

EFL Teachers' Perceptions of Implementing Critical Thinking in Teaching Reading: Focus on the Possible Hindrances

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Abstract

The study explores Iranian English teachers' perceptions of the importance of critical thinking skills and the extent to which they practice their beliefs in real classroom setting. As a secondary purpose, the study discovered the possible hindrances in the way of implementing critical thinking in reading classes. Using a sequential mixed-methods design, data were collected through survey questionnaire, interviews and class observations from 4 universities and several English language institutes. Fifty participants took part in the study. A questionnaire with 16 closed-ended and two open-ended questions was utilized to collect data about the teachers' beliefs. For the next phase of the study, one teacher from among 10 teachers who showed strong beliefs was conveniently selected for class observation and interview. The results of one sample T-test and independent sample T-test indicated that teachers believed critical thinking was important and that there was not any significant difference between male and female regarding critical thinking. Qualitative analysis of the data showed that despite the teachers' strong beliefs about the importance of critical thinking, they did not implement it much in their classroom practices. The hindrances as well as the implications of the study are fully explained in the paper.

Keywords: critical thinking, hindrances, qualitative analysis, perception, reading course.

Восприятие учителями критического мышления и работа с ним в процессе обучения чтению

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Аннотация

В настоящем исследовании изучается восприятие иранскими учителями важности критического мышления и то, как их убеждения отражаются на практической деятельности; кроме того, исследование направлено на выявление возможных препятствий в формировании критического мышления на уроках чтения. Данные были собраны путем анкетирования, собеседований и аудиторных наблюдений в 4 университетах и нескольких институтах английского языка. В исследовании приняли участие 50 человек. Анкета с шестнадцатью закрытыми и двумя открытыми вопросами использовалась для сбора данных об убеждениях учителей. На следующем этапе один из 10 учителей, показавших наиболее значительные результаты, был выбран для наблюдения в классе и собеседования. Результаты одного выборочного Т-теста и независимого выборочного Т-теста показали, что учителя считали критическое мышление важным и что в отношении к критическому мышлению значительной разницы между мужчинами и женщинами нет. Качественный анализ данных показал, что, несмотря на твердое убеждение учителей в необходимости критического мышления, они недостаточно использовали его в своей практике. В заключение дан анализ препятствий и последствий, сопровождающих данный процесс.

Ключевые слова: критическое мышление, убеждения учителя, восприятие учителя, препятствия, курс чтения.

Introduction

Critical thinking and teacher's beliefs have been discussed and investigated by numerous researchers and in different areas of study. Belief is an “unobservable cognitive dimension” (Borg, 2003, p. 81) of teaching and learning; similar dimensions are thinking, knowledge, perception, cognition. Teacher's belief has been receiving increasing attention during the last few decades in the field of teacher education (Nuthall, 2004; Calderhead, 1996; Pajares, 1992).

Teacher education has gone through different stages due to the shifts in general trends of teaching and learning languages. As pointed out by some researchers including Borg (2006), during the 1960s the focus was on teachers' observable behaviour because of the impact of behaviourism at that time. Thus, learning was considered as the product of those effective teaching behaviours. Consequently, programs and courses for training teachers focussed on those effective teaching behaviours that were believed to lead to successful learning. However, later in the 1970s, this view was questioned for ignoring the relationship between thought and actions, and it came to be realized that teachers' thought would affect the way they behave in the classroom. Some teachers did not always follow what they were trained for, even after teacher training courses.

The concept of belief has become a common characteristic of inquiries by mainstream researchers (Borg, 2001, 2003, 2006; Freeman, 2002; Pajares, 1992) in language teaching and learning for the past decades. It is a mental state that guides individuals' thinking processes and their activities and it also has a significant effect on individual's behaviours, classroom practices, and instructional choices. Therefore, attention to the beliefs of individuals, particularly to the teacher's, should be a focus of educational researchers.

A large number of definitions are suggested by numerous professional researchers. Freeman (2002, p. 1) introduces belief as "hidden side" of individuals' mental lives. According to Borg (2003), what teachers "think, know, believe and do" refers to their beliefs.

Another definition of the term is "understanding, propositions, and premises" which are known to be true about the world around us (Richardson, 1996, p. 103). Beliefs can change over time because of the different contexts an individual faces, for instance, the experiences that a person gains can promote and change the kind of that person's beliefs. Pajares (1992), drawing from Nespor (1987) expresses the view that beliefs are far more effective in specifying how people create and organize tasks and issues and in fact they can predict behaviours strongly. Outside the classroom, teachers' behaviours are affected by their beliefs while during the class time, beliefs are affected by their behaviours. In another section, Pajares (1992), drawing from Rokeach (1968), contends that individuals are not able or willing to state their true beliefs and it is difficult to observe or measure the beliefs. Instead, it is necessary to infer their underlying beliefs, from "what people say, intend, and do." Moreover, Pajares (1992) describes that revealing teacher's beliefs is a necessary factor to promote teacher's development and practices in teaching.

In recent years, educational researchers (Allen, 2013; Basturkmen, 2012; Borg, 1999, 2003; Brown & Conney, 1982; Calderhead, 1996; Larenas et al., 2015; Pajares, 1992) have concentrated on the role of teacher's beliefs in the educational systems all over the world.

As cited above, teachers' beliefs affect their behaviours, classroom practices and instructional choices. In other words, behaviours affect teacher's beliefs outside the classroom and vice versa. Their beliefs have a great impact on their behaviours inside the classroom. In teacher training, teachers' success and behaviours in the classroom contexts are affected by their beliefs. Although various definitions exist for teacher's beliefs, in general it expresses an internally "conscious or unconscious" state of mind (Borg, 2001, p. 186).

On the other hand, today we live in a fast-paced world which is changing rapidly and these changes are leading to situations which are complicated and subject to development that happen in the context of all modern globalization processes (Ennis, 2011; 2018). In order to deal with these changes, individuals require the capabilities and qualifications to act effectively. One of the competencies identified decades ago, was being able to think critically. Critical thinking (CT) is a questioning state of mind which is able to criticize

more than the simplistic features of a situation or context. Critical thinking could lead to worthwhile changes in an individual's daily life that affect their action, beliefs, and thought (Ennis, 2011).

In general, a critical thinker attempts to ask appropriate questions, seek relevant information, reason out in an organized way, make comprehensive conclusions, reflect on the information, and assess the creditability of information and so on. It is a mode of thinking in which the thinker controls his/her thinking processes and attempts to improve the quality of thinking, furthermore, critical thinking ability is a core academic skill which has a key position in the educational system.

Critical thinking ability and teacher's beliefs are two key variables in the present study which are investigated together with various constructs examined by many researchers. These include: critical thinking ability and reading strategies (Mohammadi et al., 2012), EFL learners meta cognitive strategies and their critical thinking (Weda, 2016; 2018), the relationship of CT and meta cognitive strategies, the role of metacognitive skills in developing CT (Magno, 2010), study of CT and meta cognitive awareness in students (Kathiravelu et al., 2004), measuring CT skills (Ennis, 1985), the nature of CT (Ennis, 2011), and assessing the effectiveness of CT instruction (Halpern, 2001). Additionally, teacher's beliefs are investigated along with numerous topics by several researchers such as teacher's beliefs in teaching grammar (Borg, 1999), teacher cognition in teaching grammar, (Borg, 2003), teacher beliefs and technology integration (Kim et al., 2013), teachers' beliefs and educational research (Pajares, 1992), the role of beliefs in the practice of teaching (Nespor, 1987), and links between teacher's beliefs and practices and research on reading (Kuzborska, 2011).

Moreover, as Shell (2001) stated, individuals meet with some hindrances and difficulties while implementing CT instructions. In a classroom context, a teacher should sufficiently be aware of the barriers concerning the implementation of CT and seeking techniques and strategies in order to overcome those barriers. The result would be the development of methods, approaches and techniques which can be beneficial and practical for both teachers and learners to promote their instructional skills. Several studies in the literature have investigated the inter-relationship between teacher's beliefs and various variables (Shell, 2001).

Some barriers have been recognized to the implementation of what teachers believe. For instance, according to Fani (2011), "lack of proper assessment, vague conceptualization of CT, lack of organized sequence in teaching CT, the threatening nature of CT practice and lack of teacher training" (p. 1) are some common barriers in CT implementation. Shell (2001) also has referred to lack of time, size of the class, learner's features, and lack of knowledge and other factors and as some barriers toward implementation of CT.

Despite the numerous studies in each of these areas, there is paucity of research on teachers' beliefs towards the importance of CT in reading classes and the possible hindrances to its implementation. Prompted by these facts, the present study is intended to investigate teacher's beliefs regarding CT ability in teaching reading, with a focus on possible hindrances to the implementation of CT.

Review of the Literature

The Notion of Beliefs and Its Origin

For the past four decades, behaviour was the prominent factor in teaching and teacher education. The teacher should be trained how to behave in a classroom context that leads to success. This was a simplistic approach towards language teaching, and generated several view and research. Borg (1999) noted that a sole focus on teachers' behaviours had been

in question in 1970 and shortly thereafter (in 1975) investigation started into “belief” in teacher education. Views changed and feelings and ideas become more prominent. Allen (2013) notes that investigations on the beliefs of second and foreign language teachers started to appear in the mid-1990s. It should be noted that in addition to the teacher's behaviour, their ideas, preferences, perceptions, expectations, their personal strategies and so on are significant and should be discussed.

Teachers' beliefs or perceptions have a significant role in second language learning. They refer wholly to what they think, know, believe and do. Borg (2003, p.1) states that teacher's belief refers to “an unobservable cognitive dimension of teaching.” Teacher's belief plays a major role in their lives, and their actions and decision-making are also affected by their beliefs. However, Borg (2003) and some other researchers believe that there are some “situational constraints” that hinder teacher in putting their beliefs into practice (Basturkmen, 2012, p. 284). Allen (2013) also stated that learner's needs, contradictory beliefs, time constraints, assigned curriculum and some other elements can stimulate teachers to develop classroom instructions in a way that is not totally in agreement with their beliefs.

Belief can be held “consciously” or “unconsciously”, it can also act as a guidance for one's thinking processes and actions during classroom instruction (Borg, 2001).

Teacher's Belief

In recent years, the research into the role that belief and teacher's beliefs play in second or foreign language learning has increased considerably and teachers' belief has been investigated by many researchers in different areas. A substantial body of literature on teachers' beliefs exists, both, in education in general (e.g., Calderhead, 1996; Pajares, 1992; Richardson, 1994; 1996) and in language teaching in particular (e.g., Borg, 2003, 2006; Freeman, 2002).

Sources of confusion about the concept of beliefs are investigated by some researchers (Pajares, 1992; Zacharias, 2003). Additionally, teachers' stated beliefs and practices were studied by Basturkmen (2012) and the links between teachers' beliefs and practices by Kuzborska (2011). Considerable attention has been given to teachers' beliefs in respect to teaching grammar (Borg, 1999), teacher cognition in teaching grammar (Borg, 2003), teacher beliefs regarding the instruction of English grammar (Underwood, 2012), and teacher beliefs and technology integration (Kim et al., 2013). Research has also been conducted on in-service teachers' beliefs toward teaching methodologies (Farmanlu & Abdolmanafi-Rokni, 2014), and pre-service teachers' evolving beliefs about and perceptions of themselves (Ng et al., 2010).

It is evident that teacher's beliefs are an important construct to study, and that they play a significant role in how they teach in their classes (Kuzborska, 2011; Basturkmen, 2012). Furthermore, these areas of research have received considerable attention, while little attention has been paid to the role and perception of teacher's beliefs regarding CT ability, especially in an EFL context.

The Notion of Critical Thinking and Its Origin

Over the last few decades, a vast number of definitions have been offered for the term “critical thinking”. According to Ennis (2011) critical thinking is the ability to think clearly and logically. Critical thinking is one of the new models in recent years in education systems to help the improvement of this system. CT ability is regarded as a core academic skill which is paid less attention. In other words, researchers believe that CT is a construct which is accepted in theory but not implemented in practice. It is a mode of thinking in which the thinker controls his/her thinking processes and attempts

to improve the quality of thinking. According to Wallace (2003, p.27), “critical readers are able and willing to critique not just the micro features of a text,” but also “search for hidden assumptions, notice various facets and evaluate what is most significant” (Barnet & Bedua, 2011, p. 3). Teaching students to think critically can influence and improve their daily activities. The concept of critical thinking has been about for many years and has been identified as a significant educational purpose. It is a concept which was introduced by Socrates, who offered “deep questioning and analysis of concepts as main concepts” (Bagheri & Nowrozi, 2015, p. 43).

Ennis has contributed to the mainstream definitions and interpretations of CT (1985, 2011). He recognized that CT consists of three important components: “problem-solving process, reasoning process and decision-making process” (Ennis, 1985, cited in Runpagaporn, 2007, p. 42).

In another definition by Paul, Willson and Binker (1995) CT was identified as a systematic and goal-oriented pattern of thought. They argued that CT is a considerably “systematic process” that promotes awareness thinking process, and reasoning (Rumpagaporn, 2007, p. 43).

In general, a critical thinker attempts to ask appropriate questions, seeks relevant information, reasons in an organized way, makes comprehensive conclusions, reflects on the information, and assesses the creditability of information and so on.

Hindrances to the Implementation of Critical Thinking

Although most teachers probably accept that critical thinking is necessary in education systems and is a requirement for improvement, teaching and applying CT strategies does not seem to be an easy task. There are various obstacles in achieving this aim.

Aliakbari & Sadeghdaghighi (2013) investigated teachers’ belief of the barriers in implementing CT. They examined 100 English educators with different degrees and concluded from respondents’ reports that the highest barrier was related to students’ characteristics. The second was self-efficacy while lack of knowledge was the third highest barrier. Moreover, a large number of participants reported that CT was not a necessary element for student’s success and it is not the primary goal of their teaching.

Fani (2011) identified a number of barriers to CT implementation including: lack of proper assessment, vague conceptualization of CT, lack of organized sequence in teaching CT, threatening nature of CT practice and lack of teacher training. She set out some strategies to overcome those barriers such as assessing CT, specific teacher training courses, infusion approach, continued practice, using critical challenges, encouraging a positive attitude toward CT, and considering different levels of CT.

In a similar vein, Kowalczyk, Hackworth & Case-Smith (2012) conducted a study of 692 program directors in Radiologic science. The results of responses from 317 sample participants revealed that CT is an essential factor in course curricula and students should be encouraged in this process. This study mentioned some key barriers including lack of time, lack of knowledge, insufficient motivation, were identified as the reasons for the lack of implementing CT in classroom.

Shell (2001) revealed that among nursing faculty the most important perceived obstacles to CT strategies were student’s characteristics, lack of time and content coverage. Kowalczyk, Hackworth & Case-Smith (2012) examined radiation science educators’ perceptions of barriers to the implementation of CT. They concluded that educators regard CT skills as a key element for students’ improvement and identified some barriers in CT implementation including: content coverage, time constraint, and support from administration.

CT ability was investigated in numerous areas of educational research (Choy & Cheah, 2009; Torff, 2006), but in the Iranian context there seems to be lack of research into teachers' beliefs regarding CT ability. To some extent, teacher' enactment and implementation in enhancing and promoting strong critical reading has been ignored, while teachers' beliefs regarding CT in reading comprehension has been poorly investigated. Teachers are certainly incapable of promoting critical thinking if their perception of such skill is inept.

Despite widespread studies investigating the relationship between teacher's beliefs and other constructs such as grammar instruction, technology integration, also the relationship between CT and other variables such as metacognitive strategies, metacognitive awareness, there are few studies which consider both teacher's beliefs and CT in teaching reading in Iranian educational context and focusing on the barriers to CT implementation. In this light, the following research questions were posed:

1. What are teachers' perceptions towards critical thinking ability?
2. What factors hinder teachers to promote critical thinking ability in reading comprehension courses?

Methodology

Research Design

A sequential mixed-method design was used to address these research questions. A quantitative design was used. A questionnaire including some closed as well as open-ended questions were administered to English teachers in universities and English language institutions to discover their beliefs about CT. This also focused on the possible barriers to the implementation of CT reading classes. To triangulate the data collection process, class observation and face-to-face semi-structured interviews were conducted to collect qualitative research data which was interpreted to get the final results. The purpose of conducting interviews and observations was to establish whether teachers who have reportedly believed in CT, implement it in their reading instruction.

Participants

A sample of 50 English teachers from university and other institutions in Mazandaran province, Iran was conveniently selected to conduct a survey. Among these universities were the Islamic Azad University of Qaemshahr, the Islamic Azad University of Ayatollah-Amoli, Mazandaran University. A number of institutions such as the Rooz Language Academy, Simin Khazar, Mahan, and two branches of the Iran Language Institute, were also involved. Firstly, the teachers' perception questionnaire was administered to 50 EFL teachers to gain an understanding of the status of the issue amongst these teachers and to collect the numerical data. Its purpose was to obtain fair, unbiased and generalizable data. Of the fifty, 19 were male, and 24 were female while 7 teachers did not complete the personal information part. Schools were not considered because reading in schools is still taught in the traditional method where reading, and regurgitating the given information is the optimal goal. The participants differed from each other in age, gender, teaching background and years of experience.

The questionnaire was distributed to over 80 teachers, but only fifty completed and returned the questionnaires. Most of the principals and many teachers showed reluctance and refused to fill in the questionnaires. A sample of fifty questionnaires was collected and analysed. Only one teacher was selected according to convenience. A formal classroom observation was undertaken to collect qualitative data about types of questions he asked, to show whether he actually practiced the CT which he had reported to believe in through the questionnaire data. An individual face-to-face interview of this teacher was conducted and audio-recorded with his consent.

Questionnaire

A questionnaire is a self-reporting instrument to obtain data economically and speedily from a large number of respondents (Mohammad 2006). The questionnaire was designed to measure teachers' beliefs regarding CT ability, consisting of 16 closed questions and two major open-ended questions assessing teacher's CT ability. These open-ended questions were included for more extensive written responses from the teachers.

To ensure the validity and reliability of the questionnaire, the researchers conducted a pilot study to check the survey language, to decide whether the study was feasible and whether it was worthwhile to continue. The first copy of the questionnaire was piloted with 30 student-teachers from the University of Mazandaran who were teaching in institutes. The respondents offered some helpful suggestions and feedback to determine if any modification of the survey's statements were necessary to ensure they would be understandable. At the same time, the questionnaire was analysed by two experts to assess the statements in terms of their wording and relevance of the items to the study, and to review the content for accuracy of the statements. The researcher calculated the reliability analysis of the questionnaire by SPSS (22). The Cronbach's Alpha of 0.87 presented the degree of internal consistency of the questionnaire's items. Ultimately, the questionnaire was determined to be valid, reliable, and ready for distribution to the study's sample.

The demographic measures examined in this study included name, age, date, and gender. The items used in the questionnaire were mostly selected from several researcher's and professional's explanations of the features of CT.

Interview

Interviewing is one of the most powerful instruments employed to understand people's ideas, beliefs and attitudes. Interviewing has numerous benefits over the other kinds of data collection strategies (Creswell & Creswell, 2019). A semi-structured interview which included a set of questions designed to access information relevant to the study was conducted. Questions highlighted key issues related to the research topic. Items were often modified or added based on the open-ended responses of the teachers. The interview had the form of a conversation. The interviewees were already informed about the nature and purpose of the study. All interviews were recorded and transcribed in order to maximize both the depth and precision of data analysis.

Classroom Observation

Gebhard (1999) recognized classroom observations as "non-judgment description of classroom events that can be analysed and given interpretation" (p. 35). The purpose of the observations was not to evaluate the teachers' teaching, but rather to assess the extent to which the teachers' beliefs and reported practices corresponded to what actually the teachers do in their classes.

From among the participants who completed the questionnaire, nine were chosen for the second phase of the study. But only one agreed to be observed. As a result, the researcher had the opportunity to observe five sessions of this teacher's classes. Detailed descriptive data about what took place in the establishment was gathered and used to answer the initial questions about the class layout and the nature of the activities that were presented in classroom setting.

Procedure

For the first part of the study, the perception questionnaire was administered. Only 50 teachers accepted the invitation to participate in this educational research. Before the administration, the researcher attempted to inform the participants about the purpose of the study and the significance of the research. They were notified that its findings would help teachers at least to assess themselves regarding critical thinking ability in their teaching curricula. There was no time limitation for completing the questionnaire; some teachers completed the questionnaire through e-mail.

In the second part of the study, teachers' instructional practices were observed and recorded for further analysis of whether they implemented the variables under investigation and to what extent or in what ways. A semi-structured interview was also conducted with one teacher to discover the barriers or hindrances that he reported on the implementation of the skills under investigation.

Results

A series of pertinent calculations and statistical routines were conducted in order to test the hypotheses and answer the research questions. Likert data seem ideal for survey items, but there is a huge debate over how to analyse these data. The general question centres on whether you should use a parametric or nonparametric test for the analysis. One-sample t-test is a parametric test of means. Parametric analyses can produce reliable results even when your continuous data are non-normally distributed. You must be sure that your sample size meets the requirements for each analysis. For one sample t-test the sample size should be greater than 20 (Pallant, 2007). The data analysis and the related results are provided and discussed comprehensively.

The test of normality was run to ensure that the data is normal and the results are shown in table 1:

Table 1. Test of Normality of the Scores

<i>Kolmogorov-Smirnov^a</i>			<i>Shapiro-Wilk</i>		
<i>Statistic</i>	<i>Df</i>	<i>Sig.</i>	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>
.091	50	.200 [*]	.983	50	.668

This shows that the distribution of the scores is normal as the sig values on both Kolmogorov-Smirnov (20) and Shapiro-Wilk (66) tests are more than .05 significance level. Therefore, it is possible to use parametric test to evaluate the research hypotheses.

The first research question was concerned with the teacher's perceptions and beliefs regarding CT. To this end, in order to determine the significance of the differences between the mean scores of our sample and the population's, a one-sample t-test analysis was conducted. The result of this analysis is presented in Table 2.

The mean value of the Likert scale (1-5) was used as the test value to compare the mean of the sample. When the sample mean is compared with 3, using a one-sample t-test, it indicates whether there is a significant difference between the sample mean and the test value. According to Table 2, the mean scores of the questions were significantly higher than that of population ($p < .05$). In other words, the great majority of the teachers believed in the importance of critical thinking.

Table 2. One-sample t-test Analysis of Teachers' Perception of CT

<i>Test Value = 3</i>	<i>Mean differences</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
<i>Teachers' Perception of CT</i>			
1. As a teacher, I try to help my students to identify unstated information from the stated ones	.98	49	.000*
2. I try to begin asking comprehension questions and move towards inferential questions	.96	49	.000
3. When a part of a reading text is difficult to understand, or questionable I try to ask my students to make use of note-taking	.42	49	.006
4. In teaching reading, I assign my students to reflect on reading text outside the class.	.46	49	.002
5. In teaching reading, I do not rely just on the textbook and I try to use other sources teaching.	.38	49	.002
6. In a reading course, I check my students' comprehension by engaging them in making comprehensive conclusion.	.59	49	.003
7. I try to help my students to set goals for their reading and make reading purposeful.	.89	49	.005
8. I try to help my students to identify hidden assumptions in a text.	.80	49	.000
9. I usually ask my students to make connections between what they read in a text and their own personal experiences.	1.16	49	.000
10. I believe that for students to capture a better understanding of a text they need to analyse it in terms of main ideas given by the author.	1.24	49	.000
11. I encourage my students to evaluate the information presented in a text by looking for evidence in passage.	1.1	49	.000
12. I ask my students to reason out in an organized way by providing evidence in passage.	1.04	49	1.04
13. I try to promote problem – solving skill among my students.	1.08	49	.002
14. I try to improve the decision-making skill among my students.	1.00	49	.000
15. I teach my students how to assess the creditability of the information presented in a text	.88	49	.000

The Qualitative Results – Beliefs about Critical Thinking Ability

This section presents an analysis of the beliefs that a teacher in this study held about the importance of critical thinking ability in learning English as a foreign language. Information about these beliefs is primarily gained from preliminary semi-structured interview. Data from the interview showed that the selected teacher attached great importance to critical thinking in language teaching. He believed that critical thinking was the foundation for tertiary education, and he did not think that learners could reach achievements in English effectively and accurately without a good knowledge and practice of critical thinking.

The interviewee attempted to answer the questions, beginning from explaining the term critical thinking and then further clarified this by explaining that teachers who are critical thinkers show this ability in their behaviours and actions. He added that "if a teacher believes in ideational function of language, which has the critical view of the

world, then he will involve critical thinking in the classroom context and promote critical skills among learners. For the first question, he also stated that “artificial teaching based on predetermined materials will hinder CT skills”.

The next question asked this teacher's opinion about the effects of some factors that some scholars such as Shell (2001) identified as barriers to CT implementation. He disagreed with this claim that for example “content coverage or time constraint” could be barriers to CT skills. He also suggested that a teacher, with a purpose to teach CT, should manage and organizes the time in classroom, spend little time on mechanical language and put more energy on developing CT skills. Thus, he stated, the time constraint and content coverage could not be real excuses.

The third question was related to the kinds of questions that a teacher should ask to promote CT skills. He answered this question by referring to asking about “hidden aspects of a text which could be dropped up”.

When asked about teachers who had a tendency to promote CT ability but were incapable of implementing it in class, he referred to one of the most important aims of tertiary education which is developing CT ability. He believed that CT is a potential in everyone that should be realized, and that trainee teacher should be trained by supervisors to develop this ability. He also cited that “doing pre-reading activities make students curious about what is in the text, and asking questions that it is needed to read the text to answer the questions”.

In general, the interviewee believed in promoting CT ability and that a teacher should make his/her students analyse and synthesize the information and evaluate the credibility of a text and the claims made by the author. He stated that a teacher should start with asking questions whose answers involve “quick scanning” and move towards questions whose answers require in-depth understanding.

Observation was another qualitative data collection instrument in this study. According to Borg (2006), observation is a valuable strategy in the study of language teacher cognition because it provides evidence of what happens in the classrooms. In fact, classroom observation helps a researcher to understand the consistency between what a teacher stated and reported about his beliefs and what he does in class.

In order to explore how teacher's beliefs about CT were transferred into their classroom practices, five sessions with teachers who scored higher than the mean score were observed in practice. It was an unstructured observation which lasted for 2 hours, and it was recorded using a mobile phone.

The observation of the classes was done to find whether teachers who believed so highly in the importance of CT, implemented it in their classes and whether there was any correspondence between teachers' stated beliefs about critical thinking in the questionnaire and their classroom practices. As noticed through observation, the teachers asked some questions that made students to think deeply and then answer. But they limited themselves to a single way of making learners think more deeply. For a teacher with such strong beliefs regarding CT, and a class in which discussion, criticism, and evaluation was the key to students' success, sticking only to a simple approach such as posing a question to ponder on seems naive. Therefore, we concluded that despite their strong stance and belief regarding the importance of CT, these teachers did not implement it fully in their class. Of course, more observation of the same teacher's class may have shown different results. Unfortunately, this was not possible in this study. Further research with more teachers and more observation sessions of each teacher's class is needed to shed more light on the issue.

Discussion

The study aimed to investigate teachers' beliefs regarding the importance of critical thinking. The results of the quantitative study indicated that the participating teachers had a high perception about critical thinking. However, classroom observation as well as interview with a volunteer teacher showed that there are possible hindrances to the teaching and practice of critical thinking.

The results show that Iranian EFL teachers perceive they are teaching critical thinking to their students. Their responses to the questionnaire revealed the degree of their understanding of the features of CT and imply that they believe that critical thinking provides intellectual stimuli that can facilitate students' learning and make it deeper. For instance, their perception that students' ability to connect the reading to their own experiences is evidence that they are thinking critically. As Black (2005) aptly noted, critical thinking requires students to take their own thinking apart: to analyse their own thinking according to standards of clarity, accuracy, relevance, logic, and fairness and one way to do so is to be able to relate what we read to what we already know about the topic.

In a study conducted by Demirhan and Koklukaya (2013) in which the critical thinking dispositions of the prospective science teachers was evaluated, the critical thinking dispositions of prospective science teachers were generally at medium and low levels. The results of this study were in contrast with the results of the present study which teacher's beliefs regarding CT ability was higher than the mean score.

One of the purposes of classroom observation and interview in the present study was to find out whether the teachers' beliefs and reported practices corresponded to what actually teachers do in their classes. This issue accords with that of Kuzborska (2011) in which the relationship between the beliefs of eight teachers and their practices in the teaching of reading to advanced learners, first-year undergraduates were explored. Using a qualitative approach, they found a strong relationship between the teachers' beliefs and their classroom practices.

The findings of this study were consistent with the findings of several others (Allamnakhrah, 2013; Alwehaibi, 2012) in terms of teachers failing to teach critical thinking skills to learners due to their own lack of knowledge of critical thinking and how to implement it in the learning environment. Researchers claim that a lack of academic and applied knowledge of critical thinking and practice impedes students' critical thinking relating to their developmentally appropriate level of challenge (Kowalczyk, Hackworth & Case-Smith, 2012; Lauer, 2005; Paul & Elder, 2008; Stedman & Adams, 2012).

In terms of teaching methods and classroom structure as obstacles to foster elementary education students' critical thinking abilities, this study supported the Al-Qahtani (1995), Fisher (2007) and Kowalczyk, Hackworth and Case-Smith (2012) studies that found improvement of critical thinking could be hindered by a teacher's confusion in distinguishing between teaching organization and teaching approaches. A teaching approach focuses on the methods of conveying knowledge to the students and the framework of the subject matter. Teaching organization focuses on how the lesson is arranged in order to help students easily engage.

Moreover, it concurred with Ozkan-Akan's (2003) study that found educators have a difficult task in improving students' critical thinking skills effectively in crowded classrooms. This study's findings were consistent with Al-Qahtani (1995) and Alwehaibi (2012) who found Saudi teachers are often disappointed and discouraged to teach critical thinking in classrooms that are not designed to function as schools.

Conclusion

This mixed-methods study examined teachers' perception of and beliefs about critical thinking and how these were applied in classroom practice. The first research question addressed teacher knowledge of critical thinking and its significance. The results indicated that the respondents had two ways of perceiving critical thinking. A majority perceived that critical thinking was a method of thinking that would help students enjoy the learning process. This implies that critical thinking can be a tool to stimulate students' thinking and help them obtain better learning outcomes. The other respondents thought of critical thinking as involving reasoning which helped students analyse their learning. Observations of teacher classroom practice and teacher interviews illustrated that the teacher's knowledge does not necessarily translate to classroom instruction of and use of critical thinking. The possible hindrances were reported.

Research findings on teacher perception towards different constructs have revealed that there was no congruence between teachers' stated beliefs and their classroom practices. Such discrepancies could originate from different sources that need to be explored in further depth. Richardson (1994) argued that the relationship between teacher beliefs and practice are interdependent and influence each other. Moreover, these beliefs and practices are context-dependent. Most researchers have investigated the most immediate classroom context. However, to explore how a teacher's belief might change or to relate belief to a particular classroom practice, or the lack of one, future studies should consider the role of contextual factors taking a social contextual perspective.

In summary, teachers' beliefs about the role and importance of critical thinking become more meaningful when they are explored across various contexts. For instance, teachers may decide to demonstrate contradictory beliefs due to institutional and political pressures. This needs to be investigated in further depth.

Improving teacher's practice of critical thinking needs to be accomplished through instruction and other types of professional development for both pre- and in-service teachers. Teachers trained in these skills become better teachers, which in turn can lead to training student who become critical thinkers. Findings from this research suggest teachers know of the importance of critical thinking and to some extent, are willing to engage in it for their teaching. Nonetheless, in order to enrich their practice of using and teaching critical thinking to their students, they require additional training and practice.

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References

- Aliakbari, M., & Sadeghdaghighi, A. (2013). Teacher's perception of the barriers to critical thinking. *Social and Behavioral sciences*, 70, 1–5. <https://doi.org/10.1016/j.sbspro.2013.01.031>
- Allamkhrh, A. (2013) Learning Critical Thinking in Saudi Arabia: Student Perceptions of Secondary Pre-Service Teacher Education Programs. *Journal of Education and Learning*, 2(1). p197-210
- Allen, L. Q. (2013). Teacher' beliefs about developing language proficiency within the context of study abroad. *System*, 41(1), 134–148. <https://doi.org/10.1016/j.system.2013.01.020>
- Al-Qahtani, S. (1995). Teaching thinking skills in the social studies curriculum of Saudi Arabia secondary schools. *International Journal of Educational Development*, 15(2), 155–163. [http://dx.doi.org/10.1016/0738-0593\(94\)E0014-F](http://dx.doi.org/10.1016/0738-0593(94)E0014-F)
- Alwehaibi, H. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. *Asian Social Science*, 8(11), 193–204. <http://dx.doi.org/10.5539/ass.v8n11p193>

- Bagheri, M., & Nowrozi, R. (2015). A comparative study of the critical thinking skills among the students of accounting and software in the female technical and vocational university in the city of Borojerd. *Journal of Education and Practice*, 6(13), 43–46.
- Barnet, S., & Bedau, H. (Eds.) (2011). *Critical Thinking, Reading, and Writing: A Brief Guide to Argument*. MA, Boston: Bedford / St. Martins.
- Basturkmen, H. (2012). Review of research into the correspondence between language teachers' stated beliefs and practices. *System*, 40(2), 282–295. <https://doi.org/10.1016/j.system.2012.05.001>
- Black, S. (2005). Teaching Students to Think Critically. *Education Digest: Essential Readings Condensed for Quick Review*. |Ann Arbor: *Prakken Publications*
- Borg, S. (1999). Studying teacher cognition in second language grammar teaching. *System*, 27(1), 19–31. [https://doi.org/10.1016/S0346-251X\(98\)00047-5](https://doi.org/10.1016/S0346-251X(98)00047-5)
- Borg, M. (2001). Teachers' beliefs. *English Language Teaching Journal*, 55(2), 186–188. <https://doi.org/10.1093/elt/55.2.186>
- Borg, S. (2003). Teacher cognition in language teaching: a review of research into what language teachers think, know, believe and do. *Language Teaching*, 36(2), 81–109. <https://doi.org/10.1017/S0261444803001903>
- Borg, S. (2006). *Teacher Cognition and Language Education: Research and Practice*. London: Continuum.
- Brown, C. A., & Conney, J. T. (1982). Research on Teacher Education: A Philosophical Orientation. *Journal of Research and Development in Education*, 15(4), 13–18.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. Berliner & R. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 709–725). New York: Macmillan Library Reference.
- Creswell, J. D. & Creswell, J. D. (2019). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage Publication.
- Choy, S. C., & Cheah, P. K. (2009). Teacher perceptions of critical thinking among students and its influence on higher education. *International Journal of Teaching and Learning in Higher Education*, 20(2), 198–206.
- Demirhan, E., & A. N. Köklükaya. (2013). The Critical Thinking Dispositions of Prospective Science Teachers. *Procedia - Social and Behavioral Sciences*, 116, 1551–1555. <https://doi.org/10.1016/j.sbspro.2014.01.433>
- Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43(2), 44–48.
- Ennis, R. H. (2011). Critical Thinking: Reflection and Perspective—Part I. *Inquiry*, Vol. 26, 1.
- Ennis, R. H. (2018). Critical Thinking Across the Curriculum: A Vision. *Topoi*. 37 (1):165-184.
- Fani, T. (2011) Overcoming Barriers To Teaching Critical Thinking. Proc The Future of Education.
- Farmanlu, M. & Abdolmanafi-Rokni, S. (2014). Relationship between EFL In-service Teachers' Language Learning Strategies and their Beliefs toward Teaching Methodologies. *International Journal of Applied Linguistics and English Literature*. 3(6). 162-168. 10.7575/aiac.ijale.v3n.6p.162.
- Fisher, R. (2007). Dialogic teaching: Developing thinking and metacognition through philosophical discussion. *Early Child Development and Care*, 177(6-7), 615–631. <http://dx.doi.org/10.1080/03004430701378985>
- Freeman, D. (2002). The hidden side of the work: teacher knowledge and learning to teach. *Language Teaching*, 35(1), 1–13. <http://dx.doi.org/10.1017/S0261444801001720>
- Gebhard, J. G. (1999). Seeing teaching differently through observation, 34-68. In Gebhard, J. G. & Oprandy, R. (Eds.). *Language Teaching Awareness: A Guide to Exploring Beliefs and Practices*. Cambridge: Cambridge University Press.
- Halpern, D. F. (2001). Assessing the effectiveness of critical thinking instruction. *The Journal of General Education*, 50(4), 270–286. <https://doi.org/10.1353/jge.2001.0024>
- Kathiravelu, A., Tapsir, R., & Osman, A. M. (2004). *Metacognitive and critical thinking abilities of students at INTEC*. Selangor: Institute of Research, Development and Commercialisation (IRDC), UiTM Shah Alam.
- Kim, Ch., Kim, M. K., Lee, CH., Spector, J. M., & DeMeester, K. (2013). Teacher beliefs and technology integration. *Teaching and Teacher Education: An International Journal of Research and Studies*, 29(1), 76–85.

- Kowalczyk, N., Hackworth, R. & Case-Smith J. (2012). Perceptions of the use of critical thinking teaching methods. *Radiologic Technology Journal*, 83(3), 226–236.
- Kuzborska, I. (2011). Links between teachers' beliefs and practices and research on reading. *Reading in a Foreign Language*, 23(1), 102–128.
- Larenas, C. D, Hernandez, P. A., & Navarrete, M. O. (2015). A case study on EFL teacher's beliefs about the teaching and learning of English in public education. *Porta Linguarum*, 23, 171-186.
- Lauer, T. (2005). Teaching Critical thinking skills using course content material. *Journal of College Science Teaching*, 34(6), 34–37.
- Magno, C. (2010). The role of metacognitive skills in developing critical thinking. *Metacognition and Learning*, 5(2), 137–156. <https://doi.org/10.1007/s11409-010-9054-4>
- Mohammadi, E. N., Heidari, F., & Nirya, D. N. (2012). The relationship between critical thinking ability and reading strategies used by Iranian EFL learners. *English Language Teaching*, 5(10), 192–201. <https://doi.org/10.5539/elt.v5n10p192>
- Nespor, J. (1987). *The Role of Beliefs in the Practice of Teaching: Final Report of the Teacher Beliefs Study*. Washington: National Institution of Education.
- Ng, W., Nicholas, H., & Williams, A. (2010). School experience influences on pre-service teachers' evolving beliefs about effective teaching. *Teaching and Teacher Education*, 26(2), 278–289. <https://doi.org/10.1016/j.tate.2009.03.010>
- Nuthall, G. (2004). Relating classroom teaching to student learning: A critical analysis of why research has failed to bridge the theory-practice gap. *Harvard Educational Review*, 74 (3), 273–306. <https://doi.org/10.17763/haer.74.3.e08k1276713824u5>
- Ozkan-Akan, S. (2003). *Teachers' perceptions of constraints on improving students thinking in high schools* (Unpublished master thesis). Middle East Technical University, Turkey Retrieved from <http://etd.lib.metu.edu.tr/upload/683631/index.pdf>
- Pajares, M. F. (1992) Teachers' beliefs and educational research: cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332. <https://doi.org/10.3102/00346543062003307>
- Pallant, J. (2007). *SPSS survival manual—A step by step guide to data analysis using SPSS for windows* (3rd ed.). Maidenhead: Open University Press.
- Paul, R., & Elder, L. (2008). Critical thinking: The art of Socratic questioning. *Journal of Developmental Education*, 31(3), 34–35.
- Paul, R., Willson, J. & Binker, A. (Eds.). (1995). *Critical thinking: How to prepare students for a rapidly changing world*. CA, Santa Rosa: Foundation for Critical Thinking.
- Richardson, V. (Ed.). (1994). *Teacher change and the staff development process: A case in reading instruction*. New York: Teachers College Press.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of research on teacher education* (p. 102–119). New York: Macmillan.
- Rokeach, M. (1968). A theory of organization and change within value-attitude systems. *Journal of Social Issues*, 24(1), 13–33. <https://doi.org/10.1111/j.1540-4560.1968.tb01466.x>
- Rumpagaporn, M. W. (2007). *Students' critical thinking skills, attitudes to ICT and perceptions of ICT classroom learning environments under the ICT schools pilot project in Thailand*. Dissertation thesis. Thailand: The University of Adelaide.
- Shell, R. (2001). Perceived barriers to teaching for critical thinking by BSN nursing faculty. *Nursing and Health Care Perspectives*, 22(6), 286–292.
- Stedman, N. P., & Adams, B. L. (2012). Identifying faculty's knowledge of critical thinking concepts and perceptions of critical thinking instruction in higher education. *NACTA Journal*, 56(2), 9–14.
- Torff, B. (2006). Expert Teachers' Beliefs about Use of Critical-Thinking Activities with High- and Low-Advantage Learners. *Teacher Education Quarterly*, 33 (2), 37–52.
- Underwood, P. R. (2012). Teacher beliefs and intentions regarding the instruction of English grammar under national curriculum reforms: A Theory of Planned Behaviour perspective. *Teaching and Teacher Education*, 28(6), 911–925. <https://doi.org/10.1016/j.tate.2012.04.004>
- Wallace, C. (2003). *Critical reading in language education*. New York: Palgrave Macmillan Ltd.
- Weda, S. (2016). Knowledge sharing practices in EFL classroom at higher education in Indonesia. In P. Robertson, J. Adamson & E. Guzman (Eds.), *The Asian EFL Journal. Professional Teaching Articles* (pp. 155–166). Japan: English Language Education Publishing.

- Weda, S. (2018). Demotivational reaching practices in EFL classroom: Perceptions of English among Indonesian Learners. *Asian EFL Journal*, 20(6), 399–413.
- Zacharias, N. T. (2003). *A survey of tertiary teachers' beliefs about English Language Teaching in Indonesia with regard to the role of English as a global language*. Thailand: Institute for English Language Education Assumption University of Thailand.

APENDIX: Teachers' Beliefs Regarding Critical Thinking Questionnaire

Name..... date.....

Age..... Sex.....

Questionnaire to investigate teacher's beliefs regarding critical thinking implementation in a reading course.

Directions: For each item, indicate whether you 1) strongly agree (2) agree (3) neither agree nor disagree (4) disagree or (5) strongly disagree.

Items	1	2	3	4	5
1. As a teacher, I try to help my students to identify unstated information from the stated ones.					
2. I try to begin asking comprehension questions and move towards inferential questions.					
3. When a part of a reading text is difficult to understand, or questionable I try to ask my students to make use of note-taking.					
4. In teaching reading, I assign my students to reflect on reading text outside the class.					
5. In teaching reading, I do not rely just on the textbook and I try to use other sources.					
6. In a reading course, I check my students' comprehension by engaging them in making comprehensive conclusion.					
7. I try to help my students to set goals for their reading and make reading purposeful.					
8. I try to help my students to identify hidden assumptions in a text.					
9. I usually ask my students to make connections between what they read in a text and their own personal experiences.					
10. I believe that for students to capture a better understanding of a text they need to analyse it in terms of main ideas given by the author.					
11. I encourage my students to evaluate the information presented in a text by looking for evidence in passage.					
12. I ask my students to reason out in an organized way by providing evidence in passage.					
13. I try to promote problem – solving skill among my students.					
14. I try to improve the decision-making skill among my students.					
15. I know the value of being aware of my thinking processes and, I encourage my students to be aware of their thinking processes as well.					
16. I teach my students how to assess the creditability of the information presented in a text.					