## F-1.3

## TECHNIQUES OF TEACHING

## Course Content:

### UNIT- I: Teaching as a Profession

a) Teaching: Concept, nature, characteristic, principles and maxims.

b) Teaching as a Profession, professional ethics of teachers and Teacher accountability

c) Reflective teaching: concept and strategies for making teachers reflective practitioners.

### UNIT –II: Teaching Technology

a) Simulated Teaching: Concept, Procedure, Merits and Limitations

b) Micro Teaching: Concept, Procedure, Merits and Limitations, Skills of Micro Teaching (Introduction, Questioning, Explanation, Reinforcement, Stimulus Variation).

c) Programmed Instructions and its Types, Computer Assisted Instruction (CAI)

### UNIT-III: Models of Teaching

a) Models of Teaching: Concept, characteristics, assumptions and fundamental elements of a teaching Model

b) Concept Attainment Model

c) Inquiry Training Model and Inductive thinking model.

### UNIT-IV: Teaching as Communication

a) Communication: Concept, Types, principles and barriers in communication.

b) Multimedia in Education: Tele-Conferencing, Internet and use of multimedia presentation and Satellite Communication

c) Recent Trends in Teaching: e-learning. M-learning, Open educational resources, MOOCs and role of social media in teaching.

### UNIT- I: TEACHING AS A PROFESSION

a)      Teaching: Concept, nature, characteristic, principles and maxims.

Teaching its simple meaning is referred to either as occupation or profession of a community known as teacher or an Activity or Activities of a group undertaken to help an individual to learn or acquire some knowledge, skills, attitudes or interest etc.

Teaching includes all the activities of providing education to other. The person who provides education is called teacher. The teacher uses different method for giving best knowledge to his students .He tries his best to make understand students. His duty is to encourage students to learn the subjects.

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**Descriptive Definitions of Teaching**

- Teaching as Success
- Teaching as Intentional Activity
- Teaching as Normative Activity
- Scientific Definition of Teaching
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- **Teaching as Intentional Activity**

   "teaching is undertaking certain tasks or activities the <u>intention</u> of which is to induce learning"

- A teacher can anticipate that certain activities will result in learning, but not guarantee it.
- In short, successful teaching cannot be reduced to a set of general rules, or a prescribed pattern of behavior.
- **Teaching as Normative Activity**

- "normative teaching requires that the activities of teaching conform to certain ethical conditions"

- conditioning (stimulus-obeying behavior)

- indoctrinating (uniformed belief)

- brainwashing (conditioned behavior/uninformed belief)

- informing (information with explanations or evidence, no experience provided)

- training (rule-obeying behavior)

- instructing (training and informing)

- teaching (processes of verification, concern for what student thinks, preparing them for independent action)

- **<u>Scientific Definition of Teaching</u>**

- "teaching is the process of carrying out those activities that experience has shown to be effective in getting students to learn"

- a major problem is that there is very little research that agrees systematically on anything

- craft wisdom is frequently good, but sometimes is in error

- a scientific definition is probably not possible given student autonomy

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**Teaching means interaction of teacher and students. They participate for their mutual benefits. Both have their own objective and target is to achieve them.**

Many great teachers of world define teaching in different way and we can say that teaching is just to train the students so that they can stand on their own foot in society .

In teaching, three main aspects comes in our front
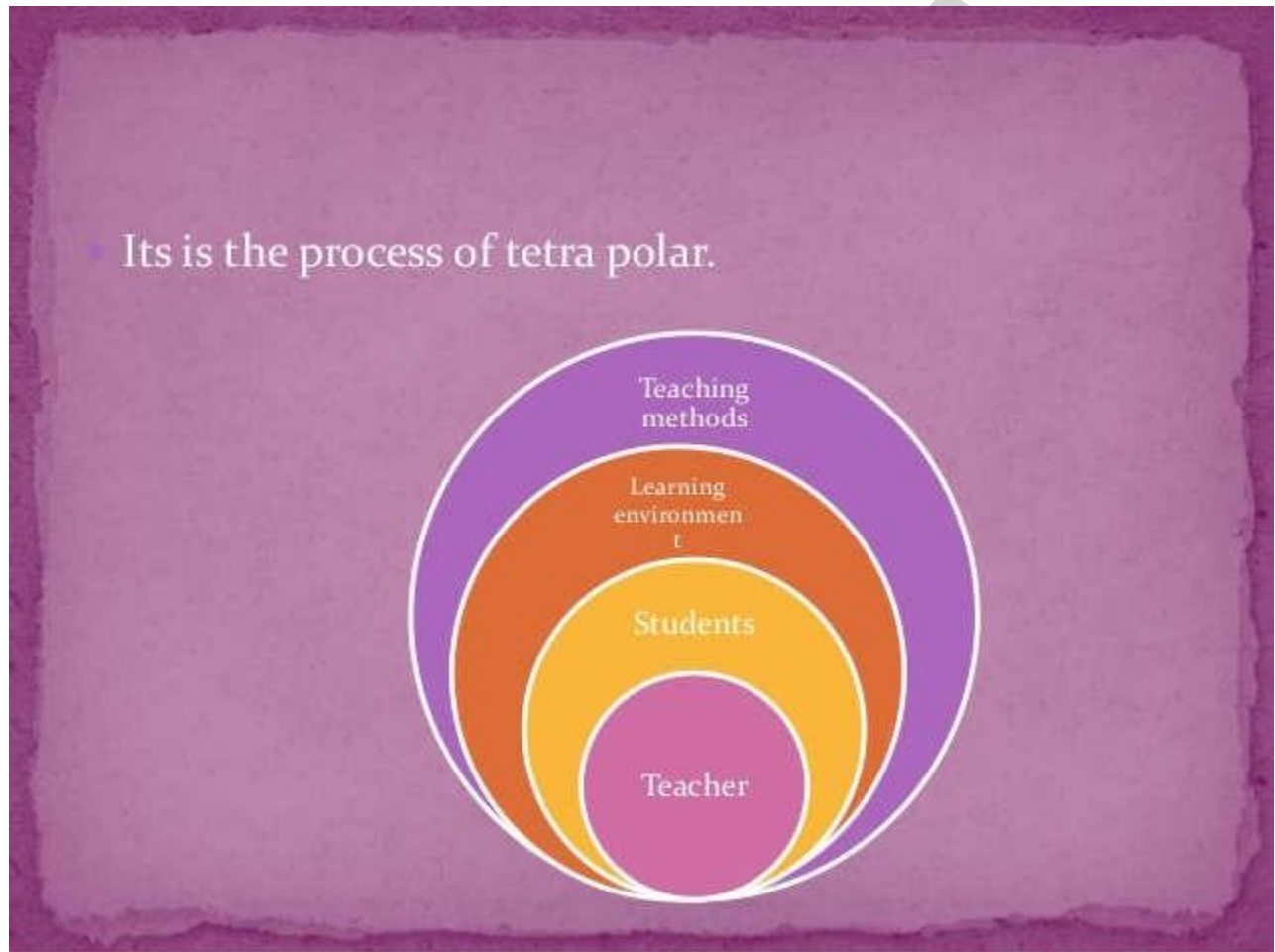
1st is teacher

2nd is students

3rd is education

**H.C. Morrison**

"Teaching is an intimate contact between a more mature personality and a less mature one which is designed to further the education of the latter."

**Thomas Green:**

"Teaching is the Task of teacher which is performed for the Development of a child."



**Maxims of Teaching:**

(i) **Form known to unknown :** A good teaching should always lead from known to unknown. Previous knowledge of a particular subject may help us to proceed from a particular subject or topic to the unknown.

(ii) **From Definite to Indefinite :** A good teaching should always lead from definite to indefinite. One can always trust the tested or definite and therefore definite things, concepts, events or knowledge may be easily approached for catching the

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Indefinite ones. Similarly definite rules of the grammar may help a student to learn the concerned language effectively.

(iii) **From simple to complex :** It is always better to begin with the relatively simple things than to fight with the unnecessary difficult and complex ones. Proceeding from simple to complex or easy to difficult always provides an opportunity or appropriate learning order or sequence.

(iv) **From concrete to Abstract :** Abstract is confusing, difficult to understand and subjective. One may be easily bored and lose one's patience while attending to an abstract phenomenon. In contrast concrete is relatively simple, understandable or objective. A good teaching should lead from concentrate to abstract.

(v) From Actual to Representative: Actual or real objects, a piece of knowledge are quite better from other objects. Real or Actual objects gives more knowledge to the students than to the Artificial objects or Illustrative aids.

(vi) **From Particular to general :** Generalized facts, principles, concepts and phenomena are quite abstract in nature therefore should not be presented in the beginning of a teaching. A teacher should always begin with the learning or experiencing of the particular cases, facts or instances and then persuade his students to generalize or conclude.

(vii) **From whole to parts :** Whole is not only greater than the parts but also more understandable, motivating and effective. Therefore, beginning should always be made on the bases of whole and then step by step proceed to its various parts. For e.g. in teaching the topic "Parts of the flower" the beginning should be made with Actual presentation of the whole plant and then move on to its parts.

(viii) **From Induciton to DFeduction :** Induction is a way of proving a thing or statement by arguing it it is true for a particular case then it should be true for the next similar case and ????.

Deduction is made by placing the generalized facts, principles, formula or rule before the students and then they are asked to verify the truth of the generalized by applying it in a particular instance or example.

(ix) **From the analysis to synthesis** : Analysis refers to a process of breaking or separating out a thing into the simple parts, elements or constituents in order to understand its structure or composition on other hand synthesis works quite opposite to analysis. It refers to a process of combining the different elements or parts teaching should always begin with analysis and lead to synthesis.

(x) **From Empirical to Rational** : In a teaching learning process, it is always safe to design with what we see, feel and experience than with what we agree,, generalize or explain. A teacher has to place facts, evidences, direct or indirect experiences, examples and instances full of objectivity and validity for arriving at some conclusion or develop a rational point of view in understanding ????????.

(xi) **From Psychological to logical** : Psychological point of view emphasizes the importance of psychological principles of learning and teaching in the process of Education. The curriculum, teaching strategies, aid material and teaching-learning environment all are set in view of the psychology of the child and teaching and learning.

So we can say that Maxims of teaching brings desirable changes or improvement in the behavior of the pupils. The Maxims of teaching are quite helpful in making teaching quite effective and purposeful.

**Nature and characteristics of teaching**

1. The main character of teaching is to provide guidance and training.
2. Teaching is interaction between teacher and students.
3. Teaching is an art to give knowledge to students with effective way.
4. Teaching is a science to educate fact and causes of different topics of different subjects.
5. Teaching is continues process .
6. Teacher can teach effectively, if he has full confidence on the subject.
7. Teaching encourages students to learn more and more.
8. Teaching is formal as well as informal
9. Teaching is communication of information to students. In teaching , teacher imparts

information in interesting way so that students can easily understand the information .

10. Teaching is tool to help student to adjust himself in society and its environment.

**General Principles of teaching**

1. **Principle of Motivation:** It creates curiosity among students to learn new things.

2. **Principle of Activity (learning by doing):** Froebel's Kindergarten (KG) system is based on this principle. It includes both physical and mental activities. For example, students are asked to make charts and models.

3. **Principle of Interest:** By generating genuine interest among the learner's community, the effectiveness of the teaching-learning process can be increased.

4. **Principle of linking with life:** Life is a continuous experience, and learning linked with life can be more enduring.

5. **Principle of definite aim:** This is important for optimum utilization of teaching resources and making learning more focused.

6. **Principle of recognizing individual differences:** Every student is unique in term of intelligence, attitude, abilities and potentialities, socio-economic background. The teaching method should be devised in such a manner to make all the students to avail equal opportunities in life.

7. **Principle of Selection:** The horizon of knowledge is expanding each day. The teacher should be able to pick contents that can be more relevant and update to the learner's objectives.

8. **Principle of Planning:** Every teacher has certain time-bound objectives, and hence, teaching should be systematic to make optimum use of resources within the time limit.

9. **Principle of Division:** To make learning easier, the subject matter should be divided into units, and there should be links between the units.

10. **Principle of Revision:** To make learning enduring, the acquired knowledge should be revised immediately and repeatedly.

11. **Principle of Certain and Recreation:** This Principle is a must to make classroom environment humorous and creative.

12. **Principle of Democratic dealing:** It entails students in planning and executing different activities; It helps in developing self-confidence and self-respect among the learner's.

**TEACHING AS A PROFESSION,**

In its broadest sense, teaching is a process that facilitates learning. Teaching is the specialized application of knowledge, skills and attributes designed to provide unique service to meet the educational needs of the individual and of society. The choice of learning activities whereby the goals of education are realized in the school is the responsibility of the teaching profession. In addition to providing students with learning opportunities to meet curriculum outcomes, teaching emphasizes the development of values and guides students in their social relationships. Teachers employ practices that develop positive self-concept in students. Although the work of teachers typically takes place in a classroom setting, the direct interaction between teacher and student is the single most important element in teaching.

*Teaching as a Profession*

The continued professionalization of teaching is a long-standing goal of the Alberta Teachers' Association. The Association continues to work to advance teaching as a profession. Professionalism is a complex and elusive concept; it is dynamic and fluid. Six generally accepted criteria are used to define a profession. The teaching profession in Alberta fulfills those criteria in the following ways:

1. *Its members have an organized body of knowledge that separates the group from all others.* Teachers are equipped with such a body of knowledge, having an extensive background in the world and its culture and a set of teaching methods experientially derived through continuous research in all parts of the world.

2. *It serves a great social purpose.* Teachers carry responsibilities weighted with social purpose. Through a rigid and self-imposed adherence to the Code of Professional Conduct, which sets out their duties and responsibilities, teachers pass on their accumulated culture and assist each student under their care in achieving self-realization.

3. *There is cooperation achieved through a professional organization.* Cooperation plays an important role in the development of the teaching profession because it represents a banding together to achieve commonly desired purposes. The teaching profession has won its well-deserved place in the social order through continuous cooperation in research, professional preparation and strict adherence to the Code of Professional Conduct, which obligates every

teacher to treat each student within a sacred trust. Teachers have control or influence over their own governance, socialization into teaching and research connected with their profession.

4. *There is a formal period of preparation and a requirement for continuous growth and development.* Teachers are required to complete a defined teacher preparation program followed by a period of induction or internship prior to being granted permanent certification. This period includes support for the formative growth of teachers and judgments about their competence. Teachers are devoted to continuous development of their ability to deliver their service.

5. *There is a degree of autonomy accorded the professional.* Teachers have opportunities to make decisions about important aspects of their work. Teachers apply reasoned judgment and professional decision making daily in diagnosing educational needs, prescribing and implementing instructional programs, and evaluating the progress of students. Teacher judgment unleashes learning and creates the basis for experience.

6. *The profession has control or influence over education standards, admissions, licensing, professional development, ethical and performance standards, and professional discipline.* As professionals, teachers are governed in their professional relationships with other members, school boards, students and the general public by rules of conduct set out in the Association's Code of Professional Conduct. The code stipulates minimum standards of professional conduct for teachers, but it is not an exhaustive list of such standards. Unless exempted by legislation, any member of the Association who is alleged to have violated the standards of the profession, including the provisions of the code, may be subject to a charge of unprofessional conduct under the Discipline Bylaws of the Association.

The competence of teachers is governed by the Practice Review Bylaws of the Association. The expectations for the professional practice of teachers related to interim and permanent certification are found in the *Teaching Quality Standard Applicable to the Provision of Basic Education in Alberta*. The Teaching Quality Standard defines the knowledge, skills and attributes all teachers are expected to demonstrate as they complete their professional preparation, enter the profession and progress through their careers. Additionally, the Department of Education's Teacher Growth, Supervision and Evaluation Policy (Policy 2.1.5) supports and reinforces the Teaching Quality Standard by setting out basic expectations for teacher growth, supervision and evaluation.

*Teachers as Professionals*

The certificated teacher is the essential element in the delivery of instruction to students, regardless of the mode of instruction. A teacher has professional knowledge and skills gained through formal preparation and experience. Teachers provide personal, caring service to students by diagnosing their needs and by planning, selecting and using methods and evaluation procedures designed to promote learning. The processes of teaching include understanding and adhering to legal and legislated frameworks and policies; identifying and responding to student learning needs; providing effective and responsive instruction; assessing and communicating student learning; developing and maintaining a safe, respectful environment conducive to student learning; establishing and maintaining professional relationships; and engaging in reflective professional practice. These processes must be free of discriminatory practices and should contribute to the holistic development of students who are actively engaged, responsible and contributing members of a democratic society. The educational interests of students are best served by teachers who practise under conditions that enable them to exercise professional judgment. Teachers have a right to participate in all decisions that affect them or their work, and have a corresponding responsibility to provide informed leadership in matters related to their professional practice.

## PROFESSIONAL ETHICS FOR TEACHERS.

Professional ethics for the teaching profession We are one profession of teachers and leaders in early childhood education and in primary and secondary schools. Our political mandate is to promote learning, development and bildung for all children and pupils. Our values, attitudes and actions influence the impact of our work. These ethical principles constitute a common ground for the development of our ethical awareness. It is our responsibility to act in accordance with these values and principles.

**Basic values of the teaching profession**

1.Human values and human rights

Our work is founded on values and principles set down in universal human rights, especially the UN convention on the rights of children. These rights must be promoted and defended in

early childhood education and in schools. The inviolability of human individual freedom and the need for safety and care are fundamental.

2.Respect and equality

Each individual person's personality and integrity must be met with respect. No form of oppression, indoctrination or prejudiced opinions shall be tolerated. All children in early childhood education and all pupils in schools have a right to participate and have their views heard and taken into account. They shall have a right to freedom within the framework of the education community.

3.Professional integrity

Ethical consciousness and high professional competence are the basis of the profession's integrity and are essential in creating good conditions for play, learning and bildung. Our right to methodological freedom and our professional discretion gives us a special responsibility to be open about our academic and pedagogical choices. Society should be confident that we use our professional autonomy both properly and ethically.

4.Privacy

Adherence to confidentiality and information standards is crucial in our work. Everyone has a right to privacy. Personal information must be managed in ways that protect the integrity and dignity of children, pupils, parents and colleagues. Electronic information dissemination requires a special critical awareness.

**Professional Ethics**

Many professions throughout the ages have set themselves ethical guidelines that express the attitudes and sense of responsibility that members are required to show towards their work, articulating the common values and principles that they should possess with respect to their profession.

The teaching profession is based on the concept of teachers as experts who have been assigned specialized tasks by society, which has also prepared them for such tasks by providing them with the necessary high level of education. The profession then demands that the representatives selected to perform these tasks should demonstrate high ethical standards in all situations, even though the tasks may frequently be difficult to define precisely or call for rapid

decisions. lt is essential for society to be able to rely on persons of this kind to exercise a high level of professional skill.

The sense of responsibility attached to the practising of a profession is based on knowledge and vocational skills on the one hand and on the values and norms that form the foundation of the work on the other. Both are essential, and neither can replace the other. Good ethical principles cannot compensate for poor professional skills, and good professional skills cannot make up for a lack of ethical principles. Thus teachers should feel obliged by their sense of responsibility to pay constant attention to the maintaining of their professional skills, and also to show particular sensitivity in the perception of ethical problems and readiness to observe the highest standards of professional ethics when resolving such situations.

Any consideration of the ethics of the teaching profession calls for a distinction to be made between legal and ethical matters. The basic duties and responsibilities of teachers are defined in the relevant legislation and norms, while the content of the teaching is laid down in the curriculum. By contrast, however, the ethics of the profession are not based on compulsion or external supervision but on an internalized concept of the moral obligations attached to the work.

The results of a teacher's work are often visible only after a considerable time lag, in that good Iearning experiences tend to promote lifelong learning. Teachers can play a significant role in both the generation of positive Iearning experiences and the reinforcement of learners' self-esteem. Thus a teacher's work is a matter of providing opportunities for upbringing, instruction and Iearning for the ultimate benefit of individual learners. ln addition, a teacher is expected to meet up to society's requirements concerning the implementation of the goals of teaching, which means that, on account of changes taking place in society, many teachers are obliged in the course of their work to take care of things for which they cannot bear sole responsibility.

The change in the role of teachers has brought them closer to the learners, but it has also increased their responsibility for the learners' development and has frequently led them into closer cooperation with others who are also responsible for this development. Teachers have a great deal of power and responsibility in matters concerned with the evaluation of learners, for

instance, and it is only by fully internalizing the ethical principles involved that they can avoid abusing their position in this respect.

A high standard of professional ethics is one of the most important resources available to teachers, guiding their work and their interactive relations at the professional level. The work of teaching should include consideration and evaluation of the ethics of one's own goals and motives. ln this sense the purpose of the present account of a teacher's professional ethics is to codify and promote the sense of what is ethically right that has always been a part of educational work.

## REFL ECTIVE LEVEL OF TEACHING

Thinking is as important to human development. At this level, teacher increase thinking, logic and
imagination in students so that the student could solve their problems later through these approaches.
At this stage, education involves both the memory and understanding levels. The thinking level of
education cannot be successful without these levels.
Thinking level of education is problem-centered. Teacher presents any regarding problem in front of
students and students start thinking by getting motivated and active. This is fundamental thinking with critical approach. It is the teacher's responsibility to develop creative abilities in students by giving
them the opportunity to develop their thinking behavior.
It is supreme level of education and completely thoughtful. Students search for new knowledge by
expressing their learning, perception, thought, belief and knowledge, consideration and reasoning to
solve the problem. It is a productive state of creation, discovery, research and creation.

At this level students search for problem solutions with self-interest, voluntarily meditate, contemplate,reason and imagination and make themselves more confi dent and active. At this stage teachers should be qualifi ed, experienced, expert and effective.Paradigm developed by **Hunt** for refl ective level of teaching is being shown through a table further.

**Hunt's Model of Refl ective Level of Teaching**

**Paradigm Side Refl ective Level Teaching**

1. Focus

(1) To develop fundamental and independent thinking power in students.

(2) To develop consideration and reasoning power to solve problems

(3) The capability to solve a problem depends on its nature. It can be individual

and social. It has four steps.

2. Syntax

(1) Creation of diffi cult situation

(2) Creation of imagination

(3) Use sense, meditate and contemplate for imagination

(4) Test of imagination and problem solving

3. Social System

(1) Classroom environment is completely open and free.

(2) Students are active and self-motivated

(3) It is the basis of student's socialization.

(4) It is an atmosphere of cooperation, social sensitivity and sympathy.

4. Support System'

(1) Written support is more useful.

(2) Aptitude, problem solving, creativeness are testing of viable..

**Suggestions for Refl ective Level of Teaching**

The following are suggestions for teaching thinking level—

1. Before teaching this level, it is necessary to have the knowledge memory and understanding level.

2. Every related step should be follow.

3. Aspiration level should be high.

4. They should have sympathy, love and sensitivity.

5. Attention should be paid towards cognitive development.

6. Students should be given more opportunities to develop consideration and reasoning power.

7. Democratic learning environment should be maintained.

8. Students should be motivated more and more for positive thinking.

9. Maintains democratic learning environment.

10. Students should be encouraged to thinking more and more perfect.

## STRATEGIES FOR MAKING TEACHERS REFLECTIVE PRACTITIONERS.

Reflective teaching strategies, however, are much older, having been proposed, discussed and used by other educators such as John Dewey, Jean Paiget and Carl Jung.

In the most simplistic description, reflective teaching strategies allow an educator to look at what is being taught, how he/she is teaching it and what the outcome of the lessons are. The purpose is to learn what works for the individual teacher as well as what works for the students.

As with all reflective practices, reflective teaching presents the educator with an opportunity to look within themselves to their own personal teaching philosophy (how they teach), thereby challenging themselves to their strengths and weaknesses.

Educators who teach reflectively use one or several of the following strategies -

- Keep a teaching journal or diary
- Collaborative journal writing - a group of teachers keep and share diary entries during a prescribed period
- 
    - Create and utilize self assessment forms
    - Video tape their work in the classroom
    - Written reports on projects/experience in the classroom
    - Ask peers to review their work
    - Work with a mentor
    - Read and utilize student assessments

- Write an autobiography on how and why you became a teacher, sharing sections with peers

Once the data is collected, educators should review it, reading any comments made by students, peers, or mentors, think about what has been revealed, discuss what it means to them and ask mentors and peers for suggestions/comments on what they (the educator) has discovered. Realistically, student teachers have the time to invest in reflective teaching, whereas, classroom teachers may find it a challenge to reflect.

- **Practicality**

While reflective teaching has many benefits, the least of which is allowing an educator to enhance their teaching skills, in today's world with the constant pressure of mandated student assessments and standardized testing, many educators find reflective teaching to be simply another weight on a scale that is already off balance. To be realistic, reflection in any form takes time. If teachers are given the time to be reflective, then they will be able to reap the benefits. Educational administrators would be wise to realize that reflective teaching strategies are, as educator Jack Richards states, "a powerful impetus for teacher development."

- **Self-Reflective Journal:** A journal is an easy way to reflect upon what just happened during your instruction. After each lesson, simply jot down a few notes describing your reactions and feelings and then follow up with any observations you have about your students. If it helps, you can break up your journal into concrete sections, such lesson objective, materials, classroom management, students, teacher, etc. In this way, you can be consistent with how you measure your assessments time after time. You can find specific questions to ask yourself below.
- **Video Recording:** A video recording of your teaching is valuable because it provides an unaltered and unbiased vantage point for how effective your lesson may be from both a teacher and student perspective. Additionally, a video may act as an additional set of eyes to catch errant behavior that you hadn't spotted at the time. Many colleges actually use this method to teach up and coming teachers the value of self-reflection.
- **Student Observation:** Students are very observant and love to give feedback. You can hand out a simple survey or questionnaire after your lesson to get students' perspectives about how the lesson went. Think critically about what questions you'd like to ask and

encourage your children to express their thoughts thoroughly. It'll not only be a learning experience for you, but also an indirect exercise in writing for them.

- **Peer Observation:** Invite a colleague to come into your classroom and observe your teaching. Now this is much different than when you have your principal come in and watch you—it's much more casual and devoid of darting eyes. As a result, you'll be able to teach more naturally and give your colleague an honest perspective of your instruction methods. To help him frame your lesson critique more clearly, create a questionnaire (you can use some of the questions below) for your colleague to fill out as they observe. Afterward, make some time to sit down with him so he can more accurately convey what he saw.

## UNIT –II:TEACHING TECHNOLOGY

### Simulated Teaching: Concept, Procedure, Merits and Limitations
### Introduction

Several methods for creating useful and effective teacher training have been developed. Simulated Teaching is one of them. This method is called simulation or customized training. Kersh fi rst villages in the area of training used in teaching. In 1966 Cruck Shank in the U.S. is used to make effective teaching practice. Is the real meaning of role play simulation. Literally, it means exactly-To imitate. Like all true teaching in a given situation to make artifi cial reality is called teaching.

### Simulation: Meaning and Definition

Histrionically also used in teaching means customizing. Histrionically method is introduced to students knowledge of the situation, after which, through conversation and discussion subject is extended

Customized teaching method is considered by the Second World War. Used to train for war, real war is Notes not possible. Therefore, different array compositions of war and war-like techniques to train artifi cial conditions is constructed and Training is provided. In this process, an action is presented in lifelike artifi cial conditions. The teaching method used nowadays in business management, administration, medicine, teaching and training in the fi eld of business.

**SIMULATED TEACHING**

The precise method of teaching learning and training through the act of pupil teacher problem— Ability to resolve behavior develops and provides training to teach him very well. Reality by acting in teaching and specifi c communication skills for the development of a complete artifi cial conditions are teaching. The behavior of learners sorted and organized learning in artifi cial conditions—experiences while maintaining desirable change is brought about by the spontaneity.

**According to Wing** "Creating artifi cial conditions is the When the student teacher to meet specifi c customized materials have to be the desired response." He Consider the actual circumstances that represents simulation.

According to Cruick Shank "Practical teaching is to create artifi cially a real situation in which your current or future actions by the participants resolve problems Sambndhti experience possible."

According to Trancy and Anwin "A simulation of a situation or environment by customizing often represents the actual conditions that is less complicated and less time-consuming." Customized learning implies the use of simulation training." Customized teaching a teacher training technique, which the student teacher is to develop teaching skills. By this method, the student teacher teaching practice skills in simulated situations are given."

Elements of Simulated Teaching

According to Cruick Shank there are three main element of Simulated Teaching—

(1) Diagnostic Element

(2) Prescriptive Element

(3) Evaluative Element Elements of Simulated Teaching

**(i) Diagnostic Element**—As a doctor does diagnose the patient's illness symptoms, as well as a teacher helps students diagnosed their weaknesses and strengths. The teacher tries to overcome these weaknesses diagnosed and Strengths in the future to maintain their places as loudly

**(ii) Prescriptive Element**—Students' weaknesses and strengths diagnose diffi culties, on the basis of their qualifi cations and skills that students attempt to treat and Students are striving to bring behavioral change.

**(iii) Evaluative Element**—To evaluate the achievement of remedial actions which the teacher activities, they all come under the process of evaluation. This indicates that the evaluation of teaching predetermine how, and to what extent determine which would have been received. Accordingly, when you're not satisfi ed, diagnosis, treatment and evaluation of the process is repeated.


Procedure of Simulated Teaching

Three major types of real-time training in teaching roles have had to juggle.

They are— (1) Teacher (2) Student (3) Inspector

These three types of roles alternately play teacher. In the process, the fi rst to play the role of teacher educators. The fellow students play the role of teacher. The role of the teacher is the teacher teaches the lesson. In it teaching session is of 6 to 15 min. Student count also from 5 to 15. Like fellow inspector one or two teachers are evaluated. Teacher at the end of the text on the Properties inspector to discuss defects and Encourage teachers to improve their teaching.

**Steps of Simulated Teaching**

**(1) Orientation**—First, all information is provided regarding teacher education a reality. The real meaning of the teacher and the Samprtyy is clear, its importance and use are explained and the procedure is explained. Students, teacher, student and observer's role is to explain the role and appropriate training is provided for subsistence. Therefore, there are three main functions under the stair—

(1) Provide accurate information to the students learning.

(2) Role selection—What role do under it, the decision is taken. How will the roles, roles that are discussed on how to play this.

(3) Select the teacher role play—Who is the teacher who will act on it, are discussed and the teacher, student and teacher of the inspector is selected.

**(2) Selection of Skills for Practice**—The stair under which it certainly is—who will be trained in teaching skills. Teaching skills and their importance when selecting the focus is on utility. Such skills are available, whose use in the teaching of all subjects to be taught in school as possible. Interpretation skills are selected, the discussion and deliberation is done. Key elements are introduced to their nature, the teacher creates lesson plans based on the selected teaching skills.

**(3)** Determination of Sequence—Reality by learning skills that are selected based on their exercise Notes program after Lesson planning is made. To what skills will be fi rst, what skills will be when it is used to determine the order. This step is used to determine the order in which the teacher and the order in which they practice different teaching skills which will role.

**(4)** Determination of Observation Techniques—It is used to determine what type of teaching skills for the practice of observing the system will be stored. Ex Audio Cassette the will be used. Thus, the equipment to observe and practice teaching skills and what methods will be used, it is decided Here it is also certain that the observations in which the points will be observed, and Which method will be adopted to nourish.

**(5)** Organisation of First Practice Session—When the entire system is held the fi rst practice session. Nutrition practice session immediately after the page is given by supervisors and suggestions for improvement are necessary. The session lasts until the turn of the teacher does not come to practice.

**(6)** Providing Mastery Over Teaching Skills—Each teacher teaching skills then keep practicing until he receives the full dexterity skills. Him to a second teaching skills are put to practice skills..And also to master is the third practice teaching skills. Thus, the sequence continues.

**Characteristics of Simulated Teaching**

(1) The student work naturally in artifi cial conditions.

(2) The students have the opportunity to be master in various skills.

(3) There are many opportunities for students to rehearsal.

(4) The pupil - teacher who is playing teacher's role get immediately feedback after completing the lesson.

(5) This method is simple, easy and very useful.

(6) By using this method confi dence of teacher awaked.

(7) Without teachers teaching in school as part of the school are learning opportunities, thereby increasing their experiences and increasing interest in teaching.

(8) School is not being addressed because of the problem, the method teaching practice teaching method is accurate.

(9) Actual teaching practice in the school is not teaching. Therefore, students would not harm any of the studies.

(10) Actual teaching of teachers face many diffi culties. Much lower than the actual conditions in real educational problems are revealed.

(11) In reality teachers teaching different learning skills are mastered, thus teaching them in full, effi ciency is relatively simple and intuitive.

(12) Develop the ability to sort the text is presented.

(13) Interest in this method, and rich in inspiration and enthusiasm. (14) Reality of teaching in the classroom teacher is learning the right way to behave.

**Limitations of Simulated Teaching**

(1) Practical training at the beginning and end time of the teacher and consequently some difficulties sometimes they can be discouraged. (2) Many times inspector who plays the role of teachers, lack of experience in the right way can not subsist. (3) Teacher evaluation sometimes makes false marking, which may lead to mutual misunderstandings. (4) Students often internalized teacher who plays the 'boys' play experience difficulties in the classroom, which do not act as a real classroom. (5) Many teachers do not fully follow the instructions or do not understand the true teaching of the key elements to create the ideal situation is difficult.

**Use**

(1) Develop the ability to ask questions in teaching. (2) Used in order to develop a potential questions. (3) General practice of classroom teaching. (4) Sort text presented as the ability to develop. (5) Follow the steps in problem solving teaching is consistent manner. (6) Classroom learning capabilities to present in summary form. (7) Deductively to lecture capabilities.

## MICRO TEACHING

**Introduction**

Micro teaching is a new symbol of hope and excitement in the fi eld of teaching and training and is a challenging voice call for teachers and trainers. Micro teaching has come as a boon for training colleges. As a result, today's teachers have started to talk about developing teaching skills. Micro teaching is kind of laboratory approach in which teachers practice their teaching skills that harms no one. This method is able to meet all conditions of the laboratory.

History of Micro Teaching

Micro teaching is a new method of controlled practice in the fi eld of training. It was developed at Stanford University. Acheson, Bush and Allen introduced the fi rst controlled 'Compressed StudyPractice Orders' in which each teacher was teaching a small lesson to 5 to 10 students while others perform various role plays. Later they started using video tape recorder to make desirable changes to teaching behavior of a teacher. While working in the fi eld of teaching competence Harry Garrison introduced 'Stanford Teaching Competence Program'. In 1967, Clenvas performed many experiments in the fi eld of micro technology. Thus, Allen (1964), Acheson (1964), Orm (1966), Tuckman, Alan (1969), Rasnik and Kiss (1970), MacLeez and Anvn (1971) and many researchers made important contributions in the fi eld. These researches-forms and reports began to attract the whole world. D. D. Tiwari (1967) fi rst in India used the word 'Micro-technology' in the fi eld of education-training. Although the 'micro teaching' means today was isolated from micro teaching. Shah (1970), Chudasma (1971), Singh, Maskar, Pangutra (1973) and Doshaj undertaken this sector in the year 1974. The fi rst publication in the fi eld of micro-education in India in 1974 was published by Pasi and Shah. The fi rst micro-teaching about scientifi c information provided. Later Bhatacharya (1974), Pasi, Lalita and Joshi

(1976), Singh Garewal (1977) and Gupta (1978) worked in this area. In 1978, a National Proposal for the Project was started on 'micro-teaching' at Indore University. Teachers and educators of various colleges and universities worked on micro-teaching. This research was completed in cooperation with Delhi's 'National Council of Education, Research and Training' (NCERT).

**Definitions of Micro Teaching**

Micro-teaching is an experimental and analytical method of education training through which teacher's teaching-skills are developed.

Allen (1968) defi ned is as follows: "Micro teaching is training related suffi x in a situation of pre-service and in-service teachers for the commercial development. Microteaching presents a plan for teaching practice that reduces the complexities of normal classroom and teachers receive feedback in large part for their teaching practice." V. M. Shore defi ned is as follow: "Micro teaching is a practice of small time, few students and of fewer teaching practices."

MacLeez and Unwin (1970), "The micro-teaching student teachers usually simplifi ed by the use of television closed environment for the process of the performance-related feedback is immediately available ...... Micro teaching is generally considered to be the nature of the study represented complications typically abstract concept or actual reduction to practice reading the feedback process on the basis of classroom teaching is provided".

According to D. W. Allen, "Micro-teaching is scaled down teaching encounter in class size and class time." According to Clift and Others, "Micro-teaching is a training procedure which reduces the teaching situation to a simpler and more controlled encounter achieved by limiting the practice teaching to a specifi c skill and reducing time and size."

According to Bush, "Micro-teaching is a training procedure in which teacher prepares a lesson by using his teaching skills carefully, interact with a small group of actual students on the basis of lesions prepared. As a result he gets the opportunity to achieve observations on videotape." (In the Indian Model of Micro technology, human observers has been recommended to replace video tape.) Allen and Ryan said that micro teaching is based on the following fi ve basic principles: (1) Micro-teaching is the actual teaching. (2) In this teaching of the common complications

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class-education is reduced. (3) Only a special task and a skill is emphasized at one time. (4) It is possible to control to exercise procedure. (5) Feedback is provided soon.

In the words of Prof. B.K. Passi "Micro-teaching is a training technique which requires pupil-teacher to reach a single concept using a specifi ed teaching skill to a small number of pupils in a short duration of time."

In the words of L.C. Singh "Micro-teaching is a scaled down teaching encounter to which a teacher teaches a small unit to a group of fi ve pupils for a small period of fi ve to twenty minutes."

Micro Teaching is by N.K Jangira and Ajit Singh: "Micro-teaching is a training setting for the student teacher whose complexities of the normal classroom reaching are reduced by practising one component skill at a time, limiting the content to a single concept, reducing the class size to 5-10 pupils and reducing the content of the lesion to 5-10 minutes for teaching practice."

According to Srivastava, Singh and Roy (1978), "The meaning of the word Micro can be a complex one because it divided into small means micro units in which teacher is trained very carefully. Therefore, Micro is the correct word."

Grifi ths (1973) after analyzing the various definitions says, "As Micro-teaching is very flexible and adaptable process, it is not fair to bind it in a specific c definition".


**Principles of Micro Teaching**

Allen and Ryan (1968) explained that micro teaching is based on the following fi ve basic principles: (1) Micro-teaching is the actual teaching. (2) In this type of teaching the common complications class-education is reduced. (3) Only a special task and a skill are emphasized at one time. (4) Exercise procedure is more controlled. (5) Feedback is provided soon.

**Micro Teaching: An Educational Process**

It is a scaled down teaching technique, scaled down in terms of class size, lession, length and teaching complexity. Micro teaching process contains the following terms— (1) Teacher offers practical knowledge and principle of micro teaching to pupil teachers. It is known as

Introduction session. (2) Teacher specifi cally states the teaching skills which are to be developed and interpretation of psychological bases to pupil teacher. (3) Teacher presents an ideal lesson on micro teaching for pupil teacher. (4) Teacher and pupil teacher closely analyze the shortcomings and discuss the characteristics of the ideal text and determine its learning– skills. (5) Teacher provides pupil teacher the needed time to prepare 'micro-lesson plan' and assists them personally. (6) According to instruction, class teacher teaches micro-lesson for 5 to 15 minutes (The lesson is recorded on a tape recorder), it is called teaching session. (7) After teaching class teacher discusses the micro lesson with teacher in detail. Both good and bad point viz. shortcomings and strengths of pupil teacher's teaching skills are discussed at this time and he is suggested to re-prepare the lesson. (8) After this critical session, pupil-teacher changes the teaching plan according to the recommendations and re-teach the necessary amendments. This is known as "session of re-creation of lesson". (9) Thus pupil teacher teaches the re-created lesson to other students of the class. This teaching is also recorded on tape recorder. It is called re-teaching session. (10) Re-criticise session come after re-teaching session

**Advantages of Micro Teaching**

There are many advantages of training process of micro teaching— (1) Micro teaching simplifi es the teaching process. (2) Pupil develops his teaching skill by focussing according his capabilities and tries to learn them. (3) Feedback adopts and completes all approaches. (4) Objective evaluation is done for pupil teacher. (5) Pupil teacher has a right to keep his side in the feedback and kept active in feedback session. (6) Inspector acts as a consultant for pupil teacher. (7) It reduces the complexities of class-reaching. (8) This method fi lls the pupil teacher with self-confi dence. (9) This method teaches more in less time. (10) Through this method pupil teacher is taught to teach smaller classes, fewer students and smaller teaching step rather than directly teaching a class. This proves to be very helpful for him.

**Limitations of Micro Teaching**

Although micro teaching bound many steps of teaching process but it has some limitations, for example— (1) This leads to controlled and compressed learning that is beyond the limits. (2) This teaching takes off the classroom teaching. (3) At a time only one teaching skill develops

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which consequently seems to be difficult to integrate them later. (4) It takes more time. (5) It is diffi cult for pupil teacher to get feedback soon. (6) There is adequacy of motivation in order to develop excellence in teaching skill. (7) It ignores the diagnostic and remedial work. Due to above limitations a number of modifications and improvements are being made in micro teaching method. Mini teaching is an example for this

## c)     PROGRAMMED INSTRUCTIONS AND ITS TYPES, COMPUTER ASSISTED INSTRUCTION (CAI)

**Meaning of Programmed Learning**

In the words of Smith and Moore, "Programmed instruction is the process of arranging the material to be learned into a series of sequential steps, usually it moves the student from a familiar background into a complex and new set of concept principles and understanding."

According to James E. Espich and Berl Williams, "Programmed instruction is a planned sequence of experiences leading to profi ciency in terms of stimulus response relationship". Stoffel said, "The arrangements of tiny bits of knowledge into logical sequence is called the 'programmed' and its process is called, 'Programmed Learning'."

According to Leith, "Programmed learning is a sequence of small steps of instructional material (called Games), most of which require a response to be made by completing a blank space in a sentence. To ensure that expected responses are given, a system of cueing is applied and each response is verifi ed by the provision of immediate knowledge of results."

N.S. Mavi says, "Programmed instruction is a technique of converting the live-instructional process into self-learning or auto instructional readable material if the form of micro-sequence of subject-matter which the learners are required to read and make some response, the correctness or incorrectness of which is told to him immediately."

According to Susan Markle, "Programmed instruction is a method of designing reproducible sequence of instructional events to produce measurable and consistent effect on the behaviours of each and every acceptable student."

James E. Espich and Berl Williams has defi ned programmed instruction as, "Programmed instruction is a planned sequence of experiences leading to profi ciency in terms of stimulus-response relationship."

According to D.L. Cook, "Programmed learning is a term sometimes used synonymously to refer to the broader concept of auto-instructional method."

**Characteristics of Programmed Learning Material**

Following are the main characteristics of Programmed Learning Material—

1. Programmed Instruction is individual and only person learns at a time.

2. The learning material is divided into small units.

3. Then small units are sequenced.

4. In programmed material, every phase is practically connected to its next phase in a logical manner

5. Learner has to make active responses.

6. Information is immediately provided to students that their effort is right or wrong. Thus they receive the feedback.

7. Students get the opportunity to learn at their own pace. (Principle of Self Pacing)

8. Programmed material fully verifi ed and liable.

9. Specifi cation of student's entering behaviour and feelings are done in it. In these behaviour, level of language understanding and simplifi cation, level of achievement, feedback and mental level are taken into account. 10. Stimulus, Responses and Reinforcement – these element remain active in it. 11. It has comparatively low error rate and fault rate. 12. As feedback is provided immediately, so true responses are enforced to students which helps in effective teaching. Every response of student provides him a new knowledge. 13. While learning instructional material, students have more readiness and curiosity due to which they understand very rapidly. 14. Instruction material is evaluated through the responses of students and it is improved and modifi

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ed according to that. 15. Programmed Instruction also organizes that aiding instruction to removing the weakness and diffi culties of students. 16. Programmed Instruction system is based on the principles Psychological learning.

**Principles of Programmed Learning**

It is clear from above discussion that programmed instruction is based on following principles—

1. Principle of Behaviour - analysis

2. Principle of Small fractions

3. Principle of active participation,

4. Principle of immediate feedback

5. Principle of Self pacing

6. Principle of legality of the content

7. Principle of knowledge and progress of students tested

8. Principle of student responses.

**TYPES OF PROGRAMMED LEARNING**

**linear programming**

B. F. Skinner (1955) was the exponent. It is based on operant conditioning on programming which explains that human behavior can be given a certain direction and the desired behavior can be taught. The actions of this pathway in the human small - small to analyse the meaningful parts. By resorting to these parts at each position by enforcing the desired behavior can be taught human. In fact, the linear programming linear programming in which each student is in order, crossing certain positions. It includes the following things— (a) At one time, subject to the small - fraction is presented to the students. (b) By responding to student answers. (c) By matching your answer enforcing student receives the correct answer. (d) He received the command what to do next.

**Characteristics of Linear Programming**

Its major features are given below— (1) Sort the student as various short—short positions through a linear path of movement behavior reaches the other end. (2) Checking the student's response is correct for response home-nutrition system. (3) All students have the same path, which eventually reach the fi nal goal. (4) To simplify the learning initially used prompts or signals, later gradually removed. (5) Response and the order of placed is control. (6) The creation of teaching materials and presentations in programming is thus likely that the student's error is almost over.

It is based on principles of learning psychology. (8) The self - study the path - paved so that students of different mental levels—may have a chance to learn at their own pace. (9) It's hard Conceptions programming able to clear easily and cheaply. (10) Active student learning time, and ready to become operational. (11) Students without teacher easily receive new knowledge. (12) Each correct response is enforced by the student, the learning process becomes more effective. (13) This method is more effective than traditional teaching

## Branching Programming

### Introduction

Mr. Naurman was the exponent of disciplinary programming. Crowder said, "The programming content is a technical submission. There are several principles of effective teaching is used. All schduled activities are controlled by the student so it is also called internal programming.

Frames Arrangement in Branching Programming

Disciplinary programming or in one or two paragraphs on the page is a frame. It is much larger than the linear programming. Students seriatim go through all the frames. After the frame, the corresponding multi-(text to come Nirvcniyn) objective is to answer questions. One of the responses has to choose the correct answer. If the answer is correct, then it proceeds but the answer is not correct, then it is given remedial instruction. The specifi cally designed for therapeutic or her original part series is directed towards and later again come to the offi ce and are asked to answer. This action, which lasts as long as the student does not give the right answer. The only correct answer to moving on to the next step only to get called.

### Characteristics of Branching Programming

Their main features are as follows— 1. Branching programming than linear programming compared to each text frame comes more teaching materials. 2. Needs of students at various positions have the freedom to reach the fi nal position. 3. Programming it is controlled by the students. 4. It serves to give home nutrition instantly. 5. The share of students in programming multi-choice questions are given. 6. This programming based on student's potential errors that emphasizes teaching materials. 7. Incorrect response, the student is given the opportunity to correct it. He then reaches to the next step until he could not answer his first major post. 8. Each frame has to make it very clear and big. 9. The agency plays an important role in the development of student's reasoning power. 10. The student - centered agency The agency is based on traditional tutorial method. Notes 12. This initiative remains equal interest in learning the subject. 13. These mistakes could not impede the learning process because it assumes that the initiatives it has learned from the mistakes and the mistakes to fi x the system is organized. 14. By initiatives such materials, books and teaching - machines both are useful. 15. The differentiation potential of initiative, creativity and problem - solution is helpful in the development of qualifications.

**Mathetics Programming**

Introduction

Thomas. F Gilbert is credited with developing mathetics programming. Mathetics of the Greek word 'Mathyn' derives from the word meaning–learn "Mathetics is defi ned as a systematic application of reinforcement theory to the analysis and construction of complex repertoires which represent the mastery in subject matter"

Characteristics of Mathetics and Related Work-System

(1) Like other instructional format Mathetics programming teaching-learning is derived from a detailed analysis of the material. (2) The unit frame rather than the practice or learning diffi culties. (3) Practice or to fi nd a solution to this problem provides students Reinforcement. (4) The descending chain theory is used

**UNIT-III: MODELS OF TEACHING**

**MODELS OF TEACHING**

Introduction There was a time when learning theories were give importance in the fi eld of education. Gradually on the basis of experience and research, it was discovered that learning theories are unable to solve the problems of teaching. So, academics and psychologists are trying to understand the nature of teaching by using technical theories. As a result, teaching theories are developing. In this area, names of Cronback, Gagne etc. are remarkable.

**Meaning, Definition and Characteristics of Teaching Models**

No teaching theories is developed yet in this fi eld of education which is perfect and is placed in the category of universal theory. Models of Teaching are such efforts or arrangements which are leading us towards Teaching Theory. Some people also call them imperfect teaching theories. In fact, these models provide raw material and scientifi c basis for the development learning theory. Model- Coombs and Associates have written while defi ning model— "Model is an abstraction of the world ... a model of the world which is tested by comparing its consequences to the observed data".

According to HC Wyld—"To confi rm in behavior, action and to direct one's to action according to some particular design or idea is called model."

According to Bhatnagar and Bhatnagar (1977), "The process given according to a design in order to achieve a behavior of Teaching or learning or teaching-learning theories is called a model." Models of Teaching—"Teaching Model is the fi rst step towards the development of teaching theories. They provide scientifi c basis to teaching theories. These are postulates which are used by teachers to make his teaching effective."

According to Hyman—"The model is a way to talk and think about instruction in which certain facts be organized, classifi ed and interpreted."

B. R. Joyce called teaching model as Instructional design, "Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situations which cause the student to interact in such a way that specifi c change occurs in his behavior."

According to Joyce and Weil—"Teaching model is a comprehensive theoretical portion about teaching learning and describing goals of learning, curriculum, setting and procedure. These are the different approaches to teaching and different kinds of strategy for teaching and learning."

According to Bhatnagar (1973)—"Teaching model may be considered as a combination of learning goals, environmental manipulations and other processes."

**Characteristics of Models of Teaching**

The following characteristics of the above parameters on the basis of model of teaching can be—

1. Model of teaching highlight the various methods to create appropriate educational environment.

2. Models of teaching arrange learning experiences on the basis of their beliefs.

3. Models of teaching directs the interactions between students and teachers.

4. Model of teaching act as guides for teachers – how to teach, which course material and instruction materials should be chosen for which class, how to improve the chapter, which educational policy, law or tips should be used and how to evaluate students' achievement.

5. Models of teaching remain striving to improve the teaching process completely.

6. There are certain fundamental basis of every model of teaching.

7. These provide desired experience for both teachers and students.

8. Models of teaching improves the students' interest. 9. Generally, models of teaching are based on the personal opinions of teachers, philosophy, ideology and values. 10. Each model is infl uenced by some kind of philosophy. 11. Each model uses certain educational formulas. 12. Models of teaching focus on social needs and assist in the development of human abilities. 13. These are based on the philosophical theories and psychological rules. 14. Models develop by consistent practice, experience, practice and experiments. 15. Teaching Model is called as the practical side of teaching process which develops the teacher's personality. 16. Models of teaching give full assistance in developing teaching as an art. 17. Model of teaching is a

framework to build educational environment and activities. 18. Models of teaching play a key role in determining specifi c instructional objectives for the specifi c teaching and learning methods. 19. These are striving toward the qualitative advancement in teacher's personality. 20. These are created on the basis of teaching-learning principles. 21. Models of teaching are able to answer certain basic questions. 22. It is a systematic form of facts through which changes can be brought in student's behavior. 23. Models of teaching specifi cally describes such environmental conditions in which the students' responses are observed.

**Elements of Teaching Models**

Every teaching model consists of four basic elements—

**(1) Focus**—Every teaching model must have a fi xed objective, which is called as the focus of that model. These focuses are infl uenced by the teaching objectives and goals and keeps striving for the development of these skills and abilities.

**(2) Syntax**—Syntax refers to those points of teaching models which generate actions according goals or objectives determined in the various educational phases. In other words, syntax of teaching models shows that how teaching actions, strategies, techniques and interactions should be sorted to achieve the desired objectives. It is related to the presentation of course material. "It involves a description or structure of teaching activities during different phases of teaching." "The syntax refers to the structure of phasing of the model i.e. kinds of activities one will like to organize at well defi ne stages of the whole teaching programme."

**(3) Social System**—Each model has its own social system, which tells us how to organize actions and interactions between students and teachers in which students have controlled behavior. Further, desired change can be brought to them. Social System tells about the techniques which give us motivation. Each model assumes that each class is a society and there should be certain social system to control and improve that society due to which education systems keep going smoothly.

**(4) The Support System**—According to a Scholar—"The support system is the most important summary variable that operates and determines the success of teaching." Evaluation system is the fourth important element model of teaching.

It tell us – to what extent we have received the teaching goals and to what extent the students' behavior can be changed. Thus, the system tells the story of the success or failure of teaching method. In other words, the process of improving and modifying teaching by investigating its usefulness is called as the support system

**Assumptions of Teaching Models**

The following are the key assumptions of teaching model:

1. Teaching model is a strong instrument to create the appropriate learning environment effectively.

2. Teaching model provides a real and practical framework for learning experiences.

3. Every model uses several teaching strategies, methods and techniques for a successful teaching.

**Bruner's Concept Attainment Model**

**Introduction**

**JS Bruner** and his colleagues developed the concept attainment model. Teachers provide accurate
information about the nature of content to students by using this model. This model is effectively used in the the clarifi cation and interpretation of new concept. "A concept is a symbol that stands for
a class of group of objects or events that possess common properties. Concepts greatly simplify our
thinking processes. They make free us from having to level and categorize each new object or event we encounter."
The objective of this model is to enhance the student's ability of inductive reasoning and to improve
the students' concept. **Dr Anand** (1966) writes by expressing his ideas about the origin of concepts in

human, "Bruner and his colleagues has the perception that the human lives in an atmosphere, that has so many variations and complexions that human can not understand it without classifi cation. Therefore every human tries to understand the objects founded in the his environment and classifi es

objects. As a result of the classifi cation of objects,concepts are developed in them. These concepts

evolve naturally, yet training is necessary for the development of the right concept.

**Main Elements of Concept Attainment Model**

The description of main elements of concept attainment model are being given below—

**(1) Focus**—The main objective of this model is to develop students' inductive reasoning. Its basis is

psychology. Under this, students get the knowledge of various concepts on the basis of thinking ability

by dividing various events, persons and goods, etc. into different sections.

Bruner and his colleagues have outlined the following four objectives of this model—

(a) To provide students the knowledge about the nature of concepts so they can gain the effi ciency to

categorize the ojects on the basis of their qualities and their characteristics.

(b) To make students able so that right concepts can be developed in them.

(c) To develop specifi c concepts in students.

(d) To develop strategies related to thinking in students.

**(2) Syntax**—In syntax, skills are developed in four steps. These are—

(a) **Collection of data**—Data related to some event or person is presented in front of students. With

the help of these data, students restricts various types of qualities to the concepts for developing different concepts.

(b) **Strategy Analysis**—At this stage, students analyze the information obtained. Mostly these are based

on analysis or 'normal to specifi c' formula.

(c) **Presentation**—In this step, student analyzes different types of concepts on the basis of his age and

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experience and prepares a report in writing.

(d) **Training**—This step includes the use and practice of learned concept, their explanation and the

origin of concepts on the basis of unorganized information.

**(3) Social System**—Teacher motivates the students and guides them in analysis and origin of

concepts.

Teacher has an important role in this model because he puts the data in front of students, creates

plan

and guides students. The main objective of teacher is help students in the origin of concepts.

**(4) Evaluation System**—In the evaluation of this model essay type and objective exams are used

and

information is provided by them through evaluation, correction and modifi cation.

In this model, students have to obtain the prior concepts, not to discover new concepts.

Evaluation

system is very useful for understanding of concepts

**Characteristics of Concept Attainment Model**

(1) This model is more productive when concepts are tried to learn and understand on the basis

of

examples.

(2) This model can not be used to improve generalization, to provide the knowledge of facts, to

answer

why, and to specify reason.

(3) This model is more useful for learning languages.

(4) It tries to make understand the fundamental principles of maths and science in a simple and

easy

way.

(5) This model is more productive in all subjects in which there are more chances of concept

formation.

Using this model is founded successful for all subjects. This model has proved useful at all

stages. While

using it for little children, easy concepts and their simple illustrations should be used. This model is not

used for providing innovation information, it will be better to use information process of other

models.

This model is used for teaching all subjects but it utility is more founded in the fi eld of learning

language,

for obtaining concepts in a language and in the fi eld of langauge science.

**Bruner's Concept Attainment Model**

**Teaching Model**

Concept Attainment Model

**Originator**

J. Bruner

**Objectives**

Inductive Reasoning

To improve language learning skills and understanding

**Syntax**

1. Teaching strategies are important in teaching

2. Four steps are included-

(i) Presentation of data

(ii) Formation of concept matrix

(iii) Creation of written report for analysis of concepts

(iv) Practice for concepts (by students)

**Social System**

1. More motivation and help by teacher in the beginning

2. Analysis of concept by students themselves in the end

**Evaluation**

1. Objective exam and

2. Evaluation through essay type exam

**Summary**

• JS Bruner and his colleagues developed the concept attainment model. Teachers provide

accurate

information about the nature of content to students by using this model.

• The objective of this model is to enhance the student's ability of inductive reasoning and to improve

the students' concept.

• Bruner and his colleagues has the perception that the human lives in an atmosphere, that has so many variations and complexions that human can not understand it without classifi cation.

• Data related to some event or person is presented in front of students. With the help of these data,

students restricts various types of qualities to the concepts for developing different concepts.

• This model has proved useful at all stages. While using it for little children, easy concepts and their

simple illustrations should be used.

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**Review Questions**

1. What ideas were presented by Dr Anand in respect of origin of concepts in human?

2. Describe the main elements of Concepts Attainment Model.

3. Descibe the characteristics of Concepts Attainment Model.

4. Who developed Concepts Attainment Model? Why is it used?

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**INQUIRY TRAINING;**

**Richard Suchman's Inquiry Training Model**

**Introduction**

**Richard Suchman** is the originator of this model. This model develops the child's humanity and mental capabilities due to which children can be trained for powerful discoveries in the direction of

science and nature. This model is based on the scientifi c method and scientifi c concept which give

training for scholarly inquiry or investigation. The students are provided full freedom of inquiry; they

are encouraged to ask questions in a disciplined manner. Students discover new dimensions from

this type of inquiry. This model was developed in 1966. The initiator of this model **Richard**

**Suchman**

believes that children are curious by nature and for the satisfaction of curiosity they experience

joy

while inquiring. Inquiry Process develops the investigation skills of the children.

## 20.1 Main Factors of Inquiry Training Model

**(1) Focus**—The main goal of this model is to develop cognitive skills of the students. Students

logically

explain the suffi xes through inquiry method. Its use helps students to generate scientifi c

approach.

Inquiry training helps to explain the problematic events. According to Suchman, "The goal of

Inquiry

Training Model is to develop effi ciency and skills in students for the analysis of statics and

inventions,

so they can make their own interpretation of events and to search for them and the correlation of

the

various elements in order to fi nd the truth"

**(2) Structure**—There are fi ve stages of the structure of this model:

(a) **Presentation of Problem**—In this, students select the problem of teacher's instruction.

(b) **Problem Related Experimentation**—For half an hour, to get the problem related

information,

students ask such questions to which teacher answers either yes or no. This student's inquiry

continues until they reach the clarifi cation of problem/event. The teacher tells students not to ask

the solution of causes and problem of the event directly. He also instructs students at a time, as

you can ask as many questions and during inquiry, you can also consult your fellow students or

can discuss.

(c) **Attempt to Solve Students' and Teachers' Problems**—In this, after exploring and direct

testing,

students compiles the suffi xes to get familiar with new elements and examines cause-effect

relationship based on them.

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(d) **Organization of Information**—The information is organized while collecting facts. Teacher evaluates

the result of collected facts and explains them.

(e) **Analysis of Inquiry Process**—The students are asked to analyse the inquiry process. They also

decided that all required information is received or not. Teacher evaluates and reviews the complete

process and attempts to reach conclusions about the appropriate decision.

**(3) Social System**—Teacher provides leadership in this model. Students are encouraged to inquire and

get the opportunity to test conclusions. In this model, both teacher and student roles are important.

There is open atmosphere of cooperation between teachers and students.

**(4) Evaluation System**—In this model, experimental test are especially used for evaluation. It shows

how and to what extent, student works effectively through problem solving.

**Characteristics of Evaluation System**

1. It is more helpful in scientifi c studies.

2. It creates a tendency in students to ask questions.

3. It develops scientifi c aptitude in students.

4. A clear and practical knowledge is provided to students through this model.

5. It develops the curiosity of students.

6. This model is used in every academic circumstance.

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**Review Questions**

1. Who is the originator of Inquiry Training Model? What are the advantages of this model?

2. Explain the major elements of Inquiry Training Model.

3. Write the characteristics of Evaluation System.

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**INDUCTIVE THINKING MODEL.**

**Taba's Inductive Thinking Model**

**Introduction**

**Hilda Taba** is the originator of Taba's Inductive Thinking Model.

**An Inductive Model of Teaching**

**Hilda Taba** is the originator of this model. It has been developed for teacher education due to which pupil teacher can analyze the problems of learning and can solve them on the basis of diagnosis.

**(i) Focus**—Its main objective is the development of mental processes and the realization of theories.

**(ii) Syntax**—In this model, situations are created for the development of mental processes which develops and realize the suffi xes. The use of rules, suffi xes and views are taken into consideration. In teaching matrix, actions are presented in such a order that the suffi xes are possible to be understand.

The sequence of teaching process presents its syntax. Group discussion is not allowed in this process.

Information and facts as presented in a complex form. Certain steps are followed in this syntax. The order of these steps is-

(a) A list of teaching actions is prepared in the fi rst step.

(b) Teaching actions are divided into sections in the second step.

(c) Teaching actions are explained in the third step.

(d) The directions and relations of teaching actions are determined in the fourth step.

(e) The direction of the relationship of these actions is interpreted in the fi fth step.

(f) These are concluded on the basis of explanation in the sixth step.

(g) The concepts of the results are rendered in the seventh step.

(h) Concepts are explained and facts and data are presented to them in the eight step.

Confi rmation and generalizaiton of concept is done in the last step.

**(iii) Social System**—In this model, classroom environment provides more opportunities for students' activities. Teacher begins his activities with students' activities. The sequence of teaching is predetermined.

Teacher controls the behavior and actions of students. There is a spirit of collaboration in the classroom. At each step the teacher acts as a director. Teacher uses the question for the development

of cognitive side. Teacher prepares students for the new experiences. Such experience is provided which can develop cognitive side.

**(iv) Support System**—For this model, **Taba** gives importance to such teaching format which can be used

for knowledge of social subjects. The emphasize is give to realization of facts, data and information. Therefore, the objective test are included in the evaluation. Written exams are not helpful in this.

**(v) Application**—'Taba' considered it more useful for the development of thinking abilities. It is included for the development of mental activities. Its priority is to develop utility-thinking abilities. This model

is used to make students realize information, facts and data. This model is considered as more useful model for teaching social subjects. It is also include in the teaching of science couse material.

**Structure**

(a) The structure consists of three major steps—

1. Identifi cation of problem

2. Compilation of information

3. Selection of teaching skills

(b) Structure presents the sequence of teaching actions –

1. To prepare a list of teaching activities

2. To divide them into sections

3. To explain them

4. To determine their direction and relationship

5. To fi nd conclusions based on these directions

6. To fi nd conclusions based on explanation

7. Rendering of Hypothesis

8. Their interpretation and data presentation

9. To generalize and confi rm hypothesis.

**Social Method**

1. Students remain active.

2. Teacher controls the classroom behavior.

3. There is mutual cooperation between student and teacher.

## UNIT-IV: TEACHING AS COMMUNICATION

**Communication: Concept, Types, principles and barriers in communication**

Communication is the backbone of education. Education and Learning cannot imagine without communication. Communication is an English word. It is developed from a Latin word "communis". Communis means—to share. Therefore it can be said, "Communication is that process in which people try to exchange views to each other through general awareness" Communication refers to the mutual exchange of information and ideas. Education and learning is not possible without the exchange of information and ideas

Communication is a process of conveying ideas, exchanging, conveying your points to others and listening to others, facts, attitudes, emotions and exchanging information and knowledge.

**According to Anderson**, "Communication is a dynamic process in which a person infl uences the equipment and resources in terms of consciousness, unconsciousness and signs of cognitive structure of others such as gestures etc."

**Ligens defi nes** communication, "Communication is that process in which two or more person mutually exchange ideas, facts, feelings etc. in such a way that everyone understands it. Sender and receiver coordinate by means of messages."

**According to Lugis and Vegal**—"Communication is that process which changes the ideas, opinions and attitudes of people by using information, instructions and decision under the social system."

**According to Edgar Dale**—"Communication is the sharing of ideas and feelings in a mood of mutuality." Three simple but important defi nition of communication are being given below— 1. Communication is the process by which an idea is transferred from a source to a receiver with the intention of changing his behaviour. 2. It is a mutual exchange of facts, thought or perceptions leading to a common understanding of all parties. It does not necessarily imply agreement. 3. Communication is the transfer of information from the sender to the receiver with the information being understood by the receiver.


## Nature and Characteristics of Communication

On the basis of above defi nition, nature and characteristics of communication can be discussed in the following manner—

1. Communication is a process of establishing a mutual relationship. 2. Special attention is given to discussion and exchanging ideas. 3. It is a two way process i.e. it has two phases. First is sender and the other is receiver of messages. 4. Communication process is an objective process. 5. Communication includes psycho-social phases such as thoughts, sensations, feelings and emotions. 6. Effective communication is fundamental element of good learning. 7. Communication process includes perception. If the person receiving the message, cannot reference the context of the message correctly, then correct communication is not possible Communication and information are different. Information has quality of facts, formality and impersonality such as book is information, program entertained in TV are information. But communication is not possible without reading book or switching on the TV. Information is objective while communication plays an important role in the individual reference. 9. In communication, people usually manifest only those things/ideas, they wish according to situations, their individual needs, values, inspirations etc. 10. Communication maintains human and social environment. 11. Communication has four main tasks (a) Exchanging information. (b) Promoting messages, instructions or orders. (c) Creating mutual faith. (d) Establishing

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coordination. 12. Communication must have mutual interaction. 13. In Communication, ideas are exchanged in verbal, written or symbolic form. 14. Communication process is dynamic process

Process of Communication

Communication is social process which establishes human relationships, strengthens them and develops them. Communication process is bounded in social structure in such way that it is not possible to imagine a social life without communication.

Communication process is being displayed as a simple model—

Source of communication or medium Encoding Medium of message Feedback Decoding Receiver Process of Communication (Model-1) According to this model, the person who sends message is initiator of message. He encodes the message and sends it through some media such radio, telephone, letter, speech etc. The message is decoded at the place where it was sent and forwarded to the receiver. Receiver gives the feedback (if necessary). Communication process is being explained by another model—

In the above model, the person who convey message (such as teacher) is the initiator of message. In effective teaching, teachers and students strive together to communicate. According to Herbart— "The main purpose of teaching to convey ideas, facts and information to students". The teacher, who effectively communicates with them, is more successful teacher. Many communication technologies are used in the fi eld of teaching and training to provide knowledge concerning complex rules, procedures, and practices and teaching array composition (policies) to students and pupil teacher.

**Elements of Communication**

1. Communication Context— (a) Physical context (such as school, classroom etc) (b) Social context (such as classroom or college environment) (c) Psychology context (such as formality) (d) Timing Context (such date and time)

2. Source—A source is a person, teacher or action that provides verbal or non-verbal clues. When source is a person, it is termed as sender. Communication process starts from source which decides the contents of the message, encodes and transmits them. Sender prepares the message carefully in order to make it effective and transmits it through appropriate channel.

3. Message—Message is a stimulus which is forwarded by the sender. Message can have many forms such as verbal, written, lip sing or body language of person. Message can be forwarded in the form of posters, charts, pamphlets or information package.

4. Channel—Channel refers to a medium through which message transmits from sender to receiver. Channels are the senses of perception can be visual, auditory, touch, taste or smell. Communication channel is that path in which message transmits in physical form. For example, cables, radio, studio, newspaper, magazines, books, letters.

5. Symbol—A symbol is something that stands for something else. These symbols can be verbal or non-verbal. Word is also a symbol.

6. Encoding—Encoding is a process of using symbols to express ideas or feelings, ciphering a message.

7. Decoding—Decoding is a process by which the receiver deciphers the symbols, transmitted by the source.

8. Feedback—It is a acknowledgement, which the receiver sends to sender after getting message. For example—notifi cation of message received, presenting views after reading message etc.

9. Receiver—receiver is a person who gets the message in the communication process. For example— audience, student, readers etc.

**Types of Communication**

**1. Verbal communication**—Language is always used in verbal communication. This communication is Notes used for mutual exchange of ideas and feelings by words or symbols in case of written communication and by speech in case of oral communication. Verbal communication is further divided into type of communications—(a) Oral communication (b)Written communication. (a) Oral communication—In oral communication, ideas and information are mutually exchanged by speech. Sender and receiver are in front of each other in this method. Oral communication is expressed through gossip, explanation, discussions, group discussion and story etc. (b) Written communication—In written communication, presence of sender and receiver is not necessary. In this communication, sender expresses his messages in written or symbolic manner in such a way that receiver tries to understand them by

understanding them. For the acceptability of written message, the language should be simple, easy, clear and understandable such that receiver can get it without any diffi culty. Message is displayed by means of appropriate format, words and small sets.

**2. Non-verbal communication**—Language is not used in Non-verbal communication. It consists of communications like speech, eye-contact, facial posture and touch etc. (a) Vocal communication—In speech communication, feeling and thoughts are expressed vocally in small groups either personally or face-to-face. For examples, continuously saying yes, ya, yeah while discussing, whistling, smiling, speaking too loudly, screaming, laughing etc. (b) Eye-contact and face making—Eye contact and face making are important in private communication. In the classroom, teachers succeed to judge the student's mood correctly by eye contact. Student's Face-making plays an important role for expressing emotional things. Happiness, fear, anger, grief and surprise can easily expressed by face-making. It is very helpful for deaf and dump people. (c) Touch—Touch is main medium of touch communication. A person is able to express its thoughts and feeling through touch. By shaking hand, we can understand whether it is a hand of friendship or enemy. Whether it is a hand of love or just a show off. Mere touch of a mother to her child is saying a lot. The plaudits of praise, a kiss of love, are an important way to express many feelings, emotions and ideas. Touch is a blessing of blind students.


**E-LEARNING**

Electronic Learning is also called as E-learning. It is also called as Computer Oriented Learning. E-learning is used in many ways. It is more related to Advanced Learning Technology. Technology and learning methods are included in E-learning. Computer network and multi-way technology is used in it. Since 2006, thousands of students participated the online learning in higher education institutions. It was started in Britain. E-learning is called as online learning. Today, online learning is organized in many higher education institutions. Online learning services are provided to individual students. It is found in research studies that generally, all students are satisfi ed with E-learning. E-learning is more effective as compared to traditional learning system. This learning system is mostly used in private institutions because this system is comparatively economical. Trained persons are selected in online learning. Assistance of trained

persons is also required for computer online and internet services. Today, online education is developing more rapidly. Even arrangements of online instruction are organized for research studies. Research students are managed by developed research institutions and open universities. Communication media are being related to the communities. The basic learning of community learning provides model. Some necessary activities are required to be edited which is organized in the class. The level of class teaching can be developed by using technology. In current circumstances, many activities and resources are required in class for learning.

**Meaning of E-Learning**

E-Learning is a new concept of Education. In this Internet technology is used for the presentation and communication of learning contents. With the help of this technology, an appropriate environment for teachers and students can originated for learning. E-learning improves a lifelong process. It provides learning facilities to the society and community.

Meaning of E-learning is— 1. E-learning is a new concept of education which is different from traditional learning. It provides a new arrangement for learning. 2. The main characteristic of E-learning is that the presentation and communication of learning contents is done through Internet system. We can say that – what is E-learning or what it is not? 3. The learning environment is expanded by using internet in E-learning. The learning environment of teachers and students is expanded by using Internet. This environment is student-centred while learning environment is teacher-centred in traditional education. 4. E-learning - the new concept of education, prepares environment for lifelong education. It provides opportunities to society for actual learning. E-learning is a wide concept. The type of learning is edited by computer and Internet. The communication of this learning is provided to everyone at any place through network. E-learning is not an alternative system of education but is a system of new education which provides opportunities of education or learning to all. It is an economical system of higher education. E-learning is a more wide and important education system. Mastery of learning contents is developed through this. Its effectiveness is similar to that of traditional education. Instructional format of E-learning is complete because teaching principle are used in it for many years. It has been used in distance education, adult education, continuing education and vocational education in many countries of the world. Some other words are related to E-learning. These are included

in E-learning. (i) Online learning (ii) Online education (iii) Distance education (iv) Technology based training

**Defi nitions of E-learning**

There are many defi nition of E-learning, some of them explained here— E-learning is used in including effective teaching and learning processes due to which regional communities and geographical communities get the opportunity to learn.

**According to Tom Kelly and Cisco**—"E-learning is about information, communication, education and training. Regardless of how trainers categorize training and education, the learner only wants the skills and knowledge to do a better job or to answer the next question from a customer." —Tom Kelly, Cisco

**According to Brandon Hall**—"Instruction that is delivered electronically, in part or wholly via a Web browser, (...) through the Internet or an Intranet, or through multimedia platforms such CD-ROM or DVD." —Brandon Hall Brandon Hall argues that, as the technology improves, e-learning has been identifi ed primarily with using the web, or an intranet's web. Increasingly—as higher bandwidth has become more accessible—it has been identifi ed primarily with using the Web, or an intranet's web, forcing the visual environment and interactive nature of the web on the learning environment.

**According to Learning Circuits**—"E-learning covers a wide set of applications and processes such as web-based learning, computer-based learning, virtual classrooms and digital collaboration. It includes the delivery of content via the Internet, Intranet/extranet, audio and videotape, satellite broadcast, interactive TV and CD-ROM." —Learning Circuits

**According to Rosenberg**—"E-learning is used in internet system. Contents are delivered through internet technology, which improves the knowledge and the achievements of student get improved." Rosenberg has given three criteria of e-learning— 1. E-learning consists of network. There is collaboration of information and storage of information. 2. Certifi ed techniques of internet are used for communication in E-learning. 3. Transmission is the goal of e-learning. The solutions of this learning is more meaningful and effective than traditional systems. "E-learning

provides the potential to provide the right information to the right people at the right times and places using the right medium."

## Characteristics of E-learning

"Good teaching is good teaching, no matter how it is done." Expansion of Internet also infl uenced our educational system. E-Learning is a result of it. In fact, online education has played an important role for providing education by reducing the distance. In such cases, Virtual Class is used in place of traditional class. Many universities of India has the facilities of online education. Indira Gandhi National Open University and Sikkim Manipal University are the leading universities. The characteristics of e-learning are displayed as under—

1. You can do any course from any university in the country or foreign through E-learning while sitting at home. For this, registration process is done online. Now, even exams are taken online. 2. Various techniques are used in online education system such as E-mail, video conferencing, blogs bulletin boards, discuss boards etc. 3. You can improve you skills through online courses when employed due to which becomes easy to update yourself. You can read study material whenever you want. Study material is always available on Internet. 4. This system is more useful for economically weak and remote students. It is very useful to learn through this. 5. Now a days, you can do practical work through virtual lab while sitting at your home. The craze of virtual lab has increased very much. 6. In online education, course content can made interesting and effective with the use of graphics, animation and multimedia. 7. Various course from certifi cate to degree are available online.

## Objective of E-Learning

Computer is used in education through E-learning. Blended media are used in it. Computer based process are normally used in the class teaching. Students are directed by the general format of lessons of E-learning and are communicated with the help information and scientifi c media. Content can be communicated with through E-learning. Every skill can't be developed through information based contents. Procedural skills are developed through conclusion based contents. It improves computer learning. Following objectives can be obtained through E-learning— 1.

Communication of content through E-learning 2. To provide educational facilities to local communities and geographical communities through E-learning. 3. To provide opportunities for open learning through E-learning 4. Everyone gets equal opportunity to learn through E-learning 5. To promote mixed media through e-learning 6. To facilitate educational process in open university through E-learning 7. To develop and promote online education through E-learning 8. To improve the rapidness of researches through online education 9. To make higher education more economical through E-learning 10. To develop mega learning techniques through its use

## Media Used in E-Learning

E-learning is used in the entire world with the help of web or CD ROM. It is similar to distance learning. Media are used in it. Communication is made with the help of media. Following media are used in it – 1. Print Media—Contents, books and E-gins are used in it. 2. Video Media—Visual tape, Cable, Visual fl ow, Satellite publishing, television etc. are used in it. 3. Communication Media—This is divided into two categories (a) Asynchronous Media—It includes E-mail, listening, discussion etc. (b) Synchronous Media—It includes Internet, virtual seminar and tele-conferencing. These media are explained in other chapters.

## Technologies of E-learning

E-learning is also called as Blended learning. Various type of media are used in it. Technologies used in it are as follows— 1. Web Based Instructional Material 2. Multimedia, CD ROM 3. Website 4. E-mail and Mobile learning 5. Internet Text 6. Learning managed software 7. Simulation 8. Computer aided assissment 9. Virtual Classroom 10. Games Blended methods are used in most E-learning. Communication is done through network. Learning technology and educational technology are widely used in terms of learning. It is used as extended format rather than computer based training. Computer assisted Instruction was used in 1980. It is more wider than online education. Generally online education is considered as web based learning. Basically, E-learning is similar to distance learning. E-learning is also called as fl exible learning. This learning is also attached to the face to face learning. The word, blended learning is used for this. It is used as a specifi c management learning environment. The trend of using management learning environment in higher education has been increasing. This environment is included in

the management notifi cation which originates management learning environment. Every phase of the course is communicated through this. In modern time, open universities has been developing very rapidly. E-learning has a great contribution in controlling open universities and open schools. E-learning is also called as educational website. It is also used in other sectors.

**Advantages of E-Learning**

]There are many advantages of E-learning. Some of them are described below— 1. Convenience and Portability (i) To reach course according to programme (ii) Attendance is not necessary in online learning (iii) Learning is done by self-pacing (iv) No boundation of time limit (v) No limit of time. (vi) Learning can be done online or by any means 2. Cost and Section (i) Courses are selected from wide areas (ii) There are degree, certifi cates and vocational programmes. (iii) Continuing education is organized. (iv) Instruction are available for individual course. (v) This approach is more wide and economical. (vi) Can visit universities for higher education. (vii) There is online education facility for artistic disciplines and scientifi c topics. It is mostly used in distance education. 3. Flexibility (i) Options are included in online learning, optional subjected are selected. (ii) Instruction is selected for self study. (iii) The known subjects can be omitted. (iv) Can use best tools for learning according to our needs which makes learning simple. 4. Higher Retention For online learning, course can be selected according to interest. Different course are communicated online with different methods which improves the perspective

**M-LEARNING**

**M-learning** or **mobile learning** is "learning across multiple contexts, through social and content interactions, using personal electronic devices." A form of distance education, m-learners use mobile device educational technology at their time convenience.

M-learning technologies include handheld computers, MP3 players, notebooks, mobile phones and tablets. M-learning focuses on the mobility of the learner, interacting with portable technologies. Using mobile tools for creating learning aids and materials becomes an important part of informal learning.

M-learning is convenient in that it is accessible from virtually anywhere. Sharing is almost instantaneous among everyone using the same content, which leads to the reception of instant feedback and tips. This highly active process has proven to increase exam scores from the fiftieth to the seventieth percentile, and cut the dropout rate in technical fields by 22 percent.M-learning also brings strong portability by replacing books and notes with small devices, filled with tailored learning contents.

Some of the possibilities offered by this methodology, according to Fombona, Pascual-Sevillana and González-Videgaray, are a greater and different access to information, along with transcendent innovations, such as the increase of informal and playful activities, iconic virtual, membership of specific groups, and networks of friendly interaction within new scales of values.

## OPEN EDUCATIONAL RESOURCES

**Open educational resources** (**OER**) are freely accessible, openly licensed text, media, and other digital assets that are useful for teaching, learning, and assessing as well as for research purposes. There is no universal usage of open file formats in OER.

The development and promotion of open educational resources is often motivated by a desire to provide an alternate or enhanced *educational paradigm.*

The idea of open educational resources (OER) has numerous working definitions.The term was firstly coined at UNESCO's 2002 Forum on Open Courseware and designates "teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work". Often cited is the William and Flora Hewlett Foundation term which defines OER as:

teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming

videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

The Organization for Economic Co-operation and Development (OECD) defines OER as: "digitised materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content, and implementation resources such as open licences". (This is the definition cited by Wikipedia's sister project, Wikiversity.) By way of comparison, the Common wealth of Learning "has adopted the widest definition of Open Educational Resources (OER) as 'materials offered freely and openly to use and adapt for teaching, learning, development and research'". The WikiEducator project suggests that OER refers "to educational resources (lesson plans, quizzes, syllabi, instructional modules, simulations, etc.) that are freely available for use, reuse, adaptation, and sharing'.

The above definitions expose some of the tensions that exist with OER:

- **Nature of the resource:** Several of the definitions above limit the definition of OER to digital resources, while others consider that any educational resource can be included in the definition.
- **Source of the resource:** While some of the definitions require a resource to be produced with an explicit educational aim in mind, others broaden this to include any resource which may potentially be used for learning
- **Level of openness:** Most definitions require that a resource be placed in the public domain. Others require for use to be granted merely for educational purposes, or exclude commercial uses.

These definitions also have common elements, namely they all:

- cover use and reuse, repurposing, and modification of the resources;
- include free use for educational purposes by teachers and learners
- encompass all types of digital media.

Given the diversity of users, creators and sponsors of open educational resources, it is not surprising to find a variety of use cases and requirements. For this reason, it may be as helpful to

consider the differences between descriptions of open educational resources as it is to consider the descriptions themselves. One of several tensions in reaching a consensus description of OER (as found in the above definitions) is whether there should be explicit emphasis placed on specific technologies. For example, a video can be openly licensed and freely used without being a *streaming* video. A book can be openly licensed and freely used without being an *electronic* document. This technologically driven tension is deeply bound up with the discourse of open-source licensing. For more, see Licensing and Types of OER later in this article.

There is also a tension between entities which find value in quantifying usage of OER and those which see such metrics as themselves being irrelevant to free and open resources. Those requiring metrics associated with OER are often those with economic investment in the technologies needed to access or provide electronic OER, those with economic interests potentially threatened by OER, or those requiring justification for the costs of implementing and maintaining the infrastructure or access to the freely available OER. While a semantic distinction can be made delineating the technologies used to access and host learning content from the content itself, these technologies are generally accepted as part of the collective of open educational resources.

Since OER are intended to be available for a variety of educational purposes, *most* organizations using OER neither award degrees nor provide academic or administrative support to students seeking college credits towards a diploma from a degree granting accredited institution.In open education, there is an emerging effort by some accredited institutions to offer free certifications, or achievement badges, to document and acknowledge the accomplishments of participants.

In order for educational resources to be OER, they must have an open license. Many educational resources made available on the Internet are geared to allowing online access to digitised educational content, but the materials themselves are restrictively licensed. Thus, they are not OER. Often, this is not intentional. Most educators are not familiar with copyright law in their own jurisdictions, never mind internationally.


**ROLE OF SOCIAL MEDIA IN TEACHING**

Social networking is a powerful tool for teachers that can be used either for personal or professional means. On a personal front, social networking lets you mix with people from all over the world. It helps maintain relationships easily. Now, instead of having to call someone and force a conversation of a decent length, one can simply comment of others' photographs and status messages or just drop them a message online. This aids communication, especially with friends and family who stay in another country or another continent even.

On the professional front, social networking acts as an informal resume. Potential clients and employers can 'check you out' on these networks and browse through your educational qualifications and experience. Some business networking websites lets you upload a portfolio to your profile and even get reviews from others on that network with whom you have previously worked.

Social networking is as important for teachers as it is for others. While, social media is a handy tool in the classroom, it can be as beneficial outside the classroom. There are a number of ways that one can take advantage of networking.

- Sharing ideas

Social networks allow teachers to share idea with each other. Comparing notes on classroom teaching techniques and learning styles can help you enhance the learning experience in your classroom. One can also share lesson plans and visual aid ideas.

- Partnership with other schools

Social networking allows teachers to connect with teachers in other school. These partnerships are useful as they keep you abreast of changes in curriculum and content in others states and maybe even other countries.

- Getting information

Teachers can also use social networking to connect with teachers and other persons from another country. This can help them get accurate information on other countries and not just use content from the internet that is often outdated. For example, you can now plan a virtual field trip, as discussed on our website earlier, with ease and accuracy. If you are planning a virtual trip to another country, you could get in touch with people from that country and understand their lifestyle, food habits and culture. You could also have them live via webcam during the virtual field trip and let them answer questions that the students may have.

- Professional development

Social networks help you know of seminar, conferences and other development workshops in your area or online. Touching base with individuals from those entities would help them connect with you and keep you in the loop.

▪ The value of contacts

While this is often not talked about, contacts are key to professional development. The world today revolves on who you know. Establishing relationships with others in different school can help you enhance your career. Getting a job is generally a lot easier if someone knows you and recommends you. Social networking for teachers, or business networking as it is often called, can be used to build contacts with teachers from others school and help keep your options open.