AN EXPERIMENTAL STUDY TO FIND OUT THE EFFECTIVENESS OF SOME MICRO TEACHING SKILLS IN TEACHING GEOGRAPHY AT THE SECONDARY LEVEL

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ABSTRACT

The study is concerned with the finding of effectiveness of some Micro teaching skills of teaching Geography in secondary school. Micro-teaching is a teaching situation which is scaled down in terms of time and number of students. Based on the different skills of micro teaching, focused critical analysis of teaching situations supported by theoretical understanding is seen as the prerequisite for developing sound practice in teaching. This study definitely indicates the great potential of microteaching in assisting geography teacher-trainees with the implementation of learner-centered instruction in classrooms. The focused feedback and encouragement, combined with the examples set by fellow-students, helped to change trainees' perceptions on the value of learner-centered instruction. It also gave students the opportunity to make thoughtful judgments on their own and fellow-students' lesson presentations and help them to develop their teaching abilities. The result of the study further revealed that significant differences had taken place in the scores of the students who were taught geography by using several micro-teaching skills by the trainee teachers. The findings of the study further claimed that micro-teaching technique brings positive results in terms of providing student teachers with classroom management skills, which further provide positive results in the achievement level of the students.

Keywords: Micro teaching skills, teaching situations, learner-centered instruction, trainee teachers.

INTRODUCTION

We know that the economic prosperity and good quality of any nation depends upon the development of human resources of that nation. The significant fact in the development of manpower resource refers to the competencies and the level on which these competencies are imparted. For this purpose we need highly competent teachers for imparting these competencies. Microteaching helps teachers improve both content and methods of teaching and develop specific teaching skills such as questioning, the use of examples and simple

artifacts to make lessons more interesting, effective reinforcement techniques, and introducing and closing lessons effectively. Immediate, focused feedback and encouragement, combined with the opportunity to practice the suggested improvements in the same training session, are the foundations of the microteaching protocol.

THE PROBLEM

The study is concerned with the finding of effectiveness of some micro teaching skills of teaching Geography in secondary school.

THE PURPOSE OF THE STUDY

The purpose of the study was to find out the effectiveness of some Micro-teaching skills in teaching Geography at Secondary level. This can be categorically stated as :

1. To investigate the achievement level of the students in geography when they were taught the subject by using some micro teaching skills;
2. To draw a comparison of the achievement level of the students in geography when a group of students were taught by using micro teaching skills and another group by using traditional method;
3. To develop teaching skills and competencies in teaching geography among secondary school teacher, which further enable to promote the performance level of the students in geography at secondary level.
4. To work out if exposure to the use of Micro-Teaching skills are effective in teaching-learning procedure and influences the level of qualitative learning of Geography.
5. To find out whether micro teaching skills really promote learning of geography among pupils.

OBJECTIVES OF THE STUDY

The objectives of the study are:

1. To determine the effectiveness of some Micro-Teaching skills in teaching Geography at secondary level.
2. To create the ideal way to really master a teaching skill and to execute it in practice under controlled circumstances.
3. To gain self-confidence in using the particular teaching skill before he is confronted with the management of a large number of pupils.

STATEMENT OF HYPOTHESIS

1. The micro teaching skills would be effective in teaching geography at secondary Level.
2. The different microteaching skills co-ordinate with each other in an integrated manner would be effective with response to the performance of the students in geography.

3. The micro teaching skills comparatively would be more effective in teaching geography than traditional method of teaching at secondary level.
4. The achievement level of the students would be much more when they would be taught geography through different micro teaching skills in comparison with the achievement level of those students who would be taught geography using traditional method of teaching.

PROCEDURE OF THE STUDY

This particular study had two main parts.

Part A: Developmental Phase

In this particular stage developing of some specific micro teaching skills among trainee teachers was done in the following manner:

i) Skill based micro teaching: In skill based micro teaching the stress is given on seven minutes skill based micro teaching. Four skill based model lesson plans and observation schedule and feedback pattern for each micro lesson has been provided.

ii) Lesson plans for actual practice lesson: Four skill based lesson plans, their formats and peculiarities depending on the type of skill have been provided for actual practice lessons of Geography.

iii) Peer Teaching: Four Prospective trainee teachers were chosen and were trained up to conduct this particular study. These trainee teachers were asked to do a 7 minute microteaching on Geography on topic of their own choice using Skill of Introducing a lesson, Skill of Questioning, Skill of Explanation and Skill of Closure.

iv) Peer Evaluation: After all four prospective trainee teachers had taught their lessons, first, his/ her peers had done an evaluation and second, the teacher educator had evaluated the prospective teacher's lesson. Feedback from peer observers and teacher educator had provide the student teacher with information on performance of his/her teaching following certain specific skills of micro teaching.

v) Re-teaching: Re-teaching helps in this respect to improve the performance level of each and every trainee teacher on the basis of evaluation provided to them by the peer observer and the teacher educator. Re-teaching given by each of the trainee teacher were evaluated by the peer observer and the teacher educator.

vi) Re-feedback: The skill based observation schedules and hints for the feedback given during peer-teaching to four trainee teachers were further used for giving re-feedback for the re-teaching that four trainee teachers had presented.

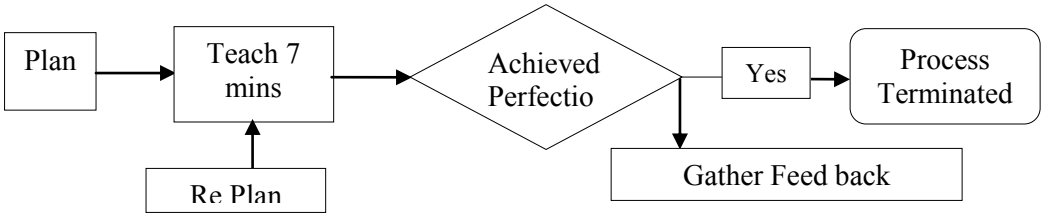

Fig 1. Phases of Micro teaching

Table 1. Rating Given To "Teacher A" By Peer Group & Teacher Educator

	TEACHER A											
SKILLS	TEACHING						RE-TEACHING 1					
	EV 1	EV 2	EV 3	EV 4	EV 5	AVG	EV 1	EV 2	EV 3	EV 4	EV 5	AVG
SKILL 1	18	18	17	18	17	17.6	24	24	23	25	25	24.2
SKILL 2	18	18	16	17	18	17.4	24	23	23	23	25	23.6
SKILL 3	17	18	17	18	16	17.2	24	24	23	25	24	24.0
SKILL 4	18	17	18	18	17	17.6	24	25	25	23	23	24.0
	Mean Score of Teaching – 17.45						**Mean Score of Re-teaching– 23.95**					

Table 2. Rating Given To "Teacher B" By Peer Group & Teacher Educator

	TEACHER B											
SKILLS	TEACHING						RE-TEACHING 1					
	EV 1	EV 2	EV 3	EV 4	EV 5	AVG	EV 1	EV 2	EV 3	EV 4	EV 5	AVG
SKILL 1	17	17	16	17	16	16.6	23	21	24	24	22	22.8
SKILL 2	17	18	16	18	16	17.0	23	22	21	21	23	22.0
SKILL 3	17	17	17	16	17	16.8	22	21	21	22	23	21.8
SKILL 4	18	18	16	16	17	17.0	22	24	24	22	23	23.0
	Mean Score of Teaching – 16.85						**Mean Score of Re-teaching – 22.4**					

Table 3. Rating Given To "Teacher C" By Peer Group & Teacher Educator

	TEACHER C											
SKILLS	TEACHING						RE-TEACHING 1					
	EV 1	EV 2	EV 3	EV 4	EV 5	AVG	EV 1	EV 2	EV 3	EV 4	EV 5	AVG
SKILL 1	18	18	18	17	18	17.8	24	24	24	24	25	24.2
SKILL 2	17	18	19	17	18	17.8	23	24	24	23	24	23.6
SKILL 3	17	17	18	18	18	17.6	25	25	25	25	24	24.8
SKILL 4	19	17	18	17	18	17.8	24	23	24	24	24	23.8
	Mean Score of Teaching– 17.75						**Mean Score of Re-teaching– 24.1**					

Table 4. Rating Given To "Teacher D" By Peer Group & Teacher Educator

	TEACHER D											
SKILLS	TEACHING						RE-TEACHING 1					
	EV 1	EV 2	EV 3	EV 4	EV 5	AVG	EV 1	EV 2	EV 3	EV 4	EV 5	AVG
SKILL 1	16	16	15	16	15	15.6	16	15	16	15	16	15.6
SKILL 2	15	15	15	14	16	15.0	15	15	15	15	14	14.8
SKILL 3	16	16	16	16	15	15.8	16	16	16	16	16	16.0
SKILL 4	14	14	14	15	15	14.4	15	14	15	14	13	14.2
	Mean Score of Teaching– 15.2						**Mean Score of Re-teaching– 15.15**					

	TEACHER D					
SKILLS	RE-TEACHING 2					
	EV 1	EV 2	EV 3	EV 4	EV 5	AVG
SKILL 1	18	18	19	19	19	18.6
SKILL 2	19	18	18	18	19	18.4
SKILL 3	19	19	19	17	18	18.4
SKILL 4	18	18	18	18	17	17.8
	Mean Score of Re-teaching– 18.3					

Note : In Table 1, 2, 3 & 4 'Skill 1' stands for "Skill of Introducing a lesson", 'Skill 2' stands for "Skill of Questioning", 'Skill 3' stands for "Skill of Explaining", 'Skill 4' stands for "Skill of Closure";'EV' stands for "Evaluator";'AVG' stands for "Average"**.**

Rank of Teachers in Descending Order

(On the basis of Rating by Peer Group & Teacher Educator on 4 microteaching skills)

Teacher C (Mean Score 24.1) ➔ Rank 1

Teacher A (Mean Score 23.95) ➔ Rank 2

Teacher B (Mean Score 22.4) ➔ Rank 3

Teacher D (Mean Score 18.3) ➔ Rank 4

Table 5. Rating Given To "Teacher A" By Peer Group & Teacher Educator For Integration Of Skills

TEACHER A											
TEACHING						RE-TEACHING 1					
EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score	EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score
18	18	17	17	17	**17.4**	23	24	24	25	24	**24**

Table 6. Rating Given To "Teacher B" By Peer Group & Teacher Educator for Integration of Skills

TEACHER B											
TEACHING						RE-TEACHING 1					
EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score	EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score
17	17	17	17	17	**17**	22	23	23	23	23	**22.8**

Table 7. Rating Given To "Teacher C" By Peer Group & Teacher Educator For Integration Of Skills

TEACHER C											
TEACHING						RE-TEACHING 1					
EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score	EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score
18	18	18	19	18	**18.2**	23	24	25	25	25	**24.4**

Table 8. Rating Given To "Teacher D" By Peer Group & Teacher Educator For Integration Of Skills

TEACHER D											
TEACHING						RE-TEACHING 1					
EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score	EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score
16	17	16	17	17	**16.6**	16	16	16	17	17	**16.4**

TEACHER D					
RE-TEACHING 2					
EV 1	EV 2	EV 3	EV 4	EV 5	Mean Score
20	21	21	20	21	**20.6**

Note : 'EV' stands for "Evaluator"

Table 9. Rank of Teachers In Descending Order

(On the basis of Rating by Peer Group & Teacher Educator on Integration of skills)

TEACHER	MEAN SCORE	RANK
TEACHER C	24.4	1
TEACHER A	24.0	2
TEACHER B	22.8	3
TEACHER D	20.6	4

↓

Identification of the best teacher - TEACHER C

Part B: Experimental Phase

In this part of the study the trainee teacher whose performance was best in the developmental stage of micro teaching skill was chosen to teach the experimental group of students, where as the controlled group was taught with traditional method of teaching.

i) Pre- testing: Forty students of class- VIII of Sakrail Abhoy Charan High School were chosen for the study. In order to do the pre-test, an achievement test of 50 marks of these forty students was taken on a topic of Geography which they have in the syllabus of class-VIII. Then these 40 students were divided into two groups: Group A (Experimental Group)

& Group B (Controlled Group). Each group consisted of 20 students of equal merit which were determined on the basis of Pre-test.

ii) Post- testing: At this step another achievement test was taken on Group A (Experimental Group) & Group B (Controlled Group). This post-test was mainly taken to find the result of the experiment. With the help of this post-test the researcher would be able to come into the conclusion how Geography can be effectively taught with the help of micro teaching skills at secondary level.

ANALYSIS OF THE DATA

In order to see whether there were significant differences between the results of the post-test of the experimental group and the controlled group, "t" test had been used. In order to do this experimental study, first of all a pre-test was taken on the sample of forty students. The total score and the mean score of Group A in the pre-test were 709 and 35.45 respectively. On the other hand, the total score and the mean score of Group B in the pre-test were 705 and 35.25 respectively. Hence, by considering the mean score of pre-test of Group A (M1), which is 35.45 and the mean score of Group B (M2), which is 35.25, we can conclude that both Group A and Group B is equivalent.

Thereby among both the groups, Group A was chosen for giving treatment and Group B, on the other hand was taught geography by using traditional method. After the completion of teaching a unit of Geography to both Group A and B, a post-test was conducted on both the group of sample on the above mentioned topic. The total score and the mean score of Group A in the post-test were 816 and 40.8 respectively. On the other hand, the total score and the mean score of Group B in the post-test were 690 and 34.5 respectively. Hence, by considering the mean score of post-test of Group A (m1), which is 40.8 and the mean score of Group B (m2), which is 34.5, a "t" test was conducted. The value of "t" was found to be 5.18, which was significant at 0.01 level.

Table 10: Comparative Mean Scores Of The Of The Achievement Test Of Geography Of The Post-Test Of Group A (Experimental Group) & Group B (Controlled Group)

Group	Mean Score	Variance	Size of Sample	"t" test
A	40.8	17.28	20	5.18
B	34.5	12.35	20	

Note: Value of "t" = 5.18; Significant at the 0.01 level

RESULT OF THE STUDY

The purpose of this study is to investigate whether any significant changes have occurred in the scores of the student after they were taught geography by using some micro teaching skills. For this purpose, the "t" test results based on the results of the post test applications on all the sample of forty students of both Group A and Group B was considered as presented in Table 14. A significant difference is observed in the mean scores of the students of Group A after the post-test ($t= 5.18$, $p>0.01$). The result of the study reveals that significant differences had taken place in the scores of the students who were taught geography by using several micro-teaching skills by the trainee teachers.

CONCLUSION

Based on the results of this study, it can be concluded that effective integration of micro teaching skills enhances the performance of the students in comparison with traditional method of teaching. This study definitely indicates the great potential of microteaching in assisting geography teacher-trainees with the implementation of learner-centered instruction in classrooms. The result of the study revealed that significant differences had taken place in the scores of the students who were taught geography by using several micro-teaching skills by the trainee teachers. The study also revealed the fact that micro teaching applications gave students positive learning experiences and students also got more interests in learning the subject and they were much more motivated to learn the subject. Hence they had shown progressive improvement in their performance level in the achievement test of geography.

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