

Micro-teaching is a system of controlled practice that makes it possible to concentrate on specific teaching behaviour and to practice teaching under controlled conditions. Teaching is a complex activity. Even teachers with long standing face difficulties sometimes. The condition of the novice student teacher on the eve of completing his training remains very miserable. The sight of the student teachers with trembling legs and palpitating heart on the fateful day of the first teaching encounter, is not uncommon. He is unprepared and finds himself in shallow waters. He is not confident whether he would swim or sink, whether he would be able to control the pupils, able to communicate effectively and follow the sequence of activities. The poor fellow is almost bewildered especially when the supervisor assesses his teaching with a global overview. In short, there are a number of serious handicaps for the student teachers in facing the actual teaching situations effectively. A few deficiencies in this respect are listed. below:

1 Inadequate preparation of the student-teachers for the block student-teaching programme.

2. Sudden exposure to complex teaching situation, where

- i. Full Class size comprising 30--40 pupils poses management and discipline problems to the beginner.
- ii. the duration of 30-40 minutes lesson is unduly long for a beginner
- iii. use of several component teaching skills in the full scale lesson cannot be satisfactorily presented by the beginner.
- iv. global supervisory comments fail to provide systematic and specific feed-back to the student teacher to make Improvement in subsequent teaching.

WHAT IS MICRO-TEACHING?

(Micro-Teaching defined)

Micro-teaching is a teacher training technique. It is defined as a system of controlled practice that makes it possible to concentrate on specific teaching behaviour and to practise teaching under controlled conditions.

(Allen and Eve, 1968).

The complexity in a teaching encounter is reduced by practising teaching skill one at a time. This complexity is further **reduced** by having a small number of pupils, short duration of time and the content being reduced to a single, simple concept and one component skill **is** practised at one time.

A MINIATURISED CLASSROOM TEACHING

Micro-teaching may be considered as a miniaturised class-room teaching or *mini-teaching*. It may be described as a '*scaled down*' *eaching encounter* in class size and class time. (Allen and Ryan 1969) In 1976, Clift described it in these words, 'Micro-teaching is a teacher training procedure which reduced the teaching situation to a simpler and more controlled encounters achieved by limiting the practice teaching to a specific skill and reducing teaching time and **the** class size.

Micro-teaching technique was first developed in 1963 at Stanford University and was used for the training of Secondary School teachers. The concept has never been a static one. It continues to grow, change and develop both in focus and format. Some of The countries like Usa, Uk, Scotland and Netherlands have set up microteaching laboratories. In India, a lot of work has been done in the centre of Advanced Study of Education, Baroda and N.C.E.R.T. The Technical Teachers Training Institute, Chandigarh has its micro-teaching laboratory.

STEPS GENERALLY FOLLOWED IN MICRO-TEACHING

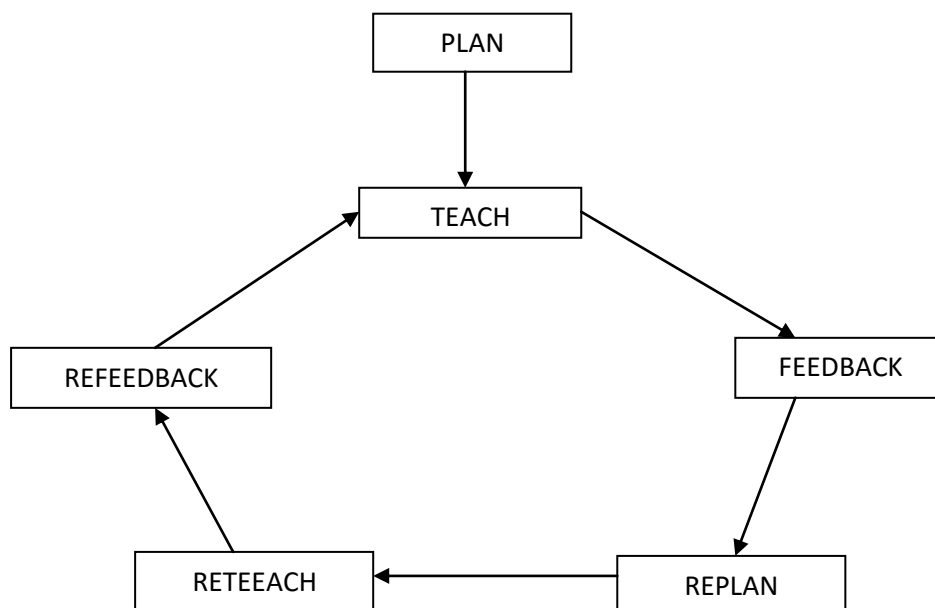
(Principles of Micro-Teaching)

The steps generally followed in a micro-teaching setting are :

- I. A student teacher teaches a *small class* of 5 to 10 pupils (micro-class) for 5 to 10 minutes. There may be real pupils or peers acting as pupils.
- II. The content of a lesson is generally a single concept. The whole lesson is built around a single teaching skill so as to maximise the use of the behavioural components involved in that skill during teaching.
- III. A micro-lesson is carefully planned on the basis of a pre-decided model. The lesson can be observed either by a supervisor or peer Supervisor using a specially developed evaluation performance for the skill. It can be recorded on a video tape for later evaluation. This session is known as teach session.
- IV. After this session, the trainee is given the *feed back*. This is known as view, assess/feedback/critique session.
- V. During the next session, the trainee goes to another room where he re-plans or re-structures his lesson in the light of the feedback received. It is also known as *re-plan* session.
- VI. Next is the *re-teach session* where the trainee re-teaches to different set of pupils the same unit which is re-structured.
- VII. After re-teach session there will be re-feedback regarding the lesson. This session is termed as *re-view/re-assess/re-feedback*

All the session may be together called as one microteaching cycle.

It may be represented as shown diagrammatically below:



The basic principles of micro-teaching are very simple. A student teacher teaches a short lesson of about five minutes' duration to a small number of pupils. At the end of the lesson the pupils leave and the student teacher discusses the lesson with the supervisor. After a short practice the student teacher repeats the lesson with a different group of pupils making use of the feedback from the supervisor to improve his previous lesson. He thus gets re-feedback.

PROCEDURES USED IN MICRO-TEACHING

Different procedures have been used by different persons. A mention is made of the following procedure used by Mishra, Goswami and Kulshrestha (1979)

- Teach-6 minutes
- Feedback--6 minutes
- Re-feedback by actual evaluation 4 minutes
- Re-plan --7 minutes
- Re-teach 6 minutes
- Re-feedback---6 minutes
- Total time 35 minutes.

There can be many variations within this broad outline ; the size of the class may vary from 3 to 10 pupils ; time may vary from 3 to 28 minutes ; the pupils may be either real or peers acting as pupils ; the sources of feedback may be from one or many sources like self, pupils, peers acting as supervisors, teacher educators, audio-tape recording, video-tape recording and the like ; the feedback can be immediate or delayed, prescriptive or descriptive, qualitative or quantitative ; and variations in length of time devoted to any phase of the micro-teaching cycle.

MAIN PROPOSITIONS OF MICRO-TEACHING

Allen and Ryan (1969) have mentioned the following as the main propositions of micro-teaching :

1. Micro-teaching is *real teaching*. Although the teaching situation is a constructed one, nevertheless bonafide teaching does take place.
2. Micro-teaching lessens the complexities of normal class-room teaching. Class size, scope of content, and time are all reduced.
3. Micro-teaching focuses on training for the accomplishment of specific tasks.
4. There is provision for increased control of practice. A number of factors 'variables can be manipulated. A high degree of control can be built into the training programme.
5. Micro-teaching greatly expands the normal knowledge of results or feedback dimension in teaching. Several sources of feedback are at his disposal. All this feedback can be immediately translated into practice when the trainee re-teaches shortly after the critique conference.
6. The main focus in micro-teaching is to train teacher trainees

Plan + Teach + Feedback + Replan + Reteach + Re-feedback in specific teaching skills although learning on the part of the pupils is no less important.

7. Micro-teaching is also possible under simulated situations

TEACHING SKILLS

Micro-teaching is based on the assumption that the process of teaching can be analysed into a number of skills called the teaching skills which can be 'defined, observed, measured and controlled'. The term 'teaching skill' is said to be a "group of teaching act behaviours intended to facilitate pupils' learning directly or indirectly.

NUMBER OF SKILLS

The exact number of skills involved is very difficult to decide, Different authors have drawn their list of skills. However, no list is final. It is also not necessary, perhaps will never be, that a particular lesson will need all the skills with equal importance to teach it effectively. The Centre of Advanced Study in Education, Baroda (CASE) has identified twenty one teaching skills. They have studied thirteen of those in detail and prepared the Baroda General Teaching Competence Scale (BGTC) and measuring criteria for each of these skills.

The

skills are :

- 1) The skill of writing instructional objectives.
- 2) The skill of introducing a lesson.
- 3) The skill of fluency in questioning
- 4) The skill of probing questions
- 5) The skill of explaining
- 6) The skill of illustrating with examples.
- 7) The skill of Stimulus variation
- 8) The skill of silence and non-verbal cues.

- 9) The skill of increasing pupil participation.
- 10) The skill of increasing pupil participation.
- 11) The skill of using black-board.
- 12) The skill of achieving closure.
- 13) The skill of recognizing attending behavior.

RATIONALE FOR MICRO-TEACHING IN INDIA

The existing teacher-education programme in India has a number of loop-holes. We find that the practice teaching conducted these days is not so effective due to the defects in the supervisory system, and certain points of disagreement and other apparent drawbacks. The important elements in the micro-teaching technique offer tentative solutions to some of the loop-holes. Following points may be noted for justification for the technique be implemented in India: --

Micro-teaching the trainee concentrates on practicing a well-defined teaching skill which includes a set of related teaching.

- 1) Micro-teaching provides for pin-pointed feed-back in behavior
- 2) It is not easy but safe for the student teachers to teach a small group. They will have less problems of class-room discipline.
- 3) There will be less administrative problems for teacher educators in arranging lessons for student teachers when the teaching sessions are arranged with peers as students.
- 4) Micro-teaching provides an opportunity to undertake research studies with better control over conditions and situations.

The studies conducted in India indicate that micro teaching is an effective technique in the modification of teacher behaviour. It is certainly a better technique than that of the traditional approach. Micro-teaching is a new departure in teacher training

programme. Because of its merits it is a useful supplement in the present day teacher training programme. It is in no way a substitute to the existing practice teaching programme. Similarly, it is _not a panacea for all the ills teacher education. It has its own limitations and shortcomings. It is a skill based technique. Micro-teaching the trainee concentrates on practicing a well-defined teaching skill which includes a set of related teaching.

COMPARISON BETWEEN CONVENTIONAL STUDENT TEACHING AND MICRO-TEACHING BASED STUDENT TEACHING

Conventional Student Teaching	Micro-Teaching based Student Teaching
Objectives are not specified in behavioral terms.	Objectives are specified in behavioural terms.
The class consists of 30 to 40 student-teachers	Class is divided into small groups of 5 to 10
Teaching becomes complex and threatening.	Teaching is relatively simple and non-threatening.
Feedback is not immediately provided.	Immediate feedback is provided
The role of the Supervisor s vague and not helpful to Improve teaching.	The role of the Supervisor is specific and well-defined to Improve teaching.
Patterns of class-room inter- action cannot be objectively studied	Patterns of class-room interaction can be objectively studied.
Student teacher practices whole complex teaching behaviour	Student teacher One skill practiced at a time.
Time duration is 35 to 45 minutes	Time duration is 5 to 10minutes.

CHARACTERISTICS OF MICROTEACHING

- *Micro element:* Micro teaching reduces the complexities of the teaching situation in terms of i) duration of the lesson ii) length of the content iii) number of students to be taught and iv) the one skill taken up for practice. at a time.

- *Teaching skills* are categorized as Pre-instructional Instructional and post-instructional skills. Microteaching enables the trainees to develop these skills and perfect them in such a way as to master the teaching strategies.
- *safe practice ground:* Microteaching provides simulated conditions of teaching in which the safety of trainee is used
- *The teaching models:* The trainee gets many opportunities to study the desired pattern of behavior for each skill through the demonstration given by the supervisor, audio-tape or videotape. With the help of these perceptual models as the guides the trainees develop their own models.
- *Defining the skill:* A particular skill is defined to student teachers in terms of specific teaching behaviors and the objectives, which are meant to be achieved.
- *Planning the lesson:* The student teacher prepares a lesson plan based on the model on a suitable topic relating to the particular skill which he proposes to practice.
- Observation schedules filled in by the peer group, audio and videotape recording.
- *Demonstrating the skill.* A lecturer of the teachers' college gives a demonstration lesson using a particular skill and he may also present a prepared lesson with the help of an audio or videotape.
- *Discussion:* The trainees get doubts clarified of the model lesson given, by way of discussion with the lecturer.
- *Micro Teaching Practice:* The student teachers, after suitable planning for the skill teach the lesson to a small group of pupils. The supervisor observes the lesson, peer group also observes with observation schedule and the micro lesson is audio\videotaped..

- *Feedback:* The lesson delivered by the trainee is followed by discussion to provide him feedback. Peers who participated in the lesson as learners, peer observers or the supervisor can provide the necessary feedback.
- *Re-planning the lesson:* In the light of the feedback and or a different lesson In order to use the skills more effectively.
- *Re-teaching the lesson:* The revised lesson is taught to different or same group of pupils. The lesson is again observed with the help of observation scheduled *Re-discussion or re-feedback:* The ' feedback is provided on the lesson re-taught.

SKILL OF STIMULUS VARIATION

Having captured the interest of his pupils, the teacher's main problem will be to sustain the attention of his pupils throughout the lesson. What psychological principles will the teacher need to use to prevent monotony in the class? We know that attention tends to shift from one stimulus to another frequently. So it is extremely difficult to hold the attention of the pupils unless the teacher introduces variation in the stimulus.

Boredom is often a major problem in the classroom and the instructional styles of many teachers do not even recognize this factor. They remain stationary at a place or speak in a monotonous voice throughout. This skill is related to procedures by which the attention of the classroom can be secured.

A set of related teaching acts or behaviours that help the teacher to draw and maintain the attention of the students throughout the class is called the Skill of Stimulus Variation.

Teacher movement

Teacher's movement in the classroom facilitates useful shifts for attention. Standing still at one place without moving tends to create boredom, as we know that movement attracts attention. The teacher may either move towards the specimen or model being used, she may move towards the pupils to examine their work or she may move towards black board to write a new word or to discuss a point on the black board. Hence in order to secure a sustained attention in pupils, a teacher has to move about in the class. But he should make purposeful movements. Body movements can be used for emphasis. The head movements like nodding for approval or shaking head for a negative response can be effectively used. Gestures can be made by movements of the parts of the body to direct attention, to emphasize importance, to explain emotions etc. Gestures are classified as *body language*.

Change in speech pattern

By introducing changes in tone, volume and pace in his speech, he can hold the attention of his pupils. By modulating his voice, by raising his voice or dropping it and by sudden changes in pitch he will force his pupils to pay attention to what he is saying. By deliberate use of pauses, he can secure the attention of his students.

Change in sensory focus

Focusing pupils' attention to particular point, can include verbal statements or gestures or movements or both verbal statements and gestures.

Verbal focusing

When you say, "look at this diagram", "listen carefully to this" etc pupils attention will be directed immediately.

Gesture focusing

It takes place when the teacher points to something important on a map, picture or to important words on the black board. He may also underline the important words on the black-board .

Verbal and Gesture focusing

This involves both verbal gesture focusing. You can focus pupils' attention both by pointing to figure and saying verbally "look at this figure". This is more effective than either used alone.

Pupil Talk

It involves getting verbal participation of students in the classroom teaching. These teaching acts keep the students mentally alert.

Pupil movement

Besides getting students, verbal participation by answering question, he can ask them to (i) make notes drawings or diagrams in their note books (ii) come forward to the black board and write or draw on it (iii) examine the model, specimens or use the apparatus for an experiment etc. Physical participation in the classroom teaching enables the teacher to sustain the attention.

SKILL OF PROBING QUESTIONS

Questioning is one of the most important teaching skills, It is indispensable for good teaching. He who never questions never teaches. Questioning plays a very important part in learning, teaching and testing. It is said that the success and efficiency of our teaching depends more on the skill and judgment with which we put questions than on any single circumstances. The minds of the learners and the teacher can be brought into close touch through this device. Teaching is not just like that of filling an empty pot. The students through their mental process must attain the knowledge. For that they ask questions. We can very easily answer a question. But it is difficult to construct a question involving higher order mental abilities. Asking question is an art. A teacher must learn to ask suitable, appropriate and meaningful questions. Questions, which fit in with the following, are called meaningful questions: 1. Structure 2. Process and 3. Product Structure includes grammatical part and content part of question which when taken together convey the intent of her. Process refers to the way of asking the questions. Product refers to the pupil's response. Many a time it happens that nothing is wrong with the mixture or the process of the questioning. But even then the pupils do not give any response; they give partially correct responses incorrect response and completely correct responses. to handle such responses of the pupils? In case of all such situations except completely correct responses, you will have to lead the pupils to the correct response if you want to be an effective teacher. That is you will have to go deep or probe into pupils' responses by asking a number of questions about what already know and to lead them to the correct responses. Even the response is correct you will have to help the pupils to view from a broader perspective. A set of related teaching acts that tend to help the teacher to go deep in "Pupils" response by asking a series of subsequent questions is called the *skill of probing Questions*.

Components

Prompting Techniques

This involves the teacher to give clues or hints to the pupils and ask leading questions. Here, the teacher neither supplies the answer nor does he redirect the question to some other pupils. It helps the pupil to answer the question himself. This technique allows the teacher to probe by prompting the pupil even though at its instance it appears that the pupil cannot answer the question. This technique is used when the student says 'I don't know' and gives incorrect response. Keep two things in mind that the teacher does not discourage the pupil for his no or wrong response. Secondly the teacher helps the pupil to arrive at the criterion response by means of systematic and step by step questioning process.

Seeking Further Information

It consists of asking the pupil to supply the additional information to bring initial response to the criterion level and expected level. "

Refocusing

This technique is used when a student gives correct response. The teacher relates the present answer with the topic already covered. This technique consists of enabling the pupil to view his response in relation to other similar situations.

Redirection

It involves putting or directing the same question to many pupils for responses. The purpose of this is to increase more pupils participation.

Increasing Critical Awareness

This involves, asking 'how' and 'why' of completely correct response. The teacher asks the pupil to justify his response rationally. Therefore this technique elicits rational for his response.

Skill of Explaining

Generally, a teacher is said to be explaining when he is learning 'how' and 'what' of a concept, phenomenon, event, or condition. (Explaining can also be defined as an activity related about in understanding in some one about concept, etc. In a classroom, an explanation is a set of interrelated statement made by the teacher related to a phenomenon, an idea etc.in order to bring about or increase understanding in the pupils about it. Now the question that may come to a teacher's mind is he can become an effective explainer in the classroom. It requires a skill on his part for being so. A teacher should always endeavor to explain the concepts, generalizations or rules in such y that they are understood by the students. The ability to explain logically and clearly is one of the most important skills. And a teacher must strive to perfect it. Hence it is necessary that the teacher plans his lesson carefully to ensure that his notions are clear and logical, The following are the component behaviours relating to the skill of explaining.

COMPONENTS

Desirable Behaviour

Explaining links (or) Cognitive links:

These involve words and phrases in the statements of an explanation. Such links made the explanation clearer by continuity in the statements used. They are generally conjunctions or prepositions which explicitly indicate the causes, consequences, reasons behind, means or purposes of an event, concept, action or conditions. The following are some of the cognitive links which are generally used: - *the result of therefore, in order to, since, as a result, because, due to, before etc.*

Using beginning statements

Generally, before an explanation certain statements are made for setting the minds of the listeners. The beginning statements create a mental readiness on the part of pupils to listen to what is going to be explained.

Testing Pupils Understanding

This behavior of the teacher involves putting questions to people to test whether or not they have understood what has been explained. It helps in knowing whether the purpose of explaining the concept or phenomenon has been achieved or not.

Concluding Statement

After the explanation, certain statements are made which conclude the whole explanation. The concluding statements help in consolidating what has been explained

Undesirable behavior

Irrelevant Statement:

While explaining, a statement becomes irrelevant when it is not related to and does not contribute to the understanding of the concept being explained. Such statements distract the students' attention from the subject of explanation and thus lead to confusion.

Lacking in Continuity

This refers to break in the sequence of ideas presented during explaining. During explaining, continuity breaks in the following situations:-

(When a statement is not logically related to the previous statement.)

When a topic already taught is referred to without showing its relationship with the subject of explanation. When the statement is irrelevant.

Lacking in Fluency

It occurs when a teacher speaks incoherently. When there is a lack in the influence, it not only distracts pupil's attention, but also hinders their understanding of the subject or explanation

Vague words and phrases

Sometimes while explaining a teacher uses such words and phrases which indicate that he is failing to make something illicit) The use of such words and phrases not only hinders the understanding of what is being explained but also irritates the listeners (Some words and phrases, which are commonly used, are given below I Think, o.k., Say, I mean, You know etc.,)

Inappropriate Vocabulary

This involves using terms unknown to most of the pupils of that age group and grade level. Sometimes more difficult technical terms are used to explain certain simple terms.

SKILL OF REINFORCEMENT

While teaching, a teacher encounters a variety of student's behaviors. Obviously he would like the student's desirable behavior and criterion responses to be retained and strengthened and undesirable behavior to be eliminated. A set of related teaching acts (or) behavior that enables the teacher to encourage reinforce the desirable behaviour and eliminate undesirable behavior is *called skill of reinforcement*.

The skill of reinforcement refers to the effective use of reinforcers. The skill is used when the teacher reinforces a good behavior with a smile, praises a good answer, encourages a slow learner (or) writes 'well done' on a piece of work slow reinforcement can increase pupil's attention, maintains motivation and improves pupils learning.

Components:

❖ *Positive verbal reinforcers*

With the use of such words as 'good', 'yes', 'correct,' 'excellent' etc., a teacher can reinforce pupil's desirable behavior.

❖ *Extra verbal cues*

Words like 'Um', 'aha' etc., are used to strengthen the desirable behavior of the pupils.

❖ *Positive non-verbal reinforcers*

They are made without use of words. Non-verbal cues like *nodding, smiling, looking attentively* etc., reinforce positively a desired response.

❖ *Repeating and rephrasing*

Teacher repeats (or) rephrases the response given by the student. This teaching act strengthens the desirable behavior.

❖ *Writing the pupil's answer on Blackboard*

This teaching behavior reinforces the desirable behavior of the student.

❖ *Negative non-verbal reinforces*

This is brought out using such behaviors such as frowning, nodding the head in negative way, staring at angrily etc.,

❖ *Negative verbal reinforces*

The teacher expresses his disapproval of the response of the pupil by such words as *no, wrong, incorrect etc.* This type of reinforcement affects learning negatively and decreases the motivation of the pupils. Hence you avoid giving this type of reinforcement.

❖ *Wrong use of reinforcement*

Approving the wrong responses or disapproving the correct response are the examples for the occurrence of this component.

❖ *Inappropriate use of reinforces*

Using reinforces in a delayed manner is an example of the occurrence of this component.

SKILL OF USING BLACKBOARD

The black board is the most widely used teaching aid. In spite of newer and better devices in use, it is indispensable in the classroom, as it is still the cheapest and most economical. It is valuable as it intensifies pupil's interest and attention on the main aspects of the lesson, allowing the teacher to proceed at a pace commensurate with the understanding of the pupils.

The following list of items, for which a blackboard may be used, indicates the versatility and effectiveness of this visual aid of drawings sketches, graphs maps, diagrams, definitions utilities, giving assignments, tests solving problems, etc. But the black board technique needs to be learned and practiced. It is extremely important that the teacher's own handwriting is legible. He must ensure neatness in the black board work and the summary, maintained on the black board should be appropriate. A set of teaching acts or behavior that enables the teacher to use the black board effectively during the teaching learning process is called the *skill of using blackboard*.

Legibility

1. Every letter is distinct.
- 2) Adequate spacing is there between two letters
- 3) Adequate spacing is there between two words.
- 4) The slantness of each letter is closer to the vertical
- 5) The size of the letter is large enough to be read from the far of the
- 6) The size of the capital letters is just bigger than the all letters
- 7) All the capital letters are of the same size.
- 8) All small letters are of the same size.
- 9) The thickness of the lines of the same width.

Neatness

1. The words and sentences written are parallel to the base of the black board
- 2) There is adequate spacing between two lines
- 3) There is no overwriting
- 4) Only the relevant matter, which is the focus of classroom discussion, is retained on the board.

Appropriateness

1) There is continuity in the points being presented on the black board 2) The points written on the black board are brief and simple 3) Only the important points are underlined to draw the pupils' attention. 4) Colour chalks are used suitably 5) Diagrams / illustrations are developed along with the lesson 6) The diagrams are simple, large, clear and proportionate in size 7) There are no unnecessary details in the diagrams / illustration.

SKILL OF CLOSURE

Achieving closure is similar to a step as recapitulation in Herbartian steps. It is a process of associating new facts with the old knowledge, applying new knowledge in various situations and ensuring repetition of the facts in the best possible way. The new knowledge and facts are not repeated mechanically but are reviewed from various points of view for developing insight into their meaning.

It may be necessary to use this skill at convenient points during the lesson for definite summing up at every step when there are too many ideas in the lesson.. At the end of a lesson, it is absolutely essential to make a quick review of what has been taught.

Components

Consolidation of Major points

This involves summarizing the main points covered during the lesson into a meaningful whole. This can be done either by the teacher with or without the involvement of the students or by the pupils alone.

Application of the present knowledge in new or different situations

It refers to creating situations where the pupils can make use of what they have learnt during the lesson in different or new situations. For this purpose the teacher may use some media/approaches in the form of oral, written, non-verbal or termination

Linking the past knowledge with the present knowledge.

Past knowledge and the present knowledge involves helping the pupils to see the relationship between them, it enables them to get a clear view about the present knowledge.

Linking the present knowledge with the future knowledge

It refers to relating the present knowledge to the home k or assignments given to the pupils. It may also require them to learn on their own.

Link Practice

According to Gestalt psychology complex learning like concept formation and problem solving can be brought about only when various bits of information are structured and received as a whole. This whole is something more than the simple summation of the analyzed elements.

Micro-teaching is definitely a helpful technique for their trainees not only in knowing the teaching skills but also able them to gain confidence in teaching. It helps them acquire proficiency only one skill at a time. But a macro lesson involves the combination of several skills. Hence to give practice in integrating the various skills required for teaching a macro lesson, *link lesson* for 20 minutes is also attempted in the college. This provides an opportunity to the trainee for smooth transition from minute's micro-lesson to 45 minutes macro lesson. A link practice lesson is for 20 minutes duration integrating the different skills required for teaching a sizeable chunk of subject matter.

COMPARISON OF MICRO, LINK AND MACRO LESSONS

CHARACTERISTICS	MICRO-LESSONS	LINK-LESSONS	MACRO-LESSONS
Time limit for practice	5 minutes	20 minutes	45 minutes
Class size	5 or 6 peers	20 peer group students	40 students
Number of skills	One	Skills required for teaching the content and integration	All the relevant skills for topic
Size of content	One single concept	A part of a lesson	Probably a complete lesson