

Audio-Recording as a Stimulus for Reflection in Teachers' Performance

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Abstract – The idea of teachers' reflection refers to the extent to which teachers contemplate on their teaching practices in the classroom in order to develop their teaching abilities. The purpose of this study was to investigate whether reflective teaching had any effects on teachers' performance or not. The population of the study consisted of five female EFL teachers and their fifty students in two language schools in Esfahan during a semester in 2014. The data were collected via classroom observation and class audio-recording. The statistical analysis of data included the application of Wilcoxon Signed Ranked Test and t-test. The analysis of both students and teachers' data revealed that there was a significant difference between the teachers' performances prior to and after the treatment.

Keywords: EFL teachers, teachers' performance, audio-recording, reflective teaching, reflection

I. INTRODUCTION

In real life, when something goes wrong in our lives, our rational reaction is to set a moment aside and think about the problem. This thinking process will help us to find a solution for the problem, and it gives us a view not to repeat the mistake or alert us to prevent it. These experiences usually make us grow. Hopefully, we will be prepared to encounter the same situation or similar situation if it happens again.

Reflection or 'critical reflection' refers to an activity or process in which an experience is recalled, referred, considered, and evaluated, usually in relation to a broader purpose" (Richards, 1998). "Simply, 'reflection' refers to the process of thinking back about our past action" (Haruna & Al-Amin, 2013, p.15). Accordingly, it can be argued that reflective teaching means thinking about one's own teaching and analyzing it critically in order to improve teaching practice.

Every teacher has a professional responsibility to reflect and evaluate about their practices. As a result of applying this approach, "reflective teachers will be able to identify how to improve their professional activity in order to improve the quality of pupils' learning" (Richards, 1998, p.13).

According to Gibbs' model, whenever teachers encounter a problem, first, they should describe it in details for themselves. The second step is to explain their feelings and thoughts toward that problem. Afterward, they can analyze their situation and think about a solution. If the solution works, they can use it again in the same situation in future. Through this model,

teachers can think about different phases of an activity or experience systematically and structure their reflection process (Gibbs, 1988).

Ramirez (1995) has added “in the second language classroom, reflective teaching may entail asking a number of ‘what’ and ‘why’ questions about teaching practices, reasons for language study, and explanations for students success or failure” (cited in Stanley, 1998; p.372). These questions can help the teacher to understand what works and what doesn’t work, and make the teacher think deeply about his/her way of teaching and its effectiveness. In fact, it is a serious process in which the teacher contemplates about all the details alone. Reflection makes teacher slow down or stop to some extent in order to notice, evaluate and analyze their teaching practice and finally interpret it; consequently, this reflection helps them to improve and get better day by day.

According to Jasper (2003), reflective teaching bridges the gap between theory and practice. Reflective teaching is a long life learning which causes the training qualified and self-directed teachers. In addition, reflective teaching is a cyclic process with specific steps. To conduct reflective teaching, teachers should start with data collection, data analysis and finally data evaluation. This process leads to detect the defeats and, consequently, develop the teaching practice.

Some researchers (Tice, 2002; Sharifi & Abdolmanafi Rokini, 2014) believe that reflection practices are just useful and applicable for pre-service and novice teacher as a model. On the contrary, there are some other researchers (Gibbs, 1988; Stanley, 1998; Richards, 2008) who approved that reflection practices should be considered as a crucial approach for in-service teachers to develop their professional attitude and competence, as well. Consequently, reflective teaching is implemented in two ways. One way is an attempt to organize a reflective curriculum for pre-service teacher education. The other is to promote certain activities that will foster reflective practice among serving teachers. Furthermore, in research on the effectiveness of reflective teaching on second language teachers, a clearer distinction is needed to be made between reflection as an approach to pre-service teacher preparation, and reflection as a strategy for in-service teachers' professional development.

Kurt and Atamturk (2011) claim reflection-on-action was found to be ignored by the majority of the teachers. This level of reflection can be achieved by thinking back our experiences, testing our existing beliefs and questioning decisions and their results. This can be expressed in writing reflective journals, audio journals, action research, and keeping professional portfolios. In other words, it is a deeper level of Reflection and more time-consuming. They suggest that the workload that teachers have is the main obstacle for teachers to practice reflection-on action in reality (cited in Jadidi & Keshavarz, 2013).

Teaching is a hard and challenging job and teachers should develop themselves continuously to teach effectively. Edwards (2010, cited in Kavoshian, 2013) declares that the idea of Continuous Professional Development (CPT) or Professional Development (PD) means that instructors continue their development throughout their active profession and do not stop development and improvement when they start doing the job. CPT has many means to help teachers develop in their professions; the most two important means of CPT are definitely reflective teaching and action research. Although most of the pre-service teachers attend a number of teachers training courses do their best to learn as much as possible in teaching area, unfortunately they stop learning and developing after getting the job. There are

a few in-service teachers who may involve in professional development programs in their career life. In order to develop one professionally, both reflective teaching and action research can have some positive influences on teachers' improvement by applying significantly in the teaching practice and they will help encourage the idea of 'continuous professional development'.

II. LITERATURE REVIEW

Nobody can deny the effective role of class recording; some researches which dated back to the 1960s support the use of audio- and video-recording for teachers' professional development. Because when teachers listen to their voice or watch themselves in process of teaching, they can access different aspect of teaching process in details. As a result, they can identify their own strength and weakness during teaching process which may lead them toward professional development in future (Kavoshian, 2013, p. 13).

A study was conducted by Fatemipour (2009) on the effectiveness of reflective teaching tools in English language teaching. He aimed to determine whether different reflective tools lead to the same kinds of data. His research showed that different tools of reflection cannot lead to the same data. According to him, teacher's diary was the most efficient tool, the second useful tool was peer observation. He put the Students feedback and Audio Recording at the end of list. Finally, he concluded "reflective teachers are recommended to apply more than one tool in order to obtain more reliable data". (p. 87)

Hoseini Fatemi, Elahi Shirvan and Rezvani (2011) conducted a study on the effects of teachers' self-reflection on EFL learners' writing achievement. Their study includes 100 EFL teachers and their students. The data were collected through a questionnaire followed by an unstructured interview. The findings of the study showed that there was a positive correlation between the reflection of the teacher and the learners writing achievement. Low reflective teachers were mostly unaware of the reflective teaching process; therefore, their students got lower learners achievement. On the other hand, the students of high reflective teachers could obtain the higher score in writing.

Kavoshian,(2013) conducted a valuable study on self-evaluation through videotaping as an alternative mode of teaching supervision. In her study she filmed eight English classes and then interviewed the teachers and asked them to practice reflective teaching on their own classrooms. The finding showed that there was a significant difference between teachers' self-evaluations and supervisor's evaluation of their teaching process in the videotapes. The results of this study also demonstrated that the main reasons of these discrepancies can neatly be classified into different categories of a framework including psychological aspects, effectiveness of teachers' self-evaluation, critical views of supervisor, effectiveness of videotaping, and objectivity of supervisor's ratings. The findings also strongly suggested that teachers had very positive ideas regarding the videotaped self-analysis and they found it as a very effective and promising method of teaching supervision which can be an alternative to on-site visits of supervisors.

Despite the importance of reflective teaching in teachers' professional development, to the best knowledge of the researcher, reflective teaching has not received the attention it deserves in Iran's teachers' education system. Although, in recent years Iranian researchers

have conducted some valuable research studies in this field, there seems to be no relevant research on the possible effects of reflective teaching on teachers' performance through audio-recording. In this connection, this study is a step to explore teachers' self-reflection on teaching process to answer the following research question:

Are there any differences between the teachers' performance before and after applying 'reflective teaching'?

III. METHODOLOGY

A. Participants

The participants of this study consisted of 5 Iranian EFL teachers. They were 5 female teachers selected from two Language Schools in Isfahan; Sadr Institute of higher education and Khane Sanat va Madan Institute. The participants' age ranged from 21 to 35 with the mean age of 28. They had 4 years of experience in teaching English to adult in average. They varied in their field of studies (English translation, English literature, teaching English).

In this research one of the researchers was the participant observer. She was responsible for audio-taping the teaching process, observing the classrooms, listening to the audiotapes and analyzing and evaluating the teaching process.

B. Materials

In order to answer the research question, the researcher employed three different types of materials: (a) class observation, (b) class audio-recording, and (c) students' general scores.

1. Class Observation. In order to collect all the data, the researcher participated directly in the classroom and observed the teacher's performance and student's feedbacks. The researcher used observation forms which were designed by Kavoshian (2013).

2. Class Audio-Recording. The English teaching process of 5 participants were recorded by voice recorder. For each participant, there were two 90-minute audiotapes after an interval of one month.

3. Students' General Scores. In order to check the effects of reflective teaching on teachers' performance, their students' scores, before and after applying reflective practice, were collected and analyzed.

C. Data Collection Procedure

According to the materials of this study, this triangulation approach enabled the researcher to capture as much as information as possible. Thus given that number of participants of the present study was limited (i.e., 5), we can argue that it is a qualitative research.

To start the research process, the researcher asked all the participants to sign the participants Audio-Video Consent Form, and the participants were ensured that the data

would be kept confidential. In the next step, the English teaching process of these participants were audio-taped, for each participant there was a 90-minute-audio recording. The researchers attended the same class session as an observer, different aspects of teaching process like communication patterns, teacher's decision making, the affective atmosphere, teacher's feedback, error correction, teacher's appearance, management of the class, and rate of praise were considered by the researcher and after the class she filled a class observation form for each participants. The audio-recordings were done by the use of voice recorder which was situated on the teacher's table. As voice recording may have a negative impact on the students' behaviors, the researcher did not let them be aware of the presence of the voice recorder. After an interval of one month (at the end of the term), the second voice recording session was done like the first one. The class was observed by the researcher again.

D. Data Analysis Procedure

Data were triangulated in three main sources; audio-recording, observation, and students' scores. All of the data collected, categorized, and labeled. For each participant there was a document including two observation forms, two audio-recording transcriptions, and two lists of their students' scores.

IV. RESULTS

In order to investigate the effects of reflective teaching on teachers' performance before and after the using reflection tools, teachers' pre-treatment and post-treatment reflective teaching scores were compared. Thereafter, students' pre-test and post-test score were analyzed and compared.

A. Descriptive Statistics Comparing Teachers' Reflective Teaching Scores

The result of mean and standard deviations of the teachers, before and after applying reflective teaching is illustrated in table 1.

Table 1: Descriptive Statistics Comparing Teachers' Pre-Treatment and Post-Treatment Reflective Teaching Scores

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-Treatment	5	98.6	19.37	66.00	113.00
Post-Treatment	5	118.4	23.79	89.00	152.00

The number of teachers, their pre- and post-treatment mean scores, standard deviations, and minimum and maximum scores are presented in table 1. The mean score of pre-test for teachers is 98.6 and the standard deviation is 19.37. The mean score of teachers' post-test is 118.4 and the standard deviation is 23.79. There is a difference between their pre-treatment (M = 98.6) and post-treatment (M = 118.4) mean score. To find out whether this difference is

statistically meaningful or not, we need to take a look at the Wilcoxon Signed Ranked Test. Table 2 shows the result of this test.

Table 2: Wilcoxon Signed Ranks Test for Comparing Teachers’ Pre-Treatment and Post-Treatment Reflective Teaching Scores

Post-Treatment – Pre-Treatment	
Z	-2.032(a)
Asymp. Sig. (2-tailed)	.042

Since the Sig. (2-tailed) value in Table 2 is less than the level of significance (.042 > .05), it could be concluded that there was a significant difference between the teachers’ performances prior to and after the treatment.

B. Descriptive Statistics Comparing Students’ Scores

The number of students, result of mean and standard deviations of the student, and minimum and maximum scores before and after applying reflective teaching by their teachers are shown in table 3.

Table 3: Descriptive Statistics Comparing Students Pre-Treatment and Post-Treatment Scores

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Treatment	87.00	31	6.89	1.23
	Post-Treatment	89.64	31	5.98	1.07

The mean score of pre-test for students is 87.00 and the standard deviation is 6.89. The mean score of students’ post-test is 89.64 and the standard deviation is 5.98. To find out whether the difference between pre- and post-treatment scores was meaningful or not, we should refer to the paired-samples T-test table. Table 4 shows the paired-samples T-test result for comparing students’ pre-treatment and post-treatment scores.

Table 4: Paired-Samples T-Test Results for Comparing Students Pre-Treatment and Post-Treatment Scores

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Treatment Post-Treatment	-2.64	4.9	.88	-4.44	-.84	-3.00	30	.005

The p value under the Sig. (2-tailed) column is less than the significance level (.005 <.05), indicating that the difference between pre-treatment ($M = 87.00$, $SD = 6.89$) and post-treatment ($M = 89.64$, $SD = 5.98$) scores of the students was statistically significant, $t(30) = -3.00$, $p = .005$.

V. DISCUSSION AND CONCLUSION

The main purpose of this study was to investigate the effects of reflective teaching on teacher' performance before and after its application. The obtained results indicated that EFL teachers benefit from audio-recording critical analysis. It seems that EFL teachers can use self-evaluation through reflective teaching in order to develop in their profession. Reflection considered to be an important part of learning in teacher progress and is often the core of teacher progress activities (Richards & Smith, 2005, cited in Fatemipour, 2009).

The finding of this study showed that Iranian FEL teachers are aware of the crucial role of their reflection. The finding of the study is in line with Jadidi and Keshavarz's (2013) who believed teachers realize by being a reflective teacher they can improve their teaching.

Zeichner and Liston (1987) highlighted that self-awareness is an important element in becoming a reflective teacher. Accordingly, the necessity of self-awareness was supported by the finding of this study; as all the participants showed an amount of professional development after applying self-reflection teaching practice in their classrooms.

Richards (2008) states that a reflective approach to teaching involves changes in the way we usually perceive teaching and our role in the process of teaching. He argued that "like other forms of self-inquiry, reflective teaching is not without its risks, since journal writing, self-reporting or making recordings of lessons can be time-consuming" (p. 33). In addition he believes that reflective teaching suggests that experience alone is insufficient for professional growth, but that experience coupled with reflection can be a powerful impetus for teacher development.

Curriculum developers and syllabus designers in teacher education program can expand level of reflectivity in student teachers by incorporating course like "training in reflectivity" or "teacher development group meeting" into the teacher education curriculum (Liou, 2001), because reflective abilities are not innate and teachers should be in structured in the field (Liou, 2001). Educators can provide teachers with opportunities to investigate their teaching by analyzing their audio-recording.

The limitation of this study is that, because of qualitative nature of this study sample size was limited to 5 female participants. As using limited sample size the result and finding cannot be generalized.

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