

Education Psychology & Method of Educational Psychology

By Sultan Muhammad

CONTENTS

1. Meaning of Psychology 1
2. Education and Psychology 1
3. Contribution of Educational Psychology 2
4. Methods of educational psychology 4
5. Observation Method 6
6. Experimental Method 8
7. Clinical Method 10
8. Case Study Method 10
9. References 12

Meaning of Psychology

The word “psychology” comes from the Greek word (Psyche mean Soul, Logos mean Science), thus the meaning of Psychology is the science of soul.

Education and Psychology

Psychology is the science of behavior, the activities of animate creature, which can be observed and measured in an objective way.

Education in the narrow sense is the modification of behavior of children in a controlled environment. To shape the behavior of the subject and bring some positive or negative changes, it is necessary to study the science of behavior. The developmental stages and characteristics of children are very essential factors from which the teacher must aware in order to be a successful teacher. If the teacher has no knowledge of children psychology, how can we expect from him that he would succeed in bringing about the desirable changes in children?

Definition of Educational Psychology

Educational psychology is the application of psychological findings in the field of education. Educational psychology is the systematic study of the development of the individual within the educational settings. It helps the teacher to understand the students and enhance their skills.

Educational psychology is an applied discipline which combines the two different fields of education and psychology. It is the scientific study of human behavior by which it can be understood, predicted and directed by education to achieve goals of life.

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.”

Contribution of Educational Psychology

One simple question may be asked as to why educational psychology should be taught to prospective teachers in training colleges. The educational psychology helps the teachers in the following ways;

1. To understand developmental characteristics

Children pass through different stages of development in life as infancy, childhood and adolescence. These developmental stages have their own characteristics and demands.

2. To understand the nature of class room learning

With the help of education psychology the teacher understand the students and their need and problems, it help teacher in learning process in general and class-room learning in particular.\

3. To understand individual differences

With the help of psychology teacher understand the individual’s differences. Teacher faces a class of 30 to 50 students who have a different range of individual differences. Teacher with the knowledge of education psychology and individual differences may adjust his teaching to the needs and requirements of the class.

4. To understand effective teaching methods

Every day experience shows that lack of proper methods of teaching sometimes results in failure of communication in the classroom. The educational psychology gives us the knowledge of appropriate methods of teaching. It helps in developing new strategies of teaching.

5. Knowledge of mental health

Mental health of the student and teacher is very important for efficient learning. With the help of educational psychology, the teacher can understand the various factors, which are responsible for the mental health and maladjustment.

6. Curriculum construction

Psychological principles are also used in formulating curriculum for different stages.

7. Measurement of learning out-comes

Psychological tools help the teachers to evaluate the learning out-come of the students. it helps the teacher to evaluate his own performance.

8. Guidance for the education of exceptional children

Most important contribution of educational psychology is the provision and organization of the educational psychology is the provision and organization of the education for the education of sub normal children.

Methods of educational psychology

Different types of techniques are used by researchers to collect data and conduct research studies. With the increasing use of educational technology in education, psychology and other social sciences, new research strategies are evolved.

Following are the important methods and techniques of collecting data are:

1. Introspection
2. Observation
3. Case study
4. Survey or differential methods
5. Scientific or experimental method

1. Introspection

Historically introspection is the oldest method of all, which was formerly used in philosophy, and then in psychology to collect data about the conscious experience of the subject. Introspection means to see with in one self or self-observation. To understand one's own mental health and the state of mind. This method was developed by the structuralists in psychology who defined psychology as the study of conscious experiences of the individual. Introspection has some advantages and disadvantages;

- **Merits:**

1. It gives information about one's own self which is difficult by other methods.
2. It is an easy method and needs no equipment

3. It makes a base for other methods such as experimental and observation method

- **Demerits:**

1. This method is subjective in nature and lacks scientific objectivity

2. the most serious objection against this method is that human mind is not static like inanimate objects such as stone or chairs etc. our mental process is under constant changes so when one attempts to introspect, the state of mental process disappears and it becomes a retrospect.

3. The human mind is divided in two parts. One is his own mental operation and the other is the object to which this mental operation is directed. To expect any individual to attend the workings of his own mind during a mental process, especially in a complex and emotional state such as anger or fear, is a mistaken idea. Ross commenting on the limitation of introspection said, "The observer and the observed are the same, the mind is both the field and the instrument of observation

4. Introspection cannot be employed on children and insane people.

5. There are conflicting reports, as regards the findings collected from different introspectionists.

2. Observation

With the development of psychology as an objective science of behavior, the method of introspection was replaced by careful observation of human and animal behavior. Observation literally means looking outside oneself. It is a very important method for collecting data in almost all type of research studies. Different type of Observation used in research, direct or indirect, scheduled or unscheduled, natural or artificial, participant and non-participant. But there are two basic types of observation. They are;

1. Natural observation

In natural observation the observer observe the specific behavioral and characteristics of subjects in natural settings and the subject does not aware of the fact that their behavior is being observed by someone. The teacher can observe the behavior of his student in the playground or in any other social gathering without making him conscious. Natural observation can be done anywhere without any tools.

2. Participant observation

In participant observation the observer became the part of the group which he wants to observe. Observational study is particularly very important and produces significant results on developmental characteristics of children. No doubt that observation is a scientific technique of collecting data, whose results can be verified and relied upon to locate behavioral problems

- **Merits:**

1. This type of observation is a natural and normal way of knowing the external world but also the mind of the subject
2. This method is objective in nature and free from personal bias and prejudice.
3. Through this method we can observe as many children as we like
4. This method is quite suitable for children and abnormal persons who cannot be examined through introspection.
5. This can be used anytime and anywhere

- **Demerits:**

1. Observation is useful only for collecting data about overt behavior which is manifested in a number of activities. This overt behavior does not provide reliable information regarding the internal mental process. We can only guess about the mental state of the individual on the basis of overt behavior which may or may not be true. It becomes very difficult to draw any conclusion in case of adults who can hide their actual behavior in the presence of the observer.
2. Subjectivity of interpretation is another limitation of this method. The observer may interpret his sensation of external stimulus on the basis of his past experience. He may be biased in his interpretation. It has also been found in some studies that strong personal interests tend to make researchers see only those things which they want to see.
3. Observation is subject to two types of errors, sampling error and observer error. The first error occurs because of inadequacies of selecting situations to be observed. The observer error may be due to knowledge and background of the situation to be observed. Because some time the observer is not familiar with the total situation and hence he may commit error.

3. Experimental Method

This method has been developed in psychology by the continuous efforts by psychologists to make objective and scientific study of human behavior. One of the major contributions of behaviorism is the development of experimental method to understand, control and predict behavior. It is the most precise, planned systematic observation. The experimental method uses a systematic procedure called experimental design. Experimental design provides important guide lines to the researcher to carry out his research systematically. The layout of the design depends on the nature of the problem that an investigator wants to investigate. The layout or design of the experimental method is as follows:

1. Selecting a research topic
2. Formulating hypotheses

3. Selecting an appropriate design
4. Collect data
5. Analyzing and interpreting data
6. Discussion and conclusions

Experiments may be conducted in a laboratory or in the classroom or anywhere else in the community. Experimentation involves comparison between behavior of a control group and that of an experimental group.

Hypotheses have a rational base or they emerged from a frame work of theory or preliminary experimentation. An experiment involves two or more variables for example; incentives have a measurable impact on learning. The variables whose effects are being studied are called independent variable.

- **Merits:**

1. This method is the most systematic procedure of solving problems. It provides reliable information.
2. It is a revisable method
3. It makes psychology a scientific study
4. It provides objective and precise information about the problems.
5. It give observer easy approach to the mind of an individual
6. It provides innovative ideas for the further experimentation.
7. It enable us to control and direct human behavior
8. It is applicable in educational, individual and social problems

- **Demerits:**

1. It is arranged in a laboratory like situation. This situation is artificially arranged. Behavior is a natural phenomenon and it may change under artificial environment.
2. This method is time consuming and costly. Moreover it requires specialized knowledge and skills.
3. Psychologists have criticized the fact that mostly the experiments have conducted on rats, cats and dogs. The results are conducted and then applied on human beings.
4. It sometimes interferes with the very thing that we are trying to observe.

4. Case Study

Case study is in-depth study of the subject. It is the in-depth analysis of a person, group, or phenomenon. A variety of techniques are employed including personal interviews, psychometric tests, direct observation, and archival records. Case studies are most often used in psychology in clinical research to describe the rare events and conditions of the subject; case study is specially used in education psychology. It deals in education the following problems;

- Lack of interest in students
- Aggressive behavior in student
- Day dreaming
- Poor academic performance
- Emotional problem
- Social problems
- Empathetic understanding
- Find the problem
- Establish report
- Treatment

4. Clinical Method

This method is primarily used to collect detailed information on the behavior problems of maladjusted and deviant cases. The main objective of this method is to study individual case or cases of group to detect and diagnose their specific problems and to suggest therapeutic measures to rehabilitate them in their environment.

It involves the following steps;

1. Interview
2. Information gathering
3. A hypothesis formulate
4. Diagnoses are made
5. Planned a treatment program