Using CRT-Based Workshops to Develop EFL Teachers' Language Teaching and Language Testing Skills

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Abstract

This study aimed to assess the impact of critical reflective thinking (CRT)-based workshops in developing EFL teachers' teaching and language testing skills. Subsidiary aims of the study include: ascertaining EFL teachers' perceptions of their own teaching and language testing skills both before and after CRT-based workshops. The study made use of both the interpretive constructivist mode of inquiry and the quasi-experimental research design. Data were collected using three instruments: (1) Teacher Self-Appraisal Form; (2) Language Tests Checklist; and (3) Semi-structured Focus-group Interviews. Participants were 12 EFL university teachers working in the English department at College of Arts, King Khalid University, Saudi Arabia. They belonged to a variety of academic, social and cultural backgrounds. The CRT-based workshops addressed three components: cooperative learning, thinking maps and language testing. Analysis of data indicated a positive impact of the CRT-based workshops on developing trainee teachers' perceptions of their own teaching and language testing skills. Findings also indicated a positive impact of the CRT-based workshops on developing trainee teachers' language testing and language test-items development skills. Findings of the study were discussed and a set of implications and recommendations were highlighted.

Keywords: Critical-reflective thinking (CRT), language teaching skills, language　　　　　　　testing skills.

Introduction

The notion of teachers as reflective practitioners was further developed in reaction to a tendency for research to be done on, rather than by, teachers. In the early 1970s, Stenhouse, at the University of East Anglia, promoted the change from reliance on outside expert research (Stenhouse et al, 1970 & Stenhouse, 1975), a discourse in which teachers were the intended recipients of advice from university-based researchers who wrote papers on what constituted good practice. As Kincheloe (1991) pointed out, this advice was usually ignored by the teachers who perceived it as irrelevant if they were aware of it at all.

Stenhouse was at the forefront of the 'researching teacher' movement in the U.K., claiming that all teaching ought to be based on research but that research and curriculum development should be the preserve of teachers who gain understanding of their work through studying their own problems and effects (McKernan, 1991). Stenhouse coined the term —teacher as researcher - (in Zeichner & Noffke, 2001). Elliott and Adelman (1973) further promoted teacher-research work using action research in their Ford Teaching Project, which aimed to promote pupil independence, teacher identification of problems through utilizing systematic reflection, and the ongoing development of teacher self-awareness. Elliott's later work (1978) argued that teaching is inescapably a theoretical activity (quoted in McKernan, 1991:22). Teachers, according to Elliott, should interpret their everyday practice through the pursuit of reflective self-development.

Part of effective teaching is the ability to reflect on what is happening in the classroom, and to identify any differences in what was

planned and what actually occurred. By conducting "systematic, intentional inquiry" within his/her own classroom, the instructor builds a better understanding of his/her own practice (Cochran-Smith & Lytle, 1993, p. 7). As this understanding develops, different teaching strategies may be suggested to better support student learning.

Critical reflection is advocated in many areas of professional development and practice, including the all areas of health care, education, teaching, management, and research, as it encourages practitioners to gain insight into their own professionalism through their experiences. These programmes generally require some form of fieldwork to be closely integrated with academic study. Consequently, there is wide variation in the techniques and approaches used in the practice of critical reflection. Approaches may range from informal discussions to highly structured formats. Guidelines in the literature on how to determine, facilitate and assess critical reflection in practice appear to be limited (Leijen et al., 2012; Smith, 2011).

Critical reflection is used in education to encourage the integration of theory and practice while enhancing student learning and self-confidence. However, an extensive literature search on the role of reflection for learning through experience by Harvey et al. (2010) concluded that the relationship between reflection and positive student learning outcomes was inconclusive. This suggests there is scope to explore the role of critical reflection in learning and the development of a theoretical basis in cooperative education. There is increasing interest in the concept of critical reflection (Boud & Walker, 1998) in work-integrated education and research (Brookfield, 2009).

Context of the Problem

Most of EFL university teachers in the College of Arts, King Khalid University, KSA, have entered the teaching service with unexamined beliefs and assumptions of students as well as problematic conceptions of the academic role of the university teacher in both teaching and testing. It is widely, yet mistakenly, believed that speaking in a specific language is a guarantee to teach that language and test its skills as well. Moreover, none of the EFL teachers in the English department has had training of any kind in language teaching skills or language testing skills. Therefore, seeking solutions requires a critical reflective process from educators that extends beyond strategy implementation in case these teachers have taken for granted that teaching and testing EFL skills are just routines, individual practices and standing explanations. For the researchers, as teacher educators having considerable expertise in initial teacher education, efforts to promote critically reflective practice with EFL teachers' field practices would help support the development of their teaching skills as well as language testing skills.

The Pilot study

Feeling this problematic situation, the researchers conducted a pilot study to ascertain the difficulties or the issues that helped to create this dilemma. Two types of surveys were conducted. The first was a survey to ascertain teachers' training needs for both teaching and language testing skills from their viewpoints through Self-Appraisal Form. Besides, EFL major students in the English department were asked to assess their teachers' both teaching skills and language testing skills through a Course Evaluation Checklist. Results of data analysis of both types of surveys were consistent in most

cases highlighting a need to train EFL teachers on both teaching and language testing skills. Results of analysis indicated the following:

1. EFL teachers lack both the knowledge and skills needed to relate language learning to students' lives by providing them with concrete language learning experiences through language activities.

2. They lack both knowledge of different teaching strategies and how to use them.

3. They lack both knowledge and skills of using media in teaching.

4. They lack knowledge of adapting their lessons to match students' target language background.

5. They lack knowledge of how to motivate students by creating support and warm climate in the EFL class so that they can participate more effectively.

6. They hold misconceptions related to different aspects of language teaching

As far as language testing skills are concerned, results of analysis indicated the following:

1. EFL teachers lack both the knowledge and skills needed to construct good language test items.

2. They do not know how to use wait time appropriately.

3. They lack knowledge of higher order thinking abilities and how to test them.

4. They do not know how to develop themselves professionally

5. They lack both knowledge and skills needed to address students' language errors/mistakes and the appropriate feedback/correction strategies that would help.

6. Their knowledge of different types of questions and questioning strategies is insufficient. Besides, their attempts to use them appropriately and maintain interest and momentum in the EFL classroom are inadequate.

7. They hold misconceptions related to feedback provision strategies, language test items, types of language questions and types of language tests.

8. They lack knowledge and skills of using electronic devices in target language testing.

Statement of the problem

EFL teachers in the College of Arts, King Khalid University, KSA lack the language teaching and language testing skills due to different reasons including lack of knowledge and skills and owing to their deeply held conceptions about different aspects of language teaching and language testing. This emphasizes trainees' needs for training on language teaching and language testing. The weaving of critical reflective thinking has proved effective in teacher training, especially when the training initiatives seek to induce change both in trainees' classroom teaching behaviours and their deeply held conceptions (e.g. Carrington & Selva, 2008; Harrington, et al., 1996; Lay & McGuire, 2010; Shandomo, 2010; Smith, 2011; *Thompson & Pascal*, *2012;* van Woerkom, 2010; *etc.*). This justifies this study's use of CRT-based workshops to develop EFL teachers' language teaching and language testing skills. Following are the research questions of the study.

Research questions

This study aimed to find answers to the following research questions:

1. What are EFL teachers' perceptions of their own language teaching skills?

2. How effective is the use of critical reflective thinking (CRT)-based workshops in developing EFL teachers' perceptions of their language teaching skills?

3. What are EFL teachers' perceptions of their own language testing skills?

4. How effective is the use of CRT-based workshops in developing EFL teachers' perceptions of their language testing skills.

5. How effective is the use of CRT-based workshops in developing EFL teachers' language testing skills?

6. What are EFL teachers' reactions to CRT-based workshops?

Purpose of the study

This study aimed to:

1. Ascertain EFL teachers' perceptions of their own language teaching and language testing skills.

2. Assess the effectiveness of using critical reflective thinking (CRT)-based workshops in developing EFL teachers' perceptions of their language teaching and language testing skills.

3. Assess the impact of using critical reflective thinking-based workshops in developing EFL teachers' language testing skills.

4. Ascertain EFL teachers' reactions to CRT-based workshops.

Significance of the study

- What is new about this study is its attempt to investigate the potential of using critical reflective thinking processes that EFL teachers have at their stake to develop their teaching and language testing skills.

- The marriage between teaching and language testing skills adopted by this study is significant since it is based on a strong conviction that teaching and testing are inseparable. Most of teacher education research addressed both aspects discretely. Namely, they focus on one aspect apart from the other and disregard the interconnectivity based between both.

- This study is using critical reflective thinking as an interventionist variable to induce change in EFL teachers' classroom teaching techniques and language testing skills and not as an end. This is because teachers' critical reflection on their own beliefs and deeply held conceptions and practices has more sustainable impact on their professional development than any external enterprise that aims to induce change in teachers' classroom practices.

- Learning is enhanced by critical reflection, which involves the "creation of meaning and conceptualization from experience" (Brockbank & McGill, 1998, p. 56). As teacher educators, we need to facilitate critical reflection to enable trainee teachers to move beyond a superficial understanding of their world. We agree with Mezirow (1990) that "reflection enables us to correct distortions in our beliefs and errors in problem solving. Critical reflection involves a critique of the presuppositions on which our beliefs have been built" (p.1). By creating a reflective environment for and with trainee EFL teachers, the educational experience will lay the foundations of a critically reflective member of the teaching community.

Review of literature

Teacher development and CRT

The area of critical reflection is generally understood to be a difficult and contested terrain, that appears to be attractive on paper but is complex to put into action. Educators say this is an important capability for students to develop as it contributes to greater depth of understanding and learning (Boud, Cohen, & Walker, 1993; Lay & McGuire, 2010; Moon, 2006; Wolf, 2010). The wide range of approaches to critical reflection suggests the focus of learning is placed on techniques rather than the broader purpose and outcomes of critical reflection. Critical reflection should not be a prescriptive activity (Moon, 2006) but guidelines should enable the students to develop their own style.

In their daily practices, in-service teachers make sense of interactions –referred to by Coburn (2001 and 2004)- between the knowledge about teaching and the knowledge gained through experience. A 'give-and-take' between these levels of knowledge is refined over time. In addition, to influence general growth in learning to teach, others argue that the conventions of content areas may also lead teachers to adopt teaching practices and beliefs about student learning that align with more commonplace practices in their content areas regarding the ways in which curriculum and instruction are typically approached, ultimately socializing teacher behaviors in classrooms (Gossman, 2008; Neumann, Parry & Becher, 2002).

While reflection helps teachers to make informed decisions in predictable and unpredictable situations in the classroom (Walkington et al., 2001), CRT typically prompts examinations of how teachers reflect on

question identification and their understandings for problem solving. Therefore, researchers have conceptualized CRT in a variety of ways: problem identification or framing (Loughran, 2002; Rodgers, 2002 & Shandomo, 2010); reflection on the basis of that identification (perhaps historical, social, or cultural in nature) and and action planning to address the perceived problem (Brookfield, 1995; Shandomo, 2010). Thus, the CRT process is complex in nature, requiring introspection about how one's beliefs, assumptions, and experiences influence perceptions of self and the social world (Shandomo, 2010).

Many teachers enter the teaching job with unexamined beliefs and assumptions of students, as well as problematic conceptions of the role of schools in society; yet it is imperative that teacher educators and recruiters develop stances that allow them to view "problems" from multiple perspectives and actively question assumptions, routines, practices, and standing explanations that are taken for granted (Carrington & Selva, 2010 and Loughran, 2002). That is, teacher trainers must help trainee teachers identify why a problem exists and examine the factors that have influenced its identification.

Van Manen (1977) defined critical reflection as using criteria of justice and equity to consider the political, moral, and ethical consequences of teaching practice. Larrivee (2008) similarly suggests that critical reflection is an opportunity for teachers to "reflect on the moral and ethical implications and consequences of their classroom practices" (p. 90), a process that requires examination of how one's personal and professional belief systems might impact students and their learning.

For teacher educators, efforts intended to promote critically reflective practice have been limited in terms of the impact on teachers' thinking. For example, case analyses and discussions, reflective journaling, and action research provide tools for staging reflective thought (Carrington & Selva, 2010; Gore & Zeichner, 1991; Harrington, Quinn-Leering & Hodson, 1996; Leland, Harste & Youssef, 1997; Moje & Wade, 1997; Nolan, 2008; Risko, Roskos & Vukelich, 1999; Wade, Fauske & Thompson, 2008). However, findings have indicated that the degree to which reflective thinking takes place by teachers is often limited. Like others, this study assumed a combination of approaches to teaching critically reflective thinking in connection with field experiences would provide support for the development of CRT and teaching practices. We hoped adopting a contextual approach would enable EFL teachers to engage in CRT in meaningful ways by connecting coursework and fieldwork (Shandomo, 2010).

Critical reflection, in Mezirow's (1990) belief is the distinguishing characteristic of adult education. It "refers to questioning the integrity of assumptions and beliefs base on prior knowledge. It often occurs in response to an awareness of a contradiction among our thoughts, feelings and actions, (p.9)." To Brookfield (2009), critical reflection is an adult learning strategy of four processes: assumption analysis, contextual awareness, imaginative speculation and reflective skepticism.

Critical reflection then addresses the question of the justification for the very premises on which problems are posed or defined in the first place. It is to validate the long-taken-for granted meaning perspective. It is not

concerned with the 'how- to' of action but with the 'why', the reasons for and consequences of what we do (Mezirow, 1990, p.13)."

Critical reflection is advocated in many areas of professional development and practice with different areas, including areas of professional development, initial teacher education, teaching, management, and research, as it encourages practitioners to gain insight into their own professionalism through their experiences. This generally requires some form of fieldwork to be closely integrated with academic study. Consequently there is wide variation in the techniques and approaches used in the practice of critical reflection. Approaches may range from informal discussions to highly structured formats. Guidelines in the literature on how to determine, facilitate and assess critical reflection in practice appear to be limited (Leijen et al., 2012 & Smith, 2011).

In teacher education, critical reflection about teaching is important for six reasons: It (1) helps us make informed actions with a better chance of achieving desired outcomes; (2) helps us develop a rationale for practice, and the underlying principles behind our practice; (3) helps us keep perspective about limits to our abilities in the classroom; (4) enlivens our classroom; and (5) increases democratic trust enabling students to feel safe in their own opinions and beliefs (Brookfield,1988). This study is designed to foster a greater understanding of the impact of critical reflective teaching for 12 university EFL teachers, with an examination of how critical reflective thinking-based workshops help develop their perceptions of both their language teaching and language testing skills.

Definition of critical reflective thinking

There appears to be lack of a clear understanding of critical reflection, as it is a contested term reflecting the ideology of the user. Critical reflection can be understood to mean very different things (Boyd & Fales, 1983; Brookfield, 2009; Gardner, 2009; Harvey et al., 2010; Hatton & Smith, 1995; Smith, 2011; and van Woerkom, 2010) and varies within individuals and contexts. Critical reflection is widely recognized as a key component in the learning processes of individuals and is advocated in many areas of professional practice (Brookfield, 2009; Jarvis, 2010; and Leijen, et al, 2012), especially within programmes where there is rich learning possible through specific experiences (Harvey et al., 2010).

Critical reflection has been given different definitions throughout the years: (1) "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it includes and a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality (Dewey, 1933) and (2) "a process of testing the justification or validity of taken-for-granted premises" (Mezirow, 1999). Although there are many definitions, they seem to have some things in common and say something about a process of questioning our beliefs, values, and behaviours in order to justify why we do things the way we do, and what other views or behaviours contrary to our own might be.

In the above sense, CRT in this study is meant to refer to a process through which teachers test and question the validity of their own beliefs, values and behaviours related to language teaching and language testing in order to justify the way they do things the way they do, and examine other

views of behaviours different from their own. When they engage in this process, teachers become more aware of and control their learning by actively participating in reflective thinking- assessing what they know, what they need to know, and how they bridge that gap – during learning situations.

Method

In order to investigate the effect of CRT-based workshops on trainee teachers' teaching and language testing skills, a quasi-experimental research design was adopted. The one-group pre-post design was used. The participants were assigned to the following conditions: pretest, intervention (i.e. CRT-based workshops) and posttest. The intervention took place in ecologically appropriate lecture rooms in terms of seating arrangement, conditioning, lighting, space and resources availability, etc. Participants' scores at the pretest were compared to their scores at the post test. However, this does not imply a positivistic stance by the researchers. Besides, at the post-intervention stage teachers' constructs were recorded (Radnor, 1994).

Data collection and instrumentation

Data were collected using triangulated design making use of both quantitative and qualitative procedures. The instruments used were: teacher self-appraisal form; students' evaluation of teachers' teaching; content analysis of teachers' tests; and teachers' interactions to the CRT-based workshops. Participants were 12 EFL university teachers working in the English department at College of Arts in King Khalid University, Saudi Arabia. Data were collected via three types of instruments. These were: (a)

Self-Appraisal Form, (b) Language Tests Checklist and (c) Semi-structured Focus-group Interviews. An overview of each instrument is given below.

a. Self-Appraisal Form

The Self-Appraisal Form (SAF) (see Appendix 1) aims to ascertain EFL trainee teachers' assessment of their own teaching and language testing skills. The SAF consists of two sections: the first is on language teaching skills and the second is on language testing skills. Teachers' perceptions of their own EFL teaching and language testing skills were recorded through teachers' endorsement to one of the options given in a three-point Likert Scale, ranging from 'to a great extent' to 'to some extent' to 'not at all' regarding each item (see Appendix 1).

b. Language Tests Checklist

The **Language Tests Checklist** (LTC) was developed purposefully by the researchers to ascertain how far the trainees are skilled or not in language tests and test items development. The LTC consisted of seven categories or standards. These are: *content relevance, clarity, legitimacy, validity, variety, leveling and coverage.* Each standard was assessed through a set of three rubrics ranging from 3 (the highest) to 1 (the lowest). The checklist was face-validated and approved by a group of language testing and language teaching specialists. The final format of the checklist is given in Appendix (3).

c. Semi-structured Focus-group Interviews

Trainees were asked to articulate their reactions to the CRT-based workshops. Interviews with the teachers were included in the research design of the study because of their potential to get teachers to articulate their perceptions of their teaching and language testing skills and how the

trainees construe their views of the world and make sense of their experiences (Brown and Dowling, 1998). They were conducted in a semi-structured focus-group form at the post-intervention stage.

Trainees were divided into two groups. The first group was formed by teachers of courses of linguistics and language skills (e.g. listening & speaking, reading, writing, morphology, phonetics, applied linguistics, etc.), and the second was formed by teachers of literature (e.g. novel, poetry, drama, etc.). The purpose was to provide a context where teachers of the same or similar courses can articulate their reactions and reflect on how to make the learning experiences gained from the CRT-based workshops part of their daily professional practices. The interviews made use of a protocol which covered two main issues or themes representing the benefit they obtained and added to their language teaching and testing skills as a result of participating in the CRT-based workshops.

Reliability and Validity of the Instruments

To assess reliability of SAF, it was administered twice to a sample of EFL teachers similar to the participants of the study. An interval of five weeks separated the two administrations. An Alpha Cronbach's correlation coefficient of .97 was calculated. To assess inter-rater reliability of Language Tests Checklist (LTC), it was used twice by two independent researchers with a random number of language tests produced by the participants in the previous year (2 language tests per teacher). A correlation coefficient of .97 was calculated for the LTC. Meetings between the two raters helped to reach full agreement on the final ratings. Besides, an internal consistency reliability check was computed and it was

found that the alpha coefficient for the SAF was .97 and for the LTC it was .98.

The readability and face validity of SAF and LTC were assessed. A number of jury members, who are specialized EFL teacher educators, checked the items' readability, understandability and wording. Their feedback proved invaluable in refining some items until both SAF and LTC reached their final layout. Besides, guidance obtained from literature on language teaching and language testing helped to achieve concurrent validity of both instruments.

The Participants

The participants of the study were 12 EFL male teachers working in the English Department, College of Arts, King Khalid University, Kingdom of Saudi Arabia. They represent, with the researchers, the total number of staff members in the English Department. Trainee teachers belonged to a variety of academic, social and cultural backgrounds. They were almost homogenous in terms of age and academic level. They teach courses related to language skills, literature and applied linguistics.

Content of the CRT-based workshops

In order to fulfill the aims of the study, the content of CRT-based workshops had to be strongly related to and consistent with those aims. Therefore, the researchers developed three- component content for the workshops: cooperative learning, thinking maps and language testing. The content of workshops was meant to be experiential, i.e. based on practical tasks carried out by the trainees. A detailed overview of the three CRT-based workshops is given in appendix (2).

Procedures

Based on the feedback collected on EFL teachers' work at the end of the first semester of the academic year 2013/2014, preparations started for launching the main research project. At the beginning of the second term of the same academic year, an attempt was made to assess the training needs of EFL teachers through Self-Appraisal Form and the Language Tests Checklist. Based on the analysis of data collected by the two instruments, the CRT-based workshops were conducted over four consecutive weeks. The first week was on cooperative learning as a teaching and learning strategy. The second week addressed thinking maps and the third week was on language testing. The fourth focused on reflection and evaluation. At the end of the fourth week both the SAF and LTC were administered again. Figure (1) below represents the methodological framework of the study.

Fig; (1): The methodological framework of the study

PRE-INTERVENTION PHASE

Preliminary Data Collection

Pilot Study

GETTING SUPPORT FOR THE STUDY PROBLEM

DESIGN OF ADMINISTERATION OF DATA COLLECTION

INSTRUMENTS

Teacher Self-Appraisal Form

Language Tests Checklist

INTERVENTION PHASE

Design of Intervention
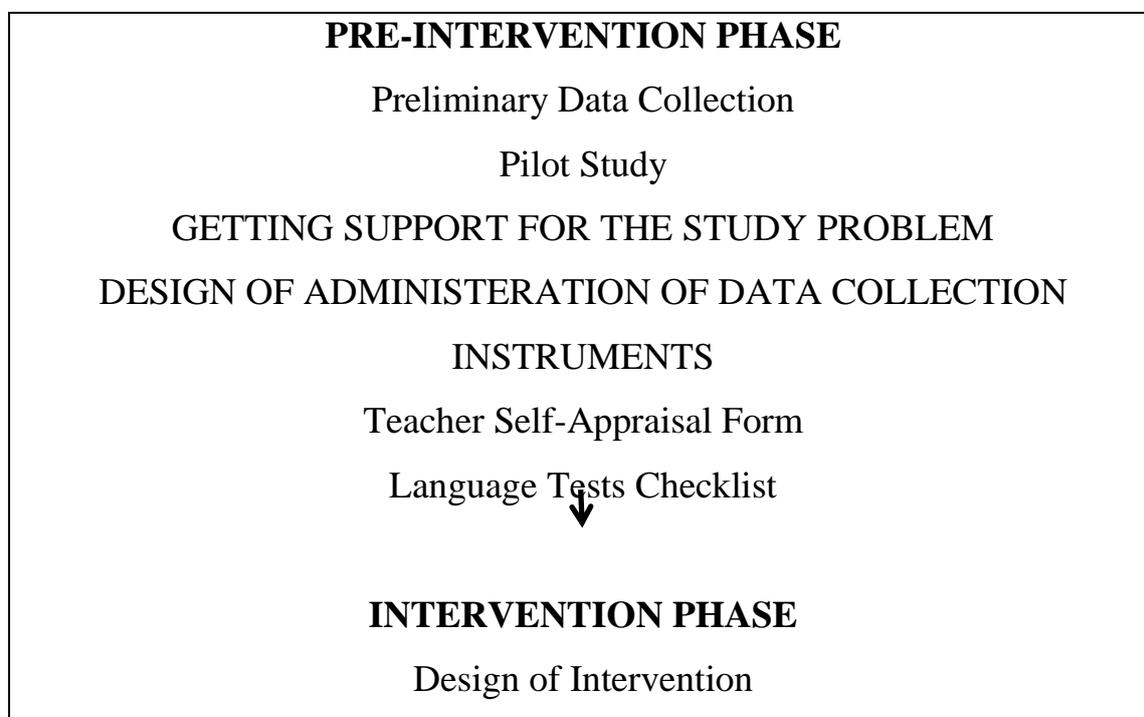
CRT-based Workshops (Cooperative Learning, Thinking Maps and Language Testing)
↓
POST- INTERVENTION PHASE
Teacher Self-Appraisal Form
Language Tests Checklist
Semi-structured focus-group interviews
Data Analysis
Quantitative & Qualitative Analysis
Dissemination of Findings

Data Analysis

Data collected through the Self-Appraisal Form (SAF) were analyzed by summing the trainees' ratings of the 14 items of the first section on language teaching skills and 14 items of the second section on language testing skills. Responses were processed statistically using the Statistical Package for Social Sciences (SPSS) –Version 18. Trainees' pre-training SAF scores were compared to their post-training SAF scores.

The Language Tests Checklist (LTC) was used to assess the trainees' developed language tests in their respective courses. At the pre-training phase, each of trainees was asked to submit two model language tests which he considered as 'good language tests' from his perspective on two of the courses he was teaching. On the other hand, at the post-training phase, every trainee was asked to submit two different 'good language tests' from his perspective. This made a total of 48 language tests that were subjected to analysis. Analysis was conducted by the researchers in joint sessions. To achieve inter-rater reliability of analysis, the language tests

were analyzed by a neutral external rater who is specialized in English language testing for the same academic level. Results of both types of analysis were compared and few variances were found. However, due to two conferences, full agreement was reached and the final analysis was settled upon and each trainee was given two scores that represent his language testing performance before and after training. In the light the raw data obtained, trainees' performance in language tests development before training was compared to their performance after training.

The interviews were fully recorded, transcribed and respondent validated. Transcripts were divided into chunks through coding and labeling to assign units of meaning to the data through marginal remarks (Miles and Huberman, 1994). Reliability was checked at two levels: firstly, through the coding of data and secondly, through the analysis and categorization. An inter-rater reliability coefficient of 97% was achieved.

Results

Presentation of the results of the study will follow the same order of the research questions of the study. Results of descriptive statistical analysis will be presented followed by results of inferential statistical analysis.

Research Question no. 1:

What are EFL teachers' perceptions of their own language teaching skills?

Table (1) represents trainee teachers' assessment of their own teaching skills at pre-training stage. Based on the results given in table (1), it can be observed that trainee EFL teachers felt more difficulty in relating English learning tasks to students' life; leading, directing and pacing students'

activities in the target language and in providing alternative explanations in plain language when students are confused as top three difficulties they face in teaching. Following in difficulty was their attempt to use a variety of student grouping strategies in the EFL class.

Table (1)

Trainees' perceptions of their language teaching skills before CRT-based workshops*

No.	*As an EFL teacher, I think I can…*	Mean	SD	Rank
1	Relate English learning tasks to students' life.	1.25	.452	1
2	Incorporate different activities and tasks into English teaching.	1.67	.492	5
3	Implement a variety of new EFL teaching strategies.	1.67	.492	5
4	Give students concrete experiences in learning English.	2.08	.669	10
5	Use media to support EFL teaching.	1.83	.389	7
6	Adjust lessons to the proper level of individual students' target language background.	2.00	.603	9
7	Provide alternative explanations in plain language when students are confused.	1.50	.674	3
8	Employ different techniques and instructional strategies consistent with new trends in TEFL.	1.75	.622	6
9	Design target language activities considering student attention spans and learning styles.	1.67	.492	5
10	Use a variety of student group strategies in the EFL class.	1.58	.515	4
11	Provide different motivation strategies to meet students' individual differences.	1.92	.669	8
12	Lead, direct ad pace students' activities in the target language.	1.33	.492	2
13	Facilitate student participation in the target language classroom.	1.67	.651	5
14	Create a supportive and warm climate in the EFL classroom.	1.75	.622	6

* The lowest average mean refers to the area that trainees suffered from the most, and the highest average mean refers to the area that trainees suffered from the least.

Fifth was difficulty in design target language activities that suit student attention spans and learning styles and facilitating student participation in the target language classroom.

This finding indicates that teachers are more obsessed to make their teaching practices more student-centred oriented since they gave priority to the need to sensitize their language teaching behaviours to learner-centred issues. This also implies teachers' assessment of their current teaching as being more teacher-centred, something that reinforces the need for further training.

Research Question 2:

How effective is the use of critical reflective thinking (CRT)-based workshops in developing EFL teachers' perceptions of their language teaching skills?

Table (2) below represented the effect of CRT-based workshops on cooperative learning and thinking maps on EFL trainee teachers' classroom language teaching behviours from their own perspectives. Using descriptive statistical analysis, figures represent the mean averages of trainees' assessment of their teaching skills after training. Based on these mean averages attached to each item, items were ranked according to trainees' perceptions of the most to the least benefit they obtained.

Table (2)

Trainees' perceptions of their language teaching skills after CRT-based workshops*

No.	*As an EFL teacher, I think I can…*	Mean	SD	Rank
1	Relate English learning tasks to students' life.	2.75	.452	2
2	Incorporate different activities and tasks into English teaching.	2.75	.452	2
3	Implement a variety of new EFL teaching strategies.	2.75	.452	2
4	Give students concrete experiences in learning English.	2.83	.389	1
5	Use media to support EFL teaching.	2.58	.515	4
6	Adjust lessons to the proper level of individual students' target language background.	2.75	.452	2
7	Provide alternative explanations in plain language when students are confused.	2.83	.389	1
8	Employ different techniques and instructional strategies consistent with new trends in TEFL.	2.67	.492	3
9	Design target language activities considering student attention spans and learning styles.	2.58	.515	4
10	Use a variety of student group strategies in the EFL class.	2.58	.515	4
11	Provide different motivation strategies to meet students' individual differences.	2.83	.389	1
12	Lead, direct ad pace students' activities in the target language.	2.58	.515	4
13	Facilitate student participation in the target language classroom.	2.58	.515	4
14	Create a supportive and warm climate in the EFL classroom.	2.83	.389	1

* The highest average mean indicates the area that trainees benefited from training the most and the lowest average mean indicates the area that the trainees benefited from training the least.

As seen in table (2) above, the fourteen items were placed by the trainees in only four ranks. This reflects the significance they endorsed to each sub-

skill in this sub-scale. For example, items no. 4, 7, 11, and 13 took the first place. Items no. 1, 2, 3 and 6 occupied the second rank. The third rank was given to item no.8 while the fourth and last rank was given to items no. 5, 9, 10, 12 and 13. This highlights the significance the trainees attached to these sub-skills since the weight of importance attached to them was more or less similar if not the same.

In order to ascertain the impact of CRT-based workshops on trainees' perceptions of their language teaching skills, their assessment of their own teaching skills before the CRT-based training workshops was compared to their assessment of their teaching skills after training. Mann-Whitney U test was used to assess the impact of CRT-based workshops. The trainees' mean averages at the Self-Appraisal Form before training were compared to their average means after training. Figures in Table (3) below show a statistically strong positive effect (p<.01) of CRT-based training workshops on trainees' perceptions of their teaching skills. This means that CRT-based training workshops could help to induce a positive change in this respect.

Table (3)

Mann-Whitney U Test analysis of trainees' perceptions of their language teaching skills before versus after CRT-based workshops*

No.	*As an EFL teacher, I think I can…*	Mean Rank		Sig. (.01)
		Before CRT	After CRT	
1	Relate English learning tasks to students' life.	18.12	6.88	.000
2	Incorporate different activities and tasks into English teaching.	17.50	7.50	.000

3	Implement a variety of new EFL teaching strategies.	17.50	7.50	.000
4	Give students concrete experiences in learning English.	16.17	8.83	.004
5	Use media to support EFL teaching.	16.42	8.58	.002
6	Adjust lessons to the proper level of individual students' target language background.	16.25	8.76	.004
7	Provide alternative explanations in plain language when students are confused.	17.58	7.42	.000
8	Employ different techniques and instructional strategies consistent with new trends in TEFL.	16.67	8.33	.002
9	Design target language activities considering student attention spans and learning styles.	16.83	8.17	.001
10	Use a variety of student group strategies in the EFL class.	17.04	7.96	.001
11	Provide different motivation strategies to meet students' individual differences.	16.75	8.25	.001
12	Lead, direct ad pace students' activities in the target language.	17.67	7.33	.000
13	Facilitate student participation in the target language classroom.	16.54	8.46	.003
14	Create a supportive and warm climate in the EFL classroom.	17.33	7.67	.000

Research Question 3:

What are EFL teachers' perceptions of their own language testing skills?

Assessing EFL teachers' of their own language testing skills was essential so that the feedback obtained could help in identifying their training needs and shaping the training foci and materials of the CRT-based workshops. Figures in Table (4) show that the fourteen items were placed in only five ranks. This highlights the high level of significance trainees endorsed to these language testing skills based. As indicated by the ranking of the mean scores, the first priority was given to identifying own areas of strengths and

weaknesses; encouraging students to ask questions, using higher order questions, using a variety of question types and encouraging peer correction. The last priority was given to seeking professional development in language testing.

Table (4)

Trainees' perceptions of their language testing skills before CRT-based workshops*

No.	*As an EFL teacher, I think I can…*	Mean	SD	Rank
1	Construct good questions for testing students' achievement in the target language.	1.62	.506	4
2	Use wait time during questioning appropriate to the target language tasks.	1.55	.660	3
3	Emphasize higher order thinking skills in target language testing.	1.54	.660	2
4	Seek professional development in language testing skills.	1.77	.599	5
5	Address students' target language mistakes/errors in ways that suit the target language tasks in hand.	1.54	.776	2
6	Identify areas of personal strengths and weaknesses in aspects of language testing.	1.46	.519	1
7	Encourage students to ask questions in the target language freely.	1.46	.660	1
8	Use questions in the target language that tease students' thinking and problem solving abilities.	1.46	.660	1
9	Vary question types to maintain interest and momentum.	1.46	.660	1
10	Use reflection to improve ELT assessment.	1.85	.555	6
11	Develop different types and levels of questions.	1.46	.660	1
12	Provide appropriate immediate feedback on students' performance in the target language.	1.54	.660	2
13	Use electronic devices in target language testing.	1.54	.519	2
14	Encourage student peer correction.	1.46	.519	1

* The lowest average mean refers to the area that trainees suffered from the most, and the highest average mean refers to the area that trainees suffered from the least.

Research Question 4:

How effective is the use of CRT-based workshops in developing EFL teachers' perceptions of their language testing skills.

A snapshot look at the figures in Table (5) indicates that trainees considered as first priority and placed equal focus on six sub-skills (items 1, 4, 6, 7, 9 & 11). This highlights their concern with the practical aspect of language testing, including ability to construct test questions, develop professionally in language testing, encourage students to pose questions and vary questions to match the thinking capabilities and maintain students' interest. Second in focus came their skills to use wait time effectively and address students' mistakes appropriately. Third in rank of impact was their ability to use questions that target students' higher order thinking and problem-solving capabilities. Fourth in rank of impact is to provide students with appropriate feedback. Last, but not least, is their ability to target higher order thinking skills in target language testing.

Table (5)

Trainees' perceptions of their language testing skills after CRT-based workshops*

No.	*As an EFL teacher, I think I can…*	Mean	SD	Rank
1	Construct good questions for testing students' achievement in the target language.	2.83	.389	1
2	Use wait time during questioning appropriate to the target language tasks.	2.67	.492	2
3	Emphasize higher order thinking skills in target language testing.	2.42	.515	5

4	Seek professional development in language testing skills.	2.83	.389	1
5	Address students' target language mistakes/errors in ways that suit the target language tasks in hand.	2.67	.492	2
6	Identify areas of personal strengths and weaknesses in aspects of language testing.	2.83	.389	1
7	Encourage students to ask questions in the target language freely.	2.83	.389	1
8	Use questions in the target language that tease students' thinking and problem solving abilities.	2.58	.515	3
9	Vary question types to maintain interest and momentum. Burrow	2.83	.389	1
10	Use reflection to improve ELT assessment.	2.58	.515	3
11	Develop different types and levels of questions.	2.83	.389	1
12	Provide appropriate immediate feedback on students' performance in the target language.	2.50	.522	4
13	Use electronic devices in target language testing.	2.42	.515	5
14	Encourage student peer correction.	2.58	.515	3

* The highest average mean indicates the area that trainees benefited from training the most and the lowest average mean indicates the area that the trainees benefited from training the least.

In order to assess the impact of CRT-based workshops on trainees' perceptions of their language testing skills, their pre-training scores were compared to their post-training scores. Figures in Table (6) below show big differences between the mean ranks of trainees' post-training perceptions and pre-training. This resulted in a high statistically significant difference in favour of post-training highlighting a highly positive impact of CRT-based workshops on trainees' perceptions of their language testing skills.

Table (6)

Mann-Whitney U Test analysis of trainees' perceptions of their language testing skills before versus after CRT-based workshops

No.	As an EFL teacher, I think I can…	Mean Rank		Sig. (.01)
		Before CRT	After CRT	
1	Construct good questions for testing students' achievement in the target language.	7.67	17.33	.000
2	Use wait time during questioning appropriate to the target language tasks.	7.12	17.88	.000
3	Emphasize higher order thinking skills in target language testing.	7.75	1`7.25	.000
4	Seek professional development in language testing skills.	7.67	17.33	.000
5	Address students' target language mistakes/errors in ways that suit the target language tasks in hand.	7.50	17.50	.000
6	Identify areas of personal strengths and weaknesses in aspects of language testing.	7.33	17.67	.000
7	Encourage students to ask questions in the target language freely.	6.67	18.33	.000
8	Use questions in the target language that tease students' thinking and problem solving abilities.	7.17	17.83	.000
9	Vary question types to maintain interest and momentum.	6.83	18.17	.000
10	Use reflection to improve ELT assessment.	8.00	17.00	.001
11	Develop different types and levels of questions.	7.00	18.00	.000
12	Provide appropriate immediate feedback on students' performance in the target language.	7.33	17.67	.000
13	Use electronic devices in target language testing.	8.50	16.50	.002
14	Encourage student peer correction.	7.75	17.25	.000

Research Question 5:

How effective is the use of CRT-based workshops in developing EFL teachers' language testing skills?

Since the results of language tests analysis of EFL teachers at the pilot study indicated that their language tests are of poor quality, a further aim of the study was to ascertain the impact of CRT-based workshops on language testing on the quality of teachers' produced language tests. Based on the data collected through the use of the Language Tests Checklist, trainees' language testing performance in each language test was placed on a continuum starting with 21 (the highest) and ending with 7 (the lowest). Since trainees submitted two tests before training and two tests after training, this doubled the highest point to become 42 and the lowest to become 14. The scores given to trainees at the pre-training phase were compared to their scores at the post-training phase. Table (7) below gives a detailed overview of the language tests analysis in both cases.

Table (7)

Results of trainees' language tests analyses pre-training versus post-training

No of trainees	Results of before-training analysis of trainees' tests			Results of after-training analysis of trainees' tests		
	1st Test (Total: 21)	2nd Test (Total: 21)	Total (Total: 42)	1st Test (Total: 21)	2nd Test (Total: 21)	Total (Total: 42)
1	7	8	15	17	18	35
2	7	7	14	15	19	34
3	13	9	22	20	18	38
4	9	7	16	19	18	37
5	8	7	15	16	18	34
6	7	7	14	19	21	40
7	11	8	19	18	20	38
8	9	7	16	18	20	38
9	9	8	17	17	18	35
10	8	7	15	15	18	33

As observed from table (7) figures indicate that the trainees' post-training scores are quite higher their pre-training scores, highlighting a positive impact of Language Testing Workshop on trainee's language test and language test items development skills.

Non-parametric statistics was used to assess the extent to which this difference between trainees' scores in both cases is statistically significant. Mann-Whitney U analysis was conducted for this purpose. Figures in Table (8) indicate a highly statistically significant difference between the mean ranks of trainees' scores in both cases in favour of the post-training scores, highlighting a highly positive impact of CRT-based workshop on language testing in developing trainees' language testing and test item development skills.

Table (8)

Man-Whitney U Test Analysis of trainees' Language Testing Skills

	Mean Rank	Sum of Ranks	2-Tailed Significance (P<.01)
Before training	6.50	78.00	.000
After training	18.50	222.00	

Research Question 6:

What are EFL teachers' reactions to CRT-based workshops?

At the post-intervention stage, trainees were divided into two focus-groups and interviewed in a semi-structured form to articulate their reactions to the CRT-based workshops. Interviews were recorded, transcribed and analyzed qualitatively. Trainees were asked to express their reactions in an open-minded manner. Trainees' responses, which were positive in favour of the

CRT-based workshops in general, were categorized and quantified in terms of frequencies, as represented in Table (9) below.

Table (9)

Trainees' positive reactions to CRT-based workshops

No	Trainees' positive reactions to CRT-based workshops The CRT-based workshops provided me with the following….	Frequency of mentions *
1	Awareness of areas of personal strengths and weaknesses.	33
2	More motivation to participate in staff development training.	34
3	More understanding of students as individuals in terms of ability, achievement, learning styles and needs.	23
4	More ability to monitor and assess students' progress.	22
5	Using a variety of grouping strategies.	29
6	Ability to suit instruction to students' achievement levels and needs.	24
7	Ability to use reflection to improve teaching.	27
8	Ability to vary instructional strategies, types of assignments, and activities.	32
9	More ability to set high expectations for personal classroom performance.	26
10	Capability to hold balanced variety and challenge in student activities.	32
11	Demonstration of high self-efficacy.	34
12	Participation in collegial activities.	32
13	Ability to teach metacognitive strategies to support reflection on learning progress.	33
14	Employing different techniques and instructional strategies, such as hands-on learning.	26
15	Setting clearly articulated high expectations for self and students.	18
16	Providing students with meaningful, clear, specific, and timely feedback.	37
17	Re-teaching students who did not achieve mastery and offers tutoring to students who seek additional help.	30

18	Varying question type to maintain interest and momentum.	29
19	Using wait time during questioning.	31
20	Creating a supportive and warm climate in the EFL classroom.	33

(*N.B. As the trainees often made multiple responses to each question, the number reported in the table above can sum to more than the number of respondents)

Discussion

Being able to critically and reflectively develop EFL teachers' language teaching and language testing skills required examining those teachers' perceptions and personal practices of teaching and testing. Such an objective had to be accomplished through CRT-based workshops. Having reached global result that CRT-based workshops positively and significantly affected EFL teachers' language teaching and language testing skills, it is necessary to discuss the study results in an analytical, critical, reflective way.

In general, the study participants indicated that training in CRT-based workshops provided them with a positive experience which helped them to develop the skills which were needed in their profession, namely language teaching and testing skills. Nearly all participants in response to Self-Appraisal Form reported that the workshops on cooperative learning, thinking maps and language testing were the most valuable training experience they had ever received. This might be attributed to their departure from the notion that part of effective teaching is the ability to reflect on what is happening in the classroom, and to identify any differences in what was planned and what actually occurred. By the way, questions and answers, discussions and comments, and thinking and

reflection might have created or constructed – among EFL teachers - dialectical arguments and supported conclusions that they were not willing to accept. Also, critical oral discourse could be exploited within the cooperative framework established in CRT-based workshops. In addition, the pragmatic properties of those workshops could provide the participants with the requested information specifically about approaching new areas in cooperative learning and testing, and exploring thinking maps as an innovative teaching-learning strategy and an assessment tool. What determines whether the information is complete or innovative is dependent partly on the presuppositions of the trainers and partly on the skills and experience demanded by the participants.

The three workshops contained certain presuppositions. Importantly, the presuppositions not only guided the flow and sequence of the researchers'/trainers' work but dictated the nature of critical reflective thinking on workshops as well. In the simplest way, the cooperative learning workshop was seen to an efficient and effective opportunity for interaction among the trainee teachers which underlies an attempt to shift their perspectives through making their views heard. The trainee teachers cooperated, collaborated, and deliberated in such ways that would help them implement cooperative learning strategy in their classes, which could result in finding creative solutions to practical problems. Even with the limited time of the workshops, the participants tried to share the supplementary materials to be used in their classes.

The second workshop that focused on thinking maps could help participants transform different modes of discourse into visual language. The concept of critical reflection provided a framework for understanding

how different texts produce different maps according to the thinking processes and patterns they address. The organization of thinking maps workshop made it possible for the participants to think, reflect, criticize and then map their thinking. Visual representations of texts presented by the participants showed an active and dynamic reflection. A possible explanation of that result is that when participants overcame their reluctance to map their thinking whatever the way is. This might have led them to map different modes of discourse even in given texts or in simple authentic situations. By applying specific techniques, participants could then design and present thinking maps with their key words, phrases and helping questions. Such a view is supported by the notion that 'thinking maps' is a graphic tool that can help people to communicate visually. In this conception, the trainers and the trainee teachers had positive interaction that stimulated the flow of dynamic construction of thinking maps. In a critically reflective thinking environment, both trainers and trainees had experienced 'participative communication' in which both parties became collaborators, members of meaning, cooperative, and joint builders of thinking maps. The trainers' goal might not have been to instruct or to train - in its literally meaning – but to transform their experience, and harness participants' power and skill in using thinking maps as a teaching-learning strategy and an assessment tool. At this point, the participants might have resurrected the notion that *"If you are more reflective, then you may be able to make better judgments about appropriate instructional approaches, accurate evaluative criteria, curriculum sequencing and responses to group problems that are more useful"* (Brookfield, 1990).

To perceive thinking maps as an innovative strategy to map different forms of discourse requires a fundamental change in thinking habits. Researchers think that what had been done to trainee teachers can support this notion. To put it more clearly, when we read and write, or even listen and speak, we do confront with different thinking processes and patterns as we test validity of our or others' perspectives. But unless we are able to identify the thinking process or pattern that we or others are using, we do come to occasional agreement, ambiguity, contending views, or misinterpretations. Using critical reflection in a thinking-maps workshop can pave the way to describe things, show characteristics, similarities and differences among them and the classifications and process they have, and therefore right thinking appears at the right time. That constructivist, critical reflection might have appeared as a cooperative quest of trainers and trainee teachers.

At university, language instructors are usually expected to read widely as part of their academic and professional development. But they are not expected to be involved in language and testing skills development workshops as they are already teaching and testing students. By thinking carefully, thinking critically and staying reflective and focused while you each, teachers will be in a better position to test their students' performance and thereby make the best of assessing their achievement. Due to the fact that the importance of coining teaching and assessing cannot be emphasized enough, the CRT-based workshops was to deepen, expand and complement the participants' understanding of what to test, how to test and why to test during lectures, activities as well as at the conclusion of teaching classes. Therefore, the revealed significance of the participants'

gain score in testing skills can be attributed to one or two of these views: (1) the effective in-depth discussion led by the trainers addressing authentic problems related to different course tests, (2) participants could have broaden public participation when they felt that were fully involved in the process of their training and became aware of the importance of being critical reflective thinkers when assessing their students.

A further possible explanation of the results reached might be related to the face-to-face immediate and constant kinds of feedback (both trainer and peer feedback) that the participants were exposed to during the workshops. Those different kinds of feedback gave the trainee teachers an opportunity to see their oral and graphic participations from different perspectives, critically reflect on others' comments and suggestions, and thus trying to improve their participations as much as possible.

To sum, researchers found that CRT-based workshops could help EFL teachers develop their language teaching and testing skills. Critical reflective thinking positively and significantly affected EFL teachers' performance according to the current study. The mutual respect-led discussion might have functioned as a critical reflective thinking stimulus and a hands-on democratic practice acquiring new skills and generating critical exploration of new areas of experience. Also, the relational interactive discussion in which personal opinions were expressed in public participation could have developed through view exchange with participation. Furthermore, the deliberative safe training environment that built mutual trust and respect could help the participants voluntarily emphasize, modify or change their perceptions and perspectives of language teaching and testing skills.

Our findings speak to the work of others who have emphasized that to be critical, results must transform curricula and practice or alter the status quo (Brookfield, 1995 & Larrivee, 2008). Where past research speaks to the need to advance basic problem solving in ways that go beyond questions of immediacy to consider why something works and for whom (Zeichner & Liston, 1996), our study highlights the need for an awareness of the embedded impact of content area conventions on how teachers reflect, for what reasons, and how the consequences of this reflective thinking impacts teaching and learning. Being critical, thus, "has the power to change the pedagogical process from knowledge transmission to knowledge transformation" (Leonardo, 2004).

The positive impact of training in this study would highlight the necessity for inservice training programmes to utilize "strategies that force in service teachers to change taken-for-granted notions" about their particular content areas (Mensah, 2009). Thoughtful problem framing and conscious reflection are essential components of EFL teacher education, using a critically reflective stance.

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