



EFFECT OF REFLECTIVE PRACTICE TRAINING ON THE ATTITUDE OF PROSPECTIVE TEACHERS TOWARDS TEACHING

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Abstract

Teacher education is major concern in most of developed and emerging economies across the globe because quality of education is hinges upon quality teacher and teaching. Most of the countries who are suffering low quality of education are facing the challenges to improve their teacher education. In order to cope with these challenges that are associated with professional development of prospective teachers; there is a dire need to focus on the effectiveness of their teaching practicum. The main purpose of this research was to find out the effect of reflective practices training on the attitude of prospective teachers towards teaching. The nature of this research was experimental. Total 80 students were selected from 2 universities. Both groups were asked to complete the Teacher Attitude toward Teaching Scale (TATTS) before intervention and after intervention. Both groups were offered subject of Reflective Practices in their semester VI. Reflective practices training module was developed for training. Experimental groups were taught through this module which comprised practical activities regarding reflective practices. Independent t - test was used to find the difference between experimental and control groups. The findings suggest that prospective teacher's attitude toward teaching were significantly different after getting reflective practices training. Above mentioned findings indicate the importance of reflective practices training for bringing change in prospective teacher's attitude towards teaching and bridging the gap between theory and practice.



Keywords

Attitude towards Teaching, Prospective Teachers, Reflective Practices Training

1. Introduction

A significant 20th century educationist and philosopher John Dewey (1933) presented a notion of reflection in educational perspectives. He differentiated a “daily action governed by practice, authority and habit from reflective action which includes a readiness to participate in continuous self-review and professional development” (Harrison, 2011). Previously in 1916, he defined ‘reflection’ as a logical method of decision making to solve a given problem (Dewey, 2001). Process of reflective thinking includes organized and planned action achieved through persistent self-inquiry where teachers meticulously review their classroom experience. It is a cyclical process involving reflection, action, and again reflection in order to achieve better standard of learning and teaching (Pollard, 2002). Reflective thinking is essential for the improvement of practices in every field of life. In teaching learning environment, it is the procedure of intense thinking and improvement in teaching (Grabowski, 2012). Skills like Decision-making, Metacognition and Logical Thinking in students can be developed through reflection (Goodley, 2018). Atherson (2005) stated that the aim of reflective practitioner is to create environment of classroom that makes it exciting, stimulating and encouraging for students. Teachers use their insights and knowledge to assess their teaching performance. The main crux of reflective practices is that teachers themselves criticize their teaching, sought remedies there off. It makes teachers self-evaluators for their own teaching practices. Reflective teaching practices help in refining the knowledge and teaching

methods of teachers that helped them in setting new objectives. Reflection prepared prospective teachers for effective teaching and equipped with power to overcome their academic issues (Rarieya, 2006). Therefore Positive attitude towards teaching creates conducive environment to enhance basic pedagogical skills. According to Dewey Open mindedness, entails that reflection is the capability to discover new ideas, reflect on problems that may arise in the situation, use alternatives solutions for the problem, and be inquisitive (Gorden, 2017). Individual performance can be influenced directly and indirectly by attitude. Effective and supportive learning environment in a classroom cannot be created without positive professional attitude. Likewise, attitude could affect how well a teacher displayed pedagogical skills. Negative attitudes make teacher accessibility difficult as compared to teacher having positive attitude towards teaching. This lack of accessibility increases student’s ambiguity tolerance. Resultantly students hesitate to ask questions regarding the grey areas of the subject he/she teaches. This implies that teachers’ attitude towards their students and teaching in general is very important for students’ success (Eagly & Chaiken, 1993). So, attitude is an important concept to understand human behavior. “Attitude is a positive or negative feeling that an individual holds about objects, persons or ideas. Usually it is defined as a complex mental state involving beliefs and feelings recognized through reflective practices” (Maheshwari, 2013:601). Previously teacher training programs just focused on preparation and presentation of the instructions. These were

used as the basic skills for prospective teachers. During this contemporary epoch, the activities of teaching become more composite, demanding, goal specific and competitive. Specific teaching strategies are appropriate for different discipline. In this respect, job of teacher has become diverse with respect to using different pedagogical techniques, creating conducive learning environment, formulation and distribution of assessment tools, mixing technology and seizing students' interest. "Only reflective teachers are able to refine and modify their practices for improved learning. They are

able to accommodate diverse learning styles of students and contribute to quality teaching-learning process" (Afghani & Ferdeowsi, 2015:20). Akbari (2008:28) said that "reflective practice is diverse way of pacing back and following one's owns thoughts/actions that occur in a routine. Reflective practice is a recent phenomenon in teacher education and it has been steadily changing the conventional teacher training concept". The cycle of the relationship between attitudes and teaching practices can be summarized as follows (Smith, 1993:15).

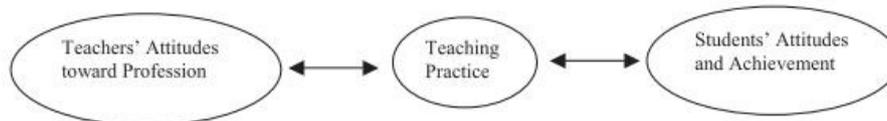


Figure 1: The cycle of the relationship between attitudes and teaching practices

When the cycle is examined it can be obviously understood that teachers attitude toward profession has an effect not only on their teaching practice but on their student also. Many Studies conducted in South Africa elaborate the importance of reflective practices in daily classroom routine. (Makura and Toni 2015; Bayat and Naicker, 2012). Present study is designed while keeping in view that attitude can be changed through training. Therefore the

rationale behind conducting this research was to compare outcome of reflective practices training on prospective teacher's attitude toward teaching. Teacher attitudes toward teaching through reflective practices training provide potential links in teacher education. The main objective of the research was to measure the effect of reflective practice training on attitude of prospective teachers toward teaching.



Figure 2: Conceptual framework of the study

2. Literature Review

Reflective practice is a systematic process of evaluating and critically assessing our own feelings and actions for the purpose of personal and professional learning. Dewey (1933) first introduced these reflective processes which contain three basic steps for analyzing our own experiences of situation. Later on many educationalists refined this reflective cycle. Now the basic reflective cycle have four stages, as proposed by Kolb (1984:30). In this process first, individual describe their experience. Second, they bring aware and evaluate their feelings and thoughts that connected to the experience. Third, we generate insights and draw conclusions and fourth, they plan how they want to apply their learning in the future and use alternative ways. Mccoach and Smith (2016) state that for Dewey, individuals learned through doing not just by thinking: he further explain that thinking is about what they were doing and why they were doing it that way is called reflection, therefore, the process of “doing something overtly to bring about the anticipated result and thereby testing the hypothesis” of that phenomena (Dewey, 1916). Later, on Schön expanded this way of thinking by two methods. One reflection in action, as the process by which professionals make decisions in the process of their work. In this concept, there is a continual interaction of thought and action, and the ability to be more than reactive in real-time, which exemplifies the truly reflective practitioner (Schön, 1987). On other side reflections –on-action is the process of analyzing situation or experience of past event and then improve their self by reflection. Many

researchers acknowledged reflective practice as a research approach that could promote all teachers for professional development and that completely increases the quality of teaching and learning. Jacobs, Vakalisa, and Gawe (2011)

3. Methodologies of Research

3.1 The context of the research

This paper is based on data collected for PhD research dissertation partially.

3.2 Research Design

The main purpose of this research was to find out the effect of reflective practice training on attitude of prospective teachers. To investigate the reflective practice training effect the pretest post experimental research design was used. For teacher training the researcher developed the reflective practice training module. The following reflective skills were the part of this module:

- Reflective reading, writing and listening skills
- Critical and creative thinking skills
- Reflective lesson planning and presentation
- Self-reflection

3.3 Sampling procedure

The purposive sampling technique was used. B.Ed semester VII was selected as sample of the study from two public sector universities located in Lahore. The B.Ed classes were divided in to two groups on the bases of their previous examination marks. There were total 80 (40) students respectively in each university. 40 prospective teachers select as an experimental group and 40 prospective teachers were selected as a control group from two universities.

3.4 Instrumentation

Teacher Attitude toward teaching Scale (TATTS) developed by Rasheed (2006) was used to measure the attitude. It is comprised of 71 items based on Likert's scale. A

questionnaire was administered to 80 prospective teachers before and after training. To ensure the reliability of the instrument the split half reliability was used and the reliability coefficient is $\alpha = .760$.



Figure 3: Complete Structure of Research

3.5 Data Analysis

Independent t-test was used to analyze the data. Following hypotheses were tested.

H0₁ = There is no significant change in attitude towards teaching before training of

reflective practices in experimental and control groups of university 1.

Table 1: Mean Difference Pre-Test Scores of Experimental and Control Group of University 1

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental group	20	247.70	14.161	.687	.496
	Control group	20	244.75	12.977		

In order to examine differences in overall attitude scale score measure of prospective teachers' attitude towards teaching between the control and experiment groups in the beginning of experiment, an independent sample t-test was conducted.

Table 1 result shows that $t = .687$, p is $.496 < 0.05$ which indicates that experimental group and control group are not significantly

different. So, the null hypothesis stating that Pre-test scores of experimental and control groups are not significantly different is accepted.

H0₂ = There is no significant change in attitude towards teaching before training of reflective practices in experimental and control groups of university 2.

Table 2: Mean Difference Pre- Test Scores of Experimental and Control Group of University 2

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental group	20	243.90	14.071	.439	.0926
	Control group	20	241.95	12.032		

Table 2 result shows that $t=.439$, p is $.926 < 0.05$ which indicates that experimental group and control group are not significantly different. So, the null hypothesis stating that Pre-test scores of experimental and control groups are not significantly different is accepted.

It can be concluded that, at the beginning of experiment, prospective teachers of both

experiment and control groups at University 2 showed almost the same attitude towards teaching.

H_{03} = There is no significant change in attitude towards teaching before training of reflective practices in experimental and control groups of both universities.

Table 3: Mean difference pre-test scores comparison of University 1 and University 2

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental group	40	245.80	14.066	.797	.428
	Control group	40	243.35	13.416		

Table 3 clearly shows that $t=.797$, p is $.428 < 0.05$ which indicates that experimental group and control group are not significantly different. So, the null hypothesis stating that Post-test scores of experimental and control groups are not significantly different is accepted. It can be concluded that, at the beginning of experiment, prospective teachers of both experiment and control groups showed almost the same attitude towards teaching.

Post-Test Data Analyses of Teacher Attitude toward Teaching Scale (TATTS)

After six weeks training, same Teacher Attitude toward Teaching Scale (TATTS) was conducted as post-test. The results show significant difference in prospective teachers' attitude towards teaching at confidence interval CI (95%) and even significant at CI (99%).

Independent t-test was to analyze the data. Following hypotheses was tested.

H_{04} = There is no significant change in attitude towards teaching after training of reflective practices in experimental and control groups of university 1.

Table 4: Mean Difference Post Test Score of Experimental and Control Group of University 1

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental Group	20	289.00	8.341	8.189	.000
	Control group	20	251.90	18.464		

Table 4 result indicates that $t=8.189$, p is $.000 < 0.05$ which indicates that experimental group and control group are not significantly different. So, the null hypothesis stating that Post-test scores of experimental and control groups are significantly different is rejected.

Furthermore Since $p < .000$ is less than significance level $\alpha = 0.05$, it can reject the null hypothesis “there is no significant difference between attitude towards teaching of

prospective teachers of experiment and control group”, and conclude that the attitude towards teaching of prospective of experiment group is significantly different. Prospective teachers of experiment are more inclined towards teaching than prospective teachers of control group.

The trend of attitude towards teaching of prospective teachers of both experiment and control groups at University 1 is shown in the below figure.

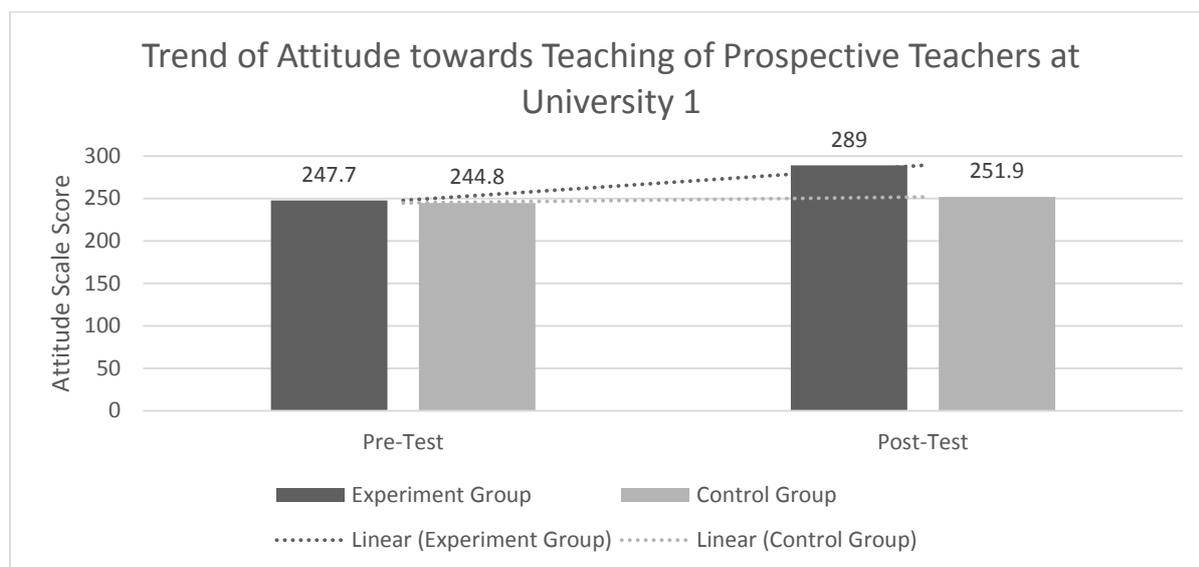


Figure 4: Trend of Attitude towards Teaching of Prospective Teachers at University 1

Above figure explores that after getting training on reflective practices, experiment group shows more attitude towards teaching than control group. The attitude towards teaching of prospective teachers of control group almost remains the same in both before treatment and after treatment.

This more inclination towards teaching of prospective teachers of experiment group may be due to their training on reflective teaching practices subject to all other extraneous factors are assumed to be same during training period. Since attitude towards teaching of prospective teachers of control group almost remains the same during six week period of training of

prospective teachers of experiment groups, therefore researcher may infer that all other extraneous factors are same during six week training period. Thus positive increase in attitude towards teaching of prospective teachers of experiment group may be due to

only their training on reflective teaching practices.

H₀ = There is no significant change in attitude towards teaching after training of reflective practices in experimental and control groups of university 2.

Table 5: Mean Difference Post Test Score of Experimental and Control Group of University 2

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental group	20	276.00	22.525	2.525	.016
	Control group	20	259.35	19.030		

Table 5 result shows that $t=2.525$, p is $.016 < 0.05$ which indicates that experimental group and control group are not significantly different. So, the null hypothesis stating that Pre-test scores of experimental and control groups are significantly different is rejected. Since $p < .016$ is less than significance level $\alpha = 0.05$, we can reject the null hypothesis “there is no significant difference between attitude towards teaching of prospective teachers of

experiment and control group”, and conclude that the attitude towards teaching of prospective of experiment group is significantly different. Prospective teachers of experiment are more inclined towards teaching than prospective teachers of control group.

The trend of attitude towards teaching of prospective teachers of both experiment and control groups at University 2 is shown in the below figure.

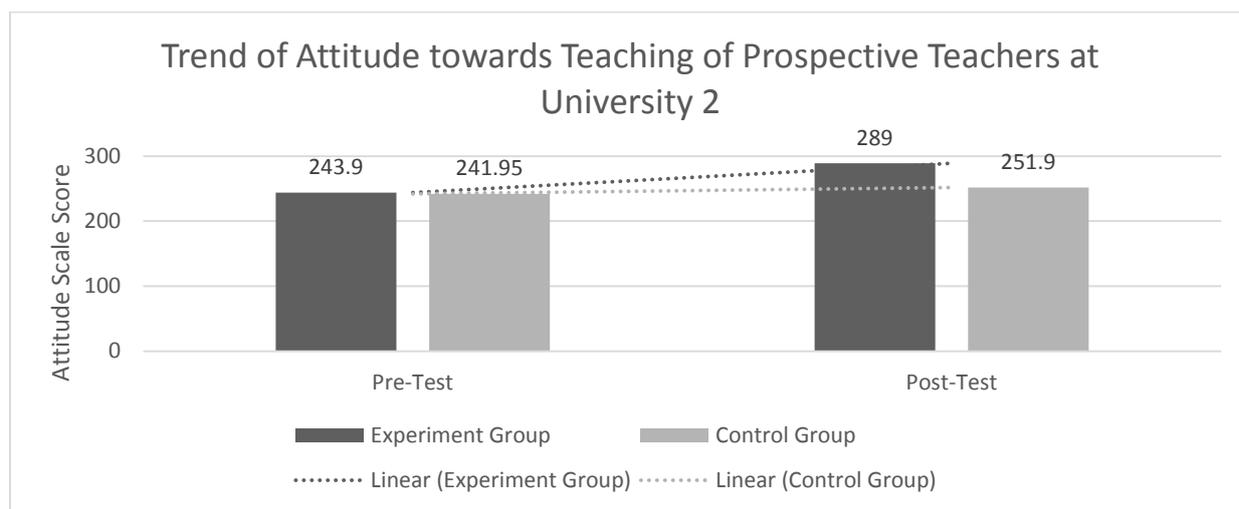


Figure 5: Trend of Attitude towards Teaching of Prospective Teachers at University 2

Above figure explores that after getting training on reflective practices, experiment group shows more positive attitude towards teaching than

control group. The attitude towards teaching of prospective teachers of control group almost remains the same in both pre-test and post-test.

This more inclination towards teaching of prospective teachers of experiment group may be due to their training on reflective teaching practices subject to all other extraneous factors are assumed to be same during training period. Since attitude towards teaching of prospective teachers of control group almost remains the same during six week period of training of prospective teachers of experiment group therefore researcher may infer that all other

extraneous factors are same during six week training period. Thus positive increase in attitude towards teaching of prospective teachers of experiment group may be due to only their training on reflective teaching practices.

H0₆: There is no significant change in attitude towards teaching after training of reflective practices in experimental and control groups of university 1.

Table 6: Mean Difference Post-Test Comparison of University 1 and University 2

	Groups	N	Mean	Std deviation	t	P
Overall Attitude Scale/Score	Experimental group	40	282.50	18.011	6.513	.000
	Control group	40	255.63	18.888		

Table 6 indicates that $t = 6.513$, p is $.000 < 0.05$ which indicates that experimental group and control group are not significantly different. So, the null hypothesis stating that Pre-test scores of experimental and control groups are significantly different is rejected.

Since $p < .000$ is less than significance level $\alpha = 0.05$, we can reject the null hypothesis “there is no significant difference between attitude towards teaching of prospective teachers of experiment and control group”, and

conclude that the attitude towards teaching of prospective of experiment group is significantly different. Prospective teachers of experiment are more inclined towards teaching than prospective teachers of control group.

The trend of attitude towards teaching of prospective teachers of both experiment and control groups collectively at University 2 and University 1 is shown in the below figure.

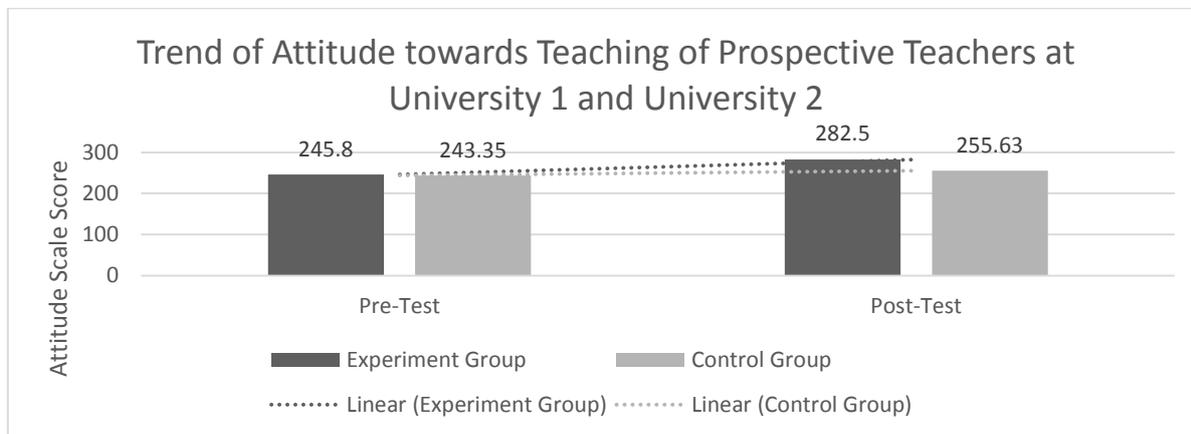


Figure 6: Trend of Attitude of Prospective Teachers at University 1 and University 2

Above figure explores that after getting training on reflective practices, experiment group shows more positive attitude towards teaching than control group. The attitude towards teaching of prospective teachers of control group almost remains the same in both pre-test and post-test. This more inclination towards teaching of prospective teachers of experiment group may be due to their training on reflective teaching practices subject to all other extraneous factors are assumed to be same during training period. Since attitude towards teaching of prospective teachers of control group almost remains the same during six-week period of training of prospective teachers of experiment group therefore researcher may infer that all other extraneous factors are same during six-week training period. Thus, positive increase in attitude towards teaching of prospective teachers of experiment group may be due to only their training on reflective teaching practices.

4. Result and Findings

Finding of pretest data analyses of teacher attitude toward teaching scale

1. The findings of group statistics of University 1 suggest that prospective teachers in experiment group ($M = 247.7$; $SD = 14.16$) shows same attitude towards teaching as prospective teaches in the control group ($M = 244.8$; $SD = 12.97$).
2. The results findings of University 2 indicated that there was no significant difference in overall attitude towards teaching is observed between the two groups, $t(38) = 0.663$, $p = .005$. The group statistics results suggest that prospective teachers in experiment group ($M =$

243.90 ; $SD = 14.07$) shows same attitude towards teaching as prospective teaches in the control group ($M = 241.95$; $SD = 14.03$).

3. The results findings of both universities prospective teachers indicated that there was no significant difference in overall attitude towards teaching is observed between the two groups, $t(38) = 0.428$, $p = .005$. The group statistics results suggest that prospective teachers in experiment group ($M = 245.80$; $SD = 14.06$) shows same attitude towards teaching as prospective teaches in the control group ($M = 243.35$; $SD = 13.41$).

Finding of post test data analyses of teacher attitude toward teaching scale

Based on the findings results, researcher can state the following:

1. There was a significant difference between attitude towards teaching of prospective teachers of experiment and control group ($t(26.445) = 8.189$, $p < .001$) of University 1
2. There was a significant difference between attitude towards teaching of prospective teachers of experiment and control group ($t(38) = 2.525$, $p < .005$) of University 2.
3. There was a significant difference between attitude towards teaching of prospective teachers of experiment and control group ($t(78) = 6.513$, $p < .005$) of both universities.

5 Discussion and Conclusion

This study investigated the effect of reflective practice training on the attitude of prospective

teachers. The reflective practice is a cyclical process, because once we start to implement changes, then the reflective and evaluative cycle begins again. As a result of reflection, the teacher may decide to do something in a different way, or may just decide that what she/he has been doing is the best way. Therefore, being teacher, one needs to reflect on the experiences or activities one is doing for one's growth. In short, by developing knowledge and understanding the setting practice and the ability to identify and react to the problems the student teachers can become effective teachers. Teachers can deal with the needs and different issues of the learners and demand of time if they reflect on their daily teaching learning activities for their professional growth. To deal and survive in their professional field, the student teachers need to grow and bring changes in their behaviour and style. Sample was selected from two universities for this research and their identities were not disclosed. Instead of their name, nomenclature of university A and B were used. There were 120 students enrolled in University A and 100 students in University B (Session 2015-2018). Continuous teacher education is a key element to ensuring the quality of teaching as well as providing appropriate responses to the changing demands of our society. The investment made in teacher education is considerable, both from public organizations as well as from individual centers and teachers. Results of the research shows that trained group of prospective teacher's attitude was changed than untrained teachers of control group. It was concluded that both groups found big difference teaching practices. Results show that reflections on professional practices improve

prospective teachers teaching skills and enhance their professional development. On the basis of this present research, it can be concluded that reflective practice training helps prospective teachers to develop their teaching skills and learning skills in an effective way. It's also concluded that teachers who get reflective practices training have more competent for that prospective teachers who do not get formal reflective practice training. These results also support the study conducted in South Africa by Baxen & Botha 2016 results of their study showed that the educators and prospective teachers had different understandings of the nature and practices of reflection in their profession. Moreover, teacher's attitude toward teaching also lay on reflective practice training, the prospective teacher's attitude significant change after reflective practice training. The results of this research study recommended the crucial role of the reflective practices in enhancing teaching attitude toward teaching. In this regard, Black (2013), Macroch and Smith (2016) and Pollard (2005) also highlight the importance of reflective practice as to assist prospective teachers to become better future teachers and change educational standards. Therefore, our institutional authority should take into consideration to provide ways to help teachers become reflective teachers through the following suggested points:

- Harmer, 2007 also emphasizes for more training through collaborative venture of reflective teaching practice between prospective teachers and experienced teachers such as peer tutoring.

- Administrators provide support for teachers to network and accomplished profound results professional level. In teacher training institutions prospective teachers may need to move from individual awareness to groups of schools working together doing action research, and consequently solve problems together as by Desimons, 2009 study.
- Institutions should start teacher mentorship program to support prospective teachers and experienced teacher for choosing effective method of teaching.
- Teacher education programs should focus more on the critical level of reflection. Reflection requires practice; the more student teachers are encouraged to reflect on the ethical, social and political issues of educating pupils, the more their reflective skills will be enhanced.

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