

Research Paper



MICROTEACHING: A COMPARATIVE STUDY OF SKILL DEVELOPMENT OF PUPIL TEACHERS IN RELATION TO THEIR GENDER

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ABSTRACT

Teacher education refers to the policies and procedures designed to equip pupil teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in transfer of learning. The quality of education is directly related to the quality of the teachers. Thus, teacher education is a multidimensional activity that encompasses various aspects of a teacher's life and work. Teaching is a social act of influencing pupils by the act of the teacher that leads to learning. Microteaching can be used for recording the class interaction and the behaviours of the pupil teachers vividly and accurately that leads to the development of a systematic and accurate method of giving feedback. In order to achieve educational effectiveness it is important for the teachers to adopt an effective teaching method and various teaching skill that suits the individual learning style. A comparative study was carried out to know measure of skill development among male and female pupil teachers. It was an experimental research which shows the degree of skill development among pupil teachers. The findings of the study show that the male pupil teachers were found to be better in the teaching skill, "Introducing the Lesson" in comparison to their female counterpart. Female pupil teachers were found to be better in Skill of probing questioning. Both the group of pupil teachers indicated equal performance in the teaching skill, "Skill of illustrating with examples". Male pupil teachers were found to be better in the teaching skill, "Skill of stimulus variation" and "Pupil Reinforcement". Thus, it is concluded that the male pupil teachers were more skilled in pupil reinforcement in comparison to their female counterpart.

KEY WORDS: Microteaching, Teaching, Teaching skills, faculty members

INTRODUCTION

Education is a dynamic force which is controlled the teachers. The teacher has a central position in education system who contributes significantly in character building of the individuals. A teacher plays key role in educating the citizen, hence the future of the nation depends, to a very large extent upon the quality of the teachers. No doubt quality of education is closely related to the improvement of educational objectives, policies programs, curricula, facilities, equipment and administrative structure but it is only the teacher who puts life into this skeleton. In the words of Ryan (1994) If competent teacher can be obtained, likelihood of attaining desirable educational outcomes is substantial on the other hand, although schools may have excellent material resources in the form of equipment, buildings and textbooks and although curricula may be approximately adopted to community requirements if the teacher is misfit or indifferent to their responsibilities, the whole program is likely to be ineffective and largely wasted. Teaching is an art and like all other arts it can be learned with varying degrees of proficiency. Some

teachers are born teachers and they can be good teachers without learning the art of teaching. Just as some singers have brilliant musical careers without studying voice culture. On the other hand, there are individuals who are naturally so handicapped for a teaching career that instructions in the teaching art could do as little for them. Hence like every artist a teacher requires sufficient amount of practical education in his/her future job.

MICROTEACHING

The idea of Microteaching originated for the first time at Stanford University in USA, when an Experimental Project on the identification of teaching skills was in progress under the guidance and supervision of the faculty members (Bush, Allen, McDonald Acheson and many others). In 1961, at Stanford University a doctoral candidate, Keith Acheson, discovered a newspaper article about a German Scientist who had invented a portable videotape recorder. The name of Microteaching was coined for this method of developing teaching skills in 1963. Since then this technique of teacher education has been widely used in almost all Colleges and Universities of Europe and Asia.



Micro-teaching introduced to India since the late 1980s, in normal colleges of education in teacher professional courses. Micro-Teaching was introduced in India in 1967, with the humble attempt made by D.D. Tiwari of Government Central Pedagogical Institute, Allahabad. In 1970, G.B. Shaw experimented with Micro-Teaching at M.S. University, Baroda. Then the Technical Teachers Education Institute, Madras introduced Micro-Teaching to train the technical teachers. Basically microteaching aims at modifying teaching behaviour provides flexibility, location, organization and divergent ways of thinking. Passi (1976) also known as the "Father of Microteaching" through his intensive application determined the domains of microteaching. He found that microteaching was practiced in terms of definable, observable, measureable and controllable teaching skills.

Microteaching is technically a scaled-down teaching which helps teachers to improve both contents and methods of teaching and develop specific teaching skills such as probing questions, questioning, explanation, illustration and stimulus variation etc. Immediate, focused feedback and encouragement is provided during the course of microteaching. Microteaching reduces the complexities of normal classroom teaching. Micro-teaching helps the pupil teachers to master the teaching skills. It requires the pupil teachers

1. to teach a single concept of content
2. using a specified teaching skill
3. for a short time
4. to a very small member of pupils

Thus, the pupil teachers practice the teaching skill in terms of definable, observable, measurable and controllable form with repeated cycles till they attain mastery in a skill.

CHARACTERISTICS OF MICRO-TEACHING

A few characteristics of Micro-Teaching are as under:

1. It is a teacher education technique and not a method of classroom instruction.
2. It is micro in the sense that it scales down the complexities of real teaching.
3. In microteaching, out of contents, a single concept is taken up at a time.
4. Only one skill is practiced at a time.
5. The size of the class is reduced and thus the number of students is just 5 to 7.
6. Duration of each micro lesson is 5 to 7 minutes.
7. Feedback is provided immediately after the completion of the lesson.
8. The use of Video Tape and Closed Circuit Television makes the observation very objective.
9. It is highly individualized education device.
10. There is a high degree of control in practicing a skill when this technique is used.
11. Micro-Teaching is an analytic approach to education.

COMPONENTS OF MICRO-TEACHING

The components of Micro-Teaching are:

- i. A teacher,
- ii. The pupils (usually 4 or 5),
- iii. A brief lesson,
- iv. The objectives of the specific Micro-Teaching occasion,
- v. Feedback by the supervisor, or by using audio tape recordings, video tape recordings and closed circuit television.

MICROTEACHING CYCLE

There are six steps generally involved in Microteaching cycle as given below;

- i. **Plan:** This involves the selection of the topic and related content of such a nature in which the use of components of the skill under practice may be made easily and conveniently. The activities are planned in such a logical sequence where maximum applications of the components of a skill are possible.
- ii. **Teach:** This involves the attempts of the pupil teacher to use the components of the skill in suitable situations coming up in the process of teaching-learning as per his/her planning of activities. If the situation is different the teacher should modify his/her behaviour as per the demand of the situation in the class.
- iii. **Feedback:** This term refers to giving information to the pupil teacher about his/her performance. The information includes the points of strength as well as weakness relating to his/her performance. This helps the pupil teacher to improve upon his/her performance in the desired direction.
- iv. **Re-plan:** The pupil teacher replan his/her lesson incorporating the points of strength and removing the points weakness during teaching in the previous attempt.
- v. **Re-teach:** This involves teaching to the same group of pupils if the topic is changed or to a different group of pupils if the topic is the same. This is done to remove boredom or monotony of the pupil.
- vi. **Re-feedback:** This is the most important component of Microteaching for behaviour modification of pupil teachers in the desired direction in skill practice.

TEACHING SKILLS

There are many approaches for identifying teaching skills. B.K. Passi has given the following list of Teaching Skills in his book "Becoming Better Teacher; Microteaching Approach":

1. **Skill of Introducing a lesson:** a teacher should have knowledge of introducing a lesson in a classroom, followed by a suitable statement made by the teacher. Here, a teacher should avoid irrelevant statements, inappropriate vocabulary, vague words and phrases as far as possible.
2. **Skill of probing Questioning:** Probing questions require ability of teachers to search relevant questions that teacher asks to students in a class room. This can be done in five ways.
 - i. Asking the pupil for more information and/or more meaning.
 - ii. Requiring the pupil to rationally justify his response.
 - iii. Refocusing the pupils or class's attention on a related issue.
 - iv. Prompting the pupil or giving him hints.
 - v. Redirecting the question to other pupil.
3. **Skill of Stimulus variation:** This skill is related to attraction of students to make classroom more attentive. Such behaviours include teacher movements, gestures, change in speech patterns, focusing, changing interaction styles, shifting sensory channels, pausing and such others.

4. **Skill of illustrating with examples:** Examples are necessary to clarify, verify, or substantiate concepts. Both inductive and deductive uses of examples can be used effectively by the teacher. Effective use of examples includes:

- i. Starting with simple examples and progressing to more complex ones.
- ii. Starting with examples relevant to students
- iii. Relating the examples to the principles or ideas being taught.
- iv. Checking to see if the objectives of the lesson have been achieved by asking students to give examples which illustrate the main points.

5. **Skill of Reinforcement:** Reinforcement is a term that belongs to the stimulus response (S-R) theoretical paradigms. Reinforcement is a theoretical construct. It was first used by Pavlov in connection with his classic experiments with dogs.

This skill involves teacher encouraging pupils' responses using verbal statements like good, continue, etc. or non-verbal cues like a smile, nodding the hand, etc.

NEED AND IMPORTANCE OF THE STUDY

Microteaching is an excellent way to build up skills and confidence, to experience a range of lecturing/tutoring styles and to learn and practice giving constructive feedback. Microteaching trains pupil teachers' teaching behaviors and skills in small group settings aided by video-recordings. Microteaching also provides skilled supervision with an opportunity to get a constructive feedback. Micro teaching makes the teacher education program, more purposeful, goal oriented and helps to decide common objectives for the program. It provides individualized education with more realistic evidence to students. This enables them to develop competency in using specific teaching skills in view of their unique needs. Microteaching is a safe practice which is a useful vehicle for providing continuous education to serving teachers. It provides setting for experimentation which helps them in acquiring such skills.

"In the act of teaching there are two parties (the teacher and the taught) who work together in some program (the subject matter) designed to modify the learners' behaviour and experience in some way" (Britannica, 2005). The teacher's role is "making relevant experience available to the student at the right time". This role very much corresponds to certain functions of learning platforms, which aim to provide such relevant experiences to a learner. There has been special emphasis on the idea of the student's readiness to grasp concepts of concrete and formal thought. Therefore, a study was conducted to compare the effectiveness of male and female pupil teachers' competency in microteaching.

STATEMENT OF THE PROBLEM

The title of the research is given as: "*Microteaching: A Comparative Study of Skill Development of Pupil Teachers in Relation to Their Gender*".

OBJECTIVES OF THE STUDY

1. To study effectiveness of microteaching in improving teaching skills of pupil teachers.
2. To study the classroom teaching competency through microteaching technology.
3. To compare the skill development of Pupil teachers by using microteaching.
4. To find out advantages and disadvantages of using of microteaching in the classroom.

HYPOTHESES OF THE STUDY

1. There is no any effect of microteaching in improving skill development of pupil teachers.

RESEARCH METHOD

The study was conducted through experimental method of research. An experiment is the process in which the experimenter manipulates one variable to study the effect of the manipulation on another variable. The experimental method tests the hypothesis concerning cause and effect relationship. In the present study, since the objectives were to find out the application of microteaching in effective classroom teaching, therefore the experimental method was followed. There was no any control group.

Population: The students of B.Ed. course of a Teacher Education College of Faridabad were taken as population.

Sample: Random sampling technique was adopted for selection of 60 students of B.Ed. course as an experiment group.

TOOLS USED FOR RESEARCH WORK

The under mentioned tools were used for data collection of the study;

1. General Teaching Competence Scale (GTCS) of Dr. B.K. Passi and Dr. Mrs. Lalita
2. Observation Schedule cum Rating Scale for the Skill of Introducing the Lesson.
3. Observation Schedule cum Rating Scale for the Skill of Probing Questioning.
4. Observation Schedule cum Rating Scale for the Skill of Illustration through examples.
5. Observation Schedule cum Rating Scale for the Skill of Stimulus Variation
6. Observation Schedule cum Rating Scale for the Skill of Reinforcement

PROCEDURE OF DATA COLLECTION

The lesson plan for 5-7 minutes was prepared as being suitable for the activity theme chosen by the students. Recording of the studies by video camera, watching of the records, being evaluated by the counselor teacher and the classmates, filling the "micro-teaching evaluation form" and supplying verbal feedback by the other students and their evaluation of themselves were practiced.

STATISTICAL TECHNIQUES USED

Mean, Standard Deviation, t-Test and Z-test were used for analyzing and interpretation of the data.

DELIMITATIONS OF THE STUDY

1. The study was delimited to development of only 5 microteaching skills.
2. Only selected topics in each and every subject were taught in the study.
3. The study was delimited to 60 B.Ed. students studying in teacher Education College located at Faridabad.

OBSERVATION TABLE FOR MICROTEACHING SKILL

The under mentioned skills were developed and observed during the research.

1. Skill of Introducing the Lesson

The performance of the 60 pupil teachers for Development of Skill of Introducing the Lesson was tabulated, interpreted and analyzed according to the standard design of research. Table-1 shows that the mean of the male and female pupil

teachers with reference to Introducing the Lesson and its different four aspects.

S. No.	Item	Male (N=30)	Female (N=30)
1	The method of introduction of lesson was interesting	17	15
2	The keen interest of the students in the lesson Was due to the method of introduction	18	16
3	The introduction of the lesson and the relation of actual lesson was clear to the students	20	17
4	Overall impression on introducing a Lesson	18	18

The mean of the responses of the four different aspects of male teachers were observed ranged from 17 to 20 whereas of female pupil teachers ranged from 15 to 18. Male pupil teachers showed better performance in "Introducing the Lesson" than the female teachers.

2. Skill of Probing Questioning

Table-2 shows the mean of the male and female pupil teachers with reference to probing questions and its different seven aspects as given below:

S.No.	Item	Male (N=30)	Female (N=30)
1	Questions were asked clearly	18	19
2	Questions were generally comprehended by the students	17	15
3	After questioning the students were given time for thinking answer	19	20
4	Both easy and difficult questions were asked	17	19
5	The questions provided the students to think deep over for Response	19	18
6	Maximum students were asked questions in the given time	19	17
7.	Questions were relevant to the under study lesson	18	20

Table -2 shows that the mean of the male pupil teachers with reference to, "Skill of probing questioning" and its different seven aspects ranged from 17 to 19 whereas the mean of female pupil teachers ranged from 15 to 20. Thus, it is concluded that the female pupil teachers were found to be more skilled in probing questions in comparison to their male counterpart.

3. Skill of Illustrating with Examples

Table-3 shows the mean of performance of the male and female pupil teachers with reference to skill of Illustration and its different five aspects as given below:

S.No.	Item	Male (N=30)	Female (N=30)
1	Explanation was fully comprehensive to the students	18	19
2	The students were impressed by the explanation	19	18
3	Explanation covered the important points	19	20
4	Demonstrated models, pictures and examples were source of interest to the students	21	20
5	Demonstrated models, pictures and examples were up to the mental level of the students	22	22

Table 3 shows the performance of mean of the male pupil teachers with reference to teaching skill, "Skill of illustrating with examples" and its different five aspects ranged from 18 to 22 whereas of female pupil teachers ranged from 18 to 22. This indicates equal performance of both the group the male and the female pupil teachers in the teaching skill, "Skill of illustrating with examples".

4. Skill of Stimulus Variation

Table-4 shows that the mean of performance of the male and female pupil teachers with reference to skill of stimulus variation and its different eight aspects as given below:

S.No.	Item	Male (N=30)	Female (N=30)
1	Movement was appropriate	20	19
2	Gestures was good	24	23
3	Change in voice was well in time	23	22
4	Focusing on important points was done	17	16
5	Change in interaction patterns took place	19	21
6	Pausing was proper	22	16
7	Physical participation of pupil was active	19	17
8	Oral-visual switching was appropriate	18	16

Table 4 shows that the mean of the male pupil teachers with reference to teaching skill, "Skill of stimulus variation" and its different eight aspects ranged from 17 to 24 whereas of female pupil teachers ranged from 16 to 23. This indicates better performance of male pupil teachers in the teaching skill, "Skill of stimulus variation".

5.Skill of Pupil Reinforcement

Table-5 shows the mean of performance of the male and female pupil teachers with reference to reinforcement and its different six aspects as given below:

S.No.	Item	Male (N=30)	Female (N=30)
1	Words, phrases like "correct", "good", "very good", "fine" and "excellent" were used during interaction session.	20	15
2	Responses like "yes", "right" and "good" were used on the correct response of the students for their encouragement	18	18
3	Multiple gestures like, "smile" "yes yes" "now say" and "this is good idea" were used for students' encouragement	19	19
4	The students were provided help for suitable answer	18	15
5	With the help of simple instructions the students Were encouraged for correct response, e.g. "think over again"	20	16
6	Students were encouraged for correct part of answer.	18	17

Table 5 shows that the mean of the male pupil teachers with reference to teaching skill, "Pupil Reinforcement" and its different six aspects ranged from 18 to 20 whereas of female pupil teachers ranged from 15 to 19. This indicates better performance of male pupil teachers in the teaching skill, "Pupil Reinforcement".

MAJOR FINDINGS OF THE STUDY

- The male pupil teachers were found to be better in the teaching skill, "Introducing the Lesson". Thus, it is concluded that the male pupil teachers were more skilled in Introducing the Lesson in comparison to their female counterpart.
- Female pupil teachers were found to be better in skill of probing questioning. Thus, it is concluded that the female pupil teachers were more skilled in probing questions in comparison to their male counterpart.
- Both the group of pupil teachers indicated equal performance in the teaching skill, "Skill of illustrating with examples".
- Male pupil teachers were more skilled in Skill of stimulus variation in comparison to their female counterpart.
- Male pupil teachers showed better performance of in the teaching skill, "Pupil Reinforcement". Thus, it is concluded that the male pupil teachers were more skilled in pupil reinforcement in comparison to their female counterpart.

CONCLUSION

Teacher education programmes require continuous innovations to respond to changing needs. Teacher education should not appear as apprenticeship, where only imitation of their lecturers / supervising teachers is done by pupil teachers rather it should be flexible, challenging and reflective. Pupil teachers should be given empowerment in an institution in order to actualize their responsibility in a better and competent way. Microteaching is essential for development of teaching which must be enforced. Micro-teaching promotes the performance of pupil teachers in many ways by developing their teaching skills. Like a programmed teaching machine, the goal of micro-teaching is to enhance teaching skills in Teacher education program.

SUGGESTIONS

Following suggestions can be beneficial for pupil teachers in order to develop their skills.

1. More time should be devoted in the college/ department of universities by pupil teachers in learning and applying skills under mock conditions where feedback can be provided by their own classmates and lecturers.
2. Lesson planning can be made flexible and pupil teachers should adopt new methods of teaching with the help of teaching aids.
3. Children should be encouraged to prepare charts, models in the classroom, either individually or in small groups. This practice can help in developing psychomotor skills as well as increases interaction level of pupil teachers and taught.

4. It has been observed that comments of supervising teachers remain limited to use of various skills. They should use new approaches for effective use in the class.
5. At the end of lesson plan, along with one supervisor's observation sheet, one more sheet should be included where pupil teachers can record his/her own observations, experiences, classroom environment, his extempore activities, improvisations of that particular day to reflect and for further improvement.

EDUCATIONAL IMPLICATIONS

- In India, Microteaching is a recent innovative technique in teacher education. It has been introduced in some universities and teachers education Institutions for the last few years as part of their regular practice teaching programme.
- During the last few years so many secondary teachers' education institutions have tried microteaching as a research project. The results of this experiment therefore have direct relevance to this need.
- The findings will prove useful in effective micro-teaching as a powerful supplement to the existing student teaching programme.
- To prepare competent teachers, microteaching is needed for successful functioning of teachers and development of their skills which is enforced in teacher education program.

- The process of improvement in teacher education programme is in progress in our country, but these improvements are marginal in nature.
- The minimum requirement of any teacher education programme is that it should enable the trainee to acquire the basic skills and competence of a good teacher.

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