Research Papers

Modification of Teaching Behaviour through Micro Teaching

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ABSTRACT

Teacher education programme in India requires too much of improvement. Microteaching comes as remedy to the difficulties of teacher education programme. Present study aimed to study the modification of teaching behaviour of pupil teachers through micro-teaching approach. The sample consisted of 60 pupil teachers at teachers training colleges of Gorakhpur University. The testing of hypothesis is done by comparing the scores of the two group using the "t" test. Result indicated there is remarkable change in teaching behaviours of teachers through microteaching programme.

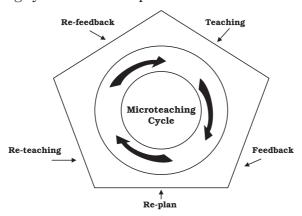
To improve the quality and efficiency of teaching is an important objective of Teacher Education. This objective is not properly realised in our country due to so many factors. Absence of adequate feedback, short coming in the way of modifying as well as improving teacher behaviour. A number of techniques have been developed and introduced during the last decade for providing feed back and modification of teachers' behaviour. These techniques are simulated social skill training, Team-Teaching, Flander's interaction analysis, personalised system of instruction etc. These are the innovations in Teachers education. Promotion of new idea or practice in education and teaching is known as innovation. Some other techniques are T-group, educational games etc., have been tried out innovations in teachers' education. Micro Teaching is one of these techniques.

Concept of Micro-Teaching – Microteaching is a new design for teacher education which provides trainees with information about their performance immediately after completion of their lesson. It is

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a laboratory technique of teaching in which the complexities of normal classroom teaching are simplified. It is scaled down with respect to teaching complexity also. Teaching is considered to be made up of a number of teaching skill and each teaching skill is a set of related teaching behaviours which tend to facilitate pupil's learning. Such skills can be defined, practiced, controlled, observed and evaluated. The student teacher (Micro-teacher) gives a short lesson based on a single teaching skill (Micro-lesson). This lesson is recorded, observed and followed by immediate feedback by the observer. This lesson is re-planned in the light of the feedback received and re-taught generally to a different set of pupils. This is followed by re-feedback from the same observers. This completes one microteaching cycle. It can be represented as:



Core Teaching Skills: NCERT in its publication core teaching skills (1982) has laid stress 19th teaching skills but it is not possible to train all the pupil teachers in all these skills in any training programme because of the constraint of time. Therefore a set of teaching skills which cut across the subject has been identified. They can be very useful for every teacher. The set of these skills are known as core teaching skills.

- 1. Introducing a Lesson 4. Reinforcement
- 2. Questioning
 - 5. Increasing Pupil's Participation
- 3. Probing Question 6. Experimentation

The Department of Teacher Education in the National Council of Educational Research and Training (NCERT) designed a project to study the effectiveness of micro-teaching in 1975 in collaboration with the center of Advanced Study in Education (CASE), Baroda. Research and training programme, for teacher educators were also initiated in collaboration with the department of education, university of Indore in 1979. Instructional material on micro teaching developed by Passi (1976), Singh (1976, 1979) and Jangira (1978) was used for the training of teacher educators.

The term modification of teaching or teacher behaviour refers to the attempts or measures adopted for bringing desirable improvement or modification in the existing entry behaviour of a teacher for helping them to attain the desired terminal behaviour in order to exercise his professional duties as effectively as possible. It can be properly modified through the adoption of a variety of techniques including the most commonly used techniques such as micro teaching.

N.C.T.E. has given equal weight to micro teaching. Parallel to macro teaching seeing its utility and importance in the present curriculum of B.Ed. probably essential changes can be brought in the teaching behaviour of pupil teacher by following the practice of microteaching. Teaching of pupil teacher is affected with micro teaching to a large extent. The gist of its research paper is to know how much micro teaching influences the teaching behaviour of pupil teacher.

Objectives: The objectives of the study are as follows:

- 1. To study the modification of teaching behaviour of pupil teachers through micro-teaching approach.
- 2. To study the modification of teaching behaviour of pupil teacher through microteaching approach between first teaching session and fifth teaching session (on evaluation sheet) with respect to core teaching skills.

Hypothesis: The following null hypothesis are formulated:

1. There is no significant difference in teaching behaviour (on evaluation sheet) of pupil-teachers of first teaching session and fifth teaching session with respect to core teaching skills (Introducing a lesson, Questioning, Probing Question, Reinforcement, Increasing Pupils Participation and Experimentation)

RESEARCH DESIGN

Single group pre-test and post test type design selected for the study. The mean scores of first and final tests are compared to ascertain what difference, if any, the exposure to X (teaching through Microteaching Cycle) has made. An appropriate statistical technique has been used to ascertain whether the difference is statistically

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significant or not. Line paradigm for designed single groups is given below:

Paradigm for the design: Single group Design

Pre-test	Independent Variable	Post-test
T ₁ Mean of the first Observation	X—————————————————————————————————————	$\mathrm{T_2}$ Mean of the final Observation

Sample: A sample of 60 pupil-teachers have been selected randomly out of 150 students studied at Teachers-training colleges of Gorakhpur University. These 60 pupil-teachers are divided into six groups as is evident from the Table-1.

Table 1 Structure of the Sample

S.No.	Microteaching Skill	Group	Pupil-Teacher
1.	Introducing a lesson	First	10
2.	Questioning	Second	10
3.	Probing question	Third	10
4.	Reinforcement	Fourth	10
5.	Increasing students participation	Fifth	10
6.	Experimentation	Sixth	10
	Total	6	60

Tool

Evaluation sheets for core teaching skills

For observing the above six core teaching skills rating type evaluation proforma is used. This is developed at the **Centre of Advanced Study in Education**, **Baroda**. This rating type evaluation proforma is used by expert after the lesson

Procedure: The five B.Ed. trainees and one investigator for one skill have been observed through this procedure. The investigator acts as supervisor sits in the rear of the classroom. The trainee starts teaching his micro-lesson. When he has taught his lesson for six minutes, his teaching behaviour related to the various aspects of the skill was carefully examined by rating type observations performa. The investigetor gives five attempts to B.Ed. trainee for modification of teaching behaviour.

Statistical Technique: In the present study the data were given the following statistical treatment:

- 1. Mean of difference (M_D)
- 2. Standard deviation of difference (S.D_D)
- 3. Standard error of difference (S,E M_D)
- 4. 'T' test

Analysis and Interpretation: The skill wise study of the pupil teachers has been presented in table no. 2. Each skill has equal size of sample i.e. 10 pupil teachers in each skill. Core teaching skills have been presented for the purpose of the study.

 $SD_{\!\scriptscriptstyle D}$ S.N. M_D SEM_{D} Skills No. of pupil t-value teachers 9.38** 1 Introducing a lesson 10 26 6.79 2.77 2 Questioning 10 17.75 6.03 2.13 8.33* 24 3.03 3 Probing Question 10 6.78 7.92* 4 Reinforcement 10 12 16.22 5.41 2.21 23 29.35 11.98 1.92 5 1.0 Increasing pupil's 25 35.46* 6 Experimentation 10 1.41 .705 participation

Table 2 Skill-wise't' - values

The first skill is introducing the lesson for which the means of difference, standard deviation of difference and standard error of mean of difference are 26, 6.79 and 2.77 respectively. After computation of the value of 't' comes out 9.38 which is significant at both the levels i.e. 0.05 level and 0.01 level after getting feedback. It means that there is a significant change in the behaviour of teachers towards this skill due to the awareness of pupil teachers towards the introducing of the lesson.

The second skill presented on the above table is questioning. It also includes 10 teachers. Here mean of difference, standard deviation of difference and standard error of mean of difference are 17.75, 6.03 and 2.13 respectively. The computed 't' value comes out 8.33 which is significant at both the level i.e. 0.05 level and 0.01 level after getting feedback. It means that there is significant change in the behaviour of teachers towards this skill due to the awareness of pupil teachers towards the question and questioning technique.

^{*} Significant at 0.05 level

^{**} Significant at 0.01 level

The third skill is probing questioning. For this skill the value of mean of difference, the standard deviation of difference are 24, 6.78, 3.03 and 't' value comes out 7.42. this value of 't' is significant at both the levels i.e. 0.05 level and 0.01 level after getting feedback. It means that there is a significant change in the behaviour of teachers towards this skill due to the awareness of pupil teachers towards the probing questioning technique.

The fourth skill is reinforcement. For this skill the value of mean of difference, standard deviation of difference, standard error of mean of difference for these teachers are 12, 16.22 and 5.41 and finally 't' value comes 2.21 which is not significant at any level i.e. 0.05 level and 0.01 level. It means that there is no remarkable change have taken place in the behaviour of teachers on the skill of reinforcement. The reason behind it is that the pupil teachers are trained in such a manner that they know quite well about the skill reinforcement. So the change on this skill, after feedback does not come significant.

The fifth skill is increasing pupil's participation. For this skill the value of mean of difference, the standard deviation of difference and standard error of mean of difference are 23, 29.35 and 11.98 respectively. The computed 't' value is 1.92 which is not significant at any level i.e. 0.05 level and 0.01 level. This shows that teachers are not aware towards the skill of increasing pupil's participation before starting the microteaching cycle as well as after completion of microteaching cycle.

The sixth and last skill is skill of experimentation which covers the behaviour of 10 teachers. The values of mean of difference, standard deviation of difference, standard error of mean of difference for these teachers are 25, 1.41, .705. After calculating the value of 't' it comes out 35.46 which is very high and significant at 0.05 level as well as 0.01 level. It also concludes that there is a very clear cut and notable change has taken place in the behaviour of teachers on the skill. The main reason of this major change is unawareness of use of experimentation before the practice teaching but after starting practice teaching each and every pupil teacher has used very commonly skill of experimentation. So after getting feedback from the investigator who is also a supervisor, the measurable changes have taken place on this skill.

FINDINGS

1. There is significant difference for the skill of introducing a lesson of pupil teachers between first teach session and fifth teach session.

- 2. There is significant difference for the skill of questioning of pupil teachers between first teach session and fifth teach session.
- 3. There is significant difference for the skill of probing question of pupil teachers between first teach session and fifth teach session.
- 4. There is no significant difference for the skill of re-inforcement of pupil teachers between first teach session and fifth teach session.
- 5. There is no significant difference for the skill of increasing pupils participation of pupil teachers between first teach session and fifth teach session.
- 6. There is significant difference for the skill of experimentation of pupil teachers between first teach session and fifth teach session.

Conclusion

The teaching behaviour of the pupil teacher has been remarkable changed after providing the feedback which has been provided by the supervisor. It provides trainees with proper information about their perforance immediately after completion of this lesson. Reported by Kaur and Meenakshi (2007) who found that significant impact of teacher training programe on B.Ed. students attitude towards teaching and personality. Jain (2008) study reveal that tribal B.Ed. trainees who gone through the training programmes for creativity development have shown significantly higher fluency, flexibility and total creativity in comparison to untrained group.

EDUCATIONAL I MPLICATION

Teacher-education programme in India requires too much of improvement. Micro-teaching comes as a remedy to the difficulties of teacher education programme. In this method an effective feedback provided for modification of behaviour. The knowledge and practice teaching skill viz. introduction, questioning, probing, reinforcement, interaction and experimentation are developed through microteaching at analysed the performance of pupils by use of videotape. It is economical and takes less time.

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