The Effect of Professional Development Training on EFL Teachers' Perception of Research Practice at Selected Schools in Arba Minch

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ABSTRACT

The purpose of this study was to examine the effect of need-based professional development (PD) training on primary school EFL teachers' perception of research practices in Gamo Zone, Ethiopia. Employing an experimental research design, pre-test and post-test measures were analyzed using a t-test statistical procedure. The data gathered through a questionnaire was subjected to quantitative analysis. 59, randomly selected EFL teachers filled the pre-test and post-test questionnaires. The result showed that there was a statistically significant difference before intervention (M=64.00, SD=13.612) and after intervention [M= 80.52, SD=15.512, t (51) =-6.554, p<0.05]. Based on the findings, the study concluded that need-based PD practice could have great value in improving primary school EFL teachers' perception of research practices in Arba Minch, Ethiopia

Key terms: Perception, Research Practices, Need-based, Professional development, English language, Experimental research design

1. INTRODUCTION

The English language has been serving as an important bond between countries and the outside world by simplifying their economic, technological, educational, and cultural connections with other parts of the world (Nunan, 1989). It also plays a vital role in the country's educational system. In countries like Ethiopia where English is given as a subject and medium of instruction, enhancing ELT teachers' quality has received more attention and support than other subject areas (Eba, 2013).

Professional development (PD) encompasses the ongoing processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve their qualities. Teachers' PD comprises a lasting PD process which is very critical in the overall requirement for competent, professional, and qualified teachers in a dynamic society. Therefore, PD is conceptualized as a process for the development of proficiencies for meeting the changing demands of the profession by common exposure to professional update plans.

English language teachers' PD has always been an important issue because the field of language teaching is subject to rapid change which inevitably affects the way teachers teach (Richards & Farrell, 2005). For teachers to keep up with these changes and vary their teaching methods, they need to update their knowledge and skills in language teaching. Therefore, they need PD opportunities. PD is important for teachers in attaining sustainable education. Accordingly, exploring teachers' perceptions of PD activities could be a significant endeavor as they impact their professional qualities and, thus have educational implications.

PD is also a key tool to help teachers update their knowledge, skills, and practices. Research is a PD tool that involves teachers inquiring into their practice, studying and reflecting on their practice, and correspondingly changing their practice (Richards, 2005). So, teachers' parties research that can help with resolving problems or issues that are of concern to them by being actively involved in problems in their classrooms. It enables teachers to act as researchers and develop personal goals, values, and beliefs about practice (Burns, 2000).

Research inspires and develops the expertise of teachers to become more reflective practitioners, to bring about changes and innovation in teaching and learning that facilitate the professional development of educators. Furthermore, research is a PD strategy and teachers who participate in

action research effectively promote their personal growth, improve students' learning, and help advance the teaching profession that facilitates teacher empowerment (Brown, 1994).

Growing evidence in the field of action research shows that teacher quality and ability to reflect on their instructional practices critically affect students' learning outcomes and provide teachers with new knowledge and understanding about how to improve educational practices or resolve significant patterns in classrooms and schools. By utilizing the research process teachers not only learn about students and colleagues but also learn about themselves as they seek ways to continually improve 'to gain insight, develop reflective practices and create positive changes both in their professional learning and in their classroom' and in school improvement scheme (McNiff, 1997).

The Ethiopian Ministry of Education, MOE (2009) suggested research as one professional development tool for secondary and primary school teachers in Ethiopia. In the Ethiopian context, the action research practice is considered a tool for teachers' quality improvement, promoting PD, and improving students' achievement.

On the other hand, studies in Ethiopia (for example Firdessa (2015) and Rukiya (2016) conducted on the research implementation revealed that EFL teachers were not engaged in the action research implementation due to lack of research knowledge and skills, incentives, and motivation. In addition, workloads in the schools and shortage of research facilities are listed as constraints of research practice.

However, studies for example (Zeyneba, 2014, and Sintayehu, 2016) commonly revealed teachers did not engage in PD due to their low perceptions of PD, and lack of commitment of mentors to support them. In addition to this, studies revealed that lack of interest, dissatisfaction in their job, unattractive salary, lack of knowledge and skills in conducting research, and misperceptions of the concept of PD and how to do it were the major obstacles to professional development activities. Moreover, teachers' misperceptions of PD, the top-down approach of PD, and one model that attempts to fit every teacher engaged in PD largely contributed to the poor practice of PD.

On the other hand, Endelibu (2020) examined the effects of bottom-up CPD on ELT teachers' perception and level of self-efficacy beliefs in Arba Minch, Ethiopia. His study concluded that the need-based CPD practices had a significant effect on EFL teachers' perceptions and level of

self-efficacy beliefs. However, his entire study did not show the effect of the experiment on the subjects' research practice.

Due to criticisms of the existing practices in Ethiopia, the current study attempts to implement need-based PD training considering the participants' needs. Moreover, the researcher believed that needs-based PD can minimize the above shortcomings and thereby positively affect the teachers' perception of research activities. So, the study attempts to examine the effects of needs-based PD training on ELT teachers' perception research activities. Thus, the following null and alternative hypotheses have been formulated:

H0: There is a statistically significant effect on EFL teachers' perception of research practices.

H0: There is no statistically significant effect on EFL teachers' perception of research practices.

2. OBJECTIVES OF THE STUDY

This study aims to examine the effect of need-based professional development training on EFL teachers' perception of research practice in Arba Minch, Ethiopia. The study attempts to add the following specific objectives accordingly.

- To assess primary school ELT teachers' current professional development needs
- To examine the effects of needs-based PD training on ELT teachers' perception research activities.

3. RESEARCH DESIGN

The design of this study has two different phases. The first phase focuses on the EFL teachers' needs assessment while the second phase focuses on the implementation of PD training.

3.1. Phase One: EFL teachers' PD need assessment

The purpose of this phase was to assess secondary school ELT teachers' current professional development needs. In doing so, a survey research design was employed to achieve the intended purpose of this phase of the study.

3.1.1. Sampling Technique of EFL Teachers' PD need assessment

Fifty-nine EFL teachers from 5 primary schools rated the needs assessment questionnaire. A simple random sampling technique was employed to select EFL teachers from each primary

school. This technique gives every school and teacher an equal chance to be chosen (Creswell, 2009). The sampling technique proceeded by developing a sampling frame from which the subjects were selected. The frame contained the list of selected primary schools and EFL teachers. A simple lottery method was employed to select schools and teachers for the need assessment.

3.1.2. Data Collection of EFL Teachers' PD need assessment

The questionnaire was employed to gather data for the need assessment and to see how EFL teachers prioritize their PD needs because questionnaires are cost-effective to gather more comprehensive data as compared to face-to-face interviews. Besides, it is easy to analyze as data entry and tabulation that will be done with computer software packages. It further elaborates that responses or answers are summarized to obtain a numerical value that represents the characteristics of the subject. For respondents who might have other PD needs that were different from the given list, blank spaces were provided at the end of the questionnaire.

3.1.3. Data Analysis Method of EFL Teachers' PD need assessment

The data collected through a questionnaire was analyzed employing a ranking scale.   Then, teachers' priorities were based on their rating frequency. This helped the researcher to identify the PD needs that were most frequently rated. The results of the ranking scale were used as a framework for the preparation of training materials for the intervention.

3.1.4. Results Of the EFL Teachers' PD Need Assessment

A total of 59, (20 male and 39 female) EFL teachers from 5 primary schools of Arba Minch town administration were rated on the needs assessment questionnaire. The need analysis employed index value to see how the teachers prioritized the PD activities which were collected and organized from the need assessment questionnaire. The following table indicates the index value of the needs assessment which was obtained from the need analysis questionnaire.

Table 3.1: The Summary of Needs Assessment

No	CPD Needs	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10t	Index	Rank
1.	ELT Methods	10	9	7	6	6	5	5	3	3	2	0.125	2
2.	Coaching & Mentoring	2	3	6	6	7	7	6	2	8	9	0.087	7
3.	Subject- Matter	20	14	8	4	4	2	1	1	1	1	0.150	1
4.	Reflection Practices	3	2	5	6	7	8	9	12	2	2	0.094	6
5.	Peer-observation	2	5	5	5	8	9	8	7	5	2	0.097	5
6.	Technology and language teaching	2	5	6	7	8	6	7	5	9	1	0.098	4
7.	Field Visiting	4	2	3	4	7	5	6	4	11	10	0.080	9
8.	Research Skills	9	8	8	7	4	5	6	5	3	1	0.120	3
9.	ELT Curriculum & Material	2	7	5	6	3	6	4	5	7	11	0.087	7
10	Team Teaching	2	1	3	5	2	3	4	12	7	17	0.064	10

Index=(10 for rank 1) + (9 for rank 2)₊ (8 for rank 3) + (7 for rank 4) + (6 for rank 5) + (5 for rank 6)₊ (4 for rank 7) + (3 for rank 8) + (2 for rank 9) + (1 for rank 10) divided by sum of all rates of CPD needs.

In the above table, the index value of the EFL teachers' PD needs analysis shows what PD activities were prioritized by the respondents (see Table 2). According to the index value, EFL teachers rated subject matter knowledge (15%), English language teaching pedagogy (12.5%), and research skills in ELT (12%) as their 1st, 2nd, and 3rd PD needs they prefer to practice. Group discussions (0.98 %), peer observation (0.97%), and reflective practices (0.94%) were rated as 4th, 5th, and 6th PD needs while the rest 4 PD needs were rated from 7th -10th accordingly. Out of 10 PD needs, subject matter knowledge was the most frequently rated need. The ranks derived from the index value helped the researcher identify the priorities of EFL teachers' PD needs thereby preparing training materials for the interventions.

3.2. Phase Two: Implementation of Professional Development(PD) Training

The purpose of this phase was to conduct the experiment and thereby improve EFL teachers' perception of research activities. Professional development training on research skills was given in this phase.

3.2.1. Method of the Experiment

An experimental, (one-group pretest-posttest) research design was employed in the current study. One-group pretest-posttest design is one of the most frequently used experimental research designs in which a single group of research participants or subjects is pretested. Particular to this study, this design was the most preferable design to achieve the second and third specific objectives of the study. An experimental (one-group pretest-posttest) design is the best fitting design to administer a treatment and to compare if the difference between pre-test and post-test is significant in the same group.

3.2.2. The Experiment and Producer

As mentioned above, an experimental research design was employed in this research work. One group pre-test-post-test experiment was conducted in the study. Regarding the producer, two sets of data were collected from the same group of samples at two different times. The purpose was to test the significance of the difference between the two mean scores. A group of teachers chosen at random were given a test before participating in the PD training for a year. Then as soon as the training was ended, a similar test was administered to the group. The group mean was computed for each test. These two mean scores were compared to determine if there was a difference in the participants' perception of PD research practice.

3.2.3. Data Analysis method of the experiment

The data collected through a questionnaire was organized and analyzed with the help of a computer program (SPSS version 20). With the help of SPSS version 20, mean and slandered deviation were used to compare teachers' perceptions in the pre-test and post-test. To examine the effect of needs-based PD training on ELT teachers' perception of research activities, a T-test was employed in this study. Paired-sample t-tests were run to measure differences between responses of pretest and posttest. Paired-sample t-tests were used to see whether there was a significant difference in perception. The magnitude of the intervention's effect was calculated employing eta squared which is commonly used as effect size statistics of Cohen, (1988).

4. ETHICAL CONSIDERATIONS

Before starting the data collection, the researcher obtained a letter of official ethical clearance from Arba Minch University as the requirements of the university. Then, the researcher explained to the participants the aims of the study and how their responses would be kept confidential and anonymous. In addition, the researcher obtained permission from the participants to collect the necessary information for his study.

The secrecy of the participants intended to save them from any potential risk that their participation may have on their lives. Regarding the privacy of the information, the researcher assured them that the information they provided would be kept confidential and that their personal information would not be publicized without their determination. By and large, undertaking the above ethical issues as part of the research integrity contributed to the credibility of this research finding.

5. RESULTS OF THE EXPERIMENT

As this is an experimental study, the questionnaire was administered twice to 59 EFL teachers (before and after the intervention). Out of them, 52 EFL teachers returned the post-test questionnaires which resulted in a return rate of 94.44%.

Table 5-1: Paired Sample T-test Results Comparing Perception Means

	N	Mean	S.D	Correlation	t-value	df	Sig. (2-tailed)
Pre-test	52	64.00	13.61	0.22	-6.554	51	.000
Post-test	52	8052	15.51				

A paired-sample t-test was conducted to evaluate the effects of needs-based PD training on the EFL teachers' perception of research practice. There was a statistically significant difference before intervention (M=64.00, SD=13.612) and after intervention [M= 80.52, SD=15.512, t (51) =-6.554, p<0.05].

The above results of the paired sample t-test which were obtained by comparing the perception of research practice means, we can conclude that the interventions implemented in this study brought a significant change in EFL teachers' perception of research practice. The magnitude of the interventions' effect was calculated by the most common effect size statistics, eta squared

(Cohen, 1988). The eta squared statistics ($\mathbf{eta^2} = \frac{t^2}{t^2+N-1}$) indicated a 0.05 size effect. Therefore, we can conclude that there was a large effect, with a substantial difference in EFL teachers' perception of research practice before and after the interventions.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusions

The findings of the need assessment showed that the existing PD activities in the study area did not consider EFL teachers' PD needs. Due to this fact, EFL teachers were so hesitant to engage in it and did not think that it was relevant. According to the need assessment, teachers need activities like subject matter knowledge, improving English language teaching and researching skills, ELT curriculum and material preparation, and reflective practices as their top priorities.

A paired-sample t-test conducted to examine the effects of needs-based PD training on the EFL teachers' perception of research activities showed that there was a statistically significant difference before intervention (M=64.00, SD=13.612) and after intervention [M= 80.52, SD=15.512, t (51) =-6.554, p<0.05]. Thus, the null hypothesis (H0) was rejected and the alternative hypothesis (H1) was proved valid.

Therefore, concludes that PD activities should be presented based on the actual needs of teachers and focusing on subject specifications. It is also reasonable to conclude that need-based PD activity is valuable in improving teachers' perception of research activities in primary schools in Ethiopia.

6.2. Recommendations

Based on the findings of this research, the following recommendations are made:

- PD activities should be designed based on teachers' needs and focusing on specific subject matter so that teachers can be engaged in meaningful and purposeful activities.
- The Ministry of Education has to do something to revise the top-down PD program. This is because various studies revealed that teachers resisted practicing top-to-down PD activities. Particularly, English Language teachers need PD activities that consider their needs and are specifically focused on their subject matter.
- Finally, concerning the limitations and gaps of this study, the researcher recommends further studies on the effects of need-based PD practices in the ELT context.

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