	1.000
Literature – TEFL	26.119	7.161	3.647	.000	.001

As Table 6 shows, in terms of familiarity with CT, the difference between Literature ( $M = 31.39$ ) and Linguistics ( $M = 31.39$ ) on one hand and Literature ( $M = 31.39$ ) and TEFL ( $M = 57.51$ ) on the other hand were statistically significant

( $p < .05$ ) whereas the difference between TEFL ( $M = 57.51$ ) and Linguistics ( $M = 52.65$ ) was not statistically significant. This shows that Literature graduates did not have adequate familiarity with CT and although TEFL instructors obtained a higher mean compared to their Linguistics counterparts, this difference did not appear to be statistically significant.

TABLE 7  
PAIRWISE COMPARISONS (ITEM THREE: IMPORTANCE OF CT)

Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Literature - Linguistics	-18.369	8.857	-2.074	.038	.114
Literature – TEFL	21.991	7.261	3.028	.002	.007
Linguistics - TEFL	3.621	6.971	.519	.603	1.000

In terms of considering CT as an important concept, only the difference between Literature ( $M = 34.56$ ) and TEFL instructors ( $M = 56.55$ ) was statistically significant ( $p < .05$ ). As the mean ranks showed (see Table 4), TEFL instructors considered CT to be an important issue in language teaching. The results can be interpreted with a reference to the previous item (familiarity with CT). As Literature instructors have less familiarity with CT, they do not seem to pay due attention to its essential role in EFL instruction.

*Differences among instructors in terms of their teaching experience.* To determine the role of the participants' teaching experience in the familiarity with and the use of CT, teaching experience as an interval variable was converted into ordinal data. As such, Kendall's tau was run since there was "a small data set with a large number of tied ranks" (Field, 2013, p. 278). Table 8 represents the results of the correlation analysis.

TABLE 8  
THE ROLE OF TEACHING EXPERIENCE

		Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	
Kendall's tau_b	Teaching Experience	Correlation Coefficient	.211**	.324**	.137	.214**	.131	.125	.162*
		Sig. (2-tailed)	.005	.000	.085	.006	.087	.105	.032
		N	103	103	103	103	103	103	103

\* Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

Note. Item 1 = Preparing syllabi; Item 2 = Familiarity with CT; Item 3 = Importance of CT; Item 4 = Familiarity with official syllabi; Item 5 = Use of official syllabi; Item 6 = Syllabi's match with the official syllabi; Item 7 = Considering CT in syllabi

As indicated in Table 8, the positive relationship between the participants' teaching experience and preparation of course syllabi (item one) was found to be statistically significant,  $r = .21$ ,  $p < .05$ . The two variables, namely, teaching experience and preparation of written course syllabi, were found to be positively correlated. In addition, the relationship between teaching experience and participants' familiarity with CT (item two) was also reported to be statistically significant,  $r = .32$ ,  $p < .05$ . In other words, higher teaching experience indicated more familiarity with CT. In addition, the positive relationship between teaching experience and familiarity with official syllabi (item four) was also statistically significant,  $r = .214$ ,  $p < .05$ . This finding also suggests that higher teaching experience of the EFL instructors correlate with their higher level of familiarity with the official syllabi. Finally, the relationship between teaching experience and the consideration of CT in course syllabi (item seven) was also statistically significant,  $r = .16$ ,  $p > .05$ .

The results of the correlation analysis highlighted the significance of teaching experience as an important factor. Contrary to the expectations that more professional teachers might not have a written course syllabus, in this study, more experienced instructors expressed that they prepared their syllabi more frequently and they were also more familiar with officially announced syllabi. This might be partially due to the fact that they acknowledged the usefulness of having a written course syllabus that could act as a road map and shape and direct their process of instruction. In addition, more experienced instructors indicated their higher familiarity with CT which is indicative of their concern for more appropriate and up-to-date techniques and procedures to enhance the quality of their instruction. These findings supported those of Zygmunt and Moore Schaefer (2006) which suggested that more experienced instructors are more likely to be able to infuse CT in their classrooms, motivate their students to think critically, and assess their CT skills. This contradicts the study of Hackworth (2009) who found no relationship between instructors' age and experience and their skills in teaching critical reasoning. Hackworth explained that the instructor's experience in teaching "presented a greater likelihood of developing individuals who are able to see alternative viewpoints but apply a more inflexible approach to situations" (p. 40). This might be due to different reasons such as heavy workloads, or instructors' perception that they should know all the answers and act like an authority in the class.

## VI. CONCLUSION

This study was carried out to determine if there is significant differences among EFL instructors in terms of their familiarity with CT, the importance they place on it, their preparation of course syllabi and use of official syllabi across their level of education, their field of study and teaching experiences. The findings indicated even though instructors valued CT as a necessary tool to prepare students for the profession, their field of study, their level of education and teaching experiences influenced the degree of their familiarity with CT, official syllabi and the preparation of their own.

Results of the study verified that educators with a PhD were more confident in their CT awareness and abilities. The findings supported Alavian's study (2013) who found that teaching experience and level of education were effective factors in the application of CT activities in EFL classes.

The findings imply a prompt action in facilitating cooperation and collaboration among policymakers, curriculum developers, university instructors and all other stakeholders to bridge the gap between them skillfully as well as a felt need for in-service training programs. As Cimer and Timuçin (2010) argued, in order to develop CT skills, a serious revision needs to be made in curricula and such a paradigm shift requires reflection on lecturers' and students' role, assessment methods, learning consequences and above all, believing that learners build their knowledge themselves based on their own experiences and backgrounds. In fact, having a CT-inspired instruction is a desired objective that requires the interaction and collaboration on the part of all stakeholders.

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