

Unit 1: Introduction to Educational Psychology

(Handout I)

What is Psychology?

The word, 'Psychology' is derived from two Greek words, 'Psyche' and 'Logos'. Psyche means 'soul' and 'Logos' means 'science'. Thus psychology was first defined as the 'science of soul'.

Psychology as the Science of Soul. In ancient days, the Greek philosophers like Plato and Aristotle interpreted Psychology as the science of the soul and studied it as a branch of Philosophy. But soul is something metaphysical. It cannot be seen, observed and touched and we cannot make scientific experiments on soul.

Psychology as the Science of the Mind. It was the German philosopher Emmanuel Kant who defined Psychology as the science of the mind. William James (1892) defined psychology as the science of mental processes. But the word 'mind' is also quite ambiguous as there was confusion regarding the nature and functions of mind.

Psychology as the Science of Consciousness. Modern psychologists defined psychology as the "Science of Consciousness". James Sully (1884) defined psychology as the "Science of the Inner World". Wilhelm Wundt (1892) defined psychology as the science which studies the "internal experiences". But there are three levels of consciousness – conscious, subconscious and the unconscious and so this definition also was not accepted by some.

Psychology as the Science of Behaviour. At the beginning of the 20th century, when psychologists attempted to develop psychology into a pure science, it came to be defined as the science of behaviour. The term behaviour was popularized by J.B. Watson. Other exponents are William McDugall and W.B. Pillsbury. According to R.S. Woodworth, "First Psychology lost its soul, then it lost its mind, then lost its consciousness. It still has behaviour of a sort."

Definitions of Psychology

B.F. Skinner defined, "Psychology is the science of behaviour and experience." Crow and Crow, "Psychology is the study of human behaviour and human relationships." William Mc Dougall, "Psychology is the science which aims to give us better understanding and control of

2 Educational Psychology

the behaviour of the organism as a whole.” Kurt Koffka, “Psychology is the scientific study of the behaviour of living creatures in their contact with the outer world.”

Meaning of Educational Psychology

Educational psychology is one of the branches of psychology to study the behaviour of the learner in relation to his education. As specialized branch of psychology concerns itself with suggesting ways and means of improving the process and products of education, enabling the teacher to teach effectively and the learners to learn effectively with the minimum effort.

It is thus designated as the service of education. It has simplified the tasks and improved the efficiency of the teacher or all those connected in the process and products of education by supplying them with the essential knowledge and skills in much need the same way as science and technology has helped in making possible maximum output through minimum input in terms of time and labour in our day-to-day activities.

Educational psychology is that branch of psychology which deals with the application of psychological findings in the field of education. In other words it deals with the human behaviour in educational situations. It is the systematic study of the development of the individual in the educational settings.

It is the scientific study of human behaviour by which it can be understood, predicated and directed by education to achieve goals of life.

Definitions of Educational Psychology

- **C.E. Skinner:** “Educational psychology is the branch of psychology which deals with teaching and learning”.
- **Crow and Crow:** “Educational psychology describes and explains learning experience of an individual from birth to old age”.
- **E. A. Peel:** “Educational psychology is the science of education”.
- **Trow** describes, “Educational psychology is the study of psychological aspects of educational situations”.
- **Stephens** says, “Educational psychology is the study of educational growth and development”.
- **Judd** describes educational psychology as, “a scientific study of the life stages in the development of an individual from the time he is born until he becomes an adult.”

In the words of **E.A. Peel**, “Educational psychology helps the teacher to understand the development of his pupils, the range and limits of their capacities, the processes by which they learn and their social relationships.”

3 Educational Psychology

(In this way, the work of the Educational Psychologist resembles with that of an Engineer, who is a technical expert. The Engineer supplies all the knowledge and skill essential for the accomplishment of the job satisfactorily... for example, construction of a bridge.). In the same way Educational Psychologists, who is a technical expert in the field of Education, supplies all the information, principles and techniques essential for:

- Understanding the behaviour of the pupil in response to educational environment and
- Desired modification of his behaviour to bring an all-round development of his personality.

Thus, Educational Psychology concerned primarily with understanding the processes of teaching and learning that take place within formal environments and developing ways of improving those methods. It covers important topics like learning theories; teaching methods; motivation; cognitive, emotional, and moral development; and parent-child relationships etc.

In short, it is the scientific discipline that addresses the questions: “Why do some students learn more than others?” and “What can be done to improve that learning?”

The Nature of Educational Psychology:

Its nature is scientific as it has been accepted that it is a Science of Education. We can summarize the nature of Educational Psychology in the following ways:

1. **Educational Psychology is a science.** (Science is a branch of study concerned with observation of facts and establishment of verifiable general laws. Science employs certain objective methods for the collection of data. It has its objectives of understanding, explaining, predicting and control of facts.) Like any other science, educational psychology has also developed objective methods of collection of data. It also aims at understanding, predicting and controlling human behaviour.

2. **Educational Psychology is a natural science.** An educational psychologist conducts his investigations, gathers his data and reaches his conclusions in exactly the same manner as physicist or the biologist.

3. **Educational psychology is a social science.** Like the sociologist, anthropologist, economist or political scientist, the educational psychologist studies human beings and their sociability.

4. **Educational psychology is a positive science.** Normative science like Logic or Ethics deals with facts as they ought to be. A positive science deals with facts as they are or as they operate. Educational psychology studies the child’s behaviour as it is, not, as it ought to be. So it is a positive science.

5. **Educational psychology is an applied science.** It is the application of psychological principles in the field of education. By applying the principles and techniques of psychology, it tries to study the behaviour and experiences of the pupils. As a branch of psychology it is

4 Educational Psychology

parallel to any other applied psychology. For example, educational psychology draws heavily facts from such areas as developmental psychology, clinical psychology, abnormal psychology and social psychology.

6. Educational psychology is a developing or growing science. It is concerned with new and ever new researches. As research findings accumulate, educational psychologists get better insight into the child's nature and behaviour.

Thus, educational psychology is an applied, positive, social, specific and practical science. While general science deals with behaviour of the individuals in various spheres, educational psychology studies the behaviour of the individual in educational sphere only.

Nature of Educational psychology as scientific because:

The nature of educational psychology is regarded as scientific because it is organized, systematic and universally accepted body, wherein the facts remain constantly in search of truth through research and experimentation. Employs scientific methods in its study and its results are subjected to further verification and modification.

- 1. Laws of educational psychology are universal:** Educational psychology possesses a well-organized, systematic and universally accepted body of facts supported by the relevant psychological laws and principles.
- 2. Scientific methods:** Educational psychology employs scientific methods and adopts a scientific approach for studying the learner's behaviour such as observation, experimentation, clinical investigation and generalization, etc.
- 3. Constant search of the truth:** The results of any study in educational psychology can be challenged and are modified or altered in terms of the latest explanations and findings. So the findings of any study are never taken as absolute and permanent.
- 4. Reliability:** Educational psychology does not accept hearsay and not take anything for granted. It emphasizes that essentially there is some definite causes linked with a behaviour and the causes of this behaviour are not related to supernatural phenomena.
- 5. Positive science:** Educational psychology is a positive science rather than a normative science.
- 6. Applied behavioural science:** Educational psychology is an applied/behavioural science.
- 7. Developing positive science:** Educational psychology cannot claim the status of a developed positive science like other natural or applied sciences. It is considered as one of the developing positive sciences of the learner's behaviour.

Objectives of Educational Psychology:

The general objectives of educational psychology are:

1. To provide a body of facts and methods which can be used in solving teaching problems.
2. To develop a scientific and problem-solving attitude.
3. To train in thinking psychologically about educational problems.

Education vs Schooling

Even though schooling is frequently misidentified as education, there is much difference between education and schooling. The term education encompasses basically two meanings. They are formal and informal ways of gaining knowledge while schooling stands for the initial and secondary stage of formal education system that take place in school. Education as mentioned above can take place not only through informal ways such as learning from peers, life experiences, by reading or learning things through online sources but also through formal means. For instance, through educational institutions like school, university or even training colleges. Thus, it becomes clear schooling is one branch of formal education in the wide arena of education.

Teaching Objectives of Educational Psychology:

1. To develop an understanding and appreciation of the dietary and environmental factors which underline learning ability.
2. To provide base for understanding the nature and principles of learning and to supply the techniques for its improvement.
3. To understand and appreciate factors influencing individual ability to learn.
4. To provide understanding of the external factors like training aids, libraries, classrooms which are largely within the control of the teacher and the institution.
5. To evaluate teaching efficiency.
6. To develop an appreciation of the individual and importance of the individual with their individual differences.

Scope of Educational Psychology:

Scope of educational psychology tells us the areas of application. In other words, it can be called the subject matter of educational psychology.

1. **Human Behaviour.** It studies human behaviour in the educational context. Psychology is the study of behaviour and education aims at modification of behaviour. Hence the influence of Educational Psychology has to be reflected in all aspects of education.

2. **Growth and development.** It studies the principles governing growth and development. The insight provided by the study will help in scientifically planning and executing learner oriented programmes of education.
3. **The Learner.** The subject-matter of educational psychology is knitted around the learner. Therefore, the need of knowing the learner and the techniques of knowing him well. The topics include – the innate abilities and capacities of the individuals, individual differences and their measurements, the overt, covert, conscious as well as unconscious behaviour of the learner, the characteristics of his growth and development and each stage beginning from childhood to adulthood.
4. **The Learning Experiences.** 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.
5. **Learning process:** After knowing the learner and deciding what learning experiences are to be provided, Educational Psychology moves on to the laws, principles and theories of learning. Other items in the learning process are remembering and forgetting, perceiving, concept formation, thinking and reasoning, problem solving, transfer of learning, ways and means of effective learning etc.
6. **Learning Situation or Environment.** Here we deal with the environmental factors and learning situations which come midway between the learner and the teacher. Topics like classroom climate and group dynamics, techniques and aids that facilitate learning and evaluation, techniques and practices, guidance and counselling etc. For the smooth functioning of the teaching-learning process.
7. **Evaluation of learning process:** Some forms of evaluation inevitable in teaching. Also in all fields of activity when judgments used to be made, evaluation plays an important role. Even when we want to cross a road we make a judgment whether it is safe to cross the road. Effectiveness of learning process always depends on the evaluation as it gives the knowledge of result which helps the learner as well as the teacher to modify or correct oneself. Educational psychology guides are by explaining the different methods of assessment contributing to the effectiveness of learning process. Knowing the learner, acquiring the essential skill in teaching and evaluation are the focal points in the study of educational psychology.
8. **Individual differences.** It is universally accepted that every individual differs from every other individual. This idea has been brought to light by Educational Psychology.
9. **Personality and adjustment.** Education has been defined as the all-round development of the personality of an individual. If educational has to fulfil this function all instructional programmes have to be based on the principles governing the nature and development of personality.
10. **The Teacher:** The teacher is a potent force in any scheme of teaching and learning process. It discusses the role of the teacher. It emphasizes the need of ‘knowing thyself’ for a teacher to play his role properly in the process of education. His conflicts, motivation. Anxiety, adjustment, level of aspiration etc. It throws light on the essential personality traits, interests, aptitudes, the characteristics of effective teaching etc. so as to inspire him for becoming a successful teacher.

11. Guidance and Counselling. Education is nothing by providing guidance and counselling required for the proper development of the child. This is very true, especially in the light of the extremely complex and problematic situation one has to face in the fast growing world. Educational psychology has come to the rescue by developing principles and practical measures helpful for providing effective guidance and counselling.

We can conclude by saying that Educational Psychology is narrower in scope than general psychology. While general psychology deals with the behaviour of the individual in a general way, educational psychology is concerned with the behaviour of the learner in an educational setting.

Relevance Of Educational Psychology For Teachers

Educational psychology has contributed considerably to the creation of the modern system of education. The knowledge of educational psychology helps the teacher in the following ways:

1. To understand the Stages of Development: Psychology has clearly shown that human life passes through different stages of development before it reaches adulthood. They are infancy, childhood, adolescence and adulthood. Psychologists have also thoroughly studied the characteristic behaviour patterns in these different periods of life. Identification of these periods with different sets of characteristics and attributes as regards physical, mental and emotional development greatly help educationists to design curriculum and determine appropriate methods of teaching for students at different stages.

2. To Know the Learner: The child or the learner is the key factor in the teaching-learning process. Educational psychology helps the teacher to know his interests, attitudes, aptitudes and the other acquired or innate capacities and abilities; to know the stage of development linked with his social, emotional, intellectual, physical and aesthetic needs; to know his level of aspiration, his conscious and unconscious behaviour; his motivational and group behaviour; his conflicts, desires and other aspects of his mental health. So that perfect guidance and help can be provided and positive attitude towards the learner can be formed.

3. To Understand the Nature of Classroom Learning: Educational Psychology helps the teacher to adapt and adjust his teaching according to the level of the learners. A teacher is teaching in a class but a large number of students do not understand the subject-matter which is being taught. To deal with the students effectively in the class the teacher must have the knowledge of the various approaches to the learning process, principles, laws and factors affecting it then only he/she can apply remedial measures in the learning situation.

4. To Understand the Individual Differences: No two persons are exactly alike. Pupils differ in their level of intelligence, aptitudes, likes and dislikes and in other propensities and potentialities. There are gifted, backward, physically and mentally challenged children. Thus, psychology tells the teacher about the individual differences among the students in the class and the procedure, methodology and techniques to be adopted for them.

5. To Solve Classroom Problems: There are innumerable problems like truancy, bullying, peer pressure, ethnic tensions, cheating in tests etc. Educational Psychology helps to equip the

8 Educational Psychology

teacher by studying the characteristics of the problem children, the dynamics of the group, behavioural characteristics and adjustments.

6. To develop Necessary Skills and Interest in Teaching: Educational psychology helps the teacher to acquire and develop necessary qualities and skills to deal with the problems created by the pupils, maintain a healthy atmosphere in the classroom and show concern regarding the progress of the child.

7. To Understand Effective Methods of Teaching: Educational Psychology has discovered several new approaches, principles, methods and techniques of teaching which are very helpful in today's teaching-learning process. Educational psychology tells us how significant play and recreation are for the children and how play-way methods turn learning into an interesting task.

8. To Understand the Influence of Heredity and Environment on the Child: Educational psychology helps the teacher to know that the child is the product of heredity and environment. They are the two sides of a coin. Both play a prominent part in the all-round development of the child. While the child is born with a number of hereditary qualities, environment helps them to be modified according to the requirements of the society.

9. To Understand the Mental Health of the Child: Educational Psychology helps the teacher to know what are the factors responsible for the mental ill-health and maladjustment of a student and to suggest improvement thereof. Besides this, it also provides the teacher with necessary insight to improve his own mental status to cope up with the situation.

10. To Understand the Procedure of Curriculum Construction: Curriculum is an integral part of the teaching-learning process. Curriculum should be child-centred and fulfil the motives and psychological needs of the individual because child capacities differ from stage to stage. Educational psychology helps the teacher to suggest ways and means to curriculum framers to prepare sound and balanced curriculum for the children.

11. To Provide Guidance and Counselling: Today guidance to a child at every stage of life is needed because psychological abilities, interests and learning styles differ from person to person. Similarly, what courses of study the child should undertake in future is also a vital question. All these can be answered well if the teacher knows the psychology of children.

12. To Understand Principles of Evaluation and Assessment: Evaluation is an integral part of the teaching-learning process. How to test the potentialities of the child depends upon the evaluation techniques. The development of the different types of psychological tests for the evaluation of the individual is a distinct contribution of educational psychology.

13. To inculcate Positive and Creative Discipline: The slogan of the traditional teachers was "spare the rod and spoil the child." Flogging the child was the chief instrument. Educational Psychology has replaced the repressive system with the preventive system. Now teachers adopt a cooperative and scientific approach to modify the behaviour of the students. Emphasis is laid on self-discipline through creative and constructive activities.

14. Educational Psychology and Research: Educational psychologists conduct research to improve the behaviour of human beings in the educational situation. For this purpose it helps in developing tools and devices to measure the performance and suggest remedial measures thereof.

15. To Know Himself/Herself: Educational Psychology helps the teacher to know about himself/herself. His/her own behaviour pattern, personality characteristics, likes and dislikes,

motivation, anxiety, conflicts, adjustment etc. All this knowledge helps him in growing as a successful teacher.

16. Educational Psychology Helps in Professional Growth, Changing Attitude and Innovative Thinking: Inside the classroom, educational psychology has enabled the teacher to achieve proper conditioning of pupils by achieving and directing classroom programmes on human lives. Not only this, educational psychologists are busy in finding out innovations in the field of education. These innovations will bring about professional growth of the teacher.

In **Conclusion**, we can say that educational psychology has contributed considerably to the creation of the modern system of education. In teaching, we are dealing with three elements – the teacher, the student, and the subject. It has helped teachers, headmasters, administrators, inspectors, guidance and counselling workers, social workers to significantly develop an impartial and sympathetic attitude towards children and form them into integrated personalities.

Methods

Educational psychology like any other science, makes use of scientific methods in collecting data about learner, learning process and evaluation.

1. To get facts about learning behaviour rather than opinions.
2. To get good information so that the learner can be guided.

Educational psychology as a science of education deals with the problems of teaching and learning and helps the teacher in his task of modifying the learners behaviour and bringing about an all-round development of his personality.

Therefore, while in psychology the scope of study and the field of operation are extended to cover the behaviour of all living organisms related to all their life activities in educational psychology, the scope of such behavioural study is limited within the confines of the teaching, learning processes, i.e. studying the behaviour of the learners in relation to their educational environment and the all-round development of their personality.

Thus the subject of educational psychology must be centred around the process of teaching and learning for enabling the teacher and learner to do their jobs as satisfactory as possible. Thus educational psychology definitely covers the topics helpful in suggesting principles and techniques for the selection of the learning experience appropriate to each developmental stage of the childhood.

10 Educational Psychology

Hence it includes the study of the behavior of the learner in the educational environment. It also includes the topics and content which are specifically meant for improving the process and products of education mainly centred around the teaching learning process.

Therefore, this study includes:

1. In knowing the learner.
2. Enabling the teacher to know their self-strengths, limitations and to acquire essential teaching skills.
3. Selection and organization of proper learning.
4. Experiences suited to the individuality and developmental stages of the learner.
5. Suggesting suitable methods and techniques for providing the desired learning experience.
6. In arranging proper learner situation.

Methods of Educational Psychology:

Educational psychology is the scientific or systematic study of the behaviour of the learner in relation to his educational environment. This behaviour can be studied by a simple approach called observation. However, this observation method has to be adjusted depending upon the conditions in which observations have to be made, the procedure and tools adopted.

The following are the various methods of observation under different situations:

1. Introspection method: This method which is the oldest method of studying behaviour where the learner should make a self-observation, i.e. looking inwards. For example, when a person is angry he may be asked to determine how he felt during that period of anger by his own observation.

This method is simple, direct, cheap and reveals one's behaviour. But this method lacks reliability and can be used only for adult normal human beings. This method requires the support of other methods which are more reliable.

2. Observation method: In this method the learner's behaviour is observed under natural conditions by other individuals. Such observation will be interpreted according to the perception of the observer. This helps to find out behaviour by observing a person's external behaviour.

For example, if a person frowns we can say that he is angry. But when we are studying behaviour in natural conditions we have to wait for the event to take place. This method is helpful in studying the behaviour of the children. However, this method will explain only observed behaviour, subjectivity of the investigation may affect the results.

3. Experimental method: In this method, behaviour is observed and recorded under controlled conditions. This is done in psychological laboratory or in classrooms or outside the classrooms

11 Educational Psychology

in certain physical or social environment. Accordingly the cause and effect relationships are established.

Theories of behaviour can be developed. These experiments require the creation of artificial environment. Therefore, the scope is limited. Human behaviour is very dynamic and unpredictable. This method is also costly and time consuming.

4. Case history method: This method is one of the steps used in the clinical method of studying behaviour. This method is used for those who are suffering from physical or mental disorders. For this the case history has to be made of the earlier experiences of the individual which may be responsible for the present behaviour. Information is also collected from his parents, family, relatives, guardians, neighbours, friends, teachers, and from reports about the individual's past. This information will enable the clinical psychologists to diagnose and suggest treatment if there is any problem. However, this method will be successful only if the clinical researcher is technically efficient. The findings are limited to the individuals observed and the findings cannot be generalized.

Relationship Between Education and Psychology

Psychology is closely related to education. Education is the modification of behaviour in a desirable direction or in a controlled environment and psychology is the study of behaviour or science of behaviour. To modify the behaviour or to bring about some changes in the behaviour it is necessary to study the science of behaviour. Thus, education and psychology are logically related.

The developmental stages of children and characteristics are very essential factors which the teacher must know in order to be a successful teacher. The traditional education was subject centred and teacher dominated. But the modern concept of education has been changed into learning centred to learner centred.

Today's education has become child centred:

It is the child who is to learn according to his needs, interests and capacities. Hence, there is no doubt that a knowledge of psychology is quite essential for planning and organizing any educative effort. For this purpose all the great educators emphasize that education must have a psychological base.

Pestalozzi tried to psychologise education. Montessori and Froebel also advocated that education must be based on psychological principles. Almost all the aspects of education are guided by psychological principles.

Different aspects of education related to psychological principles are as follows:

1. The objectives of education at different stages have a psychological base.

12 Educational Psychology

2. Preparation of curriculum for different stages as per the age, ability and capacities of the learner must be based on some of the psychological principles.
3. The teacher employs some of the suitable methods of teaching, appropriate motivational techniques and teaching devices which are also the contributions of educational psychology.
4. Solution of different educational problems through research are also the contribution.
5. Preparation of school time table and timing have also a psychological base.
6. Effective school administration and organization needs a knowledge of psychology.
7. Knowledge of psychology is necessary to study the gifted or the retarded child, the problem child and the maladjusted child.
8. The problem of discipline in the school can be tackled psychologically.
9. Educational psychology provides knowledge about mental health of the teacher.
10. Psychology provides knowledge about evaluation procedure for better learning in the school.
11. Better guidance can be provided for effective learning by studying the psychological traits of the learner.

Besides the above, better students participation in classroom teaching, individualized instruction, group activity, learning by doing etc. has a psychological base. So, we cannot think of education without psychology in modern education scenario.

A Brief History

According to the modern definition of psychology, mind can be analysed functionally into different mental processes—cognitive, conative and emotive and is expressed through behaviour of the interacting person. Hence psychology is a science of behaviour.

Psychology emerged as a scientific discipline as and when Wilhelm Wundt—the founder of experimental psychology— established the first psychological laboratory at Leipzig in Germany in the year 1879. From that time onward the learned world witnessed a host of renowned psychologists working in different aspects of mental performances and a long intellectual pursuit of psychological discoveries ensured.

This led more and more to the application of theories, branching, specialization, specification of methods as well as more and more qualitative and quantitative sophistication of techniques. One such branching encompasses the educational field and has been termed as Educational Psychology which emerged as a separate discipline, involving the general principles of experimental psychology applied in the field of education.

A great name in the history of educational thoughts in the early 19th century was Pestalozzi who psychologised education by emphasizing upon ‘education’ as a process of drawing out the functional mind of the individual.

13 Educational Psychology

The next great advance in educational psychology came about mid-nineteenth century when Johann Frederich Herbart, a German professor, formulated an approach to education based directly and avowedly upon psychology.

From the end part of nineteenth century till the beginning of twentieth century a number of famous psychologists started working in different lines of education applying the principles and techniques of general psychology. Among them mention may be made of Francis Galton, the oldest of the founders of educational psychology.

He conducted the first experimental investigation of associationism, tests on reaction time and sensory acuity. Stanley Hall, meanwhile, published his papers using the questionnaire to investigate the minds of children. In 1885, Ebbinghaus published his study on memory and, within the span of six years, events of importance like objective measurement, child psychology and learning experiments, all took place.

To add to the list enriching the movement was Galton's studies on nature-nurture problem, mental inheritance of ability, studies of twins, widespread realizations of individual differences in the psychological sense, various mental and physical developments as well as use of psychological tests and their statistical interpretation (particularly the correlational studies which was later followed by Karl Pearson), rating scales and questionnaires. "His most important theoretical contribution was the distinction in the 'Structure of mind' between a general broad ability of intelligence and special abilities entering only into narrower ranges of activity".

The next major contributor to the foundation of educational psychology was Alfred Binet in the field of intelligence testing. With assistance of Theophile Simon, he developed the first Binet Scale. Then comes John Dewey whose contribution is rather noteworthy in the field of educational philosophy than in the general psychological field.

After Dewey, from the year 1900 to some ten or twelve years more, educational psychology remained more or less in incubation till Edward L. Thorndike came out with his revolutionary 'laws of learning'.

He was possibly the first man to be called an educational psychologist in the modern sense of the term. He studied the art and science of learning very systematically and consistently. Then joined Woodworth with Thorndike and together they worked on transfer of training at the turn of the century.

Thorndike then published three volumes of Educational Psychology between 1913-14 consisting of his original work arising from experimental research. His studies in various

14 Educational Psychology

related fields of education opened up new vistas to be trekked by later educational psychologists.

More about Educational Psychology's Scope

Educational psychology embraced over the years various fields of education e.g. intelligence testing, mental abilities, achievement testing, child psychology, developmental psychology, school performance, mental deficiency, curriculum, personality, character, educational measurement and so on and so forth.

In 1910, the Journal of Educational Psychology was first published, to reveal experimental researches on various psychological issues regarding education and their interpretations.

In the recent past the field of educational psychology has become more complex as the vision of what it encompasses has broadened. Originally concerned with learning and measurement its scope has been extended with each succeeding generation to the point where now the newest extension is in social-educational field and a new branch emerged in educational psychology known as educational social psychology.

In conclusion, we may note that the aim of educational psychology is to apply psychological concepts and principles in order to improve educational practice. Educational psychology that has evolved as a new discipline tends to represent all the areas within psychology in general.

These include some distinct areas dealing with human development, individual difference in ability, aptitude and temperament, perception, motivation, learning, thinking, problem-solving, psychopathology, the dynamics of personality and group interactional processes.

The educational scientists have employed two strategies for applying psychology in education. Consequently, two kinds of researches had been advanced in the field of educational psychology; the first is the direct experimental investigation of learning in laboratory and school settings.

The second has been an attempt to distil from basic psychological research the educational proceedings to be employed in teaching-learning situation, implication of learning in its broader perspective (formal and informal learning), and also human nature and its interactions.

In this process educational psychology deals not only with the individual's own psychology and its functioning, but also an awareness of his interacting counterpart, the changing environment—both physical and social.

15 Educational Psychology

Any educational endeavour is actually a learning situation; the task of educational psychology is to study the learner in that situation. The first learning situation outside the family a child (or a learner) encounters is the school, which is again teaching-learning condition oriented. The teacher's duty in this setting is to apply the general propositions received from psychology and apply them in the classroom.

But not one single strategy employed so far had yielded any fruitful result. A more practical oriented strategy is required in order to synthesize the learner, the teacher the instructional techniques and the educational managers on the one hand and producing qualified students to meet the demand of the day, on the other.

The world we live in today is shaped to a considerable degree by the decisions people make—individually and collectively. Any decision-making needs possessing some knowledge and use them in solving problems. In other words, the kind of perceiving, thinking and evaluating that goes into the problem solving has to be considered.

Historically, possession of knowledge and its utilization are learned during the developmental years of the children through interacting with parents, employers, religious and political leaders as well as teachers in the classroom.

The interaction with the teachers is no less important in the process of our lifelong learning even if the exposure to school be brief and transitory (this is stated considering the number of dropouts at the school level in our country). It has an impact in their lives, nevertheless.

Specially in the developing countries like India and South Asia the involvement of young people with teachers and schools is certainly increasing as revealed by survey reports at Governmental level for the last two decades. Teachers do play an active role in the teaching-learning system.

It will not be unreasonable to say that the kind of future we and our children will experience is influenced more by teachers than by any other professional groups.

The world of tomorrow will be shaped not only by what today's children are learning from their teachers, but also by the 'way' they are learning it, for it is the way knowledge is presented that determines how children will learn to solve problems. Thus according to Lindgren (1980), the 'how' of teaching includes not only teaching methods, but also teachers' attitudes and values, and full range of teachers' classroom behaviours.

They serve as 'models' whose way of thinking, behaving, attitudes, advice and manner, the process of acquiring and imparting knowledge are imitated in more ways than they can

16 Educational Psychology

imagine. Hence they are influential far beyond their immediate awareness. Therefore, it is necessary that the teachers know consciously their personal psychology in order to understand the psychology of their students.