

Effect of Trainee Teachers' Video Recorded Teach and Re-teach Demonstrations on their Performance

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Abstract

This study observed the effect of video recording of microteaching training in comparison with traditional teaching on student teachers' performance while practicing teaching. Fifty student teachers of Regional Institute for Teacher Education female Abbottabad comprised the sample of the study. Pre-test post-test equivalent group design was used for the experiment. For data collection valid and reliable observation sheet was adopted. Pre-test post-test data was analyzed. Pre-test findings showed the same level of performance of student teachers of both control and experimental groups. Post-test t test application indicated significant difference between the performance of student teachers of control and experimental group. Comparatively the performance of prospective teachers of experimental group was better than the performance of student teachers of control group in the use of questioning and students' reinforcement skill. The use of video recording of microteaching as a feedback tool improves the teaching performance of the student teachers. Hence, it is suggested that trainee teachers teach and re-teach demonstrations may be video recorded. So that, the student teachers having received feedback in the light of their video recorded microteaching, may acquire and use microteaching skills in their professional careers for better teaching performance.

Keywords: video recording, microteaching, student teachers, observation, performance, microteaching skills, teaching practice.

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Introduction

Training affects the performance of a trainee. Teacher training improves the teaching performance which in turn, raises quality of education (Onocha, 2013). Teacher training makes its impact as trained teachers' students outperform the students of untrained teachers (Farooq & Shahzadi, 2006). It is teacher training which provides both content knowledge and teaching skills needed for teaching (Yousuf, 2002). The combination of theory and practicum forms teacher training. Being a part of practicum, microteaching enables trainee teachers to put into use their theoretical knowledge ((Rust, Koerner, 2002; Bell, 2007). Video recording of microteaching helps trainee teachers to observe and to reflect their teaching (Dymond & Bentz, 2006; Cunningham & Benedetto, 2002). It provides slow motion technique with which trainee teachers can assess their teaching (Hung, et al., 2004).). Trainee teachers by watching and reflecting their video recorded performance, can bring improvement in it (Dymond & Bentz, 2006; Ramos, 2007; Kong, Shroff & Hung, 2009; Liu, 2012; Tripp & Rich, 2011). Trainee teachers observe their video recorded teach and re-teach demonstrations and work on pinpointed behaviour which needed improvement. Resultantly, this recording facility helps them to develop professionally (Tok, 2007).

Acquisition of teaching skills comes through microteaching. This training technique puts across microteaching skills to trainee teachers through planning, teaching, observation, feedback then re-planning, re-teaching, re-observation and re-feedback (Kupper, 2001; Pekker, 2009). During microteaching training one teaching skill is practiced for five to seven minutes with every other element reduced to its one third (Tanga et al., 2013)

A microteaching skill is the collection of teacher behaviour used for bringing desired changes in students learning outcomes. This skill is practiced and acquired in different forms of behaviour. It improves teaching performance (Ajileye, 2012).

Project NPTOC (1993) video recorded microteaching sessions of teachers for feedback purpose. Studies by (Hashmi, 1998; Satti, 1998; Mehmood, 1999; Shah, 2004) on project NPTOC (1993) exhibited comparatively better performance of microteaching trained teachers than those who did not receive it. On the other hand, eighth five-year plan (1993-98) education policies (1998 & 2009) Sheikh (2000) and USAID (2006) indicated poor performance of pre-service teacher training which emphasized theory than practicum. Though microteaching was one of the main component of the practicum, yet it did not exhibit its usefulness by

imparting teaching skills to teachers. Hence, their teaching performance was not up to the required standard.

Review of literature highlighted both the effectiveness and ineffectiveness of microteaching. The doubt about the usefulness in the literature review prompted the researcher to observe the effect of trainee teachers' video recorded teach and re-teach demonstrations on their performance.

Research Methodology

Research Design. It was an experimental research. Pre-test post-test equivalent design was used.

Objectives of the study were, to observe the performance of the prospective teachers without the acquisition of questioning and students' reinforcement skills during their teaching practice and to compare the performance of the prospective teachers before and after acquisition of questioning and students' reinforcement skills during their teaching practice. Hypotheses of the study were that there is no significant difference between the performance of the prospective teachers of experimental and control group on pre-test during teaching practice and there is no significant difference between the performance of the prospective teachers of experimental and control group on post-test during teaching practice. The population of the study comprised fifty-three female trainee teachers of (ADE) Associate Degree in Education program of (RITE) Regional Institute for Teacher Education Female, Abbottabad, Hazara division, Khyber Pakhtunkhwa, Pakistan. Study sample contained fifty-three female student teachers of ADE program of RITE (Female) Abbottabad. Groups were formed through matched random sampling technique. Student teachers' pre-test observation sheet scores were used for equating the groups. Every two prospective teachers having about identical pre-test scores, were made a pair then each student teacher of the pair was randomly placed into control and experimental group. During matching three trainee teachers were eliminated. Twenty-Five trainee teachers each, were placed into experimental (G1) and control (G2) group. **Instrument.** For the observation of student teachers' performance in set induction, presentation, questioning and students' reinforcement skill, the researcher adopted observation sheet (Shah, 2004). The reliability of the questionnaire was .82 at pre-test. Set induction has three, presentation has five, questioning has eight while students' reinforcement skill has six statements. Each statement has a five-point scale, i.e. strongly agree, agree, undecided, disagree and

strongly disagree and has 5,4,3,2,1 as the respective score for these values.

Break up of training in microteaching

Pre test	Matched Groups	Microteaching Training		Post Test
Teaching Practice 05 days	EG	Theory and Demos by trainer 32 days	Trainee Teachers' Teach and re-teach demonstrations 08 days	Teaching Practice 05 days
	CG	Theory teaching by teacher 32 days	Trainee teachers did Lesson Planning for teaching practice 08 days	Teaching Practice 05 days

Researcher himself acted as trainer for experimental group. In order to conduct trainer's demonstrations and to provide feedback to trainee teachers with the help of their video recorded teach and re-teach demonstrations on four selected microteaching skills, the researcher underwent five day formal training. Daily the researcher consumed two hours in training. Urdu, Islamiyat, English and Social Studies were chosen for teaching theory and imparting skills in four selected microteaching skills. Acquisition of these targeted skills was ensured through trainee teachers' video recorded teach demonstrations followed by feedback driven re-teach demonstrations. The researcher did the planning of the demonstrations of the lessons selected from the chosen subjects. Trainee teachers' teaching performance was observed and recorded on pre-test by observation sheet. Observation sheet pre-test scores were used for matched group formation. After group formation the researcher started training experimental group in microteaching. Daily one-hour training session containing theory of microteaching skills and trainer's demonstrations, was conducted. It went on for thirty-two days. Daily during one-hour training session thirty minutes each were used for theory teaching and trainer's six demonstrations in the targeted skill. From already chosen subjects, daily three lessons from one subject, were prepared for the teaching of theory and the delivery of demonstrations. Each subject took two days for theory teaching and demonstrations delivery in the targeted microteaching skill. Hence, training in microteaching in one microteaching skill took eight days for completion. After the completion of training in each microteaching skill, for the next two days, the trainee teachers demonstrated on the respective

skill through teach and re-teach demonstrations. During teach and re-teach demonstrations, trainee teachers' performance was video recorded and was used for feedback purpose.

Each microteaching skill took two days for the cycle of planning, teaching, feedback, then, re-planning, re-teaching, and re-feedback to be completed. While for four microteaching skills it took eight days. Microteaching training got completed in forty days.

Another teacher of about identical qualification and experience taught control group through traditional method of teaching for forty days. Teacher training control group did not demonstrate on the selected microteaching skills. Trainee teachers were taught theory of microteaching, its definition, history, advantages and disadvantages, concept of microteaching skills, concept of set induction, presentation, questioning and students' re-enforcement skill. Trainee teachers of control group did not perform on their teach and re-teach demonstrations.

Results

Table 1

Comparison of performance of G1 and G2 in questioning and students' reinforcement skills on pre-test. N = 25

Questioning	Mean	S.D	<i>t</i>	<i>df</i>	<i>p</i>
G1	25.36	2.75	-.489	48	.627
G 2	25.00	2.44			
Students' Reinforcement					
G1	13.40	2.82	-.052	48	.959
G2	13.36	2.58			

Table 1. showed no significant difference ($p = .627$ $p > 0.05$, $p = .959$ $p > 0.05$) between the performance of the prospective teachers of both G1 and G2 before the acquisition of questioning and students' reinforcement skills. The performance of the prospective teachers of the two groups was same at pre-test in both the skills. Therefore, the null hypothesis is accepted.

Table 2

Comparison of performance of G1 and G2 in questioning and students' reinforcement skills on post-test. N = 25

Questioning		Mean	S.D	<i>t</i>	<i>df</i>	<i>p</i>
	G1	35.36	2.25	-10.330	48	.000
	G2	28.36	2.53			
Students' Reinforcement						
	G1	27.00	3.53	-6.09	48	.000
	G2	22.00	2.08			

Table 2. showed significant difference ($p = .000$ $p < 0.05$, $p = .000$ $p < 0.05$) between the performance of the prospective teachers of both G1 and G2 after the acquisition of questioning and students' reinforcement skills. Prospective teachers of G1 exhibited comparatively better performance on post-test in questioning and students' reinforcement skills. Therefore, the null hypothesis is rejected.

Discussion

Questioning skill. The results of this study are in congruence with the results of the research studies carried out by (Satti, 1998; Mehmood, 1999; Shah, 2004).

Satti used sample of forty-six teachers, lesser than the sample size of the present study while took eight microteaching skills, higher than the number of selected microteaching skills in the present study. Present study used observation sheet while Satti used checklist for recording the behaviour of the subjects during their classroom performance. It was observed that teachers who had undergone training in selected microteaching skills outperformed those teachers who had not received it.

Unlike present study Mehmood used post-test only control group design. Present study chose four microteaching skills while Mehmood selected eight microteaching skills for the observation of trained and untrained teachers' performance. It was concluded that trained teachers comparatively performed better than untrained teachers.

Shah included two hundred and ten teachers as sample for his study. The sample size of present study was smaller than the sample size of Shah's study. Shah observed the performance of both micro-teaching

trained and untrained teachers and exhibited the results in eight microteaching skills with respect to variables like microteaching training (trained and untrained), gender and locality. It was concluded that the performance of microteaching trained teachers was better than the performance of teachers who did not get training in microteaching.

In terms with gender it was concluded that comparatively trained male primary teachers' performance was better than the performance of trained female primary teachers in set induction and students' reinforcement skills. Comparatively microteaching trained female teachers' performance was better performance than the performance of microteaching trained male teachers in questioning skill. Both the groups were at the same level of performance showed in presentation skill.

In terms with locality data interpretation exhibited comparatively better performance of trained urban primary teachers questioning and students' reinforcement skill.

Studies by (Satti, 1998; Mehmood, 1999; Shah, 2004) used causal comparative design. These studies did not give microteaching training rather observed the impact of microteaching training conducted by project NPTOC (1993). This project used video recording of teach and re-teach demonstrations as feedback tool. Therefore, the findings of (Satti, 1998; Mehmood, 1999; Shah, 2004) also stated that video recording of microteaching as feedback tool affected the performance of trained teachers. Unlike to these studies present study being experimental in nature, administered microteaching training and used video recording as a feedback. The results of (Satti, 1998; Mehmood, 1999; Shah, 2004) and of the present study showed that video recording of teachers teach and re-teach demonstrations had a positive effect on their performance in questioning and students' reinforcement skill.

Students' Reinforcement Skill

The result of this study is in line with the results of the studies carried out by (Hashmi,1998; Killic,2010).

Hashmi using sample of microteaching trained and untrained female primary teachers, observed the impact of video recording of microteaching training on their performance in eight selected microteaching skills after they had gone through video recorded microteaching training by project NPTOC (1993). Findings showed that video recorded teach and re-teach demonstrations used for

feedback purpose affected the performance of trained teachers in eight selected microteaching skills and they comparatively performed better in eight selected microteaching skills than untrained female primary teachers.

Killic like present study used observation sheet for observing the selected behaviors. Killic developed his research tool while present study adopted it. Present study chose four microteaching skills and twenty-two behaviors while Killic selected six microteaching skills and thirty-nine behaviors. Unlike present study Killic used pre-test post-test design without control group and pre-tested sampled trainee teachers before administering them the treatment. Killic video recorded trainee teachers' performance during them teach and re-teach demonstrations.

Every trainee teacher after going through teach session, watched his performance and received feedback. In the light of teach feedback, re-teach demonstrations were conducted. Both Killic's research and present study used video recording for feedback purpose. Kilic used written feedback while present study used oral feedback. Both killic's research and present study used one cycle of teach and re-teach exercise. In Killic's study trainee teachers were given ten to fifteen minutes for their teach and re-teach performance in one microteaching skill while in present study the time allocated for teach and re-teach performance in each microteaching skill, was five to seven minutes. Findings of Killic's study exhibited that feedback of video recorded teach and re-teach demonstrations affected the performance of trainee teachers at post-test in questioning and students' reinforcement skill.

Conclusions

Findings of the study helped in drawing the following conclusions;

Post-test data interpretation indicated comparatively better performance of the student teachers of experimental group than those of the control group in questioning skill. Hence, microteaching training using video recording of teach and re-teach demonstrations for feedback purpose, proved to be more useful than traditional teaching for the acquisition of questioning skill.

Post-test findings showed that after getting microteaching training in students' reinforcement skill student teachers of experimental group comparatively performed better than the student teachers of control group in students' reinforcement skill. Therefore, microteaching training

using video recording of teach and re-teach demonstrations for feedback purpose, turned out to be comparatively more effective than traditional teaching for the acquisition of students' reinforcement skill.

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