UNIT 14 TEACHING COMPETENCE

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14.0 INTRODUCTION

As we know, every profession demands certain specific skills and competence on the part of its practitioners. Similarly, if one believes that teaching is a profession, one should demonstrate certain skills and competencies which can influence learning in the students and help them achieve their goal of life. The point of emphasis here is that the B.Ed. programme should instil certain specific skills in you, as an in-service student of education. If you are working as a teacher, the programme should sharpen your skills as an effective teacher working at the secondary/senior secondary level of education. The development of desired skills and competencies depends on the effectiveness of the learning material and practical activities you are going to undertake. Besides, your attitude towards training in general and teaching in particular can make or mar the effectiveness of even the best training inputs and educational strategies.

In order to implement the principles of teaching the teacher has to have certain skills and competencies. The inputs provided through the B.Ed. programme will help you in sharpening your teaching skills, as stated earlier it is in this context that the concept of teaching skills and competence has been discussed in this unit.

We will discuss here three major types of teaching skills - core skills, subject and grade-specific skills, and target group specific teaching skills. The main emphasis of our discussion in this unit is on the strategies of training for developing necessary skills in teachers. Since microteaching is considered to be a relatively more effective training strategy, an extended treatment has been given to it.

You have already studied in Block 2 the principles of effective teaching: teacher-controlled, group-controlled and learner-controlled teaching. You have also studied various strategies of planning and management of instruction. The discussion in this first unit deals with the principles and practices discussed in the preceding blocks of this course.
14.1 OBJECTIVES

After going through this unit you should be able to:

- define the concepts of teaching competence and teaching skills,
- classify and explain various teaching skills required by an effective teacher at the secondary/senior secondary school level,
- explain the strategies of training to instil teaching skills in teachers, and
- describe the concept, organisation and evaluation of the microteaching approach.

14.2 TEACHING COMPETENCE AND SKILLS: MEANING AND NATURE

The possession of skills is an essential feature of any profession. Skills provide a means for professionals to put theoretical knowledge into practice. Effective teachers should possess skills and competence that set them apart not only from non-professionals i.e., non-teachers but also from ineffective teachers. Effective teachers can not only do things in the classroom that others cannot, but they can also understand the relationship between their actions and the effects of those actions on the students. These days our aim is to provide mass education. The teachers we need can be made available through appropriate education and training. The skills required by them can be taught, practised, evaluated, predicted and controlled. In short, these skills can be acquired through education and training.

Throughout this course we have been discussing various principles and practices of the teaching-learning process. By now you might have realised that teaching-learning is a complex process. It consists of various activities to be performed by the teacher. These activities may be: introducing the lesson, demonstrating experiments, providing feedback, explaining concepts and principles, questioning, drawing figures, writing on the blackboard, using teaching aids and other means of communication, etc. The activities and behaviours that facilitate learning in students are called teaching skills. Thus instructional techniques and procedures used by the teacher in classroom are known as teaching skills. From the instructional point of view, the teacher employs teaching skills in the classroom or school setting.

The teaching skill is a set of strictly overt behaviours of the teacher (verbal and non-verbal) that can be observed, measured and modified. Teaching skills have essentially three components (Singh & Joshi, 1990). They are:

- **Perception**: Teaching skills have a perceptual component for observing and receiving feedback. The teacher observes and selects appropriate skills to be acquired by him.
- **Cognition**: Cognition refers to the behaviour or experience of knowing in which there is some degree of awareness, as in thinking and problem solving. Skills are thus cognitive strategies that allow the teachers to complete their assigned tasks i.e., teaching-learning activities which they learn through education and training. The knowledge thus acquired develops in teachers the ability to make interpretations, and form judgements and decisions about various teaching-learning activities.
- **Action**: Teaching skills demand every teacher to actually practise his/her perceived and acquired knowledge in an effective manner in the classroom. This is so because teaching skills are a set of strictly overt and observable behaviours.

We assume that the effective teachers need three essential kinds of knowledge before they can teach the class confidently. These are: knowledge of content, knowledge about the students they are going to teach and the learning process; and knowledge of teaching strategies. Teachers also need appropriate opportunities to practice what they have learnt through simulated or workshop experiences.
Teachers are expected to be knowledgeable in the areas outside their specialisation as well. Educated teachers, with wide knowledge, command the respect of fellow teachers and the people in their communities. In rural areas the teacher is consulted in various decision making processes; he/she is therefore expected to be well informed on a whole range of issues, e.g. local/national politics, Indian history, country's geography, etc. We are clear in our approach that we are going to provide some inputs in making you a well informed and knowledgeable teacher. Your own efforts towards life-long learning will enable you to acquire the necessary competence.

Teacher educators often recommend that in order to be successful, teachers must know the students and their learning characteristics. The students differ from each other. The teachers should assist every student in his growth and development throughout the school years. You should therefore continue to learn more about your students in the context of their lives within and outside the classroom.

We know that learning is neither easy nor simple; teaching too is difficult as well as complex. Therefore, defining teaching skills is a difficult task. The nature of teaching skills is quite complex. We therefore should not hasten to define teaching skills without understanding the complex nature of teaching skills which have external features (e.g., presenting content, managing class, etc.) and internal features (e.g., teacher's attitude towards students and their learning, motivation, etc.). Teaching behaviours/skills should therefore be studied in a systematic and integrated fashion because teaching skills have many components. These components account for the teacher's resourcefulness in helping the students to attain their objectives.

### 14.3 CLASSIFICATION OF SKILLS

Teaching skills are essential for effective teaching. The effective teachers must not only possess a good repertoire of skills, but also understand when and why to use certain skills. An effective (skillful) teacher understands that different educational objectives require different teaching skills and behaviours. For example, productive drill and practice produce better learning in mathematics while this approach may not be appropriate in literature. Understanding when and where different teaching skills are appropriate is an important dimension of effective teaching.

We are not going to draw a clear boundary line between different types of teaching skills. We shall present and discuss here various types of teaching skills for your clarity and understanding so that you can use them for clear presentation of the content to your students. Please remember that all teaching skills are inter-related and have bearing on one another.

The following sub-sections deal with the various teaching skills commonly used by teachers.

Researchers who have worked on classroom interaction and advocated speaking-listening model of teaching have divided teaching skills into two main categories:

- **Responsive skills**: These skills emphasise that the teacher should be conscious of his learners, their needs and aspirations. The teacher should understand and appreciate the feeling of the students. He has to create a non-threatening climate in classroom. He is required to motivate the students to actively participate in teaching learning activities.

- **Initiation skills**: These skills are concerned with presentation and sharing of information. The teacher may transact information through various strategies of instruction. He can use questioning as a tool to lead the students to the desired level of learning. He is, therefore, required to master and use almost effortlessly the skills of explaining, directing, etc.

Some researchers have divided teaching skills on the basis of the purposes they serve,
while others have tried to classify them on the basis of the teacher tasks or roles to be played by the teacher.

Check Your Progress 1

Notes: a) Write your answer in the space given below.

   b) Compare your answer with those given at the end of the unit.

What is the difference between responsive skills and initiation skills of teaching?

The classification of skills according to the teacher tasks is as follows (Lalitha, 1975).

**Pre-instructional skills**: A set of decisions have to be made before instruction takes place. The tasks performed by the teacher before he starts teaching fall under this category. The teacher has to plan teaching activities and prepare students for learning. The tasks involved in getting the students ready for learning are called pre-instructional skills. The skills for deciding appropriate content and its organisation, pacing of delivery, grouping the students, identifying appropriate activities, etc., belong to this category.

**Instructional skills**: You should understand that usually the students look up to the teacher for guiding their learning. Classroom learning therefore starts only after the teacher has arrived and started teaching. The tasks related to setting the climate of classroom such as presenting content, organising discussion, maintaining the motivation of the students, using audio-visual materials, using a blackboard, managing the classroom, etc., belong to this category. All pedagogic tasks performed by the teacher during the course of actual teaching are collectively called instructional skills.

**Post-instructional skills**: As the title indicates, the tasks involved in summarising what is taught, providing feedback, giving homework/assignments, testing and grading, etc., are called post-instructional skills. These skills are used only after the actual teaching act, i.e., delivery of content is over.

From the point of view of teacher education and training, we classify teaching skills into three broad categories. These are:

- core teaching skills;
- specific teaching skills; and
- target group specific skills

Let us elaborate each category with the help of illustrations. Our primary goal in the following discussion is to make you aware of the importance of teaching skills, so that you can make an effort to practise these skills whenever you teach. None of the beginner teachers use these perfectly, but with effort and practice we can master these skills and make our teaching more productive as well as effective.

**14.3.1 Core Teaching Skills**

Some of the teaching skills such as questioning, explaining, reinforcing, directing the students, etc., are extensively used by all teachers. These skills, usually known as core teaching skills, are an important concern of teacher educators. There is a long list of core skills and sub-skills in teaching. We shall confine our discussion to six broad core skills.
A detailed discussion on these skills will be presented in Units 15, 16, and 17. You may find some overlap in the discussion on these skills presented in other units. We have done it in order to emphasise the importance of the skills required by the teacher teaching the secondary/senior secondary students.

i) Skill of questioning: As you know, questioning is a tool to make the teaching-learning process more lively and participatory. Questions can stimulate thinking among students. However this is possible only when the questions are of good quality. In fact construction of good questions is not an easy task. What do we mean by a good question in the context of the teaching-learning process? A good question is not one which can be answered in 'yes' or 'no'. A quality question forces the students to think for themselves and apply the knowledge they have acquired to solve the problems. The question provides the student a lead to proceed further in his learning. A good question should help the students understand and retain knowledge being presented by the teacher; it should help them achieve the pre-determined objectives.

The questions should be appropriately structured i.e. they should be concise, clear, specific and grammatically correct. The intention of the teacher (what he expects from the students) should be explicit in the questions asked. You, therefore, should use just as many words in the question as are necessary. The question should not have telegraphic language either. Do not use jargon which usually make the question difficult and ambiguous. The purpose of asking questions is not to confuse the students. The questions should not disturb the learner's sequence of thought. This, in brief, should help you ensure the quality of the question.

Now let us talk about the levels of questions. There are various types of questions. Some questions are easy to answer while others are not. Many researchers have worked on types of questions used in teaching and also in the term-end examinations. They have proposed different categories of questions. Depending upon the level of thinking we want to develop in the students, we can classify classroom questions into three levels (Jangira, et al, 1982).

a) Lower order questions stimulate memory level of thinking which, of course, forms the basis for higher level learning. Lower order questions include recognition and recall types of questions. Through such questions, the student is asked to recall or recognise information, facts, concepts, etc., presented in classroom. The questions involve reproduction of facts presented in the textbook or through lectures. The 'yes'/no' questions have low diagnostic power. Because of the possibility of guesswork the answers to multiple choice questions do not help us decide whether the students understand the concepts properly.
b) **Middle order questions** are more suitable for stimulating higher level of thinking among students. The questions at this level involve interpretation (comparing two concepts, explaining the relationships between ideas, concepts, etc.) and generalisation and application of knowledge already gained. The emphasis of middle order questions is to help students transfer knowledge and skills from one situation to another.

c) **Higher order questions** promote highest/critical thinking. These questions are aimed at developing creative and reasoning abilities in the students. The student, for example, may be asked to analyse ideas, concepts, etc., into their components in order to study their mutual relationships. High level thinking can be achieved through inductive and deductive methods. Similarly, the student may be asked to answer some questions that involve the use of imagination such as what will happen if oxygen is not available in the atmosphere? Such questions put the student in a situation where he/she is forced to do some real thinking and come out with possible solutions. Research findings have shown that for promoting problem-solving and creativity, higher order questions are better than lower order questions. In other words, thought-oriented questions are better than fact-oriented questions.

The level of questions put to students depend on the objectives of the lesson and the mental ability of the students being taught. A higher order question for eighth grade students may be a lower order question for tenth grade students. The difficulty level of the questions should be increased gradually i.e. in the beginning lower order questions should be asked. Once the students have attained the minimum level of understanding middle or higher order questions can be asked.

**Components of questioning skills:** By now you would have realised that questioning is an important technique to make teaching/learning more productive. The teacher, therefore, should possess the skill of asking meaningful questions. There are three main components of the questioning skills (Singh & Sharma, 1987).

a) **Structure of the question:** Questions should be properly structured. They should:
- be relevant to the content and the mental level of the students
- be grammatically correct
- be specific without any ambiguity
- be clear without any hidden overtone
- stimulate thinking among learners
- be brief
- be purposeful, and
- be well sequenced

b) **Process of questioning:** The manner of asking questions should be such that it helps students to progress in their learning. The speed of asking questions depends on the difficulty level of the concepts being taught and the cognitive level of the students. If the teacher is interested in checking the previous knowledge of the students, questions can be asked at a relatively faster speed. We, however, would like to clarify that the number and level of questions asked in a lesson depend on the resourcefulness of the teacher. This is so because the questions are aimed at attainment of the pre-determined objectives of the lesson. If you feel that the students are not progressing according to your expectation, or they are not participating in the teaching-learning activities, more questions (along with group or individual exercises/activities) may be asked. Research findings show that increase in the frequency of questions fosters learning among students.

While asking questions, we should address the questions to all the students and not to the students sitting on the front seats. Similarly all the students should be given a chance to answer the questions. It usually happens that the front seaters are involved in transaction and as a result the other students become inattentive to the lesson being taught.
Good questioning behaviour requires allowing students sufficient time to think about and respond to the questions. A teacher tends to minimise the value of the question if he does not give students time to think about the question and its answer. The students should be encouraged to think, then only the questions can have the desired effect on students' thinking.

Check Your Progress 2

Notes: a) Write your answer in the space given below.

b) Compare your answer with those given at the end of the unit.

Write three features of structuring a question.

ii) Skill of response management: The questions asked by the teacher are answered by the students. The teacher uses the answer given by the student as a tool to impart knowledge and skills to them. The teacher uses different techniques to get correct answers from the students and thus leads them to higher level learning. As you know, correct responses on the part of the students reinforce their learning. The skill of obtaining correct answers from the students is known as the skill of response management.

There may be various types of responses from the students. There may be no answer, wrong answer, partially correct answer, even incomplete answer and of course, the correct answer. Whatever the situation, the teacher should have the necessary ability or resourcefulness to help the student manage his response so that he is able to formulate the correct answer or achieve the higher level learning.

There are five major components of the skill of managing responses (Singh & Sharma, 1987).

Prompting: In case the question is difficult, it may be simplified or modified by breaking
it up into smaller questions. The teacher can give clues, hints, a partial answer, etc. to the students. The clues to the correct responses are known as prompts. Before using the prompts, the reasons for no response or incorrect response should be examined. The type of prompt to be provided should be decided by the teacher according to the problem(s) faced by the students. Prompts help the student reach the correct response. Besides, the student gets encouragement from the teacher in formulating the correct answer/solution. It stimulates a student's thinking. The student feels a sense of participation in the teaching-learning activities when he tries to solve the problem with active support of the teacher. The teacher therefore should develop the ability to provide appropriate prompts in order to enable the students to formulate the desired response.

**Seeking further information:** This technique may be used when the student gives incomplete or partially correct answer. The teacher tries to help the student clarify his response. Additional information related to the question or answer can be asked for in order to judge whether or not the student has properly understood the concepts and whether he has developed mastery over the lesson being taught.

**Refoocussing:** This technique is used when the student's answer is correct. The student can be asked to relate the knowledge gained in the similar or new situations. It will provide the student an opportunity to think about the application(s) of the acquired knowledge or skills.

**Redirection:** This technique involves directing the same question to a number of the students. This technique is applied when no answer or incorrect answer is provided by the students. Through redirection, we can ensure greater participation of, and brainstorming discussion by the students.

**Increasing critical awareness:** This technique is used when the student gives the correct answer. In such a situation, the teacher puts higher order questions in order to increase critical thinking among students. Critical thinking will help the students achieve higher level objectives.

iii) **Skill of reinforcement:** Reinforcement is not only used to promote learning, but also to secure attention and provide greater motivation to the students. For this the academic activities should be meaningful and worthwhile so that the students can get the intended benefits from them. If their i.e. the students' behaviour is approved by the class teacher, they feel motivated to participate with enthusiasm and initiative in instructional activities. There are four broad components of the skill of reinforcement. These are:

- **Positive verbal reinforcement:** It involves the use of verbal or linguistic expressions which reinforce learning. Just, saying 'Good', 'Yes', 'Well done' after the student has answered can reinforce him. Teacher's utterances like 'aha', 'humm', etc., can encourage the student to continue with his answer. The important point(s) made by the student can be re-emphasised or highlighted by the teacher.
- **Positive non-verbal reinforcement:** It involves the use of teacher's gestures in order to reinforce the student's behaviour. Nodding, smiling, moving towards the student, giving him an encouraging look, etc., are examples of positive non-verbal reinforcers.
- **Negative verbal reinforcement:** The use of certain undesirable reinforcers can strengthen the occurrence of a particular behaviour. Expressions like wrong, no, incorrect, no true, etc., are examples of negative verbal reinforcers.
- **Negative non-verbal reinforcement:** The teacher uses this type of reinforcers in order to make the students aware of certain undesirable behaviours. Frowning, nodding the head disapprovingly, moving away from the student, etc., are examples of negative verbal reinforcers.

iv) **Skill of explaining:** The skill of explaining helps the student understand concepts, principles or phenomena. Explanation involves various logical steps to arrive at inferences. A good explanation is one which is understood by the student. The following are the major components of the skill of explaining:

- Use of introductory statements
• Statement of the learning outcomes
• Use of simple and relevant examples
• Use of appropriate media for illustrations
• Use of the concluding statements
• Use of the explaining links
• Use of the audio-visual aids
• Glossary of the key terms

The explanation should be interesting and the examples should be taken from real life situations. The explanation should not confuse the students by citing irrelevant examples or presenting non-essential content. Irrelevant statements can make the concepts more confusing for students.

v) Skill of illustrating: Some concepts are so abstract that explanation does not help the students understand the concepts. In such a situation the skillful teacher uses some examples to illustrate the idea, concept or principle. The teacher uses various principles of teaching such as simple to complex, concrete to abstract, etc., to help the students understand the concepts. A good illustrative example should engage the student’s attention and it should be within the student’s level of understanding. Only then can it significantly affect their understanding.

We can use various media for presenting examples and explaining abstract or difficult concepts. The examples can be presented through the visual medium (e.g., models, charts, diagrams, etc.) and audio medium (telling stories, describing events, etc.). Many concepts can be illustrated through the use of actual objects e.g., birds, reptiles, fieldtrips, excursion. Examples can be presented with or without words.

To illustrate concepts and principles, the teacher should have a good knowledge of the various methods and media of teaching. Both inductive and deductive methods can be used, depending on the students’ responses and also the concept being taught. In the inductive method the teacher presents a number of relevant examples and then draws conclusions on the basis of the examples. In the deductive method the teacher states the concept/ fact/ idea first and then gives examples to support and illustrate it. Both the methods can be used for long-term effect on the students. The illustrations can be verbal and/or non-verbal.

vi) Skill of stimulus variation: You will study in Course ES-332 (Psychology of Learning & Development) that children perceive the objects in their environment or in a situation (known as stimulus) and select the relevant information depending on the intensity, contrast and the movement of the objects. The children's attention is drawn through attractive objects, the contrast between the two objects tends to attract their attention. Again, a variety of audio-visual aids are used to attract and hold their attention. In other words, for optimum learning in the students the teacher uses a variety of stimuli in the chosen instructional tasks.

Components of the skills: There is a long list of stimuli which the teacher can use to attract and hold students' attention and to lead them to achieve the curricular objectives. The teacher’s characteristics and behaviour provide a set of strong stimuli and have a direct impact on the student’s learning. Some of the characteristics are as follows:

• The teacher’s physical movement during teaching in the classroom serves a pedagogic purpose. Purposeful movement of the teacher keeps the students attentive to what is being discussed.
• The teacher’s gestures in the class can motivate or demotivate the students in their learning. The teacher’s actions and expression can have a direct bearing on his students’ learning. The care-taking gesture of the teacher can be a very favourable stimulus for the students.
• The change in speech pattern, volume and speed of utterances, emotional
expression, etc., not only attract the attention of the students, but also make the teaching more lively.

- The use of audio and visual stimuli, as you already know, has a great impact on learning. The teacher should use, besides speech, other means of communication to effect students' learning. Various means of communication can be combined according to the chosen objectives of the lesson. The use of audio-visual media will provide multi-sensory stimuli to the students.

- The teacher should encourage and ensure active participation of the students. They should be given the opportunity to actually handle the apparatus, set-up and conduct experiments, write on the blackboard, etc. By doing so, we, as teachers, can sustain their (students') interest even for higher level learning.

14.3.2 Specific Teaching Skills

In the preceding sub-section, we have discussed the teaching skills commonly used by all effective teachers. In this sub-section, we shall discuss some specific teaching skills. You know that certain specific skills are required to teach particular topics or subjects. Similarly, the teacher needs special skills to teach students studying at different levels of education—sixth, seventh, eighth, ninth or tenth grades. Depending on the subjects and the students to be taught, there may be two types of specific teaching skills.

- Subject-based i.e. teaching skills that are common to various subjects.
- Grade-based i.e teaching skills that are common to teaching at a particular grade.

Let us elaborate each type with the help of some examples.

Subject-based teaching skills: With core teaching skills as the base, you need some specific skills to teach your subject(s) e.g. language, maths, social science or sciences. Every discipline demands specific skills to teach it effectively. The skills required for teaching Hindi as a language may not be appropriate for teaching science or even social science. Sometimes, different topics demand specific skills on the part of the teacher. For example, the teacher needs specific teaching skills to teach map reading in geography, how to do experiments in a Chemistry laboratory or how to prepare special dishes in Home Science. Such examples can easily be multiplied.

Grade-based teaching skills: The teacher who teaches both the lower and the upper grades students has to demonstrate and use different teaching skills. At the elementary school level, a teacher teaches all or almost all the subjects to a group of students. The teacher and the students remain in the classroom for the entire day. At the secondary and the senior secondary levels, the students study subjects that are taught by the teachers who specialise in them. The teachers share and use the classroom during scheduled class periods. The teachers of lower or upper primary classes need special skills for giving dictation, developing handwriting, narration, story telling, recitation, etc., to teach language, social studies or science.

The teachers need skills to teach at different levels viz., memory, understanding and reflective levels. At the lower grades, we give more emphasis on memory level teaching which of course contributes indirectly to intelligent problem-solving behaviour. As the student proceeds to higher classes, the emphasis is shifted from memory level teaching to understanding and reflective level teaching. You might have seen that when the writings of Saint Tulsi Das or Kabir Das are taught at the primary, secondary, senior and university levels, the teaching is focussed at different levels according to the objectives to be achieved. The teacher, in other words, moves towards higher level of teaching after the students have learnt and performed adequately at the lower level of understanding. As a consequence, the teacher is expected to acquire and demonstrate different skills while teaching at different levels or helping the students to achieve lower and higher levels of objectives.

Teaching is usually undertaken to achieve objectives at three levels. The teacher has to use different teaching techniques to enable students to attain different types of objectives. The following details will clarify this:
<table>
<thead>
<tr>
<th>Level of objectives</th>
<th>Teaching techniques and skills required</th>
<th>Teaching Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive/Knowledge</td>
<td>Lecturing, discussion</td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>Dramatisation</td>
<td></td>
</tr>
<tr>
<td>Psychomotor</td>
<td>Experimentation</td>
<td></td>
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</tbody>
</table>

### 14.3.3 Target Group Specific Skills

It has now been proved beyond doubt that the students differ widely in their rates of learning. But unfortunately this remains even today the most neglected aspect of learning in classroom. We tend to overlook individual differences in learning. Many teachers at times wish that the students who are unwilling or unable to learn at the rate set by the teacher should be dropped from school without seriously considering their problem. We want to bring home the idea that we should understand the individual in education. After all education is a process through which every student is helped develop his/her potential and abilities to the greatest degree, with due regard for his/her strengths and limitations. You may often have to manage students with some learning disability. The expression learning disability refers to an inability to perform a task that is normally within the capability range of learners of a particular age-group or grade. Learning disability often involves some gap(s) in essential learning processes related to perception, integration and verbal/non-verbal expression.

Now let us consider the specific cases of student disability vis-a-vis teaching skills. Take the example of handicapped students. Those students who have one or more of the following handicaps are included in this group: learning disabled, speech impaired, mentally retarded, emotionally disturbed, hearing impaired, orthopaedically handicapped, visually handicapped, and those with other health impairments. As you know, the handicapped students often do not receive the kind of education that effectively meets their needs. With special teaching strategies and personal care, they can make significant progress and learn through integrated or mainstream classes.

Besides knowledge of various handicaps and the teaching methods and materials appropriate for dealing with different types of handicaps, an effective teacher must have positive attitudes towards special students. Such a teacher believes in these students and their ability to learn and acquire skills. He makes all students feel that they are important members of the class. The teacher should help the students whatever their disability to function as independently and as normally as possible. The concept of superiority or inferiority should be removed from students' minds and this should be reflected in their classroom behaviour.

Let us consider another example of the students for whom you will need special teaching methods and materials. These are the gifted and talented students. You will find that such students are quicker, more eager learners, often capable of mastering the subject with an ease that other students (and even some teachers) may resent. They are intellectually curious and can be especially critical of the teachers who fail to stimulate and challenge them. The gifted students need innovative and fast paced teaching. They may also need

- various kinds of enriched educational tasks. To meet their educational needs, the teachers have to plan high level teaching-learning activities.
- self-directed or independent study. The teachers should encourage such students to study without constant supervision of the teachers, without the threat or reward of grade. The instructional tasks should be planned in a way that develop the skill of autonomous learning and satisfy their needs.
- special educational plan. Special assignments and activities should be planned for the gifted students.

Let us now take a disadvantaged group of students for whom you again need a different set of teaching skills. The female students are often discriminated against in the classroom and thus they enjoy minority status. Quite a few girls often dropout of school due to this. Statistics reveal a high dropout rate of girls. With patience and determination, you can help the students with learning disability to acquire knowledge and skills, despite their handicaps. The students should feel that someone cares for them and believes that they can be quite effective and successful human beings.
Check Your Progress 3

Notes:  
(a) Write your answers in the space given below.
(b) Compare your answers with those given at the end of the unit.

Which teaching techniques are required to achieve objectives at cognitive, affective and psychomotor level? Give one example in each case.

<table>
<thead>
<tr>
<th>Level of objective</th>
<th>Teaching technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Cognitive</td>
<td></td>
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<tr>
<td>ii) Affective</td>
<td></td>
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<tr>
<td>iii) Psychomotor</td>
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14.4 TRAINING IN TEACHING SKILLS

The teachers are granted a special status because they have knowledge and skills not normally held by the general public. The (professional) teacher is dedicated to continuous learning—both about the teaching-learning process and about the subject he/she teaches. You are, therefore, expected to possess specific teaching skills and competence so that you can have a distinct place in society.

The beginner teachers entering the teaching profession have many concerns, particularly in the areas of classroom management, motivation of students, and dealing with individual differences. The teacher education programme caters to these needs of the trainee teachers to succeed in their professional life. Thus through training in teaching skills you too can develop the ability to perceive the teaching situation in its entirety, select and organise skills in the desired sequence and thereby create effective environment for achieving the instructional objectives. Therefore teachers should understand the strengths of individual skills and use them in various situations with advantage.

The main objective of teacher education programme is to instil the necessary knowledge and skills in teachers. Research on effective teaching has established links between a number of teaching behaviours and student learning. An effective teacher is the one who exhibits the desired behaviours in classroom for the benefit of the students.

There are various training strategies being followed by teacher educators. We shall discuss the following five strategies popularly used at reputed and well-established teacher education institutions:

- Demonstration
- Programmed instruction
- Interaction analysis
- Simulation
- Microteaching

Fig.14.3 : Training Strategies
The first four strategies shall be discussed under Sub-section 14.4.1. Microteaching, being a more important and innovative training strategy, will be given an extended treatment in Sub-section 14.4.2.

### 14.4.1 Training Strategies

We want to emphasise here that teaching does not include the preparation of the lessons only but it aims at bringing about the desired changes in the student's personality. That is why innovative and more productive methods are used to train the teachers. In training teachers, more emphasis has been laid on effective feedback mechanisms to make the teachers under training aware of their strengths and weaknesses. Feedback regulates and controls the behaviour. Feedback strengthens the strong points and remedies the weaknesses. Some of the important feedback-based training strategies are described below.

i) **Demonstration technique:** Demonstration or modelling technique has been used in teacher training programme from the very beginning. This technique of imparting training i.e., skill development, is very popular in conventional teacher education institutions. The teacher educator demonstrates certain teaching skills in simulation or real classroom situation and the teacher trainees acquire those skills through observation and imitation.

Demonstration i.e. shaping behaviour through modelling technique is based on the theory of imitative learning. In this technique the desired skills/behaviours are demonstrated by expert teacher educators for imitation by the teacher trainees. According to experts, imitation plays an important role in acquiring and regulating different types of behaviour. In other words, new behaviours can be learnt or modelled by observing the standard i.e. model behaviours of others. This technique enables the teachers to exercise greater control over their own behaviour in classroom situations. For this, the teachers should be conversant with the theoretical background of teaching in general and lesson planning/presentation of content in particular. They should also know what to observe and the purpose of observation. The teacher educator who presents the demonstration should explain to the teacher trainees the important behaviours/skills to be observed and imitated.

There can be at least three types of demonstrations:

- Live demonstration
- Video demonstration
- Audio-visual demonstration

In face-to-face situations the teacher educators present live demonstrations showing different skills so that the teacher trainee can acquire those skills by careful observation and imitation. Live demonstrations which are real in time, content and space are therefore highly motivating and have greater impact on the trainees. Moreover, the demonstrators are available for further discussion or explanations. This strategy is effective when the teacher trainees are available at one place.

The second format used for demonstration is video recording of model lessons based on certain skills. These video programmes can either be broadcast or shown on the video cassette player (VCP). In comparison to the broadcast mode, the cassette mode is more effective. The teacher trainees can view the demonstrations on the VCP according to their convenience and practise the skills. VCPs have the control devices to stop, pause, replay or skip certain portion of the recorded demonstration. Thus the cassette mode can help the trainees acquire mastery learning of skills. To make use of this strategy, the video tape recorder should be available at every training centre i.e. every trainee should have easy access to the video tape player/recorder.

The third format of demonstration is audio-visual which could be very useful for teaching certain skills in a poor country like India. In this format, a particular teaching skill is presented in the text form which includes visuals, illustrations, handbooks, guides,
lessons, etc. The text material is supported by powerful background commentary. Audio cassettes with control facility is a useful device for development of teaching skills. The trainee reads the text while listening to the audio cassette. The commentary on the audio cassette follows the textual material. Use of audio cassette has yet another advantage i.e. you can be very informal while talking through the audio medium, which is usually not possible in the case of print medium.

ii) Programmed instruction (PI): As you will study in Course ES-332, programmed instruction is a method of providing individualised instruction in which the student proceeds according to his/her pace of learning. Programmed instruction provides to the trainee various kinds of intellectual and motor experiences in a controlled situation. A variety of devices such as teaching machine, printed text, radio, television, computer, etc., are used to support programmed instruction.

A study of how PI is developed can provide deep insight and understanding about the elements, structure, and sequencing of the content or skills on which it is based. During teaching practice, you should teach a lesson by following a traditional approach to lesson planning. The teaching should be recorded and evaluated. After that, you should develop programmed instruction materials on the same topic and reteach the same to another group of students. The teaching should be recorded and evaluated with the criteria used earlier. You will find significant improvement in your teaching. The preparation of PI material will provide you knowledge about content structure and its sequencing in the most logical way. You have studied about PI in detail in Unit 8 of Block 2.

PI can be useful in developing the following skills of teacher trainees.

- Skill of content analysis and arranging the content in a logical sequence.
- Skill of breaking content into small but manageable steps (you can easily appreciate the usefulness of the skill).
- Skill of providing reinforcement to students by confirming their responses.
- Skill of developing situations for achieving the desired learning objectives in the most economic ways.
- Skill of identifying learning outcomes and stating the objectives in behavioural terms i.e., as learning outcomes.

iii) Interaction analysis: Interaction analysis technique involves observing the direct and indirect influence of the teacher's classroom behaviour. It is an effective approach for developing, modifying and improving teaching behaviour. Like programmed instruction, the interaction analysis can also be used as a mechanism for providing feedback for modification of teacher behaviour. Research findings have revealed that interaction analysis can be used as an effective training strategy to improve teacher behaviour. You, as a trainee teacher, should be aware of coding and decoding procedure of interaction analysis.

During practice teaching, you should also request your colleagues to observe your lessons by using interaction analysis. You should decode the record sheet of the observation of your lessons. The decoding process will provide you information about your teaching behaviour. This will, in turn, provide you feedback about the strengths and weaknesses of your teaching. The feedback should be discussed with peer and resource persons. You should make use of the suggestions given by the peer and resource persons. You should repeat your teaching until you acquire mastery in these skills.

To get psycho-feedback, you can use audio or video tape recorders to record one or two lessons. The audio or video programmes can be replayed to discuss the behaviour displayed by you in classroom. With the help of electronic devices, you can observe your own behaviour which can be made still more effective to achieve your objective, i.e. affective teaching. By doing so you can overcome the problem of biased observation on
the part of your peer(s) or the resource persons. Video feedback can enable the teacher
trainees to avoid their undesirable teaching behaviour and replace it with the more
desirable.

Interaction analysis technique is specially effective for increasing student participation
in learning activities. The direct behaviour of the teacher can be shifted to indirect
behaviour which is more a democratic way of teaching-learning. The teacher can develop
insight into the flow of events which constitute effective teaching.

While following interaction analysis technique for developing skills, you should ensure
that:

- innovative methods of teaching are employed
- encoding is done for the same learner group
- the teacher thoroughly understands the concept of interaction analysis, interaction
  models, flow chart and interaction variables.

iv) Simulation: This approach of training is known by various names such as role
playing, artificial teaching, pilot training, clinical method or inductive scientific method.
As the term indicates, simulation technique is an artificial method to develop certain
psychomotor behaviour in the trainees. The teacher trainee has to play some role related
to teaching. It is a dramatic strategy based on the following principles:

- Learning by doing
- Providing immediate feedback and reinforcement
- Providing a safe platform for practice, and
- Rehearsal before facing real classroom teaching.

Simulation technique forges a link between theory and practice. The teacher trainee is
given an opportunity to study and analyse critical teaching problems. He/she can learn
classroom teaching behaviour through the technique of simulation. The teacher can
acquire teaching skills without facing actual classroom encounter. Every trainee gets
opportunities to develop the skill of observing and getting feedback (perceptual
component), making judgement and decision (cognitive component), and sequencing
classroom behaviour (performance component).

In this technique you have to play the role of a teacher. You can practice simulated
teaching according to the guidelines given below. You have to teach a small lesson (with
only a few learning concepts) to your colleagues, assuming that they are secondary level
students. They have to act as students. You should employ the principles and practices
of effective teaching. Every one of you should teach some lessons by rotation. Every
lesson should be followed by discussion within the group under the supervision of
the resource persons. The suggestions and comments thus received from the peers and the
resource persons can/will be utilised for improving your teaching behaviour, thus making
you an effective teacher. In this way, teaching competence is developed by creating an
artificial situation where the well meaning expert comments from the peer and the
resource persons are made available to the teacher trainee to improve his teaching
behaviour. The teacher trainee can thereby acquire necessary teaching skills before
entering the real classroom and facing real students.

The procedure of simulated teaching is very simple. Every trainee has a chance to act as
a teacher, as a student and as an observer one after another. You should proceed the
following sequence in organising and implementing simulated teaching.

- Decide the roles to be played as a teacher, a student or an observer
- Select a topic of your choice
- Prepare the outline of teaching
- Decide the objectives to be achieved/skills to be acquired
Teaching Skills

- Teach the topic (remember your behaviour will be recorded by the observers)
- Collect and discuss feedback with the observers
- Incorporate improvements in your teaching behaviour, and
- Repeat the cycle with a different topic till you master the skill or achieve the objectives.

Check Your Progress 4

Notes: a) Write your answers in the space given below.
    b) Compare your answers with those given at the end of the unit.
    
    i) Programmed instruction is useful for developing certain skills in teachers. Give three such skills.

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    ii) Give the three principles of simulation.

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14.4.2 Microteaching

Microteaching has been considered an effective technique for development of teaching skills in teachers. The technique has been refined over a period of last thirty years. Microteaching is like the simulation technique for developing teaching skills. This approach is used to shape the teacher's behaviour based on an effective feedback mechanism.

As the term itself indicates, microteaching is a scaled-down teaching in which the teacher teaches a short lesson to a small group of students for a short period. One teaching skill is practiced at a time. Thus microteaching is a miniature form of teaching in which teaching is scaled down in terms of class size, time, complexity and activities with focus on developing a specific teaching skill. Microteaching is carried under controlled, laboratory or clinical situation.

If you analyse microteaching in the broader context, you will find that microteaching provides opportunities to the teacher trainee to teach specific skill and get immediate feedback on his performance. Thus the trainee first teaches (i.e. displays certain behaviours) and then analyses what he/she has done in terms of acquiring the teaching skills. The cycle of microteaching continues till the necessary skills required by the profession (say teaching in this case) are acquired in entirety. The provision of getting feedback about their performance immediately after completion of the lesson is a boost to the teacher trainees.

Microteaching is an effective approach which leads one towards studying the process of human learning in general and learning of teaching skills in particular. It provides excellent opportunity to investigate the variables which affect human learning.

Assumptions in microteaching: The following are the essential assumptions in microteaching:

- Microteaching is real teaching but it aims at developing teaching skills in teachers and not developing students' ability
Microteaching is carried out under a non-complex environment (in contrast with complex classroom environment) and ensures mastery learning. The teacher practices the skill till he/she achieves perfection in his/her behaviour. Microteaching brings a high degree of control in practising teachers, and is an individualised approach to training. Microteaching depends highly on effective feedback mechanism.

Organising microteaching: As we have already discussed, in microteaching the teacher is provided training in the teaching skills individually in miniature or scaled down form of teaching. The teacher practices microteaching till he/she achieves the desired level of mastery. There are three phases of the microteaching procedure.

![Fig. 14.4: Phases of Microteaching](image)

i) Knowledge acquisition phase: This is the first stage of applying the microteaching approach. The teacher needs to know all about the teaching skills required for teaching secondary school students. This phase involves two tasks.
- Observation of demonstration skills, and
- Analysis of and discussion on demonstration.

ii) Skill acquisition phase: This phase involves acquiring actual skills through practice. Three major activities are carried out during this phase.
- Preparation of micro lesson,
- Practice of teaching skills, and
- Evaluation of performance.

iii) Transfer phase: In the last phase, the teacher is given opportunities to use the skills acquired through normal classroom situation. The knowledge and skills acquired in the controlled/laboratory situation are transferred to an actual teaching situation.

Singh and Sharma (1987) discuss the following steps to implement microteaching. These steps have been validated in various teacher education institutions.

**Orientation about microteaching**: In order to orient teacher trainees about microteaching, theoretical discussion about the concept of microteaching should be arranged. The strengths and limitations of microteaching should also be explained.
Discussion on teaching skills: The concept of teaching skills is clarified first. At least five teaching skills should be selected and explained at length. Only one skill shall be discussed at a time before it is practiced. The teacher trainees should be trained in observing the teaching skills.

Presentation of model lesson: The model lessons on the chosen teaching skills are demonstrated by the teacher educator preferably in all the method subjects opted for the teacher trainees. Model lessons can be demonstrated through video programmes as well.

Preparation of micro-lesson plans: The standard lesson format may be used for micro-teaching. As far as possible only one concept should be selected for a micro-lesson. The guidelines for preparation of a micro-lesson along with examples are given to teacher trainees.

Microteaching setting: Based on the findings of various research studies conducted in India, the following setting is suggested for effective use of microteaching technique under standard procedure:

- Time allotment
  - Teach................................................. 6 mts.
  - Feedback........................................... 6 mts.
  - Replan.............................................. 12 mts.
  - Reteach............................................. 6 mts.
  - Re-feedback....................................... 6 mts.
  - Total.............................................. 36 mts.

- Number of teacher trainees in a group 10
- Teacher trainees as real pupils (simulated teaching)
- Supervisor(s) one or two
- Feedback by peers or the supervisor(s)

Practice of teaching skills: At least five skills may be practised by a teacher trainee. The following is the suggested list of skills:

- Probing questions
- Stimulus variation
- Reinforcement
- Silence and non-verbal clues
- Illustrating with examples
- Encouraging student’s participation
- Explaining
- Effective use of blackboard
- Set induction
- Closure
- Liveliness
- Reacting
- Recognising and attending behaviour
- Quality of questioning

Evaluation and feedback: The teaching skills being developed through microteaching are observed and evaluated by the peers and the resource persons. The resourcefulness and capability of resource persons make the process of skill development effective. This is achieved through expert comments and suggestions by resource persons. Being a technical task, feedback should be pedagogically useful for the teachers under training. The comments should encourage them to improve their behaviour.

There can be various sources of feedback. These include peers, teacher educators, resource persons, students, the teacher (trainee) himself, etc. Being a specialised task, it requires serious efforts on the part of those who provide feedback. Interestingly, the teacher can analyse his/her teaching behaviour i.e. strong and weak points himself/herself. Such self-feedback is comparatively more effective.
Electronic devices, particularly audio and video recordings of the lessons presented by the teacher, are used these days to provide constructive feedback to the teacher. After the lesson is over, the audio or video programmes can be displayed/screened and the teacher can listen to or view his/her teaching behaviour. Feedback thus received will be objective, unbiased and complete. Now-a-days audiotape records are easily available to majority of the teachers in the country. Videotape recorders, however, can be either hired or made available by the teacher education institutions for feedback purposes. You might have seen that these days people get their marriage functions recorded on videotape recorder. What we wish to emphasis here is that now it is possible to get one or two lessons recorded on videotape recorder also. The recorded programmes can be played, replayed or stopped as and when required. Since the teacher sees himself/herself teaching, he/she can get greater motivation to perfect his/her behaviour by analysing his/her desirable as well as undesirable teaching behaviour.

Whatever the means of the feedback, it should be collected systematically and objectively in order to improve teaching skills. Rating type observation schedule can be used to record teaching behaviour or performance of the teacher. The rating scale can be of 3, 5, or 7 points.

Check Your Progress 5

Notes: a) Write your answers in the space given below.

b) Compare your answers with those given at the end of the unit.

i) Give three essential assumptions in microteaching.

ii) What is the difference between simulated teaching and microteaching.

14.5 LET US SUM UP

We hope that you have enjoyed reading the unit. You studied in this unit that the possession of teaching skills and competence is an essential feature of teaching professionals. Teaching skill is a set of overt behaviours. It has three components:

- Perception
- Cognition
- Action

The teaching skills can be classified into various categories. For the sake of clarity we divided teaching skills into three categories: core teaching skills, specific teaching skills,
and target group specific skills. Core teaching skills such as questioning, explaining, reinforcing, etc., are used by all the teachers across various subjects and levels of teaching. You have studied the skills of questioning, response management, reinforcement, explaining, illustrating and stimulus variation in detail.

With the core skills as base we need specific skills to teach various subjects (e.g. Science, Language, Art, etc.). Similarly we need to develop or acquire a set of specific skills to teach students at primary, upper primary, secondary or senior secondary levels. Depending on the subjects and students to be taught there are two types of specific teaching skills:

- Subject-based teaching skills
- Grade-based teaching skills

You have studied that the teacher has to recognise the individuality in the teaching-learning process. You know that different groups of students (such as gifted, average, and handicapped) demand specific teaching behaviours from the teacher. In order to cater to the needs of the students we should use target specific teaching skills.

There are various strategies to train teachers in teaching skills. You have studied five strategies in this unit. They are: demonstration, programmed instruction, interaction analysis, simulation and microteaching. The microteaching strategy, being an effective technique for development of teaching skills in teachers, has been discussed in detail. You have gone through the examples/illustrations presented in this unit to better understand the process of the skill development through the microteaching approach.

Throughout our discussion in the unit, we have been emphasising that with a little effort we can make teaching skills and competence a part of the routine teaching activity. It need not be emphasised again that the use of appropriate skills can make your teaching-learning activities more meaningful and productive (in terms of learning outputs) and thereby make you a popular and well respected teacher.

### 14.6 UNIT-END EXERCISES

1. Keep record of the questions asked in your class for a period of 15 days. Classify them as lower order, middle order and higher order questions. Justify for classifying them as lower, middle and higher order questions.

2. In your opinion which is the best method of developing teaching skills in teacher trainees? Support your discussion with appropriate arguments.

3. You might have come across some students in your class who do not pay much attention to what you teach them. What strategies would you adopt to motivate them. Apply those strategies in your class and see whether they are effective.

### 14.7 ANSWERS TO CHECK YOUR PROGRESS

1. Responsive skills of teaching emphasise on the students needs and requirements. The teacher creates an environment in which students actively participate in teaching-learning process. Initiation skill on the other hand, emphasise on the presentation style of the teacher. The teacher uses a variety of techniques to transact information/content.

2. Your answer should have included the following features:
   - Question should be relevant to the context
   - Question should be specific without any ambiguity
   - Question should stimulate thinking
   - Question should have a specific objective
   - Question should take students a step further i.e., from one learning point to another.
3. Your answer might have included the following techniques.
   i) Cognitive: Lecture, discussion, tutorial
   ii) Affective: Drama, Story-telling
   iii) Psychomotor: Experiment, demonstration

4. i) Your answer might have included some of the following skills.
   • Breaking content into small steps
   • Arranging content in a logical sequence
   • Reinforcing students' responses/learning
   • Stating objectives in behavioural terms
   • Identifying learning outcomes

   ii) Learning by doing
   • Providing immediate feedback
   • Providing opportunity for practice
   • Rehearsing in a simulated situation

5. i) Microteaching
   • is real teaching
   • is carried out in a tension-free environment
   • ensures mastery learning
   • is highly individualised approach
   • depends on effective feedback

   ii) Simulated teaching takes place in an artificial situation. There are no real students in simulation. Simulation is a more a mechanical approach to teaching. Simulation is not a scaled down approach. Innovation in computer technology have provided opportunities for effective simulation.

14.8 SUGGESTED READINGS

