UNIT-II

TEACHING SKILLS

Micro-teaching is a teacher training technique and faculty development technique. Micro-teaching was invented in 1963 at Stanford University by Dwight W. Allen, and has subsequently been used to develop educators in all forms of education.

Meaning of Micro-Teaching

A scaled-down version of real teaching and several factors. Scaled-down in terms of class, size, and time in order to minimize the complexities of normal teaching. Micro-teaching is a training technique in which a teacher trainee practices with a small group of 5 to 10 pupils for a short duration of 5 to 10 minutes on a selected content/ concept in a single skill.

Micro-teaching is a stimulated social teaching process to provide feedback to teacher trainees for the modification of the behaviour of teacher trainees. Micro-teaching provides teachers with a practice setting or instruction in which the normal complexities of the classroom are reduced and the teacher gets feedback on their performance.

The student teachers are required to teach a single concept using specified teaching skills to a small number of students in a short duration of time.

Definition of Micro-Teaching

DW Allen (1966) defined, "Microteaching as a scale down teaching encounter in class size and period."

Clift (1976) **defined**, "Microteaching as a teacher training procedure, which reduces the teaching situation to simpler and more controlled encounter achieved by limiting the practice to a specific skill and reducing teaching time and class size."

B.K. Passi (1976) defined, "Microteaching as a training technique, which requires student teachers to teach a single concept using specified teaching skill to a smaller number of pupils in a short duration of time."

Allen and Eve (1968) defined, "Microteaching as a system of controlled practice that makes it possible to concentrates on specified teaching behavior and to practice teaching under controlled conditions."

Mc. Knight (1971) defined," *Microteaching is a scaled-down teaching encounter designed to develop new skills and refine old ones.*"

Flanders, Ned. A. (1970) defined, "Microteaching program is organized to expose the trainees to an organized curriculum of miniature teaching encounters, moving from the less complex to the more complex."

Characteristics of Micro-Teaching

The following important characteristics of micro-teaching.

o Micro-teaching is a training technique (not a teaching technique) to prepare the effective teachers.

It is designed in such way which plays a significant role in developing teaching skills among the teacher-trainees.

o Micro-teaching is a scaled down teaching (miniaturized teaching).

It reduces the complexities of the real classroom teaching in terms of the number of students (5 to 10 pupils), amount of time (5 to 10 minutes) and amount of learning contents (a single concept at a time).

o Micro-teaching provides immediate feedbacks to teacher-trainee after the completion of his/her lesson.

In this way the trainee receives meaningful feedbacks from teacher-trainer, fellow-trainees and with the help of electronic gadgets like videotape (CCTV) and audio tape.

o Micro-teaching is a highly individualized training device. It offers better control over practicing teaching activities. Thus, many factors can easily be manipulated in attaining the mastery over the teaching skills during training.

Objectives of Micro-Teaching

Objectives of micro-teaching are given below –

- To find out and assimilate new teaching skills underneath controlled conditions.
- To realize confidence in teaching and mastering a variety of teaching skills on a small size of pupils.
- o To utilize the obtainable material and time to the most.
- o To modify the teaching method to achieve perfection in teaching.
- o To amass mastery during a range of teaching skills.
- o To switch the teaching behaviors within the needed manner.
- o To scale back the complexities of teaching.
- o To amass new teaching skills and refine previous ones.
- o To produce needed feedback.

Another objective of micro-teaching is that Micro-teaching aims at providing part skills of the teacher to the teacher trainees at the pre-service level.

Phases of Microteaching

There are three Phases of Micro-Teaching. Three phases of the microteaching area unit are as follows –

- **Phase I:** Knowledge Acquisition phase (pre-active phase).
- o **Phase II:** Skill Acquisition phase (Inter-active phase).
- o **Phase III:** Transfer phase (post-active phase).

Phase I: Knowledge Acquisition Phase:

It is a preparatory phase; here teacher-trainee attempts to acquire knowledge about the skill and its components. Initially, trainee tries to learn about the skill and its components through self-initiative. He reads the relevant literature and materials to develop his understanding about the skill and its components.

This can be done in one of the following ways or a combination of them.

- a) Through reading material
- b) A live demonstration of the micro-skill by an expert
- c) A video-tape of the demonstration of the skill

In the live as well as the videotaped of the demonstration of the skill, the practitioner has a model whom he emulates. The practitioner therefore reads, observes or views as the case may be. This helps him to acquire the knowledge about how to practice the skill.

Phase II: Skill Acquisition Part:

The skill acquisition phase comprised of three major activities i.e.

- preparation,
- practice and
- evaluation.

First, the teacher-trainee selects a topic and plans a micro-lesson (based on skill) for practicing the skill in a mock classroom situation. Then, trainee carefully verifies the physical setting of the classroom such as class-size, time-duration and presence of supervisors before demonstrating lesson.

Further, trainee demonstrates the lesson in the classroom and gets immediate feedbacks from trainer and fellow-trainees. As we know, proper feedback is essential ingredient to master the skills of teaching. For this purpose, both supervisor and fellow-trainees analyse the skill presentation of trainee through taught lesson and immediately provide feedbacks to him. Analysis activity provides the idea to re-plan a similar lesson for reteaching.

After considering the given feedbacks, teacher-trainee re-plans the lesson and teaches again in the classroom. This cycle of micro-teaching continues till trainee attains mastery level of skill.

Phase III: Transfer Phase:

In the transfer phase after attaining mastery and command over each skill, teacher-trainee integrates different skills and provides an opportunity to use the skills in normal classroom teaching. Thus, the skills practiced during micro-teaching sessions are transferred smoothly to regular teaching in this phase.

Creation of a microteaching setting: The Indian model of micro-teaching developed by NCERT gives the following settings.

- The number of students is about 5 to 10.
- The duration of the time is about 5 to 10 minutes.
- Number of skills only one.
- o Duration of the microteaching cycle: 36 minutes.
- o Observers: peers and teacher educators.

Practicing the skill: The student teachers should practice a particular skill to the satisfaction of the observers.

Providing feedback: The performed micro lesson should be followed by the feedback for knowing not only the mistakes but also modifications in that lesson.

Re-planning: After the feedback on the performed micro lesson, the student-teacher should re-plan the same or different micro lesson by including the suggestions of the observers.

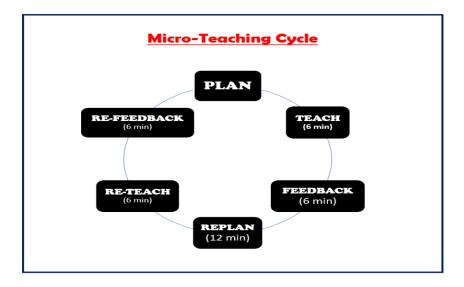
Re-teaching: Re-planed micro lessons should be taught to the same or other groups of students consisting of five to ten students.

Providing re-feedback: Feedback is given again in the re-teaching of a micro lesson as refeedback. The practice should be continued until the observers are satisfied with the skill achieved.

Integration of teaching skills: Finally the student teachers should integrate the acquired skills and perform a lesson as link practice.

Micro-Teaching Cycle:

Based on the above steps it can be concluded that the microteaching should follow a cycle as mentioned below:



Step1_Plan

In this first step, teacher-trainee selects a topic or concept and prepares short-lesson plan with the use of components of the skill under practice. The activities of micro-teaching are planned in such a way where maximum application of the components of a skill is possible.

Step2_Teach

After preparing lesson plan, teacher-trainee attempts to teach the group of students as per the planned activities within stipulated time. In case of any different situations arise during microteaching session which is not visualized in the planned activities. Trainee can alter the activities as per the situational demand. He should have the courage and confidence to handle the challenging situation of classroom.

Step3_Feedbacks

It refers to providing information about trainee's performance in the classroom. The information is comprised of strength and weakness of trainee's performance during practice session. Obviously, feedback contributes more in enhancing the performance and behavior modification of trainee in the desired direction in each and every skill practice.

Step4_Re-plan

At this juncture, teacher-trainee re-plans his lesson incorporating the given feedbacks by the supervisors. Here, the trainee again prepares a micro-lesson on the same topic or a topic which suite trainee for practicing particular skill.

Step5_Re-teach

Here, teacher-trainee teaches the micro lesson at another time. Trainee can teach on same topic to different group of students and another topic to same group of students' vice-versa. It is done to avoid the boredom of classroom. Thus, trainee will teach the class with renewed courage and confidence to perform better than the previous attempt.

Step6_Re-feedbacks

Again supervisors provide the feedbacks on trainee's performance in his second attempt of skill practice.

Advantages of Micro-Teaching

The Advantages of micro-teaching are given below.

- o It reduces traditional schoolroom teaching by scaled-down teaching.
- Its objectives square measure well outlined.
- Micro-teaching is helpful for developing teaching potency in pre-service and in-service teacher education programs.
- o Micro-teaching is a good feedback device for the modification of teacher behavior.
- The information and application of teaching skills are given by the utilization of microteaching.
- o It provides for self-analysis through the magnetic recorder and videotape.
- Microteaching could be a coaching device for rising teaching apply and prepares effective academics.
- Micro-teaching is coaching for real teaching.
- o It minimizes the complexities of traditional schoolroom teaching.
- o Micro-teaching facilitates in increase confidence step by step.
- Because it is an Associate in Nursing personal coaching device, every initiate makes progress at his own rate reckoning on his ability.
- o It's simply noticeable, measurable, achievable, modifiable, and practicable.

Disadvantages of Micro-Teaching

The disadvantages of micro-teaching are given below.

- Microteaching is an incredibly time intense technique.
- Microteaching is ability orientated instead of content orientated.
- o Scope of microteaching is slim.
- Non-convenience of a microteaching laboratory.
- o A sizable amount of trainees can not be given chance for re-teaching and replanning.
- Microteaching is carried with success solely during a controlled environmental state of affairs.
- The fortunate implementation of microteaching needs competent and suitably trained academics.
- o Microteaching doesn't take into thought the general setting of teaching.
- o It doesn't offer broad, primarily based behaviors in terms of skills.
- o It wants sufficient time to impart the teaching skills among all the coed teachers.
- It needs video, magnetic recorder, and different devices for creating the small lesson terribly effective. It becomes tough for coaching schools to create such arrangements.

Difference between Micro teaching and Traditional teaching

| S.No | MICRO TEACHING | TRADITIONAL TEACHING | |
|------|---------------------------------------|-------------------------------------|--|
| | | | |
| 1. | Class is made up of a small group of | Class is made up of 40 | |
| | between 6 and 10 students to 60 | | |
| | students. | | |
| 2. | The teacher takes up one skill at a | The teacher takes up several skills | |
| | time | at a time | |
| | | | |
| 3. | Duration of time for teaching is 5 to | Teaching is 40 to 45 minutes | |
| | 7 minutes | | |

| 4. | Immediate feedback given | Immediate feedback not given | |
|----|--|--|--|
| 5. | Teaching is done under a controlled | There is no control over the situation | |
| | situation | | |
| 6. | The role of the supervisor is specific | The role of the supervisor is vague, not clear and general | |
| | and well defined in order to improve | | |
| | teaching | | |
| 7. | Pattern of classroom interaction can | Pattern of class room interaction cannot be | |
| | be studied objectively | studied objectively | |

Microteaching Vs Macroteaching

| S.NO. | MICRO TEACHING | MACRO TEACHING |
|-------|---|---|
| 1. | Class consists of a small group of 6 to 10 students. | Class consists of 40 to 60students. |
| 2. | The teacher takes up oneskill at a time. | The teacher practices several skills at a time. |
| 3. | Duration of time for teaching is 5 to 7 minutes. | The duration is 40 to 45 minutes. |
| 4. | There is Immediate feedback. | Immediate feed back is not available. |
| 5. | Teaching is carried on under controlled situation. | There is no control over situation. |
| 6. | The role of the supervisor is specific and well defined to improve the teaching skills. | The role of the supervisor isvague (not clear). |
| 7. | Pattern of class room interaction can be studied objectively. | Pattern of classroom interaction cannot be studied. |
| 8. | There is re-teaching process. | There is no re-teaching concept in this method. |

Major Skills of Microteaching practiced in Teacher Training Institutions

- 1. Skill of Introducing a Lesson
- 2. Skill of Explaining
- 3. Skill of Probing Questioning
- 4. Skill of Illustrating with Examples
- 5. Skill of Black board Writing

- 6. Skill of Stimulus Variation
- 7. Skill of Reinforcement
- 8. Skill of Achieving closure

I.Skill of Introducing a Lesson

This Skill of Introducing a lesson can be described with reference to the components within, which are as follows:

The two desirable behaviours are as follows:

- i) Using previous knowledge
- ii) Using appropriate devices

The two undesirable behaviours are as follows:

- i) Lacking in Continuity
- ii) Uttering irrelevant statements or questions

Desirable Behaviour

- i) Using previous knowledge: Any new information given, certainly finds a foundation in the mind of the receiving learner. It is the teacher who has to gauge what previous knowledge the learner possesses with reference to the present knowledge given. The new knowledge when relevantly linked with the previous knowledge finds continuity and the old and new knowledge gets restructured to form the previous knowledge for the next lesson on the same topic. Thus, using the previous knowledge of the learners while introducing the new lesson helps in bringing the relevant previous knowledge to the conscious level of the learner. Previous knowledge of the learners can be elicited in many ways. You may refer to what they had learnt in the previous classes, or may find out what they know about the current topics in connection with the new lesson. You may also create situations and refer to the relevant knowledge.
- ii) **Using appropriate devices**: The technique used to introduce a lesson is called the device. Devices can be of various kinds like:
- Giving examples
- Asking questions
- Narrating / Describing
- Telling a story Dramatization
- Using Audio-Visual aids

• Demonstration.

The selection of devices depends on its relevance to the topic. While selecting the device, the criteria with reference to the learners, to be borne in mind are:

- Their interest
- The age groups
- The grade levels
- The maturity levels

Undesirable Behaviour:

- i) Lack in continuity: While introducing a lesson, you have to bear in mind that the statements uttered have a sequence in the ideas or information given. One statement should logically lead to another and so on and so forth, so that there is total relation in the series of statements uttered.
- ii) **Uttering irrelevant statements /questions**: While introducing a lesson, care should be taken to see that the statements uttered or the questions asked are in relation to the topic of the lesson. Unless and until this is taken care of, the statements uttered, though sequential, will only confuse the students.

II Skill of Explaining

Explaining, generally, is the description of 'what' something is, or giving reasons as to 'how' an event happened or 'why' it happened. It could also be with reference to an action, condition or phenomenon. This is done to bring clarity about the same.

Explanation in a class is the statements made by the teacher to bring about clarity of the concept taught, the idea or information given; so as to make the students understand it well. Such an explanation is effective. Now that you know what 'explaining' is, let us see how this can be effectively practised in the classroom teaching scenario. Here too, as in the Skill of Introducing, there are techniques used to explain effectively. Some of these are:

- Question Answer
- Using Audio Visual aids
- Using Inter-related statements

Here also you would find both desirable and undesirable behaviours. The desirable behaviours are:

- Using explaining links
- Using beginning and concluding statements

- Testing pupils' understanding
 - The undesirable behaviours are:
- Giving irrelevant statements
- Lacking continuity in statements
- Using inappropriate vocabulary
- Lacking in fluency

Let us now see each component of the desirable and undesirable behaviours in more detail.

Desirable Behaviour:

The desirable behaviours to be followed while practising the Skill of Explaining are:

1. **Using explaining links**: This is nothing but the utterance of statements using linking words or phrases during explanation. This brings about continuity in the series of statements uttered. Examples of linking words are - 'and', 'then', 'later', 'gradually', 'therefore', etc. Such words bring about the sequence of events in a phenomenon, process or action.

Examples of linking phrases are - 'whenever', as a result', as a consequence', etc.

- 2. **Using beginning and concluding statements**: Whenever something has to be explained, it is essential to start the explanation with a relevant beginning statement. This prepares the minds of the students as to what would follow. Having explained the idea or principle or concept, in order to conclude it, the teacher has to do so by consolidating the points explained. These statements comprise the concluding statements.
- 3. **Testing pupils' understanding**: As the purpose of explanation is to bring about understanding in the students about the concept, principle or event explained, the testing of this becomes a very essential part of any explanation. This can be done by putting questions at every point of interval after every sub-concept explained or after every key point explained.

Undesirable Behaviour:

The undesirable behaviours to be followed while practising the skill of explaining are:

- 1. **Giving irrelevant statements**: As the term indicates, 'irrelevant' statements not related with the topic or idea, have to be avoided. Such statements will only confuse the students and make the explanation ineffective.
- 2. **Lacking continuity in statements**: While explaining, if the statements uttered are not logically related to each other, it creates an obstacle in the sequential flow of statements and the idea explained suffers a setback in the understanding of the same.

- 3. Using inappropriate vocabulary: Words are the basic units of the vehicle of communication. As such, you will agree that if these basic units are not properly and judiciously used in communication, the whole process of communication becomes ineffective. Bearing this in mind, it is very essential for the teacher to use words that are suitable to the age level of the students. A major aspect of concern is the use of simple words that are easily understood. The teacher is not required to exhibit his/her proficiency in the use of high-flown language using technical jargon; but a simple language using simple words.
- 4. **Lacking in fluency**: A free flow of words and sentences, without any break or uneasy pauses in the middle of a sentence is what fluency means. As such, there is a break caused by a lack of free flow of thought into words. This should be avoided during explanation. As you have now read the components of the skill of explanation, you can now see for yourself how much you have understood them by checking it yourself.

III Skill of Questioning

The Skill of Questioning is a very important skill that a teacher had to master. When introducing a lesson, use this skill to measure the previous knowledge of the learners. While doing the lesson, ask questions to develop the lesson and after explaining every topic, ask questions to ascertain comprehension. Questions are also framed for achieving closure of the lesson in order to develop the summary of the total instruction. Again, while giving the Home Assignment, frame questions for the students to answer the same or perform some activity. Apart from using questions at every stage of the lesson, eventually for the tests and examinations too, need to set the question paper. All these go to prove how important the Skill of Questioning is for a teacher to master the same. Having seen the importance of the Skill of Questioning, let us now see the components within this skill.

- 1. Structure of questions.
- 2. Delivery and distribution of questions.
- 3. Different levels of questions

Let us now deal with the various aspects of each component.

- 1. **Structure:** The criteria for a well-structured question are
- a) Grammatical correctness
- b) Conciseness
- c) Relevance
- d) Specificity

- e) Avoiding the use of leading questionsLet us now discuss each criterion one by one in detail.
- a) **Grammatical correctness**: The correctness of the order of words in the question is the consideration here. If the question uttered is not grammatically correct, it has no clarity and hence students fail to understand it. Due to the confusion in their minds, they are unable to respond, as the question asked is not very meaningful. It also results in waste of time.
- b) **Conciseness**: This refers to the optimum length of the question, which is generally short, with no unnecessary words included. The question should be direct and straightforward.
- c) **Relevance**: A very important point of consideration with reference to the skill of questioning is the relevance of the question asked. This means that it should be with reference to the topic dealt with. The question should also contain only terms that have been explained earlier, if not, even such a question is irrelevant.
- (d) **Specificity**: This means that the question asked should be such that it will fetch only one answer that is correct. If the question asked is general in nature, it may get more than one response that could be accepted as correct, and this leads to a bit of confusion and loss of time. Moreover, the question asked should be related to only one idea.
- e) **Avoid the use of leading questions:** Questions directly reflecting the answers or those which themselves contain the answer should be avoided.
- 2. Delivery and distribution of questions: After the structuring of the questions, the way these questions are delivered and distributed is now discussed. The criteria to be considered here are as follows:
- 1. Speed of asking questions
- 2. Voice
- 3. Pause
- 4. Distribution

Let us now discuss each criterion one by one in detail.

- a) **Speed of asking questions**: The teacher should ask the question neither too slowly nor too fast. Both pave the way for ineffectiveness as students fail to comprehend.
- b) **Voice**: This refers to the audibility and the modulation with which the question is put forth. Questions should be asked in such a way that every student in the class hears it.
- c) **Pause:** After delivering the question in the required speed, a pause should be given for the students to understand the question, before expecting a response from them.

- d) **Distribution**: This refers to how the question asked is distributed among the students. It should be distributed among the volunteers and non-volunteers. The same question asked could be redirected to other students to increase pupil participation. The proper distribution of questions helps in securing and sustaining pupil's attention and active involvement in the teaching- learning process
- 3. **Different levels of Questions**: Questions can be classified into three levels, namely, Lower Order, Middle Order and Higher Order. The lower order questions include knowledge level, middle order includes understanding and application levels of thinking and the higher order questions include analysis, synthesis and evaluation levels of thinking.

IV Skill of Illustrating with Examples

As teachers, come across situations in classrooms wherein found that in order to explain an abstract concept/idea/principle to students, it creates naturally resort to giving examples. This is precisely the skill of illustrating with examples that a teacher has to acquire and master so as to bring about effective teaching.

Now what exactly is an example? An example is an observation or situation of occurrence or a concept or generalization. The skill of illustrating with examples can be defined as the selection and presentation of examples relevant to the concept/idea/principle that has to be taught to the pupils.

The components of the skill are:

- 1) Formulating simple examples
- 2) Formulating examples relevant to the concept/idea/principle
- 3) Formulating interesting examples
- 4) Using appropriate media for presenting examples
- 5) Using appropriate approach for presenting examples

Let us now discuss each component one by one:

1) **Formulating simple examples**: Simple examples are those that the students are familiar with in their day-to-day life and as such it is the previous knowledge they possess. They might have acquired this either by experience or by reading books or listening to others. The teacher should be well aware of the age, grade level and also the background of the pupils in order to give simple examples. The proof that the examples are simple is the correct responses of the students when the teacher questions them.

- 2) **Formulating relevant examples**: The examples formulated must be related to the concept being explained. This is what relevancy means. Unless the examples given are relevant, the concept or rule explained will not result in the clear understanding of the same.
- 3) **Formulating interesting examples**: An interesting example is one which arouses the curiosity of the pupils, and also sustains it. While giving such examples, the teacher has to bear in mind the chronological as well as mental age of the pupils so as to suit their level of interest.
- 4) Using appropriate media for presenting examples: The media here refers to the different types of teaching aids that can be utilized. These could be auditory, visual or tactile. Appropriateness refers to the criteria of age, grade, maturity of the pupils and the topic taught. The media used could be verbal or non-verbal. Visual examples are objects, models, maps, charts, diagrams, etc. Auditory examples are telling stories, explaining events, relating incidents, etc., Tactile examples involve presenting actual objects like real flowers, leaves, etc., while teaching Botany so as to feel the texture.
- 5) Using appropriate approach for presenting examples: While teaching, the teacher generally uses two approaches, namely, the Inductive and Deductive. In the Inductive approach, the rule/concept/ generalization is derived after giving a number of examples. This approach follows the maxim of going from known to unknown. In the deductive method, the approach is to state the rule/concept/generalization at first and then give examples for illustrating them. This goes from unknown to known.

In developing the skill of illustrating with examples, a combined approach is followed. The inductive approach is followed while clarifying the concept or rule. The teacher gives examples, which form part of the pupil's previous knowledge. Following these examples, the concept or rule is stated involving the pupils, thus deriving the same from the pupil's previous knowledge or experience. Then, in order to ascertain whether they have understood the rule/concept, the teacher asks them to give their own examples related to the concept/ rule. Thus, a three-stage approach is followed in the Inductive - Deductive approach of illustrating with examples.

V Skill of Using Blackboard

The Blackboard is the most often used visual aid by a teacher. Now, let us see what factors are to be considered by the teacher for effective use of the same.

1) Legibility of Handwriting

- 2) Neatness in Blackboard work
- Appropriateness of written work on the Blackboard
 Let us now go into the details of each component mentioned above.
- 1. **Legibility of Handwriting**: To make handwriting legible, certain points have to be given due consideration. These are the following
- a) Letters to be distinct.
- b) Adequate spacing between two letters and two words.
- c) Slantness of letters closest to the vertical.
- d) Size of the letters big enough to be read by the students at the far end.
- e) Capital letters just bigger than the small letters.
- f) All capital letters of same size and all small letters of the same size.
- 2. **Neatness in Blackboard work:** The subcomponents of this component of the skill of using Blackboard are as follows:
- a) Straightness of the line wherein the written lines should be horizontal and parallel to the base of the Blackboard.
- b) Spacing between lines to be adequate.
- c) Avoiding over-writing so as to avoid untidiness in the Blackboard work.
- d) Focusing the relevant matter by retaining the same and erasing the irrelevant and unrelated matter so as to help pupils concentrate on the matter under focus.
- 3. **Appropriateness of written work on the Blackboard:** This component of the skill of Blackboard work is realized by keeping in mind the following considerations:
- a) Continuity in the points: By this we mean that a point should be logically related to the previous one
- b) Brevity and simplicity: This are most relevant in the development of the Blackboard summary at the end of the lesson, when only the main points covering the whole lesson are written. The points are to be written in simple language and in a brief manner so that pupils easily recall the whole lesson.
- c) Drawing attention and focusing: While writing the Blackboard summary, important points/ terms/definitions are to be focused by underlining or using a colored chalk. This helps the pupils recall them easily.

VI Skill of Stimulus Variation

Stimulus is something or anything that an individual responds to. So far as a classroom is concerned, the teacher is the main source of stimuli while imparting teaching. Now let us see to what these stimuli connected with the teacher are.

Imagine a teacher explaining something and in order to make the same effective, he/ she moves to the Blackboard to write something no\ yes towards the students to ask questions in order to ascertain comprehension. The teacher uses various gestures, using hands, head and facial expressions. Such behaviours that draw and sustain pupils' attention keep changing as per the requirements of the situations. These changing movements and gestures of the teacher while teaching comprise the skill of Stimulus Variation.

Let us now see the components under this skill. The details of the various behaviours in this skill as follows:

- 1. **Movement:** The movements of the teacher should be such that the attention of the pupils are maintained at all times.
- 2. **Gestures:** These are made by the movement of the parts of the body like the head, hands and facial expressions. These can be combined with oral message too. Here too, the purpose is to direct the attention of the pupils while emphasizing something important.
- 3. **Change in Speech Pattern**: This is also referred to as the voice modulation. The variation in the voice shows the sudden change in stimulus and thus attracts the pupils' attention. The voice modulation expresses the anger, appreciation, disagreement, agreement, etc., that catches the attention of the students who respond accordingly.
- 4. **Focusing:** This could be of three types Verbal, Gestural and Verbal-Gestural. As the terms indicate, Verbal focusing is the mode of drawing the pupils' attention by words/ phrases like "Look at this diagram", etc. Gestural focusing is the way in which the teacher draws the attention of the pupils' by gestures using head, hand and body movements, like pointing to the parts of an organ on the chart. Verbal-Gestural focusing involves words or phrases accompanied by gestures in focusing a particular item, like drawing of a diagram on the Blackboard, accompanied by the description or explanation of the same.
- **5.** Change in interaction styles: The types of interaction that take place in a classroom is between teacher-student, student-teacher and student-student. By changing these interaction styles, a student's attention can be kept alive throughout the lesson.

- **6. Pausing**: Pauses are a must during teaching, for, when the teacher is continuously talking or asking questions, students don't get a chance to respond. Pauses are also essential when students' attention is to be secured. Imagine a classroom where few students are talking and the teacher is not heard. But, when the teacher stops talking, students become fully aware of the silence created, thus resulting in gaining their attention towards the teacher.
- 7. **Change of Oral-Visual Media**: Continuing to give oral information from the beginning of a period till the end is quite boring and does not sustain the attention of the students towards the lesson taught. Therefore changing the medium from oral to visual and vice-versa would create interest in the students and also help to sustain the same. The visual medium can include demonstration, experiments, filmstrips, specimens, objects, charts, models, etc. These successfully supplement the oral information.

VII Skill of Reinforcement

The term reinforcement was introduced by Pavlov in 1903. The concept of reinforcement means getting the work completed by giving some incentives or rewards to the certain person. Refers to anything stimulus which strengthens, encouraging the designated behaviour, or increases the probability of a specific response.

Reinforcement is an event which enhances the possibilities of recurrence of the response when a stimulus is produced in the similar situations. It is an evidence-based practice used to teach target skills and increase desired behaviour. Reinforcement means the use of such stimuli or their presentation or their removal so that the possibility of recurrence of some response may increase. For example, few words of appreciation increase the possibility or reoccurring the same behaviour of the pupils. In such a situation, the words of appreciation function as stimuli and the resultant behaviour of the pupils is termed as the response.

There are two types of reinforcement these include positive and negative reinforcement. If the event increases the possibility of the response, it is said to be "Positive Reinforcement". If the event decreases the possibility of the response, it is said to be "Negative Reinforcement."

Positive reinforcement: Giving a positive response when an individual shows positive and required behaviour. The most common types of positive reinforcement are praise and rewards. For example, praising a student for coming early to school or for doing a good job or for submitting an assignment on time. This will increase probability of outstanding behaviour occurring again. It is the delivery of a reinforcer (primary such as food and comfort or secondary such as verbal praise, toys, or preferred activities) after the toddler does the target skill or behaviour.

Negative reinforcement: Taking something negative away in order to increase a response. Negative reinforcement encourages students to perform better so they can have an unpleasant condition removed from them. It is the removal of an object or activity that the toddler does not like (e.g., staying at the table at dinner) when the toddler does the identified behaviour or skill.

Purpose of using reinforcement skill

The main purposes of using the skill are to:

- 1. Increase students" attention
- 2. Motivate students
- 3. Facilitate students" behaviour
- 4. Control and notify disruptive students" behavior
- 5. Help students to develop self-management learning
- 6. Enable students to evaluate their own learning
- 7. Recognize students" achievement and efforts
- 8. Improve classroom discipline
- 9. Increase participants" confidence
- 10. Encourage persistence which help learners to achieve more.

Positive Verbal Reinforcement: There are positive comments given by the teacher on the correct response of the pupils. They are manifested in form of:

- a. Using words or phrases like "good" excellent", "you have tried", "keep it up" etc.
- b. Using pupils' idea to develop the lesson
- c. Using extra-verbal cues like "um", "aha", to encourage the pupils.
- d. Using prompts like ",carry on", ",okay", ",think again"

Negative Verbal reinforcement This occurs when the teacher gives comments on the incorrect response of the pupils by saying that the pupil's response is wrong or by making sarcastic comments like "fool", "idiot", stupid", such comments discourage students.

Positive Non-Verbal Reinforcement In this case, the teacher makes comments on a correct response from the pupils without using words. He may do this by nodding, smiling, patting, writing the pupils answer on the chalkboard. By so doing, the teacher is encouraging the pupils to participate maximally in the development of the lesson.

Negative Non-Verbal Reinforcement This is when the teacher shows his disapproval without talking. He does so by frowning, staring, looking angrily at the responding pupil. This

behaviour may create fear in the pupils and he will not be bold enough to make any attempt of responding in future.

Guideline for using Reinforcement

- Show genuine warmth and enthusiasm to show that you really mean to say ,, good"
- Teacher should try to vary the style or type of reinforcement they use. A constant repetition will render the reinforcement monotonous and meaningless.
- Try to avoid using negative reinforcement. If you must use it, be tactful about it. For example, if a student is way off the subject and you desperately need to get the class back on track, do not say "ship up" but rather say "that's interesting, but maybe we can discuss it some other time and get back to our main topic for today".
- Before using reinforcement, consider the learners" age, sex, social group etc. there must be a relationship between the reinforcement and the behaviour being reinforced.
- It should be for all the pupils and not for those only who answer the questions or meritorious pupils

VIII Skill of Non – Verbal Cues

A non-verbal cue has been defined as communication without words. Although verbaloutput can be turned off, non-verbal can't. Teachers use non-verbal cues because Words have limitations. There are numerous areas where non-verbal communication is more effective than verbal.

- Non-verbal signs are powerful. Non-verbal cues primarily express inner feelings.
- Non-verbal messages are likely to be more genuine.
- Non-verbal signals can express feelings, thoughts etc.
- Complexity of the verbal message can be given through simple non verbal signals.

Components of the skill

- 1. Body language
- **2.** Proximity
- 3. Touch
- **4.** Eye-contact
- 5. Chronemics

- **6.** Smell
- 7. Vocalics
- 1. **Body Language:** Body movement (kinesics) has specific verbal transactions. To explain the subject matter or to appreciate the students we use body language. To describe shape, size body movements are helpful.
- **2. Proximity:** When a teacher wants to convey message to a student or to control a problematic 53ehavior student he has to go near him and convey non verball.
- **3. Touch:** Physical contact with others is the most basic form of communication and certain situations often communicates that there is a problem.
- **4.** Eye contact: It is a signal for lack of interest in a person. Too much eye contact shows that it is a threatening attitude.
- 5. Chronemics: With the help of chronemics we can draw attention of the students by means of waiting and pausing. While teaching teacher has to plan waiting and pausing. By increasing the waiting time, you buy for yourself an opportunity to hear and to think. Increase your waiting time upto 5 seconds or longer for slow and shy students and increase in waiting time help students to respondent higher cognitive skills.
- **6.** Smell: We can make identify things using smells. This can be used largely in lower standards.

7. Vocalics:

Postures: Postures can be used to determine participants degree of attention or involvement. Posture is understand through such indicators as direction of learn body orientation, arm position and body openness.

Adornment: Teacher should wear decent dress. If the school introduce uniform to teachers, teachers should strictly follow them. Lady teachers should not come with more jewels and shining dresses. Clothing should reflect our culture. Hair style should not be funny or attractive. **Locomotion:** Teacher should not stand or sit in one place during teaching. He has to move one

place or go near to a student to convey non-verbal messages.

IX Skill of Achieving Closure

The process of achieving closure to the lesson realizes all the above objectives. Let us now see what the components of the Skill of Achieving Closure are.

The components of the Skill of Achieving Closure are:

1) Consolidation of major points

- 2) Providing opportunities to pupils to apply present knowledge to various new situations
- 3) Linking past knowledge to present knowledge
- 4) Linking present knowledge to future learning

Let us now discuss one after the other in detail:

1. Consolidation of major points:

During the teaching of a lesson, the teacher would have ascertained at intervals the effective assimilation of the points explained. Now towards the end of the lesson, it has to be made sure that the pupils have successfully synthesized all that they have learnt into a meaningful whole. If there are any gaps in the knowledge the teacher helps in filling in the same.

Now, how does the teacher get to know this? The usual approach to this is questioning. The teacher puts forth questions that are sequential in order of the taught points, and the pupils' response to these gives the teacher the knowledge of the effectiveness of teaching and the successful grasping of the points taught. It is also advisable to write these answers on the Blackboard, as a summary, as the questions asked are logically linked so as to get responses that are conveniently developed as the Blackboard summary.

2. Providing opportunities of pupils to apply the present knowledge to various new situations:

This can be done by testing the understanding of students so that the pupils may use it in new situations. An apt example of this could be given from an English class wherein the teacher has given the meaning of strange words, use them in sentences and then ask pupils to frame sentences of their own so that it shows that they have understood their meanings well enough to use them in other situations. The testing can be done either orally or in a written manner. Another example that could be sighted is after having taught the properties of a magnet, the teacher can then ask pupils to give instances where this is applied in daily life situation and the pupils may sight examples of the refrigerator door, or the closing of a hand bag; etc. By these responses of the pupils, the teacher can conclude the successful understanding of the topic and effective application of the same in unfamiliar situations.

3.Linking past knowledge with present knowledge:

For a teacher, the present knowledge refers to the lesson in progress or just concluded. The past knowledge may refer to the immediately preceding lesson or the previous knowledge relevant to the present lesson that the pupils already possess. Now since the newly acquired knowledge has to be properly integrated into the previous knowledge, there should be links and these have to be perceived by the pupils. In this step, the teacher does exactly this, ie., to see that the pupils successfully perceive the link and integrate the present knowledge with the previous knowledge. The approach used by the teacher may be illustrated with an example.

Consider an instance where the teacher had just done with teaching the parts of an animal cell. The previous class had been regarding the parts of a plant cell. Now, since there are similarities and differences between the two, the teacher could ask how the structure of the animal cell differs from that of a plant cell and the features that are similar. This prompts the pupils to compare and contrast the two and thus naturally a link is established between the present knowledge and previous knowledge.

4. Linking present knowledge with future learning:

We know that the present knowledge becomes the previous knowledge for the next lesson. Now as knowledge acquisition is a continuous process, it certainly has a link with future learning too. Generally, by future learning we mean the application of the present knowledge in future situations. The major goal of education is application of the knowledge acquired and this is done by giving some home assignment. This should be such that it requires the pupil to apply the acquired knowledge in higher mental processes rather than just recalling the present-knowledge.

Therefore, the Home Assignment given should provide opportunities for the pupils to solve problems, find solutions, prepare charts, models etc., so that the acquired knowledge is applied in performing such activities. Having seen that the components of the Skill of Achieving Closure almost summarises a lesson, you would have realized how important it is for a teacher to master this very important skill

Link Lesson

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 some thing more than the simple summation of the analyzed elements.

Micro – teaching is definitely a helpful technique for the teacher trainees not only in knowing the teaching skills but also enable them to gain confidence in teaching. It helps them acquire proficiency only in 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, a link lesson for 20 minutes is also attempted in the college. This provides an opportunity to the trainee for smooth transition from 5 minutes micro lesson to 45 minutes macrolesson. A link practice lesson is for 20 minutes duration integrating the different skills required for teaching a sizeable chunk of subject matter.

Micro teaching Link Lesson — Class Teaching

Comparison of Macro, Link and Macro Lessons

| Characteristics | Micro Lesson | Link Lesson | Macro Lesson |
|-----------------|----------------|-----------------|-----------------|
| Time limit for | 5 – 10 minutes | 10 – 20 | 40 – 45 |
| practice | | minutes | minutes |
| Number of | One | Skills required | All the |
| Skills | | for teaching | relevant skills |
| | | the subject | for the topic. |
| | | matter are | |
| | | integrated. | |
| Size of content | One single | A part of a | Probably a |
| | concept | lesson | complete |
| | | | lesson. |

Model Episode (Link Lesson)

Model episode for grade XI computer science is given below

Name of the student Teacher : XXXX Name of the Observer : XXXX Class : XI Subject : Computer science Topic : Computer Networks Sub-Topic : Network cables Time Limit : 20 minutes Teacher : Good Morning Students Student : Good Morning Mam Teacher : You are already familiar with Computer Network. Is n't it? (Skill of Introduction) Student : Yes Mam. Teacher : Can you list some uses of computer networks? (Skill of Introduction) Student : File sharing.Resource sharing, Increasing Storage space Teacher : What can you infer from the given diagram? (Shows the Chart) Student Two or more computers connected together with cables (skill of introduction) Student :What is called network cable mam? Teacher :Cables are used to transfer the data from one another device. device to (skill of explanation)

Student : Do we have only one kind of cable?

Teacher : We have 6 types of cables for connections.

Student : Can you tell me What are they?

Teacher Yes we have Co-axial, Twisted pair, Ethernet, Fibre

Optics, USB cables, serial and parallel cables

(Teacher writes on the board- Skill of black board

writing)

Teacher : So, How many types of Cables are there?

Student : 6 types. (skill of reinforcement)

Teacher : Now, Lets discuss about Co-axial cable.

Student : Ok mam

Teacher : These cables have a copper wire inside and

insulation is covered on the top of the copper wire

to provide protection to the cable.

Student : Ok mam

Teacher : Can you give an example where coaxial cables are

used? (Skill of Stimulus variation)

Student : No Response

Teacher : Draws a cable picture on the black board .(skill of

black board writing)

Student : At home to connect TV to setup box.

Teacher : Very good. Nowadays coaxial cables are also used

for dish TV where the setup box and the television

is connected using the coaxial cable only. These cables are very difficult to install and maintain, because they are too big to carry and replace. (skill of explanation)

Teacher : Next we shall discuss about Fibre optic cables?

Student : Yes mam

Teacher : This cable is different from the other cables. The

other two cables had an insulating material outside and the conducting material like copper inside. But in this cable it is strands of glass and pulse of light

is used to send the information.

(skill of explanation)

Teacher : Shows picture of fibre optic cable. And explains

where it is used

Student : Ok mam.

Teacher : We have learnt about networks and network cables

in today's class (skill of closure).

Where do you use network cables?(Home

assignment)

Teacher : Thank you students

Student : Thank you mam