TEACHING AND LEARNING

UNIT-I

NATURE OF LEARNING AND TEACHING

- **Introduction**
- **Meaning of learning and learning definition in education**
- **Principles of learning**
- **Rote learning vs meaningful learning**
- **Difference between rote learning and meaningful learning**
- **Techniques of active learning of and their implications**
- **Self learning**
- **Meaning of teaching**
- **Teaching definition**
- **Characteristics of good teaching**
- **Model Questions**

. Introduction:

It is important for a teacher to know about learning, its concept and meaning because teaching is not complete without learning. Both teaching and learning complement each other. A teacher must know about how learners learn and this is the reason teacher gain knowledge about concept and meaning of learning in education.

. Meaning of learning and learning definition in education

Various psychologists and educationists have defined the concept and meaning of learning in their own way. Some define as a process, some As a change in performance and some define learning as acquisition and retention of knowledge.

.The basis of learning is to gain knowledge after observing the whole structure.

.The learning as the director cognitive organization of a situation.
 Motivation has a significant role and place in learning.
.The process of acquiring new knowledge and new responses of learning.
. Learning is the process by which the individuals acquires various habits,
 Knowledge, and attitudes that are necessary to meet the demands of life
 In general.
. Learning is shown by a change in behavior as a result of experience.
. Learning is a process by which behavior is originated or change through
 Practice or training.
. In the words learning is the process of progressive behavior adoption.
<u>As a result of studying and analysis:</u>
1. Learning is a modification in behavior
2. Learning is the organization of behavior
3. Learning is the confirmation of a new process.

The meaning of learning explained:

1. Learning is a broad term. Learning includes all activities which affect children, along with the growing process, the mental development of the child occurs. As a result, changes take place in his behavior continuously.
2. Learning has been explained as a stimulus-response process. According to the point of view, the establishment of the stimulus-response relationship is known as learning.

. Principles of learning

Principles of learning include the following factors:

1. Learning is a process of actively constructing knowledge
2. Students construct knowledge and make meaningful in terms of their prior knowledge and experiences
3. Learning is enhanced when it takes place in a social and collaborative environment.
4. Students need to continue to view learning as an integrated whole.
5. Learners must see themselves as capable and successful.
6. Learners have different ways of knowing and representing knowledge.
7. Reflection is an integral part of learning.

.Rote learning vs meaningful learning

Rote learning

Rote learning is the process of memorizing information based on repetition. Rote learning enhances students' ability to quickly recall basic facts and helps develop foundational knowledge of a topic. Examples of rote learning include memorizing multiplication tables or the periodic table of elements.

Rote learning is generally based on only repeating the topics and not the clear understanding of the topics. Rote learning methods are generally used when quick memorization is required, such as learning one's lines in a play or memorizing a telephone number etc. Rote learning is the method where you memorize something without full understanding and you don't know how the new information relates to your other stored knowledge.

Meaningful learning

Meaningful learning is very important to form the student point of view. Meaningful learning in today's competitive world holds the key to success. These days it is not just your grades that matter to be successful, it is something more than that. These days in the interview you are tested on your practical skills and practical knowledge before looking at your result cards. Hence proper knowledge is a must for anyone to be successful these days. Developing a capability of 'learning to learn'' and Higher-level thinking skills is a life-long practice and must be honed on a continual basis. Meaningful learning helps us a lot, in fact, our brain is designed for meaningful learning only. Our brain works in an associative way and our memory serves us in a chained structure. Existing knowledge acts as a mental block for new learning to occur.

.Difference between rote learning and meaningful learning

When it comes to the question of rote learning Vs meaningful learning - which is better? We have to understand the advantages and disadvantages of both styles of learning. Let's look at the details.

Advantages of Rote Learning

. Able to recall concepts quickly

Through rote learning, students can recall concepts quickly. Studying the capitals of states and countries usually requires rote learning. A student who is asked the capital of a state may be able to recall the answer quickly because of the rote learning method of studying the capitals of the state of the country.

. Basis of educational foundation

Some of the basic concepts in education are based on rote learning like alphabets, numbers and multiplication tables. Rote learning is considered the only way to grasp these concepts in the years of education.

Disadvantages of Rote Learning

. <u>Non understanding of concepts</u>

One of the disadvantages of rote learning is that students may not understand the concept. Rote learning is basically the <u>memorization of concepts</u>. The concept of understanding the subject does not come into play.

. <u>Short term recollection</u>

Some concepts learned through rote learning may be beneficial only from the exam point of view. Long term recollection of these concepts may not be retained in the memory bank of the brain.

On the other hand, meaningful learning requires a deep understanding of concepts. This means, that students are able to understand what they learn and can easily adapt the knowledge to real life concepts. Let's look at some advantages and disadvantages of meaningful learning.

Advantages of Meaning Learning

. Promotes active learning

Meaningful learning promotes active learning amongst the students. Students who practice meaningful learning are actively involved in the subject. They understand the subject's core concepts and try to actively use the knowledge they have absorbed.

. Able to understand

Through meaningful learning, it is possible to understand the subject. With meaningful learning students can understand easily what they are taught.

. Long term recollection

Students who adopt meaningful learning have long term memory power. This is because they have understood the subject and are able to relate it to real life processes.

Disadvantages of Meaningful Learning

. Long hours

Meaningful learning, unlike rote learning, takes a long time to absorb. On the other hand, rote learning is a mechanical system of learning so might take lesser time to learn. Meaningful learning have to understand and therefore may take more time to learn.

. Must be custom for every student

Meaningful learning cannot fit all students the same way. The concepts must instruct in different ways for different students to be able to understand. Therefore, meaningful learning must be custom for each student.

Now that we have understood the advantages and disadvantages of rote learning and meaningful learning, we can now decide which one is a better option for students- rote learning Vs meaningful learning. When it comes to rote memorization Vs meaningful learning, educationists often promote meaningful learning because it involves a deep understanding of concepts. When students understand the concept, they are able to dig deeper into the facts and broaden their horizons. Moreover, when you adopt meaningful learning techniques your brain activity increases and you become involved in the learning process. Unlike rote learning where the learning process is simply mechanical.

.Techniques of active learning of and their implications

1.Try a think- pair- share , the instructor states to encourage all
Students to interact with the material. In this activity instructor
States an open- ended question. Ask students to spend a minute
Or two thinking about and writing a response.

2. Use a one minute paper or muddiest point paper in
 your class as a formative assessment. At the end of class or just
Before a break, ask either: - What are the most important
Points from todays session? – what was muddiest (least clear)
Point from todays session?

3. With peer instruction, you pause during class and ask students a conceptual question. Give student a few minutes to think about the question, and then have them Provide answers, possibly using clickers.

4. Asking student to work together in group is a very effective way to actively engage them with your course.

5. Student groups can discuss case studies to apply course Content to solve real world problems.

.<u>The Implications for Teaching</u>

1. Recognize your own epistemological / philosophical position that determines the way you are currently teaching.
2. Reflect on the similarities or difference between academic and Everyday knowledge.
3. Decide whether technology changes the nature of knowledge, and consider the implications for teaching.
4. Describe in broad terms the main theories of learning and discuss their implications for teaching.
5. Identify different levels and types of learning and decide which is most appropriate for your subject area / students.
6. Integrate these ideas into a personal strategy or philosophy for the teaching of your subject.
7. Decide on whether or not to change your overall approach to teaching in the light of the issues raised in this chapter.

. Self learning

1. Self learning is a skill that helps individuals in learning and understanding things on their own. It is defined as the process of gathering information, processing it, and retaining it without the assistance of another person.
2. Try taking initiatives: Self learning is only possible when an individual takes initiative and has a will to learn and grow.
3. Try solving problems on your own: Learners should try to solve problems on their own, this will boost their confidence and will to practice self-learning.
4. It is an amazing skill that every learner should practice in order to ace their role.

. Meaning of Teaching

Teaching is one of the key instruments of education and its function is to offer a better understanding of concepts and skills. It is called a process wherein the teacher instructs a single student or a group of students. It is an act of giving instructions to the learners in a classroom of a feeder school or any other institute. One of the vital functions of teaching is to make It effective.

In the modern context, the term teaching is more confined to schools and schooling. One way to understand the role of the teacher is by going through the roles and responsibilities mentioned in the job profile of a teacher. In general, a teacher's role is to create a better learning environment where students enjoy learning, being a mentor, guide, and friend to his/her students.

.Teaching definition

Teaching is a process in which one individual teaches or instruct another individual. Teaching is considered as the act of imparting instructions to the learners in the classroom situation.

- **H.C. Morrison (1934):** "teaching is an intimate contact between a more mature personality and less mature one which is designed to further the education of the latter."
- **N. L, Gage(1962):** "Teaching is a form of interpersonal influence aimed at changing the behavior potential of another person"
- **B.D. Smith (1961):** "Teaching is a system of actions intended to induce learning."
- **John Dewey:** "One might as well say he has sold when no one has bought, as to say he has taught when no one has learned."

We can define teaching according to the following three viewpoints.
(a) <u>Authoritarian</u>
    According to this viewpoint:
1. Teaching is an activity of memory level only
2. This teaching does not develop thoughts and attitude in the students.
3. Is known as thoughtless teaching
4. This teaching is teachers centric criticism of the teachers.
(b) <u>Democratic Teaching</u>
     According to this:
1. Teaching is done at understanding level.
2. Memory level teaching is the prerequisite(concept) is first memorized and then understand.
3. Such teaching is known as thoughtful teaching.
4. According to this point of view, teaching is an interactive process, primarily involving classroom talks which takes place between teachers and student.
5. Here students can ask questions and criticize the teachers.
6. Here students can ask the questions and self-disciplined is insisted.

(c) Laissez Faire Attitude

1. It is known as reflective level teaching.
2. It is more difficult then memory level and understanding level of teaching.
3. Memory level and understanding level teaching are must for the reflective level of teaching.
4. It is highly thoughtful activity.
5. In this level both students and teachers are participants.
6. This level produces insights.

. Characteristic of Good Teaching:

Teaching is a social and cultural process, which is planned in order to enable an individual to learn something in his life. We can describe the nature and characteristics of teaching in following way:

1. **Teaching is a complete social process**

   Teaching is undertaken for the society and by the society. With ever changing social ideas, it is not possible to describe exact and permanent nature of teaching.

2. Teaching is giving information

Teaching tells students about the things they have to know and Students cannot find out themselves. Communication of knowledge is an essential part of teaching.

3. Teaching is an interactive process

Teaching is an interactive process between the student and the teaching sources, which is essential for the guidance, progress and development of students.

4. Teaching is a process of development and learning
5. Teaching causes a change in behavior
6. Teaching is art as well as science
7. Teaching is face to face encounter
8. Teaching is observable, measurable, and modifiable
9. Teaching is skilled occupation: Every successful teacher is expected to know the general methods of teaching- learning situations.
10. Teaching facilitates learning

11. Teaching is both conscious and an unconscious process.
12. Teaching is from memory level to reflective level.
13. Teaching is a continuum of training conditioning instruction and indoctrination.
14. It gives desirable information.
15. It creates self-motivation for learning.
16. Affective planning is essential for good teaching.
17. The students remain active in good teaching.
18. It focuses on selected information.
19. It is based on the democratic ideals.
20. It is sympathetic and full of pity.
21. It is directional in nature.
22. It is based on the co-operation of teacher and students.
23. It is based on previous knowledge of teacher.
24. It is progressive.
25. It includes all sorts of teacher performances and teaching methods.
26. It produces emotional stability.

27. It attempts to adjust the students with the environment.
28. It is diagnostic and therapeutic in nature.
29. It is the best medium for preparing the next generation for changing world order.
30. It enhances potentialities of the students.
31. The teacher work as a philosopher, friend and a direction.
32. The teachers classroom behavior includes both direct and indirect behavior.
33. It reflects harmony between teacher and the students.

Model Questions

1. What is the meaning and definition of learning?
2. What are basics principles of learning?
3. What are the difference of rote learning and meaningful learning?
4. Write the notes on techniques of achieve learning and their implications?
5. Describe the self learning?
6. What are the meaning and definition of teaching?
7. Explain the characteristics of good teaching?