

### Educational psychology and teaching

**Objectives:** At the end of this lesson you shall be able to

- **define psychology**
- **explain educational psychology**
- **explain the nature and scope of educational psychology**
- **list the advantages of educational psychology for a teacher/instructor**
- **define teaching**
- **list the steps for effective teaching**
- **explain the principles of teaching.**

#### Definition

Psychology may be defined as the scientific study of the human behaviour and mental process. The word psychology is derived from the Greek words 'psyche' means soul; 'logos' means science.

Thus, psychology is the branch of scientific study of human mind and how it influences behaviour consciously and unconsciously.

Educational psychology is nothing but one of the branches of applied psychology. In other words, educational psychology is a study of the experiences and behaviour of the learner in relation to educational and training environment.

From time to time psychologists have tried to define educational psychology in their own ways. Some of these definitions are given below:-

- Skinner defines it as : "Educational psychology is that branch of psychology which deals with teaching and learning."
- Crow and crow put it as : "Educational psychology describes and explains the learning experiences of an individual from birth through old age."

#### Nature of educational psychology

We can summarise the nature of educational psychology in the following way:-

- Educational psychology is an applied branch of the subject of psychology. By applying the principles and techniques of psychology it tries to study the behaviour and experiences of the learners.
- While psychology deals with the behaviour of all individuals in all walks of life, educational psychology limits its dealing with the behaviour of the learner/trainee in relation to educational and training environment.
- It does not concern with 'what' and 'why' of education, it gives the necessary knowledge and skill (technical

guidance) for giving education to the learners in a satisfactory way.

- It is not a normative science as it is not concerned with the values of education and does not concern itself with "what ought to be". It is an applied positive science.
- Educational psychology is not a perfect science. It has its own draw-backs. The human (as well as animal) behaviour is unpredictable. It is more variable and less reliable. Therefore, educational psychology, the applied behavioural science, cannot claim objectively, exactness and validity as claimed by natural sciences or even applied sciences like medicine and engineering etc.
- It employs scientific method and adopts scientific approach to study the behaviour of an individual in educational and training environment. Moreover the controlling of the factors and prediction of the behaviour on generalized results gives educational psychology a complete scientific base. Therefore, it is proper to call its nature as scientific.

#### Scope of educational psychology

Educational psychology deals with the behaviour of the learner in educational situations (only). Therefore, it becomes imperative that educational psychology should limit itself within the four walls of the teaching-learning process and educational and training environment. It must try to solve the problems evolving in actual teaching-learning situations and help the individuals involved in this process.

Let us judge what are the key factors in an educational process and list them one by one.

- a The learner (trainee)
- b The learning experiences
- c The learning process
- d Learning situations or environment
- e The teacher/trainer

The subject matter of educational psychology, if it is at all necessary to draw its boundaries, revolves round these five pivots mentioned above

### The learner

If we take first pivot, the learner we can find that educational psychology has the subject knitted around the learner. What this section of its subject matter it acquaints us with the need of knowing the learner and deals with the techniques of knowing him well.

The innate abilities and capacities of the individual, individual differences and their measurements, the overt, covert, conscious as well unconscious behaviour of the learner, the characteristics of growth and development at each stage beginning from childhood to adulthood.

### The learning experiences

Once the task of educational philosophy to decide the aims and objectives of a piece of instruction at a particular stage is finished, the need of educational psychology is felt. At this juncture, educational psychology helps in deciding what learning experiences are desirable at what stage of the growth and development of the learner so that these experiences can be acquired with a greater ease and satisfaction. In this area educational psychology has the subject matter which deals with the knowledge and principles of psychology which facilitates the selection of the desirable learning experiences for the learner.

### The learning process

Around this pivot educational psychology deals with the nature of learning and how it takes place and contains the topics such as laws, principles and theories of learning; remembering and forgetting, perceiving, concept formation, thinking and reasoning process, problem solving, transfer of training, ways and means of effective learning etc.

### Learning situations or environment

Topics like classroom climate and group dynamics techniques and aids which facilitate learning, evaluation techniques and practices, guidance and counselling etc. which help in the smooth functioning of the teaching-learning process come under the jurisdiction of this pivot.

### The teacher/trainer

Education psychology emphasizes the need of knowing the self for a teacher to play his role properly in the process of education. It discusses his conflicts, motivation, anxiety, adjustment, level of aspiration etc. It throws light on the essential personality traits, interests, aptitudes, the characteristics of effective teaching/training etc so as to inspire for becoming a successful teacher/trainer

### Advantages for a teacher/trainer

The inclusion of educational psychology in a professional pre-preparation programmes for the teachers has a very wide utility. It helps them to grow properly in their profession.

### To know the learner

Educational psychology equips the teacher/trainer for understanding the learner in the following different ways:-

- His interests, attitudes, aptitudes and the other acquired or innate capacities and abilities etc.
- The stage of development linked with his social, emotional, intellectual, physical and aesthetic needs.
- His level of aspiration
- His conscious and unconscious behaviour
- His motivational behaviour
- The aspect of his group behaviour
- His conflicts, desires and other aspects of his mental health.

**To select and organise the subject-matter or learning experiences.** After knowing the learner, when the stage is ready for educating the learner the following questions come in the way:-

What type of learning experiences or learning materials are to be provided?

How should we organise or grade the materials or learning experiences?

To answer these types of questions which along to the area of 'curriculum construction' one needs the knowledge of the characteristics of the learner at each stage of his/her development, the nature and laws of learning etc which come under the domain of educational psychology.

**To suggest art and techniques of learning as well as teaching.** After deciding about the learner and the learning material the next problem "how to teach" is also solved with the help of educational psychology. It explains the process of learning and suggests the means for effective and enduring learning. It reveals how to maintain interest in the learning process. It also suggests that not a single method or technique is suitable for all kinds of learners in all circumstances. A teacher/trainer should select a proper device or method according to the learning situations, he/she faces.

**To arrange learning situations or environment.** The study of the impact of the learning environment (including equipment facilities and teaching/training aid material etc.) on the teaching learning process equips the teacher/trainer for taking care of the appropriate learning situations or environment.

**To acquaint him with the mechanism of heredity and environment.** The knowledge of the role played by heredity and environment in the process of growth and development of the child, is very essential for the teacher.

**Helping in maintaining discipline.** Knowledge of educational psychology helps the teacher/trainer to have a creative type of discipline as it acquaints him with the nature of the learner, his strength and weakness, his interests and aptitudes etc on the one hand and with art and techniques of teaching and learning on the other hand.

**Rendering guidance services.** The knowledge of educational psychology helps the teacher/trainer in rendering guidance services to the learners. He/She is the person who can know the learner better, even more, than their parents. With the knowledge of educational psychology at his command, he/she is in touch with the methods of behavioural assessment and appraisal. He/she can better diagnose the abilities, interests and aptitudes of his learners and consequently have an idea of the direction and speed of their development. In this way with the help of educational psychology the teacher/trainer can show the right direction to his learners for their total development.

**Helping in evaluation and assessment.** After giving learning experiences to the learner the behavioural changes occurred in him are required to be examined and also in the beginning the potentialities are to be known. In educational psychology, as applied behavioural science, evaluation, measurement and appraisal find its place which make the teacher/trainer well equipped in the task of evaluation with proper professional skills.

**Solving class room problems.** There are innumerable problems like backwardness, absenteeism, bullying, cheating in the class room situations which are to be faced by a teacher/trainer. The study of the characteristics of the problem learner, the dynamics of the group, behavioural characteristics and adjustment etc. equip the teacher/trainer to solve the actual class-room problems.

**Knowing about himself.** Knowledge of educational psychology helps the teacher/trainer to know about himself. The own behaviour pattern personality characteristics, likes and dislikes, motivation, anxiety conflicts, adjustment etc are all revealed to him.

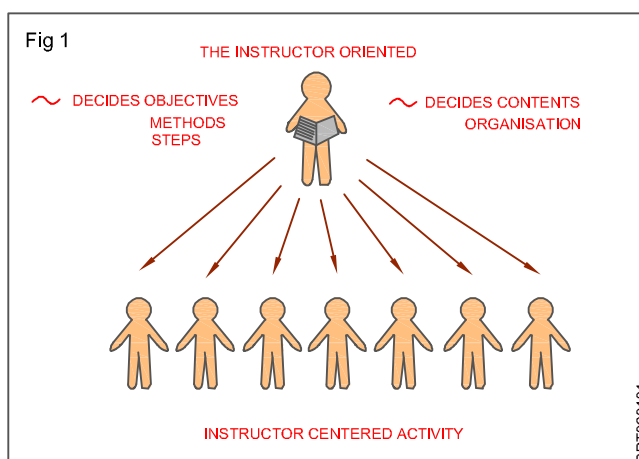
Teachers/trainers needs and problems are to many and have so many aspects. Educational psychology being a science and technology of education helps the teacher/trainer in all the phases of teaching and learning whether informal or formal, curricular or co-curricular. It does not only equip for the class-room instruction but also for the other duties assigned like construction of time-table organisation of co-curricular activities, to seek parental co-operation etc.

In this we can see that educational psychology is a subject which is very essential for the proper professional growth of the teachers and that is why it is an indispensable subject in the teacher/trainer training programmes of all stages.

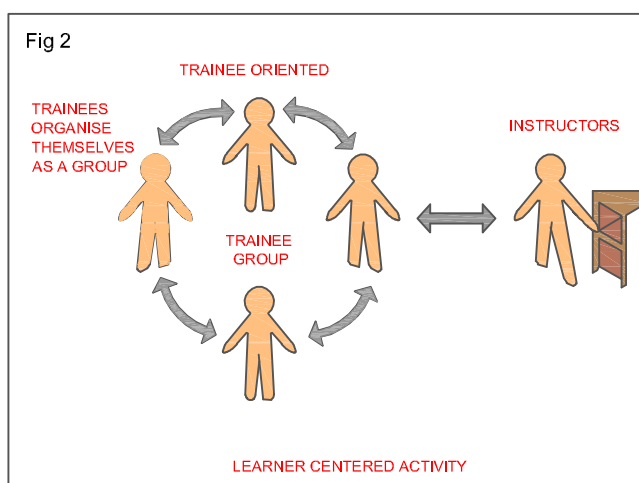
## Teaching/training

“Teaching/training is an instructional activity of delivering a particular skill or subject or something that someone tells you to do. It is aimed at bringing about meaningful learning through a method that is morally and pedagogically acceptable. It involves a teacher/trainers, a learner, content in the form of knowledge, facts, information and skill to be imparted. Teaching is considered as deliberate actions undertaken with the intention of facilitating learning”.

There are fundamentally two ways of understanding teaching/training. The first view is teaching/training as an instructor -centered activity (Fig 1) in which knowledge is transmitted from someone who has acquired that knowledge to novice learners.



The second view is teaching/training as a learner- centred activity (Fig 2) in which the instructor ensures that learning is made possible for novice learners and supports, guides, and encourages them in their active and independent creation of new knowledge and skills.



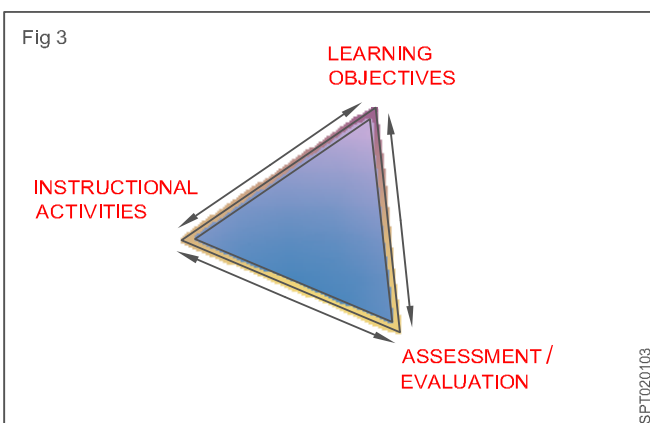
## Teaching/training skills

Teaching/training is a complex multifaceted activity, often requiring an instructor to juggle multiple tasks and goals simultaneously and flexibly. The following set of principles can make teaching both more effective and efficient by helping us create the conditions support trainee learning. While implementing these principles requires a commitment in time and effort, it often saves time and energy later on.

### Effective teaching involves acquiring relevant knowledge about trainees and using that knowledge to inform our course design and classroom teaching/training.

When we teach/train, we do not just teach the content, we teach learners the content. A variety of learners characteristics can affect learning. For example, learners cultural and generational backgrounds influence how they see the world; disciplinary backgrounds lead learners to approach problems in different ways; and learners prior knowledge (both accurate and inaccurate aspects) shapes new learning.

### Effective teaching involves aligning the three major components of instruction: learning objectives, assessments, and instructional activities.



Teaching is more effective and learner learning is enhanced when (a) we, as instructors, articulate a clear set of learning objectives (i.e., the knowledge and skills that we expect learners to demonstrate by the end of a course); (b) the instructional activities (e.g., case studies, labs, discussions, readings) support these learning objectives by providing goal-oriented practice; and (c) the assessments (e.g., tests, papers, problem sets, performances) provide opportunities for learners to demonstrate and practice the knowledge and skills articulated in the objectives, and for instructors to offer targeted feedback that can guide further learning.

### Effective teaching involves articulating explicit expectations regarding learning objectives and policies.

Trainer being clear about our expectations and communicating them explicitly helps learners learn more and perform better. Articulating our learning objectives (i.e., the knowledge and skills that we expect learners to demonstrate by the end of a course) gives learners a clear target to aim for and enables them to monitor their progress along the way.

### Effective teaching involves prioritizing the knowledge and skills we choose to focus on.

Don't try to do too much in a single course. Too many topics work against learner learning, so it is necessary for us to make decisions – sometimes difficult ones – about what we will and will not include in a course. This involves (a) recognizing the parameters of the course (e.g., class size, learner's backgrounds and experiences, course position in the curriculum sequence, number of course units), (b) setting our priorities for learner learning, and (c) determining a set of objectives that can be reasonably accomplished.

### Effective teaching involves recognizing and overcoming our expert blind spots.

As experts, we tend to access and apply knowledge automatically and unconsciously (e.g., make connections, draw on relevant bodies of knowledge, and choose appropriate strategies) and so we often skip or combine critical steps when we teach. Learners on the other hand, don't yet have sufficient background and experience to make these leaps and can become confused, draw incorrect conclusions, or fail to develop important skills. They need instructors to break tasks into component steps, explain connections explicitly, and model processes in detail. Though it is difficult for experts to do this, we need to identify and explicitly communicate to learners the knowledge and skills we take for granted, so that learners can see expert thinking in action and practice applying it themselves.

### Effective teaching involves adopting appropriate teaching roles to support our learning goals.

We can take on a variety of roles in our teaching (e.g., synthesizer, moderator, challenger, commentator). These roles should be chosen in service of the learning objectives and in support of the instructional activities.

**Effective teaching involves progressively refining our courses based on reflection and feedback.**

Teaching requires adapting. We need to continually reflect on our teaching and be ready to make changes when appropriate. Knowing what and how to change requires us to examine relevant information on our own teaching effectiveness. We might modify the learning objectives, content, structure, or format of a course, or otherwise adjust our teaching.

### **Principles of Teaching**

They are closely related to expression of principle or rule of conduct. In simple words teaching method are based on two types of principles: General principles and psychological principles.

- 1 **Principle of Motivation:** It creates curiosity among learners 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, learners 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 learners is unique in terms of intelligence, attitude, abilities and potentialities, socio-economic background. The teaching method should be devised in such a manner to make all the learners 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 learners in planning and executing different activities; It helps in developing self-confidence and self-respect among the learner's.