

Impact of Microteaching on the Use of Core Teaching Skills - An Experimental Study

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ABSTRACT

The study aimed to find the impact of Microteaching technique on the competence of pupil teachers in using the skills of set-induction, explaining, probing questions, stimulus variation and reinforcement. The study was conducted by using one-group Pretest-Posttest experimental design. Teaching behavior of the pupil teachers before they entered the experiment was assessed by pretests and at the end of the treatment the pupil teachers were given posttests. The sample for the study consisted of 120 pupil teachers selected through random sampling technique from Department of Education, University of Kashmir Srinagar enrolled for the B.Ed programme, session 2012-2013. The Observation Schedule cum Rating Scale (Nadeem. N. A) was used as the tool for the present study. Results based on statistical analysis of scores in the pre-test and posttests showed that the teacher trainees differed significantly in using the above mentioned five core teaching skills.

Key words: Microteaching, Teaching Skills, Pedagogy.

Introduction

Microteaching is a scaled-down teaching designed for the training of both pre-service and in-service teachers. Its purpose is to provide teachers with the opportunity for the safe practice of an enlarged cluster of teaching skills while learning how to develop simple, single-concept lessons in any teaching subject. Microteaching is a technique aiming to prepare teacher candidates to the real classroom setting (Brent & Thomson, 1996). Microteaching can be defined as a teaching technique especially used in teachers' pre-service education to train them systematically by allowing them to experiment main teacher behaviours. By the help of this technique, teacher candidates can experiment and learn each of the teaching skills by breaking them into smaller parts and without encountering chaotic environment of the crowded classes. While instilling teaching skills in students during microteaching, reciprocal negotiation of the students actively presenting and watching about the performances can make great contribution to the acquisition of the skills (Tasdemir, 2006). Since teachers are required to create effective and constructive learning environments in order to prevent undesired learner behaviors, teachers should be trained to implement effective learning approach Yildiz, (2002). Popovich, and Katz, (2009); revealed that microteaching exercise is a valuable tool to help students develop communication, critical-thinking, and problem-solving skills. Further, it helps to increase student learning, helps students to "think on their feet" and be reflective, provides an opportunity to have students analyze their own and fellow classmates' presentation methods and develops their skill in the provision of constructive feedback through peer assessment. Ping, W. (2013) who found that micro-teaching practice affects both female and male pre-service teacher's competency levels positively; Saban, A., and Coklar, A. N. (2013) has found that pre-service teacher's believed that the micro-teaching method gives a chance to evaluate their strong and weak aspects in teaching; Fakomogbon, et al. (2012) that the video disc instructional package enhance student teacher's performance in micro-teaching skills demonstration; Bulut, M. (2013) found that teacher trainees generally held positive attitudes towards microteaching with regard to its effectiveness for professional development, self-assessment, self-confidence, material production and teaching experiences in various

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courses. Ghafoor, et al. (2012) concluded that both groups (experimental and control) were favorable to the effectiveness of the technique in normal classroom conditions. Uzan, N. (2012) found that television program simulation designed in line with the content of environmental education course is suitable for the microteaching technique and the technique increased the students' interests, excitements and wishes to participate in the course; Shah, S. M. H., and Masrur, R. (2011) that in-service trained teachers utilized microteaching skills and their performance was comparatively better; Wahed, S. A., and Ismail, A. (2011) found that prospective teachers described a variety of benefits they gained from microteaching experiences; Chen, et al. (2010) found that microteaching can significantly improve student's skill, teaching ability, and theoretical knowledge learning results; Kilic, A. (2010) found that Learner Centered Micro Teaching (LCMT) model had a progress in teacher candidate's teaching behaviors on subject area, planning, teaching process, classroom management, communication, and evaluation; Mergler, A. G., and Tangen, D. (2010) concluded that micro-teaching has positive impact on developing teacher identity; Sen, A. I. (2009) concluded that the micro-teaching practice helped to reduce the level of first time teaching anxiety; Okunloye, R. W., and Okeowo, A. O. (2008) found that the performance of trainees in Microteaching and Teaching Practice is low but significantly correlated.

Microteaching has several advantages in helping teachers acquire the new roles and the changes based on recent developments. It is effective in developing and sharing certain teaching skills and getting rid of the mistakes. It allows for understanding important behaviors in classroom teaching. It increases the teacher candidates' self-confidence. For both pre-service and experienced teachers it provides an extensive application domain. It enables to develop teaching competence models. It involves immediate feedback. Deniz and Fakultesi, (2010), Examined significant differences were observed before and after microteaching applications. Following micro-teaching activities, while self-confidence of the student teachers and their in-class teaching skills increased, their concerns about classroom management were observed to dissipate. Kilic (2010) revealed that scores in the pre and post-tests showed that learner-centered micro teaching model, (LCMT) model had a progress in teacher candidates' teaching behaviors on subject area, planning, teaching process, classroom management, communication, and evaluation.

While reviewing of literature, the investigator found that various studies have been carried out in this area like "Impact of Micro-teaching Skills on the Performance of Primary School Teachers", "Learner Centered Micro-teaching in Teacher Education", "Using Micro-teaching to Enhance Teacher Efficacy in Pre-service Teachers", "A Micro-teaching Application on a Teaching Practice Course", "A Study of Teacher Effectiveness on Developing the Teaching Skills and Competencies through Teaching", "Evolving a Strategy of Developing Teaching Skills in Secondary School Teachers", "Micro-teaching, an Efficient Technique for Learning Effective Teaching" and the like, but no study has been conducted on the problem in Jammu and Kashmir therefore the present investigator made a humble attempt to study, "**Impact of Microteaching on the use of core teaching Teaching Skills**". The investigator after making in- depth study of different surveys, journals and other research inputs found that there is tremendous need to make systematic study on this problem. Thus, in the light of above research gap the investigator justifies, conducting and pursuing serious research study in this direction.

Objective

The study was carried out with the under mentioned objective:

- To study the impact of training in Microteaching technique on the competence to use the skills of set-induction, explaining, probing questions, stimulus variation and reinforcement by teacher trainees.

Hypothesis

In the light of above objective, the following hypothesis was formulated for the present study:

- The teacher trainees shall differ significantly in their practice and use of major skills of teaching in pre and post-test levels.

Design of the Study

The study was conducted by using one-group Pretest-Posttest experimental design. The experiments were conducted with the help of following steps concerning both theoretical aspect and practical skills of microteaching

Steps: The following steps were taken for conducting the experiments:

Step 1: Administered pre-test when the subjects had not received any treatment regarding Microteaching and their competence in using different components of major skills of microteaching.

Step 2: Introduced independent variable in the form of demonstration and training in practical skills of micro-teaching.

Step 4: The Post-test has been conducted at the end of training in microteaching skills.

Methodology and Procedure

The purpose of the present study was to study the impact of training in microteaching on the use of five main skills of teaching. For this purpose experimental method of research has been used.

Sample

The sample for the study consisted of 120 teacher trainees selected through random sampling technique from Department of Education, University of Kashmir Srinagar enrolled for the session 2012-2013.

The breakup of the Sample of Teacher Trainees is as under:

Total Sample	Sample Taken From
120 Teacher Trainees	Department of Education, University of Kashmir.

Tools

The investigator after screening a number of available tests and tools selected the following tools to collect the required data:

- Observation Schedule cum Rating Scales for the Skills of Set-induction, Probing Questioning, Reinforcement, Stimulus Variation and Explaining, by Nadeem. N. A.

Statistical Analysis

For the present study the collected data was analyzed by using Mean S.D and t- test.

Analysis and Interpretation

Table 1.1: Showing significance of mean difference on the skill of set induction in teacher trainees in pre-test and post-test scores.

TEST	N	MEAN	S.D.	t. value	Level of Significance
PRE-TEST	120	5.27	2.47	59.82	Significant at 0.01 Level
POST-TEST	120	22.70	2.02		

The perusal of the above table shows the mean difference between pre-test and post-test scores of the teacher trainees on the skill of set induction. The table reflects that there is a significant difference between pre-test and post-test scores and the calculated value exceeds the table value and the difference was found to be significant at 0.01 level which reveals that the teacher trainees have shown remarkable improvement in using various components of the skill after practicing the skill in microteaching.

Table 1.2: Showing significance of mean difference on the skill of stimulus variation in the teacher trainees in pre-test and post-test scores.

TEST	N	MEAN	S.D.	t. value	Level of Significance
PRE-TEST	120	7.71	2.22	84.73	Significant at 0.01 Level
POST-TEST	120	33.41	2.48		

The perusal of the above table shows the mean difference between pre-test and post-test scores of the teacher trainees on skill of stimulus variation. The table reflects that there is a significant difference between pretest and post test scores and the difference was found to be significant at 0.01 level which reveals that the teacher trainees have shown great expertise in using the skill after completing the skill acquisition phase of microteaching.

Table 1.3: Showing significance of mean difference on the skill of probing questions in the teacher trainees in pre-test and post-test scores.

TEST	N	MEAN	S.D.	t.Value	Level of Significance
PRE-TEST	120	2.81	1.95	69.30	Significant at 0.01 Level
POST-TEST	120	23.60	2.64		

The table reflects that there is a significant difference between pre-test and post-test scores among teacher trainees and the calculated value which is 69.30 exceeds the table value (2.58) and the difference was found to be significant at 0.01 level which reveals that the training in microteaching has helped the teacher trainees to get command on the skill of probing questions.

Table 1.4: Showing significance of mean difference on the skill of Reinforcement in the teacher trainees in pre-test and post-test scores.

TEST	N	MEAN	S.D.	t. value	Level of Significance
PRE-TEST	120	6.06	2.53	49.77	Significant at 0.01 Level
POST-TEST	120	23.57	2.91		

The table reflects that there is a significant difference between pretest and post test scores and the difference was found to be significant at 0.01 level which reveals that the teacher trainees have shown great expertise in using the skill after they completed the skill acquisition phase of microteaching.

Table 1.5: Showing significance of mean difference on the skill of Explaining in the teacher trainees in pre-test and post-test scores.

TEST	N	MEAN	S.D.	t. value	Level of Significance
PRE-TEST	120	4.07	1.94	63.71	Significant at 0.01 Level
POST-TEST	120	23.37	2.69		

The table reflects that there is a significant difference between pretest and post test scores and the difference was found to be significant at 0.01 level which reveals that the teacher trainees after practicing the skill in teach and re-teaching sessions of microteaching have shown great expertise in using all the components of the skill. Thus, the objective of the study that is, “*to study the impact of training in microteaching on the competence to use the skills of set-induction, skill of stimulus variation, skill of probing questions, skill of reinforcement and skill of explaining by the teacher trainees*” has been accomplished.

In view of the above mentioned results the hypothesis that “*the teacher trainees shall significantly differ in their practice and use of major skills of teaching in actual classroom situation*” is accepted.

Major Findings

Various conclusions have been drawn from the inferences which emanated from the intensive investigation of the present study, these are listed as under:

- Training in microteaching will develop the specific desirable teaching behaviours among the teacher trainees. Furthermore, it is confirmed that after microteaching application students know better how to start the course and their worries stemming from not being able to answer the questions of the students, and the fear of lecturing in front of the students decreased.
- Training in microteaching has helped the teacher trainees to score high on observation cum rating scales measuring the extent of the use of different components of these selected teaching skills.
- Training in microteaching is having positive impact on overall teaching behavior of teacher trainees.
- Training in microteaching has helped the teacher trainees to face actual classroom situations with full confidence.
- Training in microteaching helped teacher trainees to learn how to control their feelings, adjust their voices, manage smooth transitions between the activities, evaluate student questions and give feedbacks and adopt appropriate methods and approaches according to student’s needs and expectations.

Suggestions

On the basis of field experiences the following suggestions have been formed

- Strong steps should be taken to introduce microteaching programme and other such innovations in teacher education programmes in letter and spirit.
- By means of microteaching applications professional skills, proficiency of field, pedagogical proficiency and in-class or out of class proficiency, learning and individual proficiency can be gained.
- Modern technology like video recording, mobile phone recording, over head projectors and multimedia projectors should be used for greater success of this program.
- Microteaching should always be introduced before sending teacher trainees to actual classrooms for conducting practice of teaching.

- The teacher educators must remain cautious especially at the time when teacher trainees are made to learn the integration of teaching skills and at the time of rating their performance.
- Ways are to be determined to modify the traditional method of providing instruction and training in microteaching to the student teachers so that Cognitive-Based-Competence possessed by them can be effectively utilized to develop Performance-Based-Competence.

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