CHAPTER-III

MICROTEACHING

SETTING & ORGANISATION
The quality of education to a large extent depends upon the quality of Teacher Education Programme. Therefore, programmes are needed to update the teachers from time to time. The National Policy on Education rightly observed that teacher education is a continuous process and its pre-service and in-service components are inseparable. As the first step, the system of Teacher Education needs to be overhauled.

The training of teachers demands our urgent attention. The minimum requirement of any training programme is that it should enable the trainees to acquire basic skills and competencies of a good teacher. Teacher performance is the most crucial input in the field of education. The trainee remains all most at the same level in his teaching competence even after training. The skills and competencies can be developed. The systematic approach is to revitalize the teaching programme through training in teaching skills using microteaching approach.

Microteaching is intuitively appealing as a way of providing practice in teaching. It has come to be a convenient research tool, which dramatically simplifies the logistic of investigation for certain teaching skills and other learning variables. It is a means of highlighting teaching problems by reducing the complexities of the learning situation in terms of length of the lesson, scope of the lesson, number of students and class time. So it is a teacher training technique, which provides trainees the information about their performance immediately after completion of their lesson.

Microteaching helps to concentrate on a specific teaching behaviour and to practice teaching under controlled conditions. Here competence is acquired in one skill instead of
proceeding to another skill. In microteaching student teacher teaches a short lesson based on
one skill under controlled conditions to a small class for a short period of time.

The five steps generally involved in Microteaching session are:

Teach : Small unit for small period in small class
Feedback : Suggestions for improvement
Re-plan : Same unit in the light of suggestions
Re-teach : Same unit to another small group
Re-feedback : In terms of gain & suggestions till terminal behaviour is achieved

3.1 MICROTEACHING SETTING

The microteaching setting deals with certain variables like number of pupils, type of pupils in
a micro class, time duration of microteaching cycle, types of feedback and physical facilities
required. The investigator used the following microteaching setting:

3.1.1 SIZE OF THE MICRO CLASS: The size of the class is reduced in order to produce
environment for ‘learning to teach’. Since reduction in class size reduces the complexities of
normal classroom, which helps trainee to focus on the skill and its various components. 5-10
pupils are used in a micro class.

3.1.2 TYPE OF PUPILS: The micro class consisting of real pupils is used for student
teacher’s training. Using real pupils in micro class is helpful in the way that the setting being
more near to reality, the training is more meaningful, and transferability of training to real situation is increased.

3.1.3 MICROTEACHING CYCLE: Five steps in a microteaching cycle are: teach, feedback, re-plan, re-teach & re-feedback. While practicing a teaching skill, the student teacher completes many microteaching cycles. The duration for different steps in microteaching cycle used for the present study is:

Teach ...............6 minutes
Feedback ............6 minutes
Re-plan...............12 minutes
Re-teach...............6 minutes
Re-feedback..........6 minutes

Total Time 36 minutes

The duration of 36 minutes has been found to be workable. One thing is to be noted here that except the re-plan step, the student teacher is allowed equal time in each step, whereas in the re-plan step, he is allowed double the time.

3.1.4 TYPES OF FEEDBACK: The investigator has used live sources i.e. supervisors, peers & students and live sources in combination with mechanical source i.e. audio self, audio+supervisor, video self, video+supervisor as a mean of providing the feedback.

In Supervisor Feedback an experienced, competent, qualified and mature teacher educator provides feedback. In Peer Feedback a fellow student teacher is used as the source for providing feedback. In Student Feedback pupils provide information about the effectiveness of their teacher’s teaching in the classroom situation.

In Audio-self Feedback the student teacher listens the audio recording of the micro lesson alone and derives the self-feedback. In Audio+Supervisor Feedback the student
teacher listens the audio recording of the micro lesson in association with supervisor and receives the feedback from supervisor. In **Video-self Feedback** the student teacher views & listens the video recorded micro lesson alone and derives the self-feedback. In **Video+Supervisor Feedback** the student teacher views & listens the video recorded micro lesson in association with supervisor and receives the feedback from supervisor.

### 3.1.5 PHYSICAL FACILITIES

The essential facilities needed for the successful introduction of microteaching include teaching room, feedback room, re-planning room and equipments for microteaching.

- **Teaching Room**: It is a place for teaching the micro lesson to the pupils.
- **Feedback Room**: It is the place for providing feedback to the student teacher.
- **Re-planning Room**: It is the place for re-planning the micro lesson in the light of the suggestions received in the feedback session.
- **Equipments for Microteaching**: The equipments required for microteaching largely depend upon the type of feedback, which is to be provided to the student teacher. The seven types of feedback used for the study are Supervisor Feedback, Peer Feedback, Student Feedback, Audio-self Feedback, Audio+Supervisor Feedback, Video-self Feedback, & Video+Supervisor Feedback.

(A) **For Supervisor Feedback, Peer Feedback & Student Feedback** the only equipment used is the clock, one each for teaching room, feedback room & re-planning room.

(B) **For Audio-self Feedback & Audio+Supervisor Feedback** apart from clock the following equipments are used in the each room:

(a) **Two Pentium IV Computers**: One each for teaching room & feedback room. The computers used have following specifications:

- **Processor**: Pentium 4, 2.6 GHz
• Level 2 Cache : In CPU
• Memory : 2 GB DDR
• Expansion Slots : 3 x PCI
• Rear I/O Ports : 1 PS/2 KBD, 1 PS/2 Mouse, 1VGA, 4 USB, 2 COM
• Floppy Derive : 1.44 MB
• CD ROM Drive : One
• CD Writer : One
• Video Sub System : Integrated in Chipset
• Audio Sub System : 1 Line-in, 1 Line-out, 1 Mic
• Motherboard Form Factor : MATX
• Green Feature : ACPI Power Management
• Serviceability : Flash BIOS
• Monitor : 17” coloured high resolution HCL Monitor
• Key Board : Multimedia
• Mouse : Optical

(b) My Sound Studio Software : This is a software, which is loaded on the two computers, which are used for audio recording. This software turned the computers into the audio recording studio. It uses the sound card of the computer to record directly on the computer’s hard disk, and then the audio recording is done on the CD-RW with the help of CD Writer. This software is capable of removing noise, customising volume levels, trim silence and adding effects such as Delay, Reverb, Pitch Shifting, Time Stretch & much more. The hardware, software & display requirements for the use of this software is as follows:
• **Hardware Requirements:**
  
  Minimum : Pentium 233 MHz, 64 MB RAM  
  Recommended : Pentium II 350 MHz, 128 MB RAM

• **Software Requirements:**
  
  Minimum : Win9x, IE5  
  Recommended : Win9x, IE6, Windows Media Player 9, Winamp 2.91

• **Display Requirements:**
  
  Minimum : 800x600 at 16-bit high colour  
  Recommended : 800x600 at 24-bit true colour

(c) **Dynamic Stereo Headphone with Microphone** : This is the instrument, which is used for audio recording of the micro lesson directly on the hard disc of the computer kept in the teaching room with the help of My Sound Studio Software previously loaded on the computer. The specifications of the instrument used is as follows:

  - Ferrite Drive Units : 40 mm
  - Length of Single side cord : 2 m
  - Size of Black Colour Stereo Plug for Headset : 3.5 mm
  - Size of Red Colour Stereo Plug for Microphone : 3.5 mm
  - Frequency Response : 20-20,000 HZ
  - Headphone Impedance : 32 Ohms
  - Microphone Impedance : 1.5 K Ohms
  - Headphone Sensitivity : 105 db/MW
  - Microphone Sensitivity : -58db ± 2
  - Rated Power : 100 mW
  - Power Handling Capacity : 1000 mW
(d) **CD-RW** : Compact Disc-Re-Writeable for transferring the audio recording from teaching room to feedback room.

After audio recording of the micro lesson on the hard disc of the computer kept in the teaching room it is written on CD-RW with the help of CD Writer. Subsequently CD-RW is run on the computer kept in the feedback room and listened by the student teacher alone or student teacher + supervisor to provide relevant feedback.

**(C) For Video-self Feedback & Video+Supervisor Feedback** apart from clock in the each room following equipments are used :

(a) **Handy Cam** : This is an instrument used for video recording of the student teachers micro lesson in the teaching room. Two Handy Cams are used in the study. The Handy cam’s used have following specification :

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Night Shot: Yes
Recording Speed: LP/SP
Video In/Out: Out
Audio In/Out: Out
Battery Type: Info Lithium Battery (NP-FM30)
Dimensions (DxHxW): 7.83 in. x 3.98 in. x 3.5 in.
Weight: 1.76 lb

(b) Television: This equipment is kept in the feedback room. It helps to see larger view of video recording done with the help of Handy Cam. This equipment has following specifications:

- **Picture**: Golden Eye, Colour Status Memory, Picture Status, Memory, ARC Zoom, Blue Back On/Off
- **Sound**: XDS, Sound Output (PMPO)-300W, AV Stereo Graphic Equalizer-3-B, Sound Status Memory, Mute, AVL
- **Additional**: Game-1, Quick View, Sleep Timer, On/Off Timer Auto Power Off, Child Lock, Programme Edit Programme Naming, Turbo Search System No. Of Programmes-200
- **Input/Output**: Side /Front AV in, Rear AV In/Out-(1/1)

(c) HI-8 Video Cassette: This is used for video recording of student teacher’s micro lesson by inserting it in the Handy Cam.

After video recording of the micro lesson of student teacher in the teaching room, the handy cam is shifted to the feedback room. Here it is connected to Audio-Video Sockets of
the television with the help of AV lead. Subsequently it is played on the television by selecting TV/AV button of the television and viewed & listened by the student teacher alone or student teacher + supervisor to provide relevant feedback.

3.2 MICROTEACHING ORGANISATION:

The different steps involved in the microteaching organisation are:

3.2.1 ORIENTATION: In the beginning the student teacher is given necessary theoretical background about microteaching by having a free & fare discussion of the following aspects:

- Concept of microteaching
- Significance of using microteaching
- Requirements and setting for adopting microteaching technique
- Procedure of microteaching

3.2.2 DISCUSSION OF TEACHING SKILLS: Under this step the knowledge & understanding about the following aspects is to be developed:

- Analysis of teaching into component teaching skills.
- The discussion of the rationale & role of these teaching skills in teaching.
- Discussion about the component teaching behaviour comprising various teaching skills.

3.2.3 SELECTION OF TEACHING SKILLS: The teaching skills are to be practised by taking them one at a time. Therefore, the student teachers are persuaded to select a particular skill for practice, they are also provided with necessary orientation and processing material.
for the practice of the skill. The student teachers may be given a necessary background for the observation of a model or demonstration lesson on the selected teaching skill.

Whenever one has to identify and select the skill he must keep in mind about the rationale: i.e. how much assurance that particular skill gives to the student-teacher, about the effectiveness in terms of his general teaching competence or acquisition of competence in the use of a particular skill or set of skills.

The skills selected by research worker for the study are:

- Skill of Introducing the Lesson
- Skill of Explanation
- Skill of Probing Questioning
- Skill of Stimulus Variation
- Skill of Black Board Writing

The brief description of these skills is as follows:

3.2.3.1 **Skill of Introducing The Lesson**: Introduction of the lesson is the first step of teaching-interactive phase-because as the introduction of the lesson as will be the teaching.

**Definition**: Skill of Introducing of the lesson may be defined as proficiency in the use of verbal and nonverbal behaviour, teaching aids and appropriate devices for making the pupils realize the need of studying the lesson by establishing cognition and affective rapport with them.

**Importance of the Skill**:

- Student teacher is able to utilize previous knowledge and experience of his pupils.
- Student teacher is able to maintain continuity of the ideas and information in the introduction of lesson.

In this way utilization of previous experiences, use of appropriate devices, maintenance of continuity in the main parts of introduction and relevancy of the verbal and
non-verbal behaviour are the major component behaviours or constituents of the skill of introducing the lesson.

Components:

1. **Utilization of Previous Experiences**: One cannot teach in a vacuum. The new learning is to be based on the previous learning, knowledge, experiences acquired through formal or informal education direct or indirect experiences. An appropriate introduction of a new lesson has to be based on the previous knowledge and experience of the pupil. Therefore, a teacher has to acquire the art of utilizing such knowledge and experiences for this purpose and he has to take care of the following things:

   - The knowledge of the subjects acquired by the pupils in the previous classes or days of the present session.

   - The general awareness of the pupils with their physical and social environment.

   - Devices and techniques of exploring the previous knowledge.

   - Techniques of establishing links between the previous and new knowledge.

   - Ability of creating situations in the class for the utilization of previous experiences.

2. **Proper Use of Devices/Techniques**: A teacher should essentially acquire the ability of using appropriate devices or techniques for introducing a lesson. The various devices used for this purpose are as:

   - Questioning
   - Narration, description or lecturing
   - Story telling
   - Using audio-visual aids
   - Demonstration or experimentation
   - Dramatization or role playing
   - Visits or excursions
   - Use of examples, analogies and similarities.

3. **Overall Impression**: For providing feedback on the teaching performance the Micro lesson given by a trainee is supervised by the fellow trainees or teacher educator. For the purpose of obtaining objectivity and reliability in the observation process it is always better to lay down an observation schedule and get the supervisors/observers trained in its use.
4. **Relevance**: A teacher should try to observe relevancy in his verbal or nonverbal behaviour. What is to be stated, asked, demonstrated, dramatized or illustrated should contribute maximum towards the introduction of lesson in the ways- (a) Testing of the previous knowledge (b) Utilization of these past experiences (c) Establishing cognitive and affective rapport with pupils (d) Making the pupils feel the need of studying the lesson (e) Pinpointing the aims of lesson

5. **Continuity**: Proper introduction requires the continuity in the ideas or information presented to the pupils. There should be a logical sequence in the main parts of the introduction. One question/statement or activity on the part of the teacher should lead to the other related one in a chain of continuity for creating the need of studying the lesson. What is done at a particular moment should be properly related to pupil’s previous response and it should be properly related with the preceding activity of the teacher himself.

3.2.3.2 **Skill of Explanation**: A teacher has to learn the skill of explanation in order to make the pupils understand many ideas, concepts or principles which need explanation. It is nothing but a few interrelated appropriate statements.

**Definition**: Thus the skill of explanation may be defined as the use of interrelated appropriate statements by the teacher for making the pupils understand the desired concept, phenomenon or principle.

**Importance of the Skill**: The importance of the skill is as given below:

- Fills the gap between the topic, which is being taught & the previous knowledge of the students.
- Better understanding of the concept or phenomenon.
Components:

1. **Use of explaining links**: Explaining links in the form of words and phrases are meant for establishing links or continuity in the statements used for explaining a concept, phenomenon or principle. Some of these linking words & phrases generally used for explaining are listed below:

   Therefore, hence, thus, consequently, since, because, so that, in spite, of as a result of, the function of, the cause of, due to, that is why, this is how, in order that on the other hand, why, while, etc.

2. **Use of Introductory Statements**: These statements are used to make the listener alert. The purpose of these statements is to create mental readiness in the class and give clue for the explanation. In lengthy explanations there may be general sets of introductory statements.

3. **Use of Concluding Statements**: Some statements are made towards the end to summarise or conclude the explanation. The purpose of the statements is to give the pupil a consolidated picture of what he has been explained for ready reference. Concluding statement is also the inference drawn through logical reasoning in an explanation.

4. **Covering Essential Points**: The explanation given for the understanding of a given concept or principle should be as complete as possible. The completeness is determined by the scope of the concept or principle as specified in the instructional objectives. It should aim for covering all the essential points leading to clear understanding of the desired concept or principle.

5. **Use of Visual Techniques**: The use of blackboards, charts & other visual materials are helpful in making explanation clear. As the famous saying “one picture is worth thousand words”, the use of these aids help the students to understand the phenomenon clearly.
6. Testing Pupils Understandings by Asking Questions: This component behaviour involves asking of appropriate questions from the pupils to ascertain whether the purpose of explaining the concept or principle has been achieved or not.

7. Interesting to Pupils: For an effective understanding of explanation by the pupils, it is essential to make it interesting. This case may be achieved by taking examples from daily experiences of the pupils, using simple sentences, establishing premises properly and using different media of communication.

3.2.3.3 Skill of Probing Questioning: Success of questioning lies in evoking desired responses from the pupils. Pupils respond in a number of ways and styles such as no response, wrong response, partially correct response, incomplete response or correct response depending upon their own development level, nature of questions & teachers behaviour. For the realization of the teaching objectives, a teacher has to learn the art of managing the response of his pupil for eliciting desired response with the help of questions and some other desired behaviours.

Definition: The Skill of Probing Questioning may be defined as the art of response management comprising a set of behaviours or techniques for going deep into the pupils responses with a view to elicit the desired responses.

Importance of the Skill: The importance of the Skill of Probing Questioning is as follows:

- This helps to lead the pupils from ‘no’ or ‘wrong’ response to the criterion response by step-by step questioning process.
- To clarify pupils understanding about the response.
- To help the pupils to view the response from a broader perspective.
- To involve more and more pupils in the discussion.
- To increase the critical awareness in the pupils.
Components:

1. **Prompting**: The prompting is a technique used by someone behind the curtain for helping the characters to speak the correct dialogue and demonstrate the desired behaviour before the audience. In the teaching learning situations it refers to the cues or hints provided by the teacher through the well-framed question to a pupil for arriving at the desired response from the undesired situation. Here the teacher himself does not provide the answer to the question asked by him or any pupil but tries to manage the situation by giving prompts. Selection of prompt depends upon the factors like:

   - Level of maturity
   - Previous experience of pupils
   - Ability of the pupils to manipulate the relevant facts
   - Concepts or principles, logical consistency of the response and the desired response.

2. **Seeking further information**: In the case of partially correct or incomplete responses the technique of seeking further information may be defined as a technique of getting additional information from the responding pupil to bring his initial incomplete or partially correct response to the desired response level. The questions like what else can you say?, how can you make it more clear?, give some examples/ evidences/ argument, will you, please, elaborate your answers etc. are often used for seeking further information from pupil.

3. **Refocusing**: This technique is used in a correct response situation to strengthen the response given by the pupils. While refocusing, the teacher persuades the responding pupils either to relate his response with something already studied by him or to consider implications of his response in a more complex or noble situation.

4. **Redirecting**: This technique is generally applied in a no response or incomplete response situation and requires putting or redirecting the same question to several pupils for electing
desired response. Such redirection has the teacher in the task of proofing by prompting or seeking further information with the helps of several pupils.

5. **Increasing critical awareness** : This technique is a correct response situation to increase critical awareness in the pupil. A teacher is required to ask ‘how’ and ‘why’ of a completely correct or desired response from the responding pupils e.g. how can you justify it?, why do you assume so?, how does it occur?, what may be the reason behind it? etc., can be helpful in asking the responding pupils to justify his response for the purpose of critical awareness in him.

### 3.2.3.4 The Skill of Stimulus Variation

Generally a teacher makes use of an appropriate stimulus for evoking desired response or responses. However a continued use of a stimulus may induce disinterest and inattention on account of so many physiological and psychological factors. The stimulus variation i.e. variation or change in the stimulus available in learners environment provides an answer.

**Definition** : The Skill of Stimulus Variation may be defined as a set of behaviour for bringing desirable change or variation in the stimuli used to secure and sustain pupils attention towards classroom activities.

**Importance of the Skill** :

- It provides changing levels of sensory inputs, which are required for maintaining the attention of students in the class.
- It breaks down the monotony in the class & brings about attitudinal changes in the learner.
- It determines teacher’s liveliness in the classroom.
Components:

1. Movements: Moving objects are capable of capturing more attention than non-moving and static. Therefore the movement of the teacher in the class carries wide significance in securing and sustaining pupils attention. However, all types of movements do not bring fine results. Therefore, a teacher while practicing the skill of stimulus variation should learn to make well planned meaningful movements for securing and sustaining pupils attention.

2. Gestures: Gestures are non verbal cues provided in the oral message given by the teacher for enhancing the value of this message. They are usually made with the help of movement of eye, hand, head, body, facial expression, i.e. extending the hands in a typical shape to indicate how big or small an object is.

3. Change in speech pattern: This attention capturing behaviour of the teacher concerns with the art of bringing appropriate variation or change in the tone, pitch or speed of his voice.

4. Focusing: It refers to the behaviours that help in focusing pupil attention on a particular object, word, idea, rule or generalization.

   Such behaviours may take the following forms

   a) The use of verbal statements like look here in this map, it is an important to note etc.

   b) The use of gestures

   c) The use of both verbal statements and gestures

5. Interaction styles: The communication process going inside the class room is termed as interaction. There are three main styles of this interaction as given below:

   a) Teacher pupils or teacher group interaction (teacher conveys and get response from the class or a group as a whole).
b) Pupil-pupil interaction (here a teacher employs many pupils in a dialogue without doing direct discussion).

c) Teacher-pupil interaction (here teacher communicates with an individual pupil).

For bringing effectiveness in his teaching a teacher should learn the art of bringing variation in interaction styles.

6. Pausing: Pausing refers to the behaviour related with introducing silence during talk. A pause of approximately three seconds is regarded as quite effective in securing or sustaining pupil attention.

3.2.3.5 Skill of Blackboard Writing: Blackboard is said to be the right hand of a teacher. It is the most simple, suitable, convenient and widely used teaching aid that is employed in the teaching and learning of almost all the subjects and topics. Therefore, a teacher has to learn the art and skill of using blackboard as effectively as possible.

Definition: The skill of using blackboard may be defined as a skill or technique that helps a teacher to use blackboard in the teaching-learning process as effectively as possible for the proper realization of the stipulated teaching-learning objectives

Importance of the Skill: The proper use of blackboard is important because of

- Clarity
- Motivation
- Complete picture
- Variety

Components of the Skill:

1. Legibility: The handwriting is said to be legible when there is maximum ease in reading it. Handwriting is legible if it has the following characteristics-
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--- Distinctness- Every letter should be distinct. There should be distinct difference between letters.

--- Slantness- The slantness of each letter should be closet to the vertical.

--- Size of the capital letter- The size of the capital letter should be just bigger then that of the small letters, but not so much exaggerated so as to form an obstacle while reading

--- Size of the capital and small letter : All the capital letters should be of the same size and all the small letters should be of the same size. It may be noted that size of the double sized small letters should be the same and the rest of the same size.

--- Thickness of the lines : The thickness of the line should be of the same width one hint to maintain uniform thickness is to rotate the chalk by fingers you write.

2. Neatness : The following points should be remembered for the neatness in the blackboard work

   - Straightness of the lines
   - Spacing between the lines
   - No over writing
   - Focusing the relevant matter

3. Appropriateness of written work on blackboard : The content is of two types

   a) Letters / words / sentences
   b) Diagrams / Illustrations

The appropriateness of the work on the blackboard includes

   - Continuity in the point
   - Simplicity and briefness
   - Drawing attention and focusing

4. Proper presentation : Proper presentation means develop a well planned lesson on the blackboard i.e. while writing on the blackboard there should be continuity in the points being
presented on the blackboard. So that pupils should have clear understanding of the lesson. Also while presenting the lesson on the board the points written should be logically related to the previous one.

5. **Writing in straight lines**: In the blackboard work the words and the sentences should be written in the horizontal lines parallel to the base of the backboard. As far as possible to write in straight lines do not stretch to much to the top of the blackboard but try to write on the place which is within the reach of hand holding the chalk.

6. **Visibility**: The size of the letters should be large enough to be read from the far end of the classroom. Size depends upon the grade/level of the pupils.

7. **Figure at Proper Place**: Text written on the blackboard should be supported by the figure (if any) at the proper place. If the figure is to be explained with the help of writing supporting text on the blackboard then the figure should be normally drawn on the right side of the text. If the figure is to be explained without writing any supporting text on the blackboard then the figure should be drawn in the center of the blackboard.

8. **Speaking with Writing**: Speaking with writing means that the teacher should speak the same content what he/she writes on the blackboard so that there should not be any moment of complete silence in the classroom. This is desired so that the students will remain attentive towards the subject matter & there is additional grasping of the text by the students through listening, which is being written on the blackboard.

9. **Use of coloured Chalks**: Use coloured chalks sparingly to bring about contrast with other matter presented on the blackboard means to bring attention about the things which are more important than the other text written on the blackboard.

**3.2.4 PRESENTATION OF A MODEL DEMONSTRATION LESSON**: Here a demonstration or model lesson for the use of selected teaching skill is presented before the
trainees. This is also termed as 'modelling' i.e. demonstration of the desired behaviours in relation to a skill for imitation by the observer. Demonstration of the model lesson is given in the following ways:

- By providing written material such as handbooks, guides, illustrations
- By exhibiting a video recorded film of micro lesson
- By making trainees listen an audio recorded micro lesson
- By arranging a demonstration from a live model i.e. a teacher educator or an expert demonstrating the use of the skill

The scripts of model micro lessons on the selected teaching skills i.e. Skill of Introducing the Lesson, Skill of Explanation, Skill of Probing Questioning, Skill of Stimulus Variation & Skill of Black Board Writing, demonstrated by the investigator is given in the Appendix A, Appendix B, Appendix C, Appendix D & Appendix E respectively.

What is observed, listened read and viewed through a modelling source is carefully analysed by the trainees. In a demonstration given by an expert or teacher educator, student teachers are expected to note down their observations. An observation schedule especially designed for the observation of the specific skill is distributed among the trainees and they are also trained in its use before hand. Such observation of the model lesson and its relevant criticism provides desirable feedback to the person giving the model lesson.

3.2.5 TRAINING OF OBSERVERS & ROLE ALLOCATION: In order to provide effective and objective feed-back to the student-teachers, it is desirable that college supervisors, peer supervisors & students (holding 7th position in the micro class) are given training in observation and recording of teacher behaviour under a specific teaching skill. Adequate orientation is also given in the use of observation schedules. The three college supervisors, four peer supervisors & four students have been allocated the roles two days
before conducting the microteaching sessions so that they have a clear perception of their roles. They are also told the way in which they are required to perform the same.

Seven types of feedback used for the study are Supervisor Feedback, Peer Feedback, Student Feedback, Audio-self Feedback, Audio+Supervisor Feedback, Video-self Feedback, & Video+Supervisor Feedback. Some of the tips for providing an effective feedback for different types of feedback are:

• **Tips for Supervisor Feedback**

  1. Provide descriptive information rather than evaluative information.

  _Helpful:_ You organized the lecture by writing down the main points on the overhead.

  _Less Helpful:_ I liked how you organized the lecture.

  2. Provide specific information.

  _Helpful:_ You summarized the main points of the unit at the end.

  _Less Helpful:_ You did a good job.

  3. Begin and end with strengths of the presentation and discuss any problems in between. If you start off with negatives, the person receiving feedback might not even hear the positives that come later.

  _Helpful:_ You started with a summary of the points that you were going to cover which would really help students. But students might have some problems following an example that you don’t write down for them. At the end, you pulled the unit together by leaving them with the main points.

  _Less helpful:_ Students would have trouble following your examples because you didn’t write them down. Also I had trouble knowing which were the main points. Your summary at the end was good.

  4. Use second person for positive statements.
Helpful: You really were enthusiastic and talked about your subject as if you thought it was very interesting.

Less Helpful: I liked the enthusiasm shown.

5. Use first or third person for descriptions of problems. Avoid second person for less positive statements.

Helpful: Students need to be engaged in the class. Perhaps they could be asked questions that would lead them to give the definition. I tuned out at one point. I would have engaged in the material more if I had been asked some questions.

Less helpful: You didn’t ask enough questions.

6. Avoid inflammatory language. It is never appropriate to demean, insult, or make fun of another person’s work.

- **Tips for Peer Feedback**: In feedback session the strengths of the presentation and potential areas for improvement should be addressed. Feedback should be honest and direct, but constructive, focusing on ways the presenter can improve. The Peer while providing the feedback should keep in mind:

  1. Feedback should be descriptive, rather than evaluative.
  2. Feedback should be specific, rather than general.
  3. Feedback should be focused on behaviour, rather than on the person.
  4. It should be directed toward the behaviour that the receiver can do something about.
  5. Feedback should be emphasised sharing information, rather than giving advice.
  6. It should come in amounts that the receiver can use, rather than everything that could possibly be said.
  7. Feedback should be checked to insure clear communication.
• **Tips for Student Feedback:**

1. Thorough analysis of the quantitative data provided by the student on the evaluation form.

2. Student should be asked to answer the following three questions:

   (a) What do you like best about this micro lesson?

   (b) What do you like least about this micro lesson?

   (c) What suggestions do you have for the improvement in the learning from the students point of view when the teacher presents the same micro lesson to the next group of students?

• **Tips for Mechanical Feedback (Audio/Video-self & Audio/Video+Supervisor Feedback)**

1. Identify important features of your teaching that you want to focus on (for example, interaction with students, clarity of questions, or use of the blackboard). If you want to focus on more than 1-2 features of your teaching, plan to view the tape more than once.

2. While you are watching the tape, identify features of teaching that seem to be going well, and identify potential areas for change.

3. Select actions you would like to take based on your observation (for example, areas for improvement, new ideas to implement, or further resources to explore).

3.2.6 **PREPARATION OF MICRO LESSON PLAN** : Under this step, student teachers are required to prepare micro lesson plans by selecting the proper concept for practice of
demonstrated skill. Micro lesson is a short lesson in which one skill is used at a time. The
guidelines for making a micro lesson is as follow:

(a) **Content Selection** : The content selected should be amendable to the practice of the skill.
This content may be selected from any grade or from any subject. When a skill is
practised, the attention should be focused on the components of the skill which constitute
the content and not on the nature of the content.

(b) **Designing the Situation** : In this logical step the various situations should be carefully
designed which will ensure the practice of each of the component of the skill.

(c) **Sequencing the Situation** : The aim of this step is to provide the logical continuity in the
presentation of practice situations emerging as a lesson.

(d) **Labelling the Components** : While presenting the content of the micro lesson each
component of the skill should be labelled in bracket, whenever they occur.

(e) **Review of Micro Lesson** : After preparing the micro lesson one should review &
subsequently modify (if necessary) the lesson plan on the basis of following questions:

- Is it sufficient for 6 minutes duration?
- Has it covered all the selected components of the Skill under practice?
- Is there any further scope of increasing the skill components?
- Do different components of the skill have optimum occurrence?

The setting for micro class used is as below:

- Number of pupils : 5-10
- Type of pupils : Real pupils or preferable peers
- Type of supervisor : Teacher Educator/Self/Peers/Pupils
- Time duration of Micro lesson : 6 minutes
- Time duration of Microteaching Cycle : 36 minutes

The time in microteaching cycle is divided as follows:
Teaching session : 6 minutes
Feedback session : 6 minutes
Replan session : 12 minutes
Reteach session : 6 minutes
Refeedback session : 6 minutes
Total time : 36 minutes

3.2.7 SCHEDULING AND TIME-TABLING: Schedule for the various steps of the microteaching procedure should be prepared in advance. This includes role of each student-teacher/student at a particular point in time, allocation of college supervisors to different groups and it is done in such a way that a group may consist of 5-10 student-teachers. Before preparing schedules for the training of student-teachers, some basic questions that are to be kept under consideration.

- Type of feedback given to a particular student teacher.
- The cycle of teach & re-teach be run continuously one after another.
- It is also to be decided that re-teach session will be concluded on the same day.
- Re-teach sessions to be conducted with the different students.

3.2.8 PRACTICE OF THE SKILL (TEACH SESSION): Under this step, the student teacher teaches his prepared micro lesson for about 6 minutes duration. In the micro class consisting of 5-10 real pupils or preferable peers. Supervisor/Self/Peers/Students with the help of appropriate observation schedule supervises it. In case of audio/video feedback, audio/video recording is done.
3.2.9 PROVIDING FEEDBACK: The greatest advantage of microteaching lies in providing immediate feedback to the student teacher on his teaching performance demonstrated in his micro lesson. The feedback is provided in terms of his use of the component teaching behaviour emphasising the skill under practice so that he may be able to modify them in the desired direction.

3.2.10 RE-PLANNING (RE-PLAN SESSION): In view of the feedback received from the different sources the student teacher tries to re-plan his micro lesson. He is provided 12 minutes time for this purpose.

3.2.11 RE-TEACHING (RE-TEACH SESSION): In this session of 6 minutes the student teacher re-teaches his re-planned micro lesson to the different micro class consisting of 10-15 real pupils studying in the same class (selected for teach session).

3.2.12 PROVIDING RE-FEEDBACK: On the basis of student teacher’s teaching performance demonstrated in his re-taught micro lesson, the student teacher is provided the re-feedback in the way outlined at S. No. 3.2.9.

3.2.13 REPETITION OF MICROTEACHING CYCLE: Microteaching Cycle is repeated and the student teacher is required to re-plan & re-teach his micro lesson in the light of the re-feedback received till he attains consistency over the skill under practice.

The Microteaching Cycle is shown diagrammatically in the figure 3.1
Class size 5-10 Students

Presentation of Micro Lesson

Can be observed by

Self Supervisor Peer Students Audio Recorder Video Recorder

Feed Back to Student-Teacher
Re-plans the Micro Lesson
Re-teaches the Lesson to another group

Figure 3.1: Microteaching Cycle

3.2.14 INTEGRATION OF TEACHING SKILLS: The last step is concerned with the task of integrating various teaching skills individually mastered by student teachers. This helps in bridging the gap between training in isolated teaching skills and the real teaching situation faced by a student teacher.

The integration as a whole approach is used to integrate all the five selected skills in the mini lesson for practice. The demo lesson used by the investigator for teaching the student
teachers about integration of teaching skills was prepared by through integration as a whole approach by integrating all the five selected skills is shown in the Appendix F.

After going through the foundations of the microteaching protocol in this chapter, now it is necessary to study the research methods/techniques which are used for collection of data, establishing relationship between data and unknowns, and evaluation of the accuracy of results. These aspects related to the Present Study are covered in the next chapter, which includes the Plan & Procedure of the study, hypothesis of the study, data collection procedure, sampling techniques, detailed description of various tools & statistical techniques used in the Present Study.