

## QUINT ESSENCE OF MICRO TEACHING

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### Defining Teaching

Teaching is a term used by many people in different ways in different situations. Teaching as the transfer of knowledge from teacher to pupils.

- Teaching as the facilitation of the pupils by the teacher in the art of learning.
- Teaching as a social act of influencing pupils by the teacher.
- Teaching as doing anything that might lead to learning.
- The behaviour or activities of persons as they go about doing whatever is required of teachers, particularly those activities which are concerned with the guidance or direction of learning of others. (Ryan, 1965)
- Teaching is the arrangement of contingencies of reinforcement under which students learn. They learn without teaching in their natural environment, but teachers arrange special contingencies which expedite learning and hastening the appearance of behaviour which would otherwise be acquired slowly or making scene of the appearance of behaviour which might otherwise never occur. (Skinner. 1968)
- Teaching as an act of interpersonal influence aimed at changing the ways in which other persons can or will behave. (N.L. Gage, 1963)

The minimum requirement of any training programme is that it should enable the trainee to acquire the basic skills and competencies of a good teacher. (Challenge of Education, A Policy Perspective 1986, National Commission on Teachers)

The teacher training too is not planned and organised to develop the spirit of inquiry, initiative, scientific temper, manual-dexterity, conceptual clarity and linguistic skills for effective speaking and writing which teachers are expected to impart to their students. Adequate attention is also not given to develop communication skills which is critical to the function of the teachers. (Challenge of Education, A Policy Perspective 1986, National Commission on Teachers)

### Teaching activity

- Is imparting knowledge or skill.
- It involves doing all things that may lead to learning.

- It is a social act of influence.

From all these components of teaching we can say that there is no Specific and universally accepted definition of teaching and teacher effectiveness

#### **Micro-Teaching and Its Need**

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. You also know that it largely depends on those who develop these competencies. Therefore, for this purpose we need highly competent teachers for imparting these competencies. It is essential that teachers imparting these competencies should have the capability to perform their task efficiently. For this, they need to acquire requisite competencies themselves.

In the present Unit we will attempt to understand as to what competencies are essential for becoming better teacher and how these competencies can be imparted.

#### **Objectives**

- Understand the teaching skill.
- Understand the concept of Micro-teaching.
- Understand the principles underlying Micro-teaching
- Analyse the complex process of teaching into essential Micro-teaching skills.
- Understand the procedure of Micro-teaching for developing teaching skills.

#### **Micro teaching**

##### **Micro teaching defined**

Concept and Definition of Microteaching:

Microteaching is a scaled down teaching encounter, scaled down in terms of class size, lesson length and teaching complexity. It is a skill based approach to teacher education.

Microteaching is a procedure in which the student teacher practises teaching with a reduced period of time emphasizing one teaching skill at a time.

According to D.W Allen (1966) "Micro-teaching is a scaled down teaching encounter in class-size and class-time."

According to Buch (1968) "Micro teaching is a teacher education technique which allows teachers to apply clearly defined teaching skills to carefully prepared lessons in a planned series of five to ten minutes encounter with a small group of real students, often with an opportunity to observe the result on videotape"

Passi B.K.(1976) says, "It is a training technique, which requires student teachers to teach a single concept using specified teaching skills to a small group of students in a short duration of time".

Micro-Teaching is a training setting for the student teacher / teacher trainee where complexities of the classroom teaching are reduced by:

- practising one component skill at time
- limiting the content to a single concept
- reducing the size of the students to 5 to 10 reducing the duration of the lesson to 5 to 10 minutes

The Australian Advisory Committee on Research and Development in Education has analysed teaching into 140 skills. Allen and Ryan (1969) of Stanford University have identified the following fourteen skills that can be applied at many levels for teaching different subjects :

1. Stimulus variation.
2. Set Induction
3. Closure .
4. Silence and non-verbal cues.
5. Reinforcement of student participation
6. Fluency in speaking
7. Probing questions
8. Higher order questions
9. Divergent questions
10. Recognizing attending behavior
11. Illustration and use of examples
12. Lecturing
13. Planned repetition
14. Completion of communication.

Although all the skills are important to be practised and mastered, the following skills are very essential and they are explained in detail here

- |   |   |                     |
|---|---|---------------------|
| <ol style="list-style-type: none"> <li>1. Probing questions</li> <li>2. Reinforcement</li> <li>3. Stimulus Variation</li> <li>4. Explaining</li> <li>5. Illustration with Examples</li> </ol> | } | General Core Skills |
| <ol style="list-style-type: none"> <li>6. Introducing lexical items</li> <li>7. Demonstration</li> </ol>  | } | Specific skills     |

### **Origin and Development of Micro-Teaching**

The idea of micro-teaching 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). This project was aided by Ford Foundation and Kettering Foundation. The team of experts was assigned the development of testing and evaluation tools to measure the attainment of teaching skills. At this juncture Keath Acheson, a research worker was investigating the utility of video tape recorder in the development of technical teaching skills. This instrument could be used for recording the class interaction and the behaviours of the trainee vividly and accurately. This lead to the development of a systematic and accurate method of giving feedback to the teacher trainee. All the steps of micro-teaching technique :

Teach → Feedback → Replan → Reteach → Refeedback were formulated. Thus the name of micro-teaching was coined for this method of developing teaching skills in 1963. Since then this technique of teacher training has been widely used in almost all Colleges and Universities of Europe and Asia. In India, it is being used with great emphasis in all the teacher training programmes of developing teaching skills and competencies among teacher trainees

### **Status of Teacher Training Before Micro-Teaching**

General observations about teaching and teacher training based on the findings of researches conducted in India and abroad before the introduction of Micro-teaching practice were :

- No consensus on the procedures followed in various aspects of teaching in training colleges.
- No specific training objectives to guide student teaching
- Haphazard and Undiscriminating supervision of practice teaching - ill planned, ill supervised and ill assessed.
- Subjective feed back with respect to teacher training performance.
- No research support to prove its effectiveness (Ref. Box - 2).

In the light of these research findings and the reflections contained in 'Challenge of Education - A Policy Perspective' Micro-teaching is a new approach in teacher education. Now it has become the part and parcel of teacher education programmes relating to teacher training.

### **Concept of Micro-Teaching**

Micro-teaching is a teacher training technique which helps the teacher trainee to master the teaching skills. It requires the teacher trainee

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

In this way the teacher trainee practises the teaching skill in terms of definable, observable, measurable and controllable form with repeated cycles till he attains mastery in the use of skill.

#### **Steps of Micro-teaching**

The Micro-teaching programme involves the following steps :

Step I Particular skill to be practised is explained to the teacher trainees in terms of the purpose and components of the skill with suitable examples.

Step II The teacher trainer gives the demonstration of the skill in Micro-teaching in simulated conditions to the teacher trainees.

Step III The teacher trainee plans a short lesson plan on the basis of the demonstrated skill for his/her practice.

Step IV The teacher trainee teaches the lesson to a small group of pupils. His lesson is supervised by the supervisor and peers.

Step V On the basis of the observation of a lesson, the supervisor gives feedback to the teacher trainee. The supervisor reinforces the instances of effective use of the skill and draws attention of the teacher trainee to the points where he could not do well.

Step VI In the light of the feed-back given by the supervisor, the teacher trainee replans the lesson plan in order to use the skill in more effective manner in the second trial.

Step VII The revised lesson is taught to another comparable group of pupils.

Step VIII The supervisor observes the re-teach lesson and gives re-feed back to the teacher trainee with convincing arguments and reasons.

Step IX The 'teach - re-teach' cycle may be repeated several times till adequate mastery level is achieved.

#### **Micro-teaching Cycle**

The six steps generally involved in micro-teaching cycle are Plan Teach Feedback Replan Reteach Refeedback. There can be variations as per requirement of the objective of practice session.

**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 topic is analysed into different activities of the teacher and the pupils. The activities are planned in such a logical sequence where maximum application of the components of a skill is possible.

**Teach:** This involves the attempts of the teacher trainee 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 and not as visualised in the planing of the activities, the teacher should modify his/her behaviour as per the demand of the situation in the class. He should have the courage and confidence to handle the situation arising in the class effectively.

**Feedback:** This term refers to giving information to the teacher trainee about his performance. The information includes the points of strength as well as weakness relating to his/her performance. This helps the teacher trainee to improve upon his/her performance in the desired direction.

**Re-plan:** The teacher trainee replans his lesson incorporating the points of strength and removing the points not skillfully handled during teaching in the previous attempt either on the same topic or on another topic suiting to the teacher trainee for improvement.

**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. The teacher trainee teaches the class with renewed courage and confidence to perform better than the previous attempt.

**Re-feedback:** This is the most important component of Micro-teaching for behaviour modification of teacher trainee in the desired direction in each and every skill practice.

#### **Rationale of Micro-teaching Procedure**

The steps of the Micro-teaching procedure are based on the sequence involved in behaviour modification formulated by McDonald. The steps are :

- Step I : This involves stating the behaviour in operational terms.
- Step II : This refers to fixing of the criteria for measuring behaviours.
- Step III : In this step the entry behaviour of the individual is measured to know the point of initial start.
- Step IV : This involves the actual treatment of behaviour modification.
- Step V : The post-treatment measures of changed behaviour are obtained.

The difference between the measures of pre and post treatments indicates the extent of behaviour modification. The cycle is repeated till desired level of behaviour is obtained.

In the Micro-teaching cycle, the same steps are involved. Firstly the teacher trainee knows the behaviours (components of skill) to be practiced. Secondly he practices such a behaviour during teach session. Thirdly he gets the feedback on the basis of the observation of his performance made by the supervisor. Finally the teacher trainee improves upon his/her behaviour (performance) as desired.

### **Phases of Micro-teaching**

There are three phases of the Micro-teaching procedure which you have studied in the previous section of this Unit. They are :

1. Knowledge Acquisition Phase.
2. Skill Acquisition Phase.
3. Transfer Phase of Micro-teaching.

**Knowledge Acquisition Phase:** In this phase the teacher trainee learns about the skill and its components through discussion, illustrations and demonstration of the skill given by the expert. He learns about the purpose of the skill and the condition under which it proves useful in the teaching-learning process. His/Her analysis of the skill into components leading to various types of behaviours which is to be practised. The teacher trainee tries to gain a lot about the skill from the demonstration given by the expert . He discusses and clarifies each and every aspect of the skill.

**Skill Acquisition Phase:** On the basis of the demonstration presented by the expert, the teacher trainee plans a micro-lesson, lesson for practising the demonstrated skill. He practices the teaching skill through the Micro-teaching cycle and continues his efforts till he attains mastery level. The feed-back component of micro-teaching contributes significantly towards the mastery level acquisition of the skill. On the basis of the performance of teacher trainee in teaching, the feed back is provided for the purpose of change in behaviour of the teacher trainee in the desired direction.

**Transfer Phase of Micro-teaching:** After attaining mastery level and command over each of the skills, the teacher trainee integrates all these skills and transfer to actual classroom teaching is done during this transfer phase.

### **Analysis of Teaching**

We have discussed that teaching is a complex process. To reduce the complexity of teaching it is analysed into simple teaching activities performed by the teacher during the teaching-learning process. The main objective of all these activities is to promote learning among pupils. These activities may be explaining, illustrating with examples, questioning,

writing on the black board, drawing figures etc. These verbal and non-verbal activities are called teaching activities. Therefore, these specific teaching activities/arts/behaviours which are observable, definable, measurable, demonstrable and can be developed through training are known as teaching skills. The teacher uses these skills in pre-instructional, instructional and post-instructional stages in order to achieve pre-determined and specified objectives. Therefore teaching consists of a number of interrelated teaching skills, which occur at different stages of teaching.

#### **Teaching skill**

- a teaching skill is that behaviour of the teacher which facilitates pupils' learning directly or indirectly.
- a teaching skill includes all arts and behaviour of the teacher which maximizes pupils' learning.
- a teaching skill is that art of the teacher which makes communication between the teacher and pupils sufficiently.

#### **Identification of Teaching Skills**

There are many approaches for identifying teaching skills. The prominent among them are the following :

1. Observation of Class Room Interaction
2. Analysis of Teacher Tasks Through Interview and Discussion
3. Analysis of School Curriculum and Objectives
4. Conceptualization of a Good Teaching Model

Attempts have been made to list teaching skills. Allen and Ryan listed the following teaching skills at Stanford University in the U.S.A.

1. Stimulus Variation
2. Set induction
3. Closure
4. Teacher silence and non-verbal cues
5. Reinforcing pupil participation
6. Fluency in questioning
7. Probing questioning
8. Use of higher questions
9. Divergent questions
10. Recognizing and attending behaviour
11. Illustrating and use of examples
12. Lecturing



13. Planned repetition
14. Completeness of communication

B.K. Passi has given the following list of Teaching Skills in his book “Becoming Better Teacher; Micro-teaching Approach” :

1. Writing instructional objectives
2. Introducing a lesson
3. Fluency in questioning
4. Probing questioning
5. Explaining
6. Illustrating with examples
7. Stimulus variation
8. Silence and non-verbal cues
9. Reinforcement
10. Increasing pupil participation
11. Using black board
12. Achieving Closure
13. Recognizing attending behaviour

#### **Core Teaching Skills**

You have studied the concept of Micro-teaching technique and its application for developing teaching skills among the trainees in a systematic manner. You have also learnt the identification of teaching skills and different lists of teaching skills identified by different people. On the basis of your understanding and personal experience of class teaching, point out which of the teaching skills are extensively used in daily routine teaching.

The list is :

1. Skill of Probing Questions
2. Skill of Explaining
3. Skill of Illustrating With Examples
4. Skill of Stimulus Variation
5. Skill of Reinforcement
6. Skill of Classroom Management
7. Skill of Using Blackboard

These skills are called Core Skills because of their extensive use in classroom teaching. The specifications of these skills are given Table No.1.

### Teaching Skills and their Specifications

S.No.	Skill	Components
1.	Probing Questions	Prompting, seeking further information, redirection, focusing, increasing critical awareness.
2.	Explaining	Clarity, continuity, relevance to content using beginning and concluding statements, covering essential points.
3.	Illustrating with examples	Simple, relevant and interesting examples appropriate media, use of inducts, deductive approach.
4.	Stimulus variation	Body movements, gestures, change in speech pattern, change in interaction style, pausing, focusing, oral-visual switching.
5.	Reinforcement	Use of praise words and statements, accepting and using pupils' idea, repeating and rephrasing, extra vertical cues, use of pleasant and approving gestures and expressions, writing pupils' answer on the black board.
6.	Classroom Management	Call pupils bynames, Makenorms of classroom behaviour, attending behaviour reinforced, clarity of direction, check non-attending behaviour, keep pupils in Eye Span, check inappropriate behaviour immediately.
7.	Use of blackboard	Legible, neat and adequate with reference to content covered.

### Principles Underlying Micro-Teaching Technique

You have studied in the foregoing sections that micro-teaching is based on the premise that teaching can be analysed into various teaching skills which can be practised and evaluated. Micro-teaching seems to be based on Skinner's theory of operant condition. This theory is the very basis of feedback session. Skinner's theory of shaping a successive approximations can be applied to explain the acquisition of new patterns of behaviour in teach → feed back → reteach pattern in micro-teaching.

### Assumptions of Micro-Teaching

From the foregoing discussion about the concept of micro-teaching you might have thought of the assumption on which it is based. Let us pinpoint them :

- Teaching is a complex process but can be analysed into simple skills.
- Teaching skills can be practiced one by one upto mastery level under specific and simplified situation.
- Appropriate feed back if systematically given proves very significant for obtaining mastery level in each skill.
- When all skills have been mastered taken one by one, they can be integrated for real classroom teaching.
- The skill training can be conveniently transferred from simulated teaching situation to actual classroom teaching situation.