Module – 1

Unit – 2
Student Teaching Programmes

Author

Dr. Dibyendu Bhattacharyya

Reader, Department of Education

University of Kalyani

Paper – VII / VIII

TEACHER EDUCATION

(ELECTIVE PAPER)

Module – 2

Unit – 2

STUDENT TEACHING PROGRAMMES

CONTENT STRUCTURE :

7/8.1.2.1 : INTRODUCTION

In this Unit more than one concepts and technicalities in relation to teacher education with the broad intention to earn some important aspects of initial teacher preparation programme have been our learning objectives. These are about instructional (teaching) objectives; relation of teacher education and practicing schools (actual place for applying theory to practice), teacher education and community, techniques of teacher training (especially in simulated scaled down teaching encounters); and evaluation of student teaching.

One clarification is needed at outset which is about the term teaching objectives, ore technically called instructional objectives, which are referred to the end product of pupil learning expressed in behavioural terms. Instructional objectives identify the end product of instruction with the convention in mind that the goal of teaching / instruction is to insert some conditions by the teacher in the learning-teaching environments that facilitate pupil learning. The teacher's conscious actions are called teaching acts (observable, measurable and modifiable). Then the teacher's job is to perform some tasks for causing pupil learning. These tasks are selected by the teacher taking in cognizance of the kind and quality of pupil learning will be caused. Hence, understanding instructional objectives and expressing them in observable and measurable terms are most important. In this sense the teaching or instructional objectives may be held as the centre of teacher education.

6.1.2.2 : OBJECTIVES

You will be able to :

1. be acquainted with Taxonomy of Educational objectives for understanding clearly task analysis of learning objectives according to Bloom and his associates.
2. understand the activities in and approaches to teacher preparation in practice teaching schools
3. develop your professional knowledge about relation of teacher education and community.

4. understand some technicalities about core teaching skills and their drill in scaled down simulated condition in micro-teaching format.
5. get acquaintance with Flanders Verbal Interaction Analysis; and
6. develop competence in understanding evaluation of student teaching.

7/8.1.2.3 : TEACHING OBJECTIVES : TAXONOMY OF EDUCATIONAL OBJECTIVESS

We have learnt that instructional objectives tell us the terminal behavior or say, terminal performance is technically called task description. But mere description of tasks to be performed by the learner at that end point of learning is not very profitable to us. To be more systematic we must have to analyse tasks of learning in some scientific manner. In this task analysis we identify classes of behavior which differ in respect to the conditions necessary for pupil learning. The chief purpose of task analysis is to help teacher determine the specific tasks the pupil has to perform.

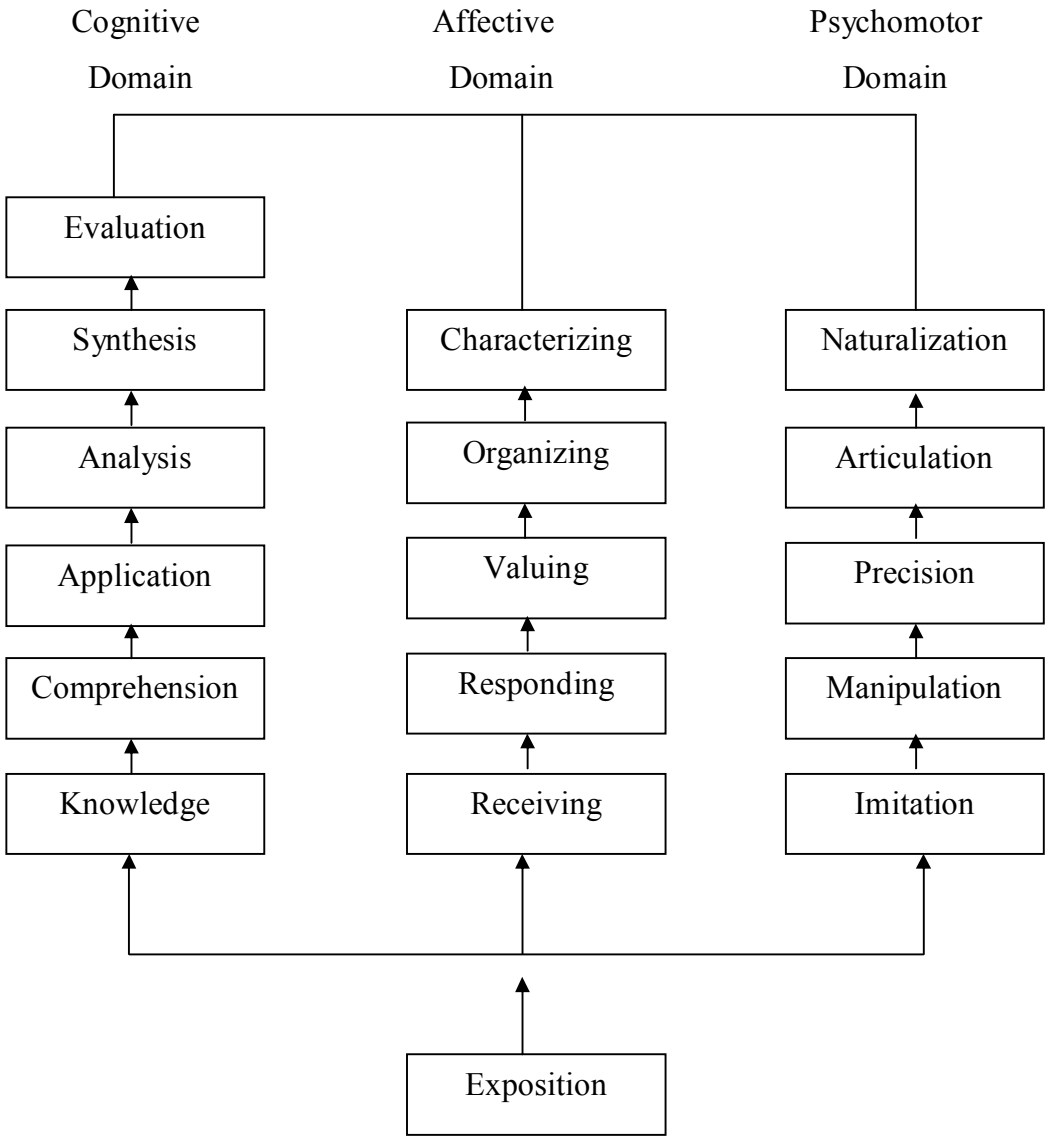
There is more than one system which can be utilized for task analysis. We shall in this Unit mention and explain only one which has been developed by many experts of which Benjamin Bloom and his associates are the leaders. They have developed a method for classifying educational objectives, a process we have called task analysis. This is known as Taxonomy (the science of classification) of Educational Objectives. We have in our stock of knowledge three separate classification system for expressing and defining multiple educational objectives that are translated into instructional objectives. These are popularly grouped into three domains representing our intellectual, feeling and movement activities – Cognitive, Affective and Psychomotor.

Some general features of such Taxonomy may be reviewed as :

1. Since the taxonomy is to be used in regard to existing educational units and programs, the major distinctions between classes should reflect, in large part, the distinction features make among student behaviors. These distinctions are revealed in the ways teachers state educational objectives.
2. A second principle is that the taxonomy should be logically developed and internally consistent. Thus, each term should be defined and used in a consistent

way throughout the taxonomy.

3. A third principle is that the taxonomy should be consistent with our present understanding of psychologically phenomena. Those distinction which are psychologically untenable, even though regularly made by teachers, would be avoided.
4. A fourth principle is that the classification should be a purely descriptive scheme in which even type of educational goal can be represented in, relatively neutral fashion.



The hierarchy of taxonomy can be depicted in the following manner :

Knowledge ⟶ Comprehension ⟶ Application
(K) (C) (A)

Analysis ⟶ Synthesis ⟶ Evaluation
(AN) (S) (E)

7/8.1.2.4 : THE COGNITIVE DOMAIN (BLOOM) OBJECTIVES

Six layers of knowledge Domain are :

1. Knowledge Objective

Knowledge is defined as recall of specifies and universals, recall of methods and processes or the recall of a pattern, structure or setting. This objective stresses the psychological process of remembering.

(a) Knowledge of specifies includes.

(i) Knowledge of terminology

(ii) Knowledge of specific facts.

(b) Knowledge of ways and means of dealing with specifies :

(i) Knowledge of conventions.

(ii) Knowledge of trends and sequence.

(iii) Knowledge of classifications and categories.

(iv) Knowledge of criteria.

(v) Knowledge of methodology.

(c) Knowledge of the universal and abstractions in a field.

(i) Knowledge of principles and generalizations.

(ii) Knowledge of theories and structures.

2. Comprehension

(i) Translation.

(ii) Interpretation.

(iii) Extrapolation.

3. Application

It involves the application of a concept to new or unfamiliar situations.

4. Analysis

It implies the breaking down of a communication into its constituent elements or parts so that relative hierarchy of ideas is made clear.

(i) Analysis of elements.

(ii) Analysis of relationship.

(iii) Analysis of organizational principles.

5. Synthesis

It refers to putting together of elements and parts into a whole.

(i) Production of a unique communication.

(ii) Production of a plant or a proposed set of operations.

(iii) Derivation of a set of abstract relations.

6. Evaluation

It refers to the judgments about the values of materials and methods for given objectives.

(i) Judgment in terms of internal evidence.

(ii) Judgment in terms of external criteria.

Above mentioned objectives are clarified as under :

1. **Knowledge :** It is defined as the remembering of previously learned material. It represents the lowest of learning outcomes in the cognitive domain.

2. **Comprehension :** It is defined as the ability to grasp the meaning of material. The learning outcomes go one step beyond the simple understanding of material and represent the lowest level of understanding.

3. **Application :** It is the ability to use learned material in new and concrete situations. Learning outcomes in this area require a higher level of understanding than those under comprehension.

4. **Analysis :** It refers to the ability to breakdown material into its component parts so that its organizational structure may be understood. Learning outcomes here represent a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material.

5. **Synthesis :** Synthesis refers to the ability to put parts together to form a new whole. Learning outcomes in the area stress creative behavirors, with major emphasis on the formulation of new patterns or structures.

6. **Evaluation :** Evaluation is concerned with the ability to judge the value or material (Statement, novel, poem, research report) for a given purpose. Judgments are to be based on definite criteria.

Objective and Mental Process or Ability in Bloom's Taxonomy are as :

Objective	**Mental Process or Ability**
1. Knowledge	1. Recall 2. Recognize
2. Comprehension	1. See relationship 2. Cite example 3. Discriminate 4. Classify 5. Interest 6. Verify 7. Generalize
3. Application	1. Reason 2. Formulate

Objective	Mental Process or Ability
	3. Establish 4. Infer 5. Predict
4. Analysis	Analyse
5. Synthesis	Synthesize
6. Evaluation	Evaluate

Cognitive Objectives and Associated Words Verbs

Objective	Associated Action Verbs
1. Knowledge	1. Define 2. State 3. List 4. Name 5. Write 6. Recall 7. Recognize 8. Label 9. Underline 10. Select 11. Reproduce 12. Measure
2. Comprehension	1. Identify 2. Justify 3. Select 4. Indicate 5. Illustrate 6. Represent 7. Name 8. Formulate 9. Explain 10. Judge 11. Contrast 12. Classify
3. Application	1. Predict 2. Select 3. Assess 4. Explain 5. Choose 6. Find 7. Show 8. Demonstrate 9. Construct 10. Compute 11. Use 12. Perform
4. Analysis	1. Analyze 2. Identify 3. Conclude 4. Differentiate 5. Select 6. Separate 7. Compare 8. Contrast 9. Justify 10. Resolve 11. Breakdown 12. Criticize
5. Synthesis	1. Combine 2. Restate 3. Summarize 4. Precise 5. Argue 6. Discuss 7. Organize 8. Derive 9. Select 10. Relate 11. Generalize 12. Conclude
6. Evaluation	1. Judge 2. Evaluate 3. Determine 4. Recognize 5. Support 6. Defend 7. Attack 8. Criticize 9. Identify 10. Avoid 11. Select 12. Choose

7/8.1.2.5 : AFFECTIVE DOMAIN OBJECTIVES

Five layers of Affective Domain are :

1. Receiving (attending)
   - Awareness
   - Willingness to receive
   - Controlled or selected attention

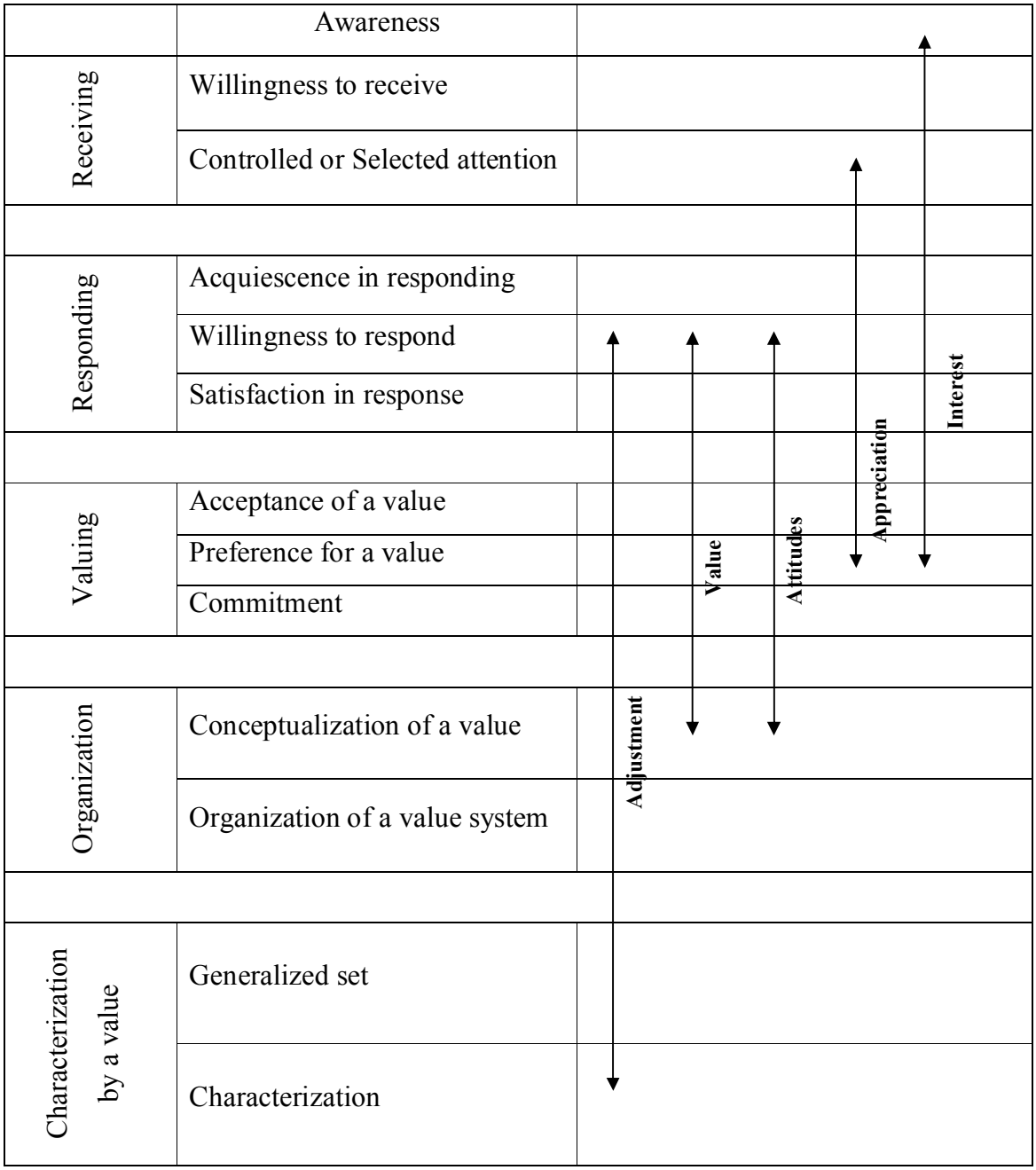
2. Responding
   - Acquiescence in responding
   - Willingness to respond
   - Satisfaction in response

3. Valuing
   - Acceptance of a value
   - Preference for value
   - Commitment (Conviction)

4. Organization
   - Conceptualization of a value
   - Organization of a value system

5. Characterization by a value or value complexes
   - Generalized set
   - Characterization

Relation of the Affective Domain Structure to Common Affective Terms :



Relations Between the Taxonomy Categories of the two Domains :

When one looks for relations between the subcategories of the two domains one finds that clearly overlap. This overlap is implicated in the following descriptions of roughly parallel steps in the two continua. The terms set in italic are used as heads of divisions in the Taxonomy of the cognitive or affective domains.

1. The Cognitive continuum begins with the students recall and recognition of knowledge.	1. The affective continuous begins with the student's merely receiving stimuli and passively attending to it. It extends through his more actively attending to it.
2. It extends through his comprehension of the knowledge	2. His responding to stimuli on request. Willingly responding to these stimuli and taking satisfaction in this responding.
3. His skill in application of the knowledge that he comprehends.	3. His valuing the phenomenon or activity so that he voluntarily responds and seeks out ways to respond.
4. His skill in Analysis of situations involving this knowledge, his skill synthesis of this knowledge into new organizations	4. His conceptualization of each value respond to.
5. His skill in evaluation in that area of knowledge to judge the value of material and methods for given purposes.	5. His organization of this values into systems and finally organizing the value complex into a signal whole a characterization of the individual.

Explanations :

Objectives in these domain concern feelings an attitude that students are expected to develop as a result of instruction. Affective learning is not completely separable from cognitive learning. Students invariably think about their feelings and attitudes when they learn various categories of affective domain which have been briefly discussed below –

1. Receiving (attending and awareness) :

This is the first and the lowest level of the objectives under affective domain. At this level we are concerned with the students sensitivity to certain stimuli; i.e., whether he is willing to receive or attend to the stimuli. It is like a teacher catching

students attention. Awareness about the information, willingness to receive the information and the selective nature of attention are the important levels of receiving. These levels are responsible for making students learning-oriented.

2. Responding (action, feelings, movement, change) :

It is the next higher level to simple awareness or attention. This category implies greater motivation and regularity in attention. It may also for practical considerations, be described as interest by which we mean a tendency to respond to a particular object or stimuli. Interest in turn is evidenced at three levels :

(a) Compliance when expected. For example, willingness to comply with health rules.

(b) Voluntary response. For example, the student takes care of his health and that of others too.

(c) Response with emotional pleasure. For example, the student feels satisfaction in looking after sick persons.

3. Valuing (Worth, Utility and Cause-effect relationship) :

This is the third level under affective domain and implies commitment to certain ideas or values. This objective includes development of attitudes. For example, the development of scientific attitude plays a role in developing of scientific attitude plays a role in developing a preference for information acquired from empirical evidence rather than opinions of other people, a disregard for superstition, willingness to suspend judgment until there is ample evidence to make a judgment, etc.

4. Organization (Judging, integrating, cateogorizing) :

This level pertains to building a system of values. At this level, values are conceptualized and conflicts between the values are resolved and interrelationships are established. This level of affective behavior involves the cognitive behaviors of analysis and synthesis. Development of one's own code of conduct or standard of public life is an example of the organization of a value system.

5. Characterization (Sustained use of new values and expression of commitment):

Characterization by a value and set of values is at the top of affective domain. It regulates a person's behavior through certain values, ideas or beliefs and the integration of values and attitudes into a world view or total philosophy of life of his own.

The taxonomy of the affective domain may not appear quite hierarchical. But nevertheless the categories become increasingly complex as we move from receiving to characterization. This is not only a taxonomical consideration but also a useful educational principle.

7/8.1.2.6 : PSYCHOMOTOR DOMAIN OBJECTIVES :

The psychomotor domain is based on the concept of coordination among various organs of the body. The domain includes muscular action and neuromuscular coordination. Educational objectives in this domain aim at developing proficiency in performing certain acts by effecting the best possible coordination between psychic and muscular action and also between different muscular actions performed by various parts of the body. In this domain, learning depends on mastery of a physical skill. In this domain five broad categories have been identified by Dr. R. H. Dave (1968) of NCERT. These are as follows :

(i) Imitation : Imitation is the lowest level of the objective in the psychomotor domain. When the student is exposed to an observable action, she / he begins to make a covert imitation of the action. Imitation begins with inner rehearsal of the muscular system guided by an inner push or an impulse to imitate action. Such covert behavior appears to be the starting point in the growth of psychomotor skill. This is then followed by covert performance of an act and the capacity to repeat it. The performance however lacks neuromuscular coordination or control., and hence it is generally in an ode form.

(ii) Manipulation : Manipulation is the next higher level of behavior in psychomotor domain. At this level, the student should be capable of performing an act according to

instructions rather than just on bair of observation as is the case at the level of imitation. She / he begins to differentiate between one set of act from another and is able to select the required act. She / he begins to attain skill in manipulating chosen elements. With sufficient practice of selected action, she / he gradually moves towards the fixation of action. At the level the performance is fairly well set. That is to say, the act is performed with relatively greater ease, thought with certain amount of consciousness. The response is not automatic at this level.

(iii) Precision : At the level of precision, the proficiency of performance reaches a higher level of refinement in reproducing a given act. The accuracy and exactness in performance become significant. The student does not need a model to reproduce or to guide his / her action. He is able to increase or decrease the speed of the action and introduce several variations according to specific requirements of different situations. Performance at this stage is accompanied by confidence and also conscious vigilance.

(iv) Articulation : This category of behavior emphasizes the coordination of a series of acts by establishing an appropriate sequence and accomplishing harmony or internal consistency among different acts. On many practical situations, as you know, not once but several acts are to be performed and different parts of the body are involved. The student becomes able to perform them in a harmonious manner with appropriate articulation in performing a number of related acts simultaneously and sequentially and thereby can produce the designed effect.

(v) Naturalisation : This is the highest level of behavior in the psychomotor domain. This category refers to naturalization of the single act or a series of articulated acts. At this stage, the skill of performance attains its highest level of proficiency and the act is performed with the least expenditure of psychic energy. The act is routinized to such an extent that it result is an automatic and spontaneous response. Ultimately, it is automatised to the extent that it is carried out unconsciously. The student does not even know that the act is being performed, until he is obstructed or severely disturbed. In other words, the habit of performance becomes his second nature.

Let Us Check Our Progress :

1. What are the guiding principles of framing educational taxonomy ?
2. Mention basic points of cognitive or effective or psychomotor domain ?

7/8.1.2.7 : TEACHER EDUCATION AND PRACTICING

Teaching is a practising art and hence teacher education needs teaching practices.

The focus of the school of Teacher education practice is on examining and developing teacher's professional practice in context effective teacher education practice is not only dependent on programmes cohesion and coherence, but also on collaboration with childhood and school communities.

There are five themes that underpin the teaching and research agenda for the school :

- The nature of the practice setting.
- The role of supervisions / mentors in field based setting.
- The nature of the relationship between pratiotioners, student teachers and faculty in the practicum.
- The connection of the practicum to the faculty's teacher education programmes.
- The nature of the learner's experience in the practicum setting.

Opportunities for practice in pre-service teacher programmes are designed to scaffold student teacher's experience in controlled contexts that approximate "real-life" situations. On practicum, student teachers are required to demonstrate, in a range of contexts, their ability to integrate understanding and to articulate and justified theories that underpin and guide their practice.

The Teacher Training Institution is responsible for assessing student teaching practice against the Faculty of Education's teacher education standards and the associated norms laid down by National Council of Teacher Education. Some modern methodology is mentioned below.

1) The first thing to do is to allow student teachers to deserve teaching in practicing schools and the demonstration school, if any. While conducting the theory courses

it will be a good practice to observe actual teaching work and then to work out ways in which a particular idea can help in improving instruction or school programme or revising school curriculum as the case may be.

2) The next step could be to provide student teachers with the opportunities to familiarize themselves with children, classroom and environment so that they have affected of the situation.
3) Perhaps a training in teaching skill like using of devices, aids or conducting of a lass to achieve a specific objective of curriculum, can also be taken up by making student teachers to teach a few lessons to the lower grades and a few to the higher grades of the school with specific objectives and aids planned for use in the class.
4) Then the fourth step would be to organize group discussions and conferences between student teachers, lecturers of the teachers training institution and teachers of the practicing school to plan an activities of the curriculum through out the year.
5) Student teachers during the final stage of their block practice should not only develop skills of classroom teaching and guiding individual pupils but diagnostic tests for remedial work, preparation of teaching aids and assignments and checking of home works, maintenance of cumulative record, and organization of co-curriculum activities. In short, they should be provided with all experience which is essential for carrying out the teachers varied responsibilities in the school.
6) Perhaps the most important and crucial aspects of the programme are the relationships between lecturers, school teachers and student teachers, and the attitude they have towards the whole programme. Co-operation, sympathy and understanding between lecturers and teachers of the practicing school can go a long way to make to programme successful and to left the student teachers develop proper teaching behavior perhaps it has to be kept in mind that development of a proper teaching behavior comes about through a gradual and slow process of action and interaction within the situations and problems of teaching.
7) It should have roofs in the social cultural milieu around the school. Students teachers should not only require sufficient standard of competencies but also work out its education potentialities in a better way.

A NEW APROACH TOWARD TEACHER EDUCATION AND PRACTICING SCHOOL :

1. In the different countries new models of partnership collaboration between Teacher Education Institution (TEIs) and schools are being developed for Teacher Education become meaning meaningful. In these new models responsibility for initial Teacher Education ranges from TEIs being fully responsible for the education of new teachers at one extreme, to schools being fully responsible for school-based teacher education at the other.
2. Relationships between TEIs and schools have often encountered in the following ways :
   - it has often been a 'one-sided' relationship, in which the school is the passive recipient of trainee teachers and in which most power lies with the TEI;
   - communication between the two parties has not always been optimal;
   - schools may have negative perceptions of TEIs, and vice versa;
   - a gap is sometimes perceived between 'theory' and 'practice';
   - the contribution that a TEIs can make to a school's programme of continuous professional development (CPD) for its staff, the contribution that student teachers can make to school development, or the contributions that school staff can make to Teacher Education have not always been recognized, leading to wasted opportunities.
3. A number Teachers and Trainers had expressed an interest in exploring the ways in which a partnership approach could help overcome such difficulties, and they agreed that this issue should be the focus of a Peer Learning Activity (PLA).
4. In man countries policies concerning partnership between schools and TEIs are already effective. The results of the Peer Learning Activity can be used to review existing policies to revive the present systems.

Aims of Partnerships for Removing Isolation

The aims and ambitions of partnerships can vary. In its most basic form a partnership should support the ambition to provide the best education for pupils. In this ambition these elements are crucial :

(a) improving methods for teaching and learning,

(b) raising the quality of teachers, and

(c) developing knowledge about teaching and learning through research. Teacher Education and practicing schools are almost isolated needs to be modification otherwise only imposing conditions can not upgrade the process.

(d) Partnership between school and TEI should create a system of support to help schools to handle this ambition.

(e) The interest in partnership between schools and TEIs is rooted on education and training, as the teaching is a profession is a 'profession based on partnerships'.

The changing demands of society create heavy expectations on teachers to 'help young people become fully autonomous learners by acquiring key skills, rather than memorizing information; they are asked to develop more collaborative and constructive approaches to learning and expected to be facilitators and classroom managers rather than ex-cathedra trainers'. Partnerships between schools and TEIs can provide such a support system.

MODELS OF TEACHER EDUCATION AND PRACTISING SCHOOL

A wide variety of partnerships models can exist, depending on local and national structures, conditions, traditions, based on the following dimensions that will help to apply the model in a better way –

- the nature of the contract or partnership agreement;
- financial arrangements;
- number of partner institutions involved;
- type of partner institutions involved (TEI, local authority, national agencies, one school, several schools ...)
- focus of the partnership (the training of student teachers / in-service training of school staff / training of mentors in school / school development / research)
- The geographical extent of the partnership (involving local partners, regional or national stakeholders or also focusing on international exchange and networks)

Different partnership models of different countries may be mentioned as for example

1. Partnership models between schools and TEIs in Denmark, focusing on strengthening the mentoring role of the schools. The models were designed locally, based on the local situation.
2. Partnership models between schools and TEIs in the Netherlands, focusing on strengthening the involvement of schools in the teacher education curriculum and strengthening the contribution of the TEIs and student teachers to school development. In these models, schools take a very proactive role.
3. Partnership models between local authorities and TEIs in Sweden focusing on using student teachers to support educational developments in schools. In these models local authorities play a crucial initiating role.
4. The Think Tank project in Sweden, in which research groups of teachers, teachers educators and other experts are created to analyze and solve specific problems faced by teachers and schools.
5. The Finnish model, in which special teacher training schools are connected to and part of universities. In these schools, student teachers have room to experiment and to do research and are supported by specially trained supervisors.
6. These examples show some of the wide variety in partnership models with respect to intentions, focus, partners and initiative.
7. In several of the models presented, partnerships only existed between certain schools and TEIs.

Models of Teacher Education & Practicing School :

The School :

The collaboration can vary from one school to another school :

- involvement in the initial education of new teachers;
- in-service development of staff within the School;
- increase school's capacity for innovation and knowledge development through support from teacher educators and through student-teachers' development and research activities;

- the feedback of the outcomes of education research into the reality of the professional within schools.

The TEI :

Benefits for TEIs are :

- opportunities to relate the curriculum of teacher education more closely to the complex reality within the school;
- to provide student teachers with a realistic learning environment;
- to get realistic and relevant research questions and assignments for student teachers

The student teacher

As student teachers are a crucial factor in partnerships, it is also important to make explicit the benefits for student teachers :

- involvement in the reality of schools helps to reduce the 'practice shock' sometimes experienced by students at the end of their studies;
- Students will get a more realistic view of the profession and the demands that it places on teachers;
- Students will be involved in a wider variety of activities, better reflecting the breadth of the profession.

The System

At the system level

- partnership can play a role in moving towards a more coherent and integrated approach to Teacher Education that links initial education to induction and continuous professional development;
- partnerships can create strong connections between innovation, professional development and research.

Conditions for Success

In discussing the partnership examples a number of crucial conditions have

been identified. These conditions can be divided into conditions regarding the quality of structures, of process and relations, and of results.

Quality in Structures

1. The partnership should be based on a national framework, identifying aims, expectations, outcomes, conditions and resources.
2. The partners need to be clearly identified. This can be done on two levels : the institutional level (schools, TEIs, local authorities) and the participants level (teachers, teacher, educators, student teachers, school leaders). On both levels it is important to identify the benefits for each involved.
3. The partnership is based upon, supported and strengthened through concrete activities.
4. For each of the institutions and participants, the contribution, roles and responsibilities need to be clearly stated. In most countries, this is made explicit in some kind of contract as regards in Teacher Education, it would be necessary to negotiate how responsibility should be shared for :
   - deciding the content of the curriculum.
   - input on Didactics and input on Subject Studies.
   - mentoring of student teachers
   - assessment of student teachers
   - training of mentors
5. The partnership model, the activities and the roles and responsibilities should fit the local context of the partnership; therefore, the concrete structure of the partnership may vary.
6. Partnerships should have clear mechanisms for creating a shared understanding and involvement, e.g. through the exchange of staff or by creating pairs of participants one from each partner which work closely together.
7. Partnerships should explicitly take responsibility to exchange, spread and disseminate the partnership results to schools and institutions outside the partnership.
8. Partnerships should have the opportunity to grow and to extend their focus beyond

the initial education of student teachers and to extend to the innovation and research in education.

Quality in process and relations :

1. For each of the partners the benefits must be clear, leading to a 'win-win' situation in which each partner understands the tangible benefits to be obtained by taking part.
2. An essential condition for effective partnerships is to have a shared vision, purpose and understanding between all participants in the partnership.
3. The partnership should model the values of the educational system within which it operates, e.g. :
   (a) The partnership should be based on parity, equity and recognition of the qualities
   (b) Competences of each of the participants;
   (c) The partnership should be based on mutual trust. This has consequences on different levels; trust between partners within a partnership and trust stakeholders inside and outside the partnership.
   (d) Trust can have different manifestations and should not only be based on formal contracts, but also on the relation and intentions of the partners.
   (e) The participants in the partnership must have a feeling of personal control and ownership.
4. All participants should have the opportunity to contribute to selection processes with respect of participants, selection of research questions, etc. The partnership should be arranged in such a way that both the long term continuity and sustainability of the partnership and the medium and short term dynamics of the partnership activities are addressed.

Quality in results

1. The partnership should invest in the quality of its participants (e.g. the quality of the mentor, research quality, etc.).
2. For the partnership as a whole, and the partnership activities, the intended

outcomes need to be clarified.

3. Indicators for measuring the outcomes should create a support system for the partnership.
4. The partnership should include outsiders to evaluate the quality and effectiveness of the outcomes of the partnership.

Policy Support for Partnerships

To create the conditions for effective partnerships there is an important role for educational policy at national and regional level. Alongside the issues mentioned above, some additional aspects can be identified :

1. Different policy approaches can be used, depending on national contexts and policy traditions :
   - Structures and regulations creating formally binding frameworks for schools and TEIs.
   - Support and stimulation through project funding for partnerships programmes Quality criteria in which partnerships between TEI and schools are a condition for included in the collaborative framework.
2. Although partnerships between schools and TEIs need to be addressed at the policy level, partnerships are not an aim in themselves; they are a means to improve the quality of teacher education (both initial and in-service) and to support innovation within schools and school development.
3. Policy activities should support and stimulate 'trust generating events', both within the partnership and between partnerships and other levels in the educational structure.
4. Policy activities should support he dissemination of the outcomes of partnerships, both with respect to the partnerships in themselves (presenting overviews of good practices of partnerships) and their outcomes.
5. Finance can be used as an explicit instrument to stimulate, facilitate and steer the development and activity of partnerships.

Other Features :

1. There should be a close liaison between the training-college and schools in the surrounding areas so that the change that training college staff live and work in ivory towers gradually loses force.
2. Another improvement that could be suggested is that training college. Staff should have had school experience before joining the training colleges.
3. It is necessary that a study of the syllabus followed at the relevant school stages is made an important part of the training courses. In teaching subject areas also a through study of the relevant syllabus should be a 'must'.
4. The internship in teaching scheme, if introduced may succeed in giving to the thainess an idea of the nuds of the schools and of the actual conditions available there.
5. A research corner, a curriculum development laboratory and a guidance corner could be additional facilities in the institutional plant, where trainees during the later part of their training be encouraged to study actual problems comforting education in the various areas think out remedies.
6. The training curriculum should be flexible so that necessary adjustment and additions could be made as and when needed within the existing framework.

Let Us Check Our Progress :

1. What are the main objectives of practice teaching at school for pre-service teacher education programme ?
2. Suggest a partnership model for improving relationship between B. Ed. colleges and practicing schools.

7/8.1.2.8 : TEACHER EDUCATION AND COMMUNITY

The community means a group of people with common interests and needs, participating in the cause of education within a particular area for Teacher Education.

Both formal and non-formal, seeking community support and participation in this task. It has been the experience that programmes introduced through

governmental agencies, often do not achieve their goals to the desired extent, without sufficient community support. This is applicable also to Teachers Education Programmes. If the educational facilities have to be increased on the one hand, with the introduction of NPE, the qualitative change in education to meet the specified educational needs of the community also need to be brought about, on the other, this requires participation and involvement of the community, in the present context of knowledge society.

Objectives of Community Involvement in Teacher :

- To understand and explain the meaning and types of the community participation.
- To appreciate the need for community participation in educational programmes.
- To analyse the causes of insufficient community participation to educational programmes, and take remedial steps.
- To identify the area in which community participation may be required, and its feasibility.
- Understand the role of school in maintaining better school community relationships and drawing latter's participation.
- To understand some basic aspects of community participation and understand and practice some methods of community contract to enhance community participation.

Learning Activities :

Community participation has been emphasized in various documents as well as by several eminent educationists.

Generally, we tend to believe that help rendered by the community is community participation. But this is not always true. Participation has a wider connotation participation may also be of different types from the standpoint of willingness and desire of the community to participate in a programme. Let us try to understand these aspects better.

It is not necessary that community members contribute on every occasion. Some times they just attend the functions enthuse the learner on the need for regular

attendance, help you in educational activities, and for advice and depend on the school for community function. This means, it is a two-way traffic. In other words, it is the process of sharing with each other.

You may have noticed that community participation or involvement may be spontaneous at times and seem to be reluctant at other times, participation can be categorized as :

1. **Spontaneous –** Persons come forward on their own to participate without any external support to force.
2. **Sponsored –** Persons participate because some mandate or official endorsements are issued. No force is applied, but it has been externally supported.
3. **Compulsory –** Persons participate because it has been made compulsory. Often its violation may demand coercion.

Let us take a particular situation in which required community participation can be achieved through any of the above three ways. This will help in understanding these concepts.

The Knowledge Commission, besides many other things envisaged expansion of educational facilities to remove disparities in educational opportunities, making education relevant to the societal needs and decentralization of management which are not likely to be achieved without the active participation of the community. It emphasizes 'decentralization' and the creation of a spirit of autonomy for educational activities as well.

The areas in which community participation or help is needed relate to the academic, management and administrative aspects of the school. Let us synthesize our experiences :

1. If there is a proper dialogue with the community it can substantially help in motivating and persuading the members to enroll their children in school. It can help in enhancing regular attendance of children, as well as their retention in the school. Sometimes, social pressure can also be put on parents by the community, to send their children to school.
2. The school is a part of the community. Therefore, the latter can help in providing

physical facilities, such as construction and maintenance of school buildings, desk, teaching aids; residence for teachers, particularly in rural areas. It can also contribute funds for various functions or help the school by providing free labor, specially free labor, specially in rural and tribal areas.

3. There are many skilled persons in the communities who can help the school in taking up activities related to work experience. Besides, in the absence of teachers, educated persons can come forward for voluntary teaching.
4. It has been observed that in villages where the community is education minded and interested in educational activities, this helps the regular functioning of schools by solving unforseen day-to-day problems, and also by close supervision and help.
5. The community helps in maintaining a congenial atmosphere in the school, by intervening in any dispute between the teacher and the parents or among teachers.
6. The administrative problems in the schools are also often taken care of by the community. It has been observed that on such occasions, the panchayat or the community members help the school.
7. In academic aspects, the community can contribute by way of giving valuable suggestions in planning and execution of activities. One important contribution of the community is to provide authentic feedback to the school, regarding children's views about teaching and co-curricular activities in order to make necessary modifications in the teaching-learning processes.

There are many others aspects, in which the community can participate and, help an educational institution.

The school can play a positive role in community. The following are some important aspects in which a school can help the community :

1. The school may extend its role and become a center for learning for every one in the community. It may not confine itself to only formal instruction to pupils but can also help community members in learning. The school may provide academic assistance to its members and encourage them to go in for further learning. It can thus become a community centre.
2. In most places as the school is the only place where people can hold meetings and

functions. In such circumstances, the community can be helped with facilities such as the library and playground, without disturbing regular school programmes.

3. Teachers are considered knowledgeable and educated persons in the villages. People come to them for advice and guidance. They should be helped.
4. The role of the school may be enhanced as an agent of change in the community.

Now the area in which the community can help the school and can be helped in return has been analyzed, let us synthesize our ideas. Some basic factors influencing community participation need explanation.

As discussed, it appears that the following major factors, which influence community participation, can be listed.

1. The school and the communities should work as co-partners which means, the community should be involved in the affairs of the school. Unless a sense of belongingness and sharing is created amongst community members, they will not feel sufficiently concerned to participate.
2. There has to be an organization at community based through community participation can be channelised. Under different names, such as, the school committee, the coordination committee, the parent-teacher association, but such committees are not properly utilized for ensuring community participation. These have to be operationalised and activated.
3. You may have noticed that in places where the youth or younger generation comes forward to take art in educational programmes, the rate of community participation increases. This aspect needs further emphasis.
4. Those of you who are working in remote, tribal and rural areas, may have noticed the existence of some traditional institutions like, youth dormitories. If these institutions are fruitfully utilized, the community participation rate will be accelerated.
5. The role of voluntary organization in increasing community participation has been encouraging. Wherever such organizations exist, they should be approached for help.
6. It is desirable that a survey of the community / locality should be made to identify

the community resources in order to know and expect the excellent of community participation. It should include the survey of socio-economic status of the community, composition of social groups, human resources village functionaries and reasons for non-attendance of students.

Let Us Check Our Progress :

1. State the needs for teacher's community involvement.
2. Mention at learnt there strategies that a teacher can employ to enhance learning resources in the community.

7/8.1.2.9 : MICRO-TEACHING : MODIFICATION OF TEACHER BEHAVOURS

The central assumption of teacher education is that teaching can be expressed in terms of observable, measurable and modifiable teaching behaviours. Hence teacher behaviour modification exercising through learn-do-assess-re-do-re-assess module. This has been used in micro teaching which is not real but a simulated teaching.

What is Micro-Teaching :

Micro-teaching is one of the most recent innovations in teachers educational programme which aims to modify teachers behavior according to specified objectives. We have recently noticed a number of changes in education and training emphasizing the importance of the individual than the group, changes from memory to enquiry, from teaching to telling to as guiding etc. A number of innovative ideas have been involved in recent past to improve class room teaching. Micro-teaching is one of them which is exclusively meant to improve teacher education programme.

Definition :

Micro-teaching has been defined ways. Some selected definition will be examined.

Allow (1966) : "A scaled down teaching encounter in class size and class time".

David B. Young : "A device which provides the novice and experienced teacher alike, new opportunities to improve teaching".

Allen and Rayan (1969) : They have not given a formal definition of micro-teaching but they have specified the essential pre-positions of micro-teaching as follows :

1. Micro-teaching is real teaching but complexities of normal class room are simplified.
2. There is emphasis on training for the accomplishment of specific task.
3. There is increased control of practice.
4. Normal knowledge of results or feedback is greatly expanded.

Operations in Micro-Teaching :

Micro-teaching is a new technique which has been very successfully used in teachers training programmes. It involves various operations for its success. The operations are detailed below :

1. Operation is the analysis of a skill in behavioral terms. The trainee is made clear the objectives of the skill.
2. The second operation involves the demonstrating of the skill a videotape, or films, or in normal classroom teaching.
3. The trainee plans a short lesson in the subject of his interest in which he can use the skill.
4. The trainee teacher the lesson to a small group of students (5 – 10) which is videotaped or audiotaped.
5. The supervisor who observes and analysis his lesson and makes reinforcing remarks where the student-teacher used the skill effectively and point out the situation where the skill would have been exercised.
6. The supervisor's replans the lesson in order to use the skill more efficiently second time.
7. The revised lesson is retaught to different but comparable groups.
8. Feedback is again provided on the retaught lesson which analyzed with the help of the supervisor.

Standard procedure of Micro-Teaching :

Now we will describe the concrete steps involved in organizing micro-teaching.

Dr. L. C. Singh, Reader in Education, NCERT, has recommended the following procedure for introducing micro-teaching in secondary teacher education in India.

Step 1. Orientation :

In order to orient teacher-educators and student teachers about micro-teaching, theoretical discussion and micro-teaching may be arranged. Merits and demerits should also be explained.

Step 2. Discussion of Teaching Skill :

The concept and teaching skill is clarified first. At last give teaching skills should be selected and explained at length with the help of Handbooks an specific teaching skills (developed by CASE). One skill at a time may be discussed before practice. Selected student-teachers should be Trained in observing the teaching skill.

Step 3. Presentation of Model Lesson :

The model lesson of the corresponding skills are then demonstrated by the trained teacher-educator preferably in all the method subjects chosen by the student-teachers.

Step 4. Preparation of Micro-Lesson Plan :

The student-teacher should preferably select one unit concept for micro lesson.

Step 5. Micro-Teaching Setting :

The following setting is suggested for the micro-teaching technique under this procedure :

Teach	6 Minutes	Feedback	6 Minutes
Replan-Reteach	12 Minutes	Refeedback	6 Minutes

Total 36 Minutes

Step 6. Simulated Condition :

Peers (student-teacher) should act as pupils. Micro-teaching is conducted in the cottage itself.

Step 7. Practice of Teaching Skills :

At least 20 component teaching skills have been suggested to practice by a student-teacher. Some of the skills are :

1) Probing questions
2) Stimulus variation
3) Reinforcement
4) Silence and non-verbal cues
5) Encouraging pupil's participation
6) Illustrating with examples
7) Explaining
8) Effective use of blackboard
9) Set induction
10) Closure

Step 8. Observation of Teaching Skills :

The teaching skills being developed through micro-teaching are to be observed by peers / college supervisor.

Step 9. Feedback :

Immediate feedback may be given to the student-teachers individually. Tallies and the ratings on the observation schedule may be used while giving feedback and the interpretation about the performance of student-teacher in the light of model lessons.

Step 10. Teaching Time :

Complete cycle of a micro-lesson for each of the five skills will be teach feed back-replace-reteach-refeedback. Normally, 35 minutes will be taken by a trainee to complete one cyle.

Step 11. Assumption of Micro teaching :

1) Teaching is complex skill, which can be analyzed, into simpler skills.
2) Component teaching skills can be practical for mastery under simplified teaching situation one by one.
3) Training with systematic feedback is helpful in skill mastery.
4) Once Component-teaching skills are mastered one by one, they can be integrated for real teaching.
5) The skill training can be transferred to actual teaching.

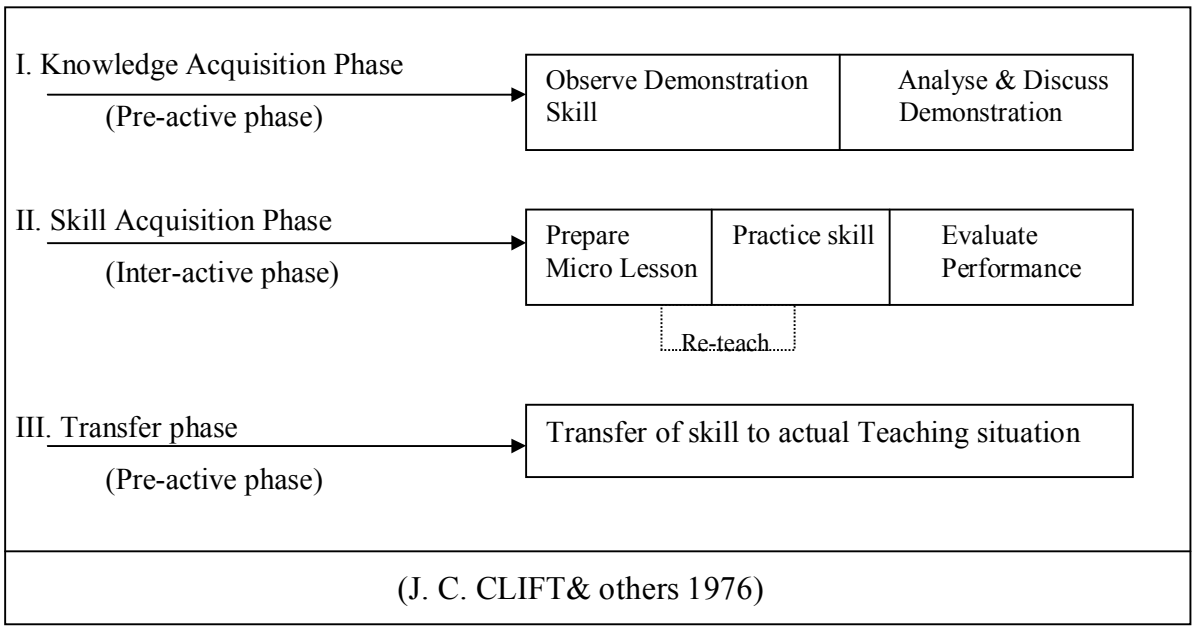
Step 12. Phase of Micro Teaching :

N. K. Jangira and Ajit Singh present these phases as under :

i) Knowledge acquisition phase : In this phase, the student-teacher attempts to acquire knowledge about the skill – its rational, its role in class-room and its component behaviors. For this he reads literature. He also observed demonstration lesson-mode of presentation of the skill.

ii) Skill acquisition phase : On the basis of the model presented to the student-teacher, he prepared a micro-lesson and practices the skill and carries out the micro-teaching cycle. There are two components of this phase : feedback and micro-teaching-setting. Micro teaching includes condition of the micro-lesson, supervisor, types of students etc.

iii) Transfer phase : Here the student-teacher integrates the different skills. In place of artificial situation, he teaches in the real classroom and tries to integrate all the skills.



(J. C. CLIFT& others 1976)

Core-teaching skills in context of microteaching have been shown in the next section of this Unit.

Rationale of Micro Teaching in India :

The foregoing discussion indicates that there were scientific and systematic efforts made in India for the installation of microteaching technique at various levels of teaching training. There was also ample support of research results to justify further the use of micro-teaching as supplementary technique to the existing teacher training practices. Therefore, the rationale for microteaching was searched by many (Singh, 1979) as discussed below :

1. In micro teaching the trainer can concentrate on practicing a specific, well-defined teaching skill and it is easier to practice the skills stated in behavior terms.
2. Micro teaching provides for the pinpointed feedback. It is also immediate, therefore, it is much easier to incorporate them the usual feedback which is delayed and global in nature.
3. Micro teaching being miniaturized teaching, there is no problem of classroom discipline so, it is a safe practice.

4. There are less administrative problems in the organization of micro teaching in teacher training institutes because the teaching session are arranged with peers. The problems of space and supervisors can also be solved by making skillful arrangements of available facilities.
5. Micro teaching provides an opportunity to undertake research studies with better control over conditions and situation.
6. Microteaching can be adopted as an integral part of teacher training in Indian context using simple paper pencil tools and there is no need of sophisticated gadgets like, CCTV or VTR for microteaching.

Advantages of Micro Teaching :

1. It is a teaching in a relatively simple and non-threatening context. It is simple because only one skill is selected for practice and non-threatening because the number of student is hardly 5 – 10.
2. The student can focus his attention on clearly defined aspect of his behavior.
3. There is no provision for much fuller and more objectives feedback to the trainee than in other teacher training procedure.
4. The teacher can experience several alternatives with a limited number of student each time with the opportunity for immediate evaluation and additional trials.
5. The micro-teaching sequence proves most effective when one or two teaching skills are selected emphasis.
6. The student teacher can concentrate on some specific aspect of teaching-learning.
7. The micro-teaching focus on individual task so that the teacher gets a very clear idea about the topic and the reaction it makes on the small groups.
8. The objectives of micro teaching are specified in terms of behavior outcomes.
9. Individual micro-lesson are observed by other teachers and improvements can be suggested by them. All the activities in micro-teaching set-up can be received. Tapes (including videotape) of excellent teachers can be heard or viewed.

Some Microteaching Terminology :

1. Modeling :

The term modeling has been borrowed from the behavior modification psychology. The rationale for the use of modeling in microteaching is derived from the theories of initiative learning as propounded by Baundura and Waltersl (1963). These theories and other research work in the area of social modeling amply demonstrate that imitation play a crucial role in acquiring and regulating different types of social behavior. In the teaching-learning process, also thee is ample evidence that different types of models do produce student learning (Young, 1969; McDonald and Allen; and Koran et al 1969).

2. Feedback :

The concept of feedback is being used widely in modifying human behavior. The term refers to providing information to an individual about his behavior / performance with a view to modifying it in the desired direction. It includes points of strengths as well as weakness relating to the behavior / performance. It has been found that the systematic feedback provided to an individual on his performance / behavior helps to improve upon it in the desired direction.

3. Microteaching Setting :

This section deals with microteaching setting comprising such variables as the number of pupils comprising a microclass, and the type of supervisor. Having gone through this section, you are expected to realize the objectives given in the box.

Integration of Teaching Skills :

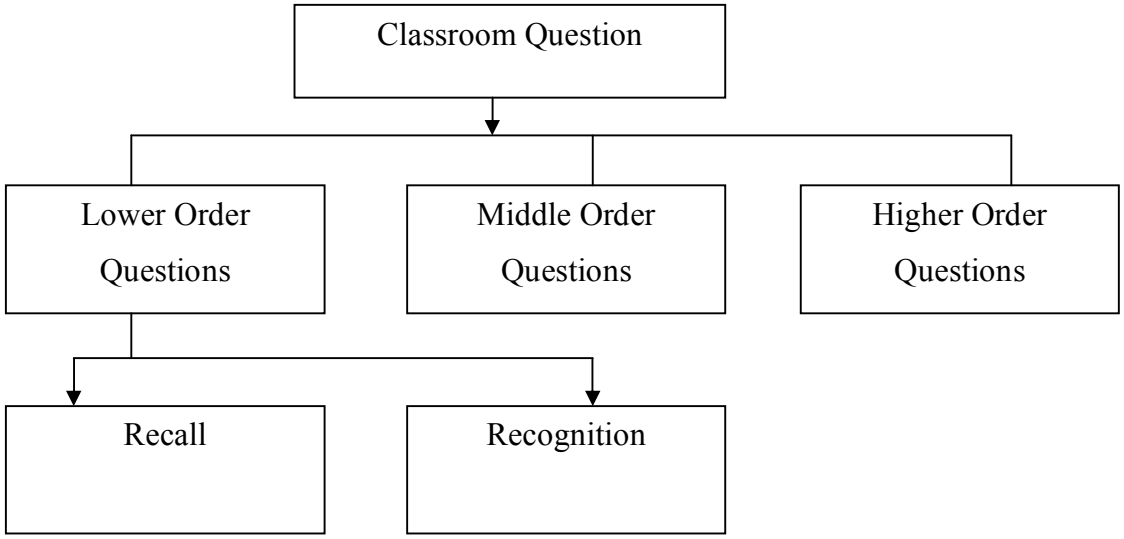
One of the criticism generally leveled at the existing practice teaching programme is that the student teachers, after being taught principle of teaching, are sent to schools for teaching practice. The procedure is comparable to an individual who after having been taught principles of swimming. It may also happen that he may get drowned. Such a procedure in the training of teachers ay work with some student teachers, but it is likely to destroy the confidence of others.

Some Example of Teaching skills :

Questionnaire

Like any other type of statement, questions also follow structures which include format and such characteristics as relevance, precision, clarity grammatical correctness and the level of thinking it generates in the pupils. The skill of structuring class-room questions can, therefore, be defined as the process of phasing classroom question with specified characteristics.

Levels of Classroom Questions :



Reinforcement :

Skill of reinforcement is one of the most vital teaching skills. This unit presents definition of the relevant terms and the use of the skill of reinforcement; specific component teaching behaviors comprising the skill, outlines guidelines for using the skill; and gives observation tool for providing feedback on the use of the skill in practice sessions. Reinforcement is a term taken from the psychology behavior of individuals in the desired direction. The concept of reinforcement is based on the hedonistic principle which envisages than an individual tends the repeat the pleasant experiences and avoid the unpleasant ones. Reinforcement, therefore, constitutes one of the essential conditions of learning.

Illustrating with Examples :

Many a time, it happens that a teacher explains in the classroom a scientific, or a mathematical rule or an abstract idea and observes that his pupils are not comprehending it. In such a situation, the teacher attempts to explain the concept or generalization more and more but he fails in his attempts. The concept of generalization requires more than more explanation for the pupils understand. This presents a challenge to the teacher. An unskilled teacher may deal with his challenging situation by rebuking the pupils for being inattentive in the classroom and asking them just to memorize the concept or rule.

Explaining :

A pupil is required to learn a number of concepts, phenomena, generalizations, procedure, functions and reason for certain occurrence. He is to learn about their attributes, constituent elements, relationships and applications. A teacher organize a number of learning experiences in the classroom towards this end. He uses a number of interrelated statements related to concept, phenomena, generalizations and functions with a view to developing in pupils and understanding about them. The set of interrelated statements used for this purposes is termed as explanation and process is termed as explaining. The term explaining can, therefore, be defined as the use of interrelated statements about a concept, phenomenon, generalization with a view to providing its understanding to someone else.

The outcomes of the micro-teaching in this way can be summarized as follows :

1) Microteaching can be successfully implemented in India teacher training institutes without major difficulties.
2) Only these general teaching skills which are useful for all school subjects should be considered for microteaching. Questioning, B. B. Work, Explanation and stimulus variation could be such skills.
3) The conditions to be selected for microteaching depend upon the mature of skill. However, the skills generally selected in B. Ed. colleges can be practiced in simulated conditions.

4) Student-teacher and teacher-educators in general show favorable attitude towards microteac.

Let Us Check Our Progress

1. State importance of micro-teaching in modification of teacher behaviours.
2. Mention three demerits of micro-teaching.

7/8.1.2.10 : CORE TEACHNG SKILLS

Core teaching skills are related to Micro-teaching. Teaching can be analyzed in terms of teacher behavior atleast at three levels viz. component teaching skill, component behaviors, comprising the component skill, and atomising teaching behaviours.

Teaching can be analyzed into component teaching skill at the first level. Following the analysis at this level, teaching can be defined as a set of component skills for the realization of a specified set of instructional objectives. By implication, teaching itself is a complex skill comprising a set of component teaching skill. The component teaching skill can be further analyzed into respective sets of component teaching behaviors at the second level. Thus, component teaching skills can be defined as a set of interrelated component teaching behaviors for the realization of specific instructional objective. The set of instructional objectives to be realized by a particular skill will be limited as compared to the set of instructional objective envisaged in the definition of teaching sine the former is more comprehensive. Component teaching behaviors can be further analyzed into simpler atomistic teaching behaviors at the third level of analysis. The component teaching behaviors of a skill, therefore, can be defined as a set of interrelated atomistic teaching behaviors contributing to the realization of some aspect of the instructional objective purported to be realized by the component teaching skill. Then we may consider that :

1. Teaching skill is a set of strictly overt or observable behaviors.
2. Purely cognitive skills such as problem-solving and interpretation etc. will not go under the preview of teaching skills.

3. Teaching skills have essentially three components viz., perception, cognition and action.
4. A setting on situation and the role played by a person determine whether the behavior exhibited is to be classified as a teaching skill or otherwise.
5. Teaching skills have dimensions of non-verbal, message of communication and reciprocity in communication.
6. Teaching skill is a set of behaviors which serve one and only one pedagogical function leading to enabling learning outcomes or changes in process pupil behavior. Intermediate and ultimate learning outcomes are not solely due to teaching skills. These are products of many more factors including broader strategies, methods and models of teaching. The component teaching skills may be shown as :

Teaching Skill and Their Components

1. Writing Instructional Objectives	–	Clarity, relevance to the context adequacy with reference to the domains and level of objectives, attainability in terms of pupil outcomes.
2. Organising content	–	The logical organization according to content and psychological organization as per need of the pupil.
3. Creating set for introducing the lesson	–	Greeting, accepting greeting, securing attention and giving instruction, establishing support, ensuring facilities like chalk, duster, aids, apparatus, etc.
4. Introducing the lesson	–	Linking with the past experiences, link between introduction with main parts, use of appropriate devices / techniques like questioning, examples, exhibits arousal.

5. Structuring classroom question	–	Structuring questions at different levels which are grammatically correct, precise and relevant to content
6. Questions delivery and distribution	–	Questions delivered with appropriate speed, with proper intonation and pitch, allowing pause for thinking and questions well distributed.
7. Response management	–	Management of pupil response using teaching techniques like promoting, eliciting further information, refocusing and asking critical awareness questions, accepting-rejecting, redirection.
8. Explaining	–	Clarity, continuity, relevance to the content using beginning and concluding statements covering essential points.
9. Illustrating with example	–	Simple, interesting and relevant to the point being explained.
10. Using teaching aids	–	Simple, interesting and relevant to the pupil's level, proper display and appropriate use.
11. Reinforcement	–	Use of praise words and statements, accepting and using pupil ideas, repeating and rephrasing pupil ideas. Use of pleasant and approving gestures and expressions, writing pupil answers on blackboard.
12. Stimulus variation	–	Body movements, gestures, change in intonation and pitch, change in interaction pattern and pausing.

13. Pacing of the lesson	–	Adjusting the speed of the lesson to the level of the pupils and difficulty level of the content.
14. Prompting pupil	–	Providing opportunity to pupil to increase participation through asking questions, creating climate of participation, use of silence and non-verbal cues, calling upon pupil's physical participation.
15. Use of blackboard	–	Legible, neat, adequate with reference to the control covered.
16. Achieving closure of the lesson	–	Summarization, establishing link between the present learning with earlier as well as future learning, creating a sense of achievement in pupils.
17. Giving assignment	–	Relevant to the content covered and level of pupils.
18. Evaluating the pupil's	–	Relevant to the instructional objectives, use progress appropriate questions and observations.
19. Diagnosing pupil learning difficulties and talking remedial measures	–	Identifying learning difficulties along with causes, remedial measures suited to the type of the learning difficulties and the level of pupils
20. Management of the class	–	Attention behavior reinforced and direction given to eliminate non-attending behavior, clarity of directions, appropriate handling of pupils' disruptive behaviors.

These 20 component teaching skills are held as general teaching skills common to all types of classroom teaching sessions; hence these are called core teaching skills.

Let Us Check Our Progress

1. What do you mean by component teaching skills ?
2. What is simulation ?

7/8.1.2.11 : CLASSROOM INTERACTION ANALYSIS : MODIFICATION OF TEACHER BEHAVIORS

There is another system of teacher behaviour modification.

What is Interaction Analysis ?

Classroom Interaction Analysis may be defined as, "any system for coding spontaneous verbal communication, arranging the data into a useful display, and then analyzing the result in order to study patterns of teaching and learning".

A particular system for Interaction Analysis usually includes –

a) Set of categories each defined clearly.
b) A procedure for observation and a set of ground rules which govern the coding process.
c) Steps for tabulating the data in order to arrange a display which aids in describing the original events.
d) Suggestions which can be followed in some more common application.

Objectives of Studying Class Room Interaction :

It provides no objectives data which may be helpful in modifying teachers behavior to bring improvement in teaching.

i) Classroom interactive techniques provide objective data, systematic record on the teaching behavior of teacher which may be helpful in giving definite instructions and guidance to the teacher for the improvement of his teaching. Thus we can say that interaction analysis is a standardized observation tools.
ii) The second objective of studying classroom interaction is to identify the pattern of teacher behavior.

iii) The third objective is to evolve remedial strategies in reconstructing our whole concepts of teaching methodology.

Assumption of Class Room Verbal Interaction Analysis :

1) "Better than 60 percent that one would hear some one talking" (Flanders, 1965).
2) Verbal behavior can be observed with higher reliability than most non-verbal behavior and also it can reasonably serve as an adequate sample of the total behavior in the classroom.
3) The teacher exerts a great deal of influence on the pupils behavior. It is affected to a great extent by the type of teacher verbal behavior.
4) Teachers classroom behavior in particular exert a crucial influence on the pupils.
5) The relation between students and teacher is a crucial factor in the teaching process and must be considered as an important aspect of methodology.
6) It has been established by experimental studies that social climate in the class is related to productivity and to the quality of interpersonal relations. It has been proved that a democratic atmosphere tends to keep work at a relatively high level even in the absence of the leader (Lewin, 1939).
7) Children tend to be conscious of a warm acceptance by the teacher and to express greatest fondness for the democratic teacher (Perkin, 1950).
8) Role of the classroom climate is crucial for learning.
9) Teacher classroom behavior can be observed objectively by use of observational techniques designed to "catch" the natural modes of behavior which will permit the process of measurement with a minimum disturbance of the normal activities of the groups or individual (Winghsfone J. Wayne, 1956).
10) Research has revealed ways and means b which observer error ma be reduced. These include clearly defined definitions of behaviour to be observed and structured forms for recording observations immediately, thus minimizing observer interpretation or inferences.
11) Changing classroom behavior through feedback is possible (Flanders).

Description of Flanders Verbal Interaction Categories (FVIAC) :

Category : Teacher Talk	Nature	Specifications
1. Accepts feeling	Response (Teacher)	Accepts feeling. Accepts and clarifies an attitude or the feeling tone of a pupil in a nonthreatening manner. Feeling may be either positive or negative. [Predicting and recalling included].
2. Praises or encourages	Response (Teacher)	Praises or encourages – Praises or encourages pupil action or behavior jokes that releases tension but not at the expense of another individual, nodding head or saying "Um Uhm" or 'Go On'.
3. Accepts or uses ideas	Response (Teacher)	Accepts or uses ideas suggested by a pupil. Clarifying, building or developing ideas suggested b a pupil; [Teacher's help in building pupil's ideas but not teacher's addition in idea formation is deleted.].
4. Asks questions	Response (Teacher)	Asks questions : Asking questions about content / or procedures based on his / here ideas with intent that a pupil will give answer.
5. Lecturing	Institution (Teacher)	Lecturing : Giving facts or opinions about content or procedures; expressing his / her

Category : Teacher Talk	Nature	Specifications
		own ideas, giving his/ her own explanation or citing and authority other than a pupil.
6. Giving directions	Initiation (Teacher)	Giving Directions : Directions, commands or orders to which a pupil is expected to comply.
7. Criticizing or justifying authority	Initiation (Teacher)	Criticizing or justifying authority: Statements indented to change pupil behavior from non-acceptable pattern; bawling someone out stating why the teacher is doing what his / her is doing; extreme difference.
8 Response to teacher	Response (Pupil)	Pupil talk response : Talk by pupil in response to teacher. Teacher initiates the contact or solicits pupil statements or structures. Situation freedom to express own ideas is limited.
9. Initiation	Initiation (Pupil)	Pupil-talk initiation : talk by pupils which they initiate expressing own ideas initiation a new topic; freedom to develop opinions and a line of thought, like asking thoughtful questions; going beyond the existing structure.

Category : Teacher Talk	Nature	Specifications
10. Silence	Silence	Silence or Confusion : Pauses, Short period of confusion in which communication cannot be understood by the observer.

Ground Rules :

Rule 1 :

When not certain to which two or more categories a statement belongs, choose the category that is numerically farthest from category 5.

Rule 2 :

If the primary tone of the teacher's behavior has been consistently direct or consistently indirect, do not shift into the opposite classification unless a clear indication of shift is given by the teacher.

Rule 3 :

The observer must not be concerned with his own biases or with the teacher's intent.

Rule 4 :

If more than one category occurs during the three – second interval, then all categories used in that interval are recorded; therefore, record each change in category If no change occurs within three seconds, repeat that category number.

Rule 5 :

If a silence is longer than three seconds, it is recorded as 10.

Rule 6 :

When the teacher calls a child by his name, the observer ordinarily records.

Rule 7 :

When the teacher repeats a student's answer and if the answer is correct one, this is recorded as 7.

Rule 8 :

When the teacher repeats a student's idea and communicates that the idea will be considered or accepted as something to be discussed, a 3 is used.

Rule 9 :

If a student begins to talk after another student, a 10 is inserted between 9's and 8's to indicate the change of student.

Rule 10 :

Reactions such as 'All Right', 'Okay' and 'Yes' etc., are recorded as 9.

Rule 11 :

A teacher's joke which is not made at the expense of children is 2, but if the joke makes fun of a child then it is recorded as 7.

Rule 12 :

Rhetorical questions are recorded as 5.

Rule 13 :

If the student gives a specific predictable answers to a narrow question, this is recorded as 8.

Rule 14 :

An 8 is recorded when several students respond in answer to a narrow question.

Constructing an Interaction Matrix :

It is done during observation of a feaching session.

The numbers that an observer writes down are tabulated in a matrix 10 row by 10 – column table. It is in sequence pairs, that is, a separate tabulation is made for each overlapping pair of numbers. An illustration will explain this procedure.

Suppose, the observer has written down 6, 10, 7, 5, 1, 4, 8 and 4. As the interaction proceeds, the observer will continue to write down numbers. To tabulate these observations in a 10 × 10 matrix, the first step is to make sure that entire series

begin and ends with the same number. The convention is to add a 10 at the beginning and end of the series unless it is already present. Our series now become

1st	2nd	3rd	4th	5th	6th	7th	8th
10, 6	6, 10	10, 7	7, 5	5, 1	1, 4	4, 8	4, 10
Pair	Pair	Pair	Pair	Pair	Pair	Pair	Pair

These numbers are tabulated in a matrix one pair at a time. The column is indicated by the second number and row id indicated by the first number. The first pair is 10-6 ; the tally is placed in row ten and column six cell. The second pair is 6-10; this tall is the row six, columns ten cell. The third pair is 10-7, the fourth pair is 7-5, and so on. Each pair overlaps with the next, and the total number of observations, 'N' always will be tabulated by 'n-1' tallies in the matrix. In this example, we started a series of ten numbers, and the series produced nine tallies in the matrix.

The location of these tallies is shown in the following Table :

Sl. No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
1				1							1
2											0
3											0
4								1		1	2
5	1										1
6										1	1
7					1						1
8				1							1
9											0
10						1	1				2
Total	1	0	0	2	1	1	1	1	0	2	9

It is a tabulated matrix and the some of the corresponding rows and columns are equal.

Construction of Interaction Matrix : Encoding

For every three-second period, one of the ten categories is recorded by a trained observer. The sequence of observation that results is shown on a 10 × 10 matrix, whose rows and columns correspondents the categories. Observations and tabulated on this matrix by pairs.

SAMPLE MATRIX (Reproduced from Flanders)

Cateogory	1	2	3	4	5	6	7	8	9	10	Total
1				1							1
2	1			6	5						12
3			8	17	4	1		1	1		32
4				14	3		1	38	48		104
5		1		26	62	8	5		1	2	105
6				5	5	13			1	3	27
7		1		2	4		3	1		2	13
8		5	9	15	6		3	4	2		44
9		4	14	17	13	2	1		13	2	66
10		1	1	1	3	3				8	17
Total	1	12	32	104	105	27	13	44	66	17	421

Interpreting a matrix. This teacher talk is the sum of first 7 categories 1 to 7 i.e. 1 + 12 + 32 + 104 + 105 + 27 + 13 = 294.

Student talk is the sum of categories 8 and 9 i.e. 44 + 66 = 100. This means that out of 421 talks teacher talks are 294 and student talk 110 which comes to 69.8% and 26.2% respectively.

Following conclusions may be drawn from above :

1. The teacher is active.
2. The control of interaction rests with the teacher.
3. 50 – 70% of teacher's statements are indirect i.e., sum of first four categories 1 + 12 + 32 + 104 – 149 = 149 out of 294.
4. The flow of communication between the teacher and the student is flexible and shift from one category to another.
5. The class is business like and words rapidly.

Flanders has observed, "It will be the responsibility of the education instructor to help prospective teachers discover what their teaching intention should be and then create training situation in which behavior gradually matches intention with practice. Teaching will remain an art but it will be studied scientifically".

Use of the Flanders' Verbal Interaction Category Systems

1) The category system can be used for research in verbal interaction for pre-service and in-service education of teachers.
2) The concept of flexibility of teacher influence can be investigated.
3) The techniques may help in the grouping of students.

Procedures for observation – Encoding Process

1) The observer sits in a class room in the best position for hear and see the participants.
2) At the end of each three – second he decides which category best represents the communication events just completed.
3) He writes down the category number while simultaneously assessing communication in the next period and continues at a rate of 20 to 25 observations per minute, keeping his tempo as steady as possible.
4) His notes are merely a series of numbers written in a column top to bottom so that the original sequence of events is preserved.
5) Occasionally marginal notes are used to explain the class formation of any unusual circumstances.
6) When there is a major change in the class formation the communication pattern or the subject under discussion, a double line is drawn and the time indicated.
7) As soon as the total observation is completed, the observer retries to a nearby room and completes a general description of each separate activity period separated by the double line including the nature of activities, the class formation and the position of the teacher.

Principle of Observation : Flanders has suggested the following principles for classroom observation :

1. No interaction analysis data should be collected unless the person is familiar with the entire process and knows its limitations.
2. Questions to be answered by inspecting the matrix should be developed before the observation taken place.
3. Value judgments about good and bad teaching behavior are to be avoided.
4. Emphasis is to be given to the problem being investigated so that cause and effect relationship can be discovered.
5. A consultation based on two observations or at least two matrices helps to eliminate value judgment or at least control them. Comparisons between the matrices are more likely to lead to principles.

Decoding : The decoding of the interaction matrix is the interpretation stage. The decoding may be done at two levels : i) Quantitative analysis of teacher behavior, and ii) Qualitative analysis of teacher behaviour.

Conclusion : It helps the teacher in the grouping of students for their betterment by finding out student talk. It provides feedback to the teacher and thus helps him in modifying his pattern to teaching and behavior. It helps in understanding analytically what goes on in the classroom and what should be done to improve teaching-learning environment.

The FVIAC takes note of verbal teaching behaviours only although teaching involves both verbal and non-verbal interactions. Secondly, this system does not provide any information about content. Thirdly, it has considered only ten categories; teaching may have other interactions too. Fourthly, it analyses only the verbal interaction when the class is supposed to be basically teacher centered. Fifthly, use of this system requires expertise on the part of the observer.

Let Us Check Our Progress

1. Write two main assumptions of Flanders' Verbal interaction Analysis Categories.
2. How can FIVAC be used in modification of teaching behaviour ? – Explain.

7/8.1.2.12 : EVALUATION OF STUDENT TEACHING

What is ?

Evaluation of student teaching refers to assessment of performance of a student teacher in practice teaching school while he / she is, especially undergoing initial teacher education in the teacher education institution. The specific tasks to be evaluated depend upon the specific curriculum requirement of the teacher education programme or course. Commonly, student teaching includes : (1) planning and observation of good (model) lessons; (2) class teaching and experiments / demonstrations; (3) organization of school-based practical work and participation in co-curricular activities; (4) study of school services and resources; (5) preparing teaching aids using them effectively in class teaching; (6) developing tests and using them; and (7) maintaining school and students' records.

Objectives

Specific objectives of student teaching, in terms of competency may be developed as a result of student teaching. The student teacher will be able to :

1. become aware of the need for putting theory into practice in order to integrate these two components.
2. acquire knowledge by experience and exposure to a variety of teaching learning situation about their professional duties.
3. understand different approaches to teaching and communication techniques and use them in class teaching.
4. develop competence in relating and using types of learning aids for effective teaching.
5. devise minimum essential instructional media in relation to different units of teaching.
6. develop needed competence in delivery of knowledge, skills and appreciation lessons at appropriate levels of learning.
7. apply knowledge and understanding of theory in delivering new strategies of teaching.

8. manage real classroom problems that may arise during instruction;
9. interpret, summarize and report evidence that accrue from the use of various assessment modalities and tools;
10. undertake effectively other collateral activities like organization of co-curricular activities, need based projects, course development, etc.;
11. analyze question papers, course of studies and content analysis as well as pedagogical analysis of content to be taught.
12. reflect professional commitment, indicative of work ethics, pride in profession, code of conduct and human feelings towards students, co-workers, etc.;
13. self evaluate on various teaching tasks and skills developed during student teaching;
14. establish human relations with students, co-worker, principal, parents and the community.

Models of Teacher Evaluation

A number of models of teacher evaluation are available and the institutions take advantages of them as per course requirements. These may be :

1. Formative Models : These models refer to improvement of teaching performance based on observation of some selected criterion behaviors and feedback of trained observers as well as peers. Focus on delivery system of instruction, improving school effectiveness through staff development, school improvement, self-evaluation, evaluation by peers etc. This is continuous during the practice teaching session or internship. These are exclusively internal.

2. Summative Models : The intention of three models of teacher evaluation are to certify teachers using rigorous standards, recognize and reward teachers, grade teaching performance, focus on assessment impact of educational systems and teachers on students' yearly gains on norm referenced tests, etc.

3. Formative-cum-Summative Models : These are a combination of the above classes of models of student teacher evaluation. The main intentions of these models

are to improve student teacher performance and influence student achievement through skilled observations and lesson analysis, develop staff competency for use in formative evaluation, or if needed, for summative evaluation, strengthen and maintain teacher morale through participative decision making and maintaining professional standards.

Every model has its strengths and weaknesses. What is important is that the summative student teacher evaluation models are invariably used in Indian teacher training programmes and these are exercised by the examining bodies as per set regulations. However, NCTE suggests using the both models of student teaching evaluation. In most cases the curriculum planners are reluctant to use formative part in the plea that this will be highly biased and subjective.

Rationales of Evaluation of Student Teaching

There are some compelling reasons for student evaluation. These are to :

- help teacher educators to certify trainees acceptable level of proficiency in various educational practices;
- provide for accountability of student teachers for competency based teaching;
- help diagnose ineffective areas of teaching to remediate;
- motivate and provide for self-evaluation to improve teaching; and
- yield evidence that can be used for maintaining performance standards.

Process of Evaluating Student Teaching

Evidence of student teaching may be gathered in many ways and many persons and the sum of all the data, thus, collected is indicative of student teacher's performance.

Who appraises ?

Four models may be there.

1. Self-appraisal by the student teachers as the ultimate aim of evaluation is self-evaluation.
2. Peer-appraisal, that is, the fellow student teachers placed in a particular practice teaching school in a particular term.

3. Hierarchical supervisor-subordinate model, in which the immediate superior teacher educator of the student teachers evaluates and, in turn, they are evaluated by one or more immediate supervisor(s) of the teacher education institution. This may be formative as well as summative.
4. External appraisal carried out by the examiners appointed by the examining body or authority which is exclusively summative evaluation.

What will be appraised ?

The following areas of performance of the student teachers are evaluated.

1. Mastery of the subject matter attained.
2. Level of teaching competence developed.
3. Technical know-how developed in assessment and evaluation of pupils.
4. Efficiency acquired in classroom management.
5. Sustained interest and efficiency manifested in organizing co-curricular activities.
6. The degree of professional commitment reflected as a teacher.
7. Originality in teaching proficiency developed.
8. Human relations maintained and developed in instructional implementation and as a colleague.
9. Proficiency developed in preparing other school-based practical activities.

Evaluation Tools and Techniques

Following tools and techniques of evaluation may be used.

1. Testing-using written unit test.
2. Observation-observing a lesson or a series of lessons in a unit.
3. Inquiry-oral questioning.
4. Analysis-analyzing the content of lessons and other reports of practical activities performed.
5. Interview technique-interview technique for understanding the perspective, attitude, planning skills, etc. of the student teachers.
6. Self-evaluation-using self-rating scales.

Each tool and technique should be systematic, objective, relevant, easy to use, and valid.

Student Teacher Profile :

Most of the aspects of evaluation of student teacher can be rated (graded) on a 5-point or 7-point or 9-point rating scale depending upon the ease of practical application. For instance if the requirement specify use of the following eight aspects of evaluation like

A. Lesson Plan
B. Class management
C. Content mastery
D. Instructional strategy
E. Communication skills
F. Questioning skills
G. Use of teaching aids.
H. Review and Assessment

Each student teacher is rated in each of the above eight aspects independently and finally a student teacher profile is constructed.

Proficiency Index

Besides student teacher profile we may calculate the proficiency index of as exemplified below.

Index of Proficiency

Sl. No.	Aspects of Assessment	Marks allotted	Rating	Weighted Score
1.	Mastery of subject matter	25	4	100
2.	Communication skills	20	3	60
3.	Questioning skills	15	5	75
4.	Pupils' involvement	10	1	10
5.	Review and reinforcement	10	2	20
6.	Assessment and evaluation	10	3	30
7.	Classroom management	10	4	40
	Total	100	1 – 5	335

Weighted Score = 335

Possible Score = 500

Proficiency Index = 335 / 500 = 67%

This is an overall index. Similar index can be prepared for each of these aspects separately if needed.

Let Us Check Our Progress :

1. State the main importance of student evaluation.
2. How can the results of student evaluation data improve quality of our teacher education programmes ? – Give your own suggestions.

7/8.1.2.13 : LET US SUM UP

The present Unit is intended to explain teacher education for the present day need and its up gradation for societal involvement. In the first part of this Unit taxonomy of educational objectives have been discussed for getting knowledge about what we have to do in a real classroom situation from cognitive domain to affective domain.

Different techniques of teacher behaviours modifications have been discussed through student teaching micro teaching, interaction analysis and core teaching skills. Efficacy is also an another turn which explains the process successfully in teacher education pointed out here in terms of evaluation of student teaching.

7/8.1.2.14 : SUGGESTED READINGS :

1. Bloom, S. B. (1960). Taxonomy of Educational Objectives, New York ; Longmans, Green and Co.
2. Singh, L. C. (1990). Teacher Education In India, New Delhi, NCERT.
3. Singh, L. C. (1990). Microteaching In India, New Delhi, NCERT.
4. Chauhan S. S. (2000). Teacher Education.
5. Aggarwal J. C. (2001). Essentials of Education Technology, (New Delhi), Vikas Publishing House Pvt. Ltd.

7/8.1.2.15 : ASSIGNMENT :

1) Discuss any one domain of taxonomy of educational objectives and communicate how these objectives may be applied in the classroom teaching.
2) Elaborate a model of teacher education and practicing school.
3) Explain how teacher education and community be collaborative ?
4) Explain different techniques of teacher training with its efficacy of teaching improvement.
5) Discuss the different techniques of evaluation of student teaching and its relevance for teacher preparation.
6) Suggest some functional strategies that might be helpful for removing isolation between teacher education institutions and practicing schools.
7) What do you mean by Core teaching skills. To what extent is micro-teaching useful in improving teacher competence in applying the core teaching skills in real classroom instruction ? – Discuss.
8) What are the assumptions of Flanders' Verbal Interaction Analysis system ? State the ten classification categories of verbal interaction as suggested by Flanders. Discuss its merits and demerits.
9) What do you mean by micro-teaching ? How can it be applied in teacher education institutions ? Discuss is micro-teaching without integrating the practice of component teaching skills effective ? – Justify.