

Chapter 4. Educational Psychology

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Introduction

The goal of education is to develop ideal responsible citizen. To create a good citizen, appropriate education system is essential. To achieve this goal, the curriculum should be based on student's interest and grasping power. Therefore necessary pedagogy and co-curricular activities etc. should be included so that the students can learn according to their ability. Educational Psychology helps in developing an appropriate curriculum according to students age, subject and its content. So it is important to study educational psychology.

4.1 Meaning of Psychology



Remember It

The word Psyche (soul) + logos (study) are two Greek words which together mean Psychology, i.e. study of soul.

The great Greek philosopher Aristotle has written "De Anima" which means about the soul. That mean psychology was defined as the science of soul.

What is a soul? The answer to this question was unsatisfactory, so it was decided to change the definition. Hence the new definition of psychology as 'the study of mind' came into practice'.

Later in 1879 Wilhelm Wundt studied about emotions, feelings and internal experiences in the laboratory and further defined 'psychology' is science of consciousness. J. B. Watson, behavioural psychologist stated that, we can study the human behaviour objectively, and therefore behaviour is the subject matter of psychology.

Hence according to new definition psychology is the study of human behaviour.

According to the above definition, the study of animals was not included in study of Psychology.

William McDugall defined psychology as the "Science of Behaviour".

There are many branches of psychology. From those diverse branches educational psychology is the important branch.

4.2 Definition of Educational Psychology

"Educational Psychology is psychology applied for improving teaching and learning process".

- B.F. Skinner

"Educational Psychology describes and explains the learning experiences of an individual from the birth to old age".

- Crow and Crow

"Educational Psychology is the science which applies already recognized psychological principles to solve educational problems." - E.R. Guthrie and F.F. Powers

“A systematic study of human behaviour and experience in the context of how to teach people is called as educational psychology.

- Mcfarland

We can say that from all the above definitions, educational psychology is applied branch of psychology, which includes individual's personality, developmental stage, teaching- learning methods, expectations of the development and problems reacted to it etc.

4.3 Objectives of Educational Psychology

- To understand how psychological principles and laws are used to solve teaching - learning, personality development, problems of adjustment.
- To utilise psychological principles, to solve the problems related to class management, discipline, social and ethical behaviour.
- To use motivation and punishment properly.
- To bring about students personality development skillfully through proper understanding of their individual differences.
- To use scientific methods, for educational and professional guidance to the students.
- To acquire psychological knowledge for teaching-learning, memory and forgetfulness and factors affecting on teaching and learning.
- Understanding the problems of normal and abnormal students and solving them skillfully.
- Psychological Analysis of behavioural issues to solve the problems of people and environment by suitable measures and the remedies.
- To Understand generalizations of mental science, rules, principles and theories in psychology.
- Teachers should take care of their own and students' mental health. The teacher should introspect and improve the behaviour as the impression of his/her behaviour influences the students.

4.4 Nature of Educational Psychology

- Educational Psychology is a science of studying education process in depth. Educational psychology tries to solve educational problems of teachers and students. It helps in curriculum planning, teacher training, planning teaching learning methods, keeping in mind, student's interests, capacity, needs etc.
- Educational Psychology is a developmental science. New research, new information, formulas, methods, etc. are being included. Some ideas are changing and some ideas are getting included, due to which educational psychology is progressing.
- Internal capacity increases due to teacher training, which is the application of Educational Psychology.
- Educational Psychology means systematic study of educational development. It includes collection and application of information providing scientific base for teaching-learning process and strengthening educational process.

In short Educational Psychology is the study of human growth and development, maturity and learning, psychological principles and application in the teaching-learning process.

4.5 Scope of Educational Psychology

1. **Learner** - In the educational process a person who is active participant individually or in the group is known as learner. Student is a major component of educational process. The main goal of education is all-round progress of the student. For this student's physical, mental, emotional, ethical, aesthetic, social

development should occur educational psychology takes the note of changes at every stage of development and provides guidance accordingly.

2. **Learning Process** - Along with understanding the students, it is also important to understand the learning process of the learner. A student learns in a classroom means, what does the student learn in the classroom? How does his learning process work? What are the teaching methods? Which factors affect learning? Such diverse thoughts are considered in educational psychology.
3. **Teaching Methods** - The basic purpose of teaching is to let students learn. Therefore the teacher needs to decide which method is useful for students. Accordingly, which is a good, impressive and result-oriented teaching method? How it should be done? What methods and techniques should be used for it? How to attract student's attention towards learning?, etc, all these issues are considered in educational psychology. The teaching has to be done after judging students interest, capacity, eligibility and inclination. Educational psychology also

provides guidance regarding how to motivate students for studying. The study of educational psychology enables teachers to get familiar with Student's temperament, emotional, conflicts, mental health etc. The teacher can select proper method of teaching accordingly.

4. **Evaluation** - After providing the learning experiences to the students, the teacher has to evaluate them. This evaluation enables him to verify whether the expected change in behaviour and an all round development has taken place or not. The teacher has to use various techniques and tests for this. Educational psychology comes to his help in preparing administering and scoring of these tests.

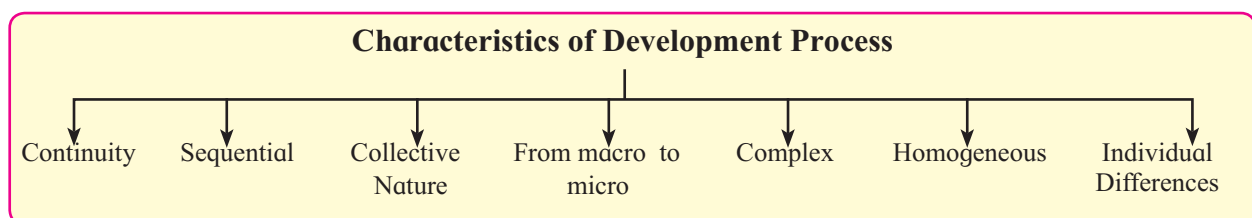
In Short, educational psychology renders valuable guidance to teachers regarding educational objectives, effective teaching methods, use of appropriate teaching aids, attracting student's attention towards learning, motivating them for learning and doing many other educational tasks successfully.



Discuss

Discuss the change that takes place in a person from birth to old age?

4.6 Development Process



4.1 : Characteristics of Development Process

4.6.1 Characteristics of development process



Do you know?

Growth and Development are generally used as synonyms. There is a difference in linguistic perspective. If growth is limited, then development is broad concept. Growth is used as physical concept e.g. height, weight, length of hands and feet in the concept of growth is used quantitative changes.

Growth is the part of development process. Development implies one's behaviour and personality makeup. Development indicates

qualitative change, but it can't be measured like growth. Development changes are qualitative e.g. brain development improves memory, decision making. All these are developmental changes. Development is based on heredity and it, goes from birth till death. Development, as said earlier implies improvement in functioning and behaviour hence qualitative changes which are difficult to be measured directly. They are assessed through keen observation in behavioural situation.

In this way, both the concepts of growth and development indicate the changes in individual's behaviour and personality.

4.6.2 Difference between Growth and Development

Sr. No.	Points of Difference	Growth	Development
1	Meaning	Measurable progress in body organs, structure is known as growth. Example-height, weight, hair, and number of bones etc.	Development involves the series of progressive, orderly and meaningful changes leading to the goals of maturity. eg. - Co-ordination in function of body parts, control on emotions, abstract thinking.
2	Nature	Growth is continuous and definite till particular age, but it is visible.	Continuous intellectual social, moral, emotional development is seen, through habits and behaviour of child.
3	Scope	Increase in number of body cells, increase in shape. Examples are growth of hands, legs, brain, muscles etc.	Development includes micro internal changes in all types of behaviour. So, development is broad concept.
4	Duration	Growth is up to limited period. Example - up to particular age height increases.	Development is continuous. No limit for age, duration. Due to experience Development occurs during whole life
5	Measurement	Growth is quantitative concept as it is measurable e.g. we can express growth in height and weight in numbers.	Development is qualitative. Due to development behavioural changes are observed in child. But how much changes occur can not be said definitely. We can predict the development by conducting different tests.
6	Factors affecting	Growth is affected by heredity and environment. Also Diet, Exercise, Health etc. affects growth	Development is also affected by heredity and environmental factors. Also proper education, inspiration, efforts affect development.

4.2 : Difference between Growth and Development



Use Your Brain



- (1) Classify the following examples according to the characteristics of growth and development
 - In standard tenth Ramesh's weight was 35 kgs which became 42 kgs in standard twelfth
 - Gitanjali needed support to ride the cycle when she was 2 years old and she started cycling herself at the 6 years of age.
 - Dipak was afraid to talk with the strangers but after going to school, he confidently performed on the stage.
 - At six years of age Sarika's height was 61 cm. At 16 years of age her height was 166 cm.
- (2) At the time of child's birth height is 40-46 cm. and in adolescence it becomes 150 cm. From this what do you conclude?
- (3) Tell the developmental stages which you know.

4.6.3 Stages of Development

To study development of child, developmental tasks related to each period of development are identified. These are called as Stages of Development. It is not necessary that every individual will attain these stages at same age, whereas it means that every individual's rate of attaining a particular stage is different. Therefore to study the stages systematically and easily, the developmental stages have been divided in following age groups.

(A) Prenatal stage (conception to birth)

The duration from conception to birth is the prenatal stage of development. The development during this stage is mainly physical growth. Maximum growth and development of the foetus is completed till seventh month and therefore the child survives even if there is premature birth. Total duration of pregnancy is nine months within which maximum human development takes place.

Prenatal Stage 250-300 Days	Postnatal Stages
	

4.3 : Childhood Stage

Prenatal Stages	Prenatal Period (250-300 days)	Postnatal Stages	Period
Neonatal Stage	0 to 2 Weeks	Infancy and early childhood	0 - 6 Years
Embryonic Stage	2 to 10 Weeks	Late childhood	6 to 12 years
Foetal Stage	10 Weeks to till birth	Adolescence	12 to 21 Years
		Youth	21 to 40 Years
		Adulthood	40 to 60 Years
		Old Age	From 60 Years till death.

4.4 : Stages of Development

(B) Postnatal Stages

1. Infancy and Early Childhood Stage

(0 to 6 years)

This is first stage after prenatal development. Early childhood is a time of tremendous growth across all areas of

development. The speed of adopting physical skills are very fast which reduces later. In this stage the child is dependent on the adult. The child is action oriented at this stage. Child learns through imitation. Child is curious and his mind is very fickle at this stage.

Physical	Motor	Mental	Social	Emotional
<ul style="list-style-type: none">• In India the average weight of baby is 2.75 to 3.75 kg and height is 40 to 46 cm.• Till one year weight doubles. Height increases by 15 cm.	<ul style="list-style-type: none">• Different movements and skills depend on development. Examples - sitting crawling, running, holding the things etc. are motors skills.• Skills depend upon maturity of bones and muscles.• Till Five years many activities can be done efficiently. Examples : holding pencil, scissor, climbing the ladder.• Achieves control over muscles. Example : throwing and catching ball.	<ul style="list-style-type: none">• Till 6 Month can understand mother's voice and touch.• curiosity about surroundings, people and animals.• After three years creativity develops.• Memory is very sharp.• Use different words	<ul style="list-style-type: none">• During first year, the development is limited upto to family only.• Gradually social developement starts with the help of different actions.• Till two years child becomes self centred Examples : playing with his own toys.• From four / five years children start playing together.• Children start co-operating each other.	<ul style="list-style-type: none">• World of experience is limited.• Development of one year old child is concerned with his physical needs.• Different emotions can be observed through facial expressions. eg. anger, happiness, love etc.• There is huge difference in emotional development of six month child and child of five years.• The child expresses himself through activities Examples : jumping, dancing.

4.5 : Characteristics of Infancy and Early Childhood Stages

Educational importance of Infancy and Early Childhood

- Education, given in nursery and kindergarten should be informal.
- Duration of educational programs should be minimal as the child has less attention span. The duration of periods in school should be less.
- Learning should be activity oriented. Children should be given ample opportunities like paper cutting, playing, singing, drawing and painting.
- Lot of opportunities should be provided

for group songs, rhymes, action songs, etc.

- Good habits should be inculcated among the children. Cleanliness should be imbibed through story telling.
- Children should be given opportunity to co-operate with each other.

2. Later Childhood - 6 to 12 years

School admission is the most important step in this stage. Children of this age group go to school. They enjoy with their peer group. Children of this age group become aware of good and bad. Confidence increases at this stage.

Physical	Motor	Mental	Social	Emotional
<ul style="list-style-type: none"> • Progress is slow. • In girls, physical development occurs slowly during 1 to 10 years and in boys during the age 10 to 11 years. • At this stage children are not conscious about their physical appearance. • Blood circulatory system, respiratory system and digestive system become active and grow continuously. • Eyes are fully developed. 	<ul style="list-style-type: none"> • Performs different activities. Examples - To cut things with the help of scissor, knife, to write with pencils, to hold books. • As the muscles are developed, children perform skills related to hands, feet. Examples : dancing, playing instruments, doing embroidery etc. • Increasing confidence, as they can perform independently. • Incomplete development of higher mental activities. Examples - Logic, imagination. • Due to motor development child becomes physically and mentally healthy. 	<ul style="list-style-type: none"> • Field experiences of children increases. They try to know new things. • Ask new questions related to things and incidences. • Attention span increases. • Perform activities voluntarily. • Vocabulary increases have use words skillfully. • Lot of respect for teachers . 	<ul style="list-style-type: none"> • Enjoy social life • At this age children play with the friends of same age. • They are loyal to their group, they obey the rules and regulations of group. • Self appraisal, loyalty towards peer group. • They want to become centre of attraction among the peer group. • Use symbolic language in the peer group. • Development of social behaviour. Examples : Leadership, competition, co-operation etc. 	<ul style="list-style-type: none"> • Afraid of imaginary things. Examples - darkness, ghost etc. • Adequate development of different emotions. Examples : love, anger, fear, worry etc. • Expression of emotions is intense and active. • At this stage, children become more emotional and sensitive. • Increase self respect and self confidence. • Live in group and love instinct develops more, hence child become more sensitive. • Express emotions through sports, writing and quarrel.

4.6 : Characteristics of Later Childhood Stage



4.7 : Late Childhood Stage

Educational Importance of Later Childhood

- Team spirit develops in this stage. This attitude can be utilized for group activities, projects, art and competition. Such responsibility should be given to the teenagers to excel in work.
- Provide a scope for teaching-learning. Reading, speaking, writing, performing experiments, counting, map filling etc. perform by a child.
- Children have respect for their teachers. They imitate the teacher, so the teacher should be aware of her/his behavior.
- Formal education is taken by the students in this stage. Therefore it is necessary to pay attention to their linguistic skills.
- Informative books should be made available for students.



Discuss

At present you all are in adolescence stage. What are the changes you feel as compared to the late childhood stage? Check the answers with classmates.

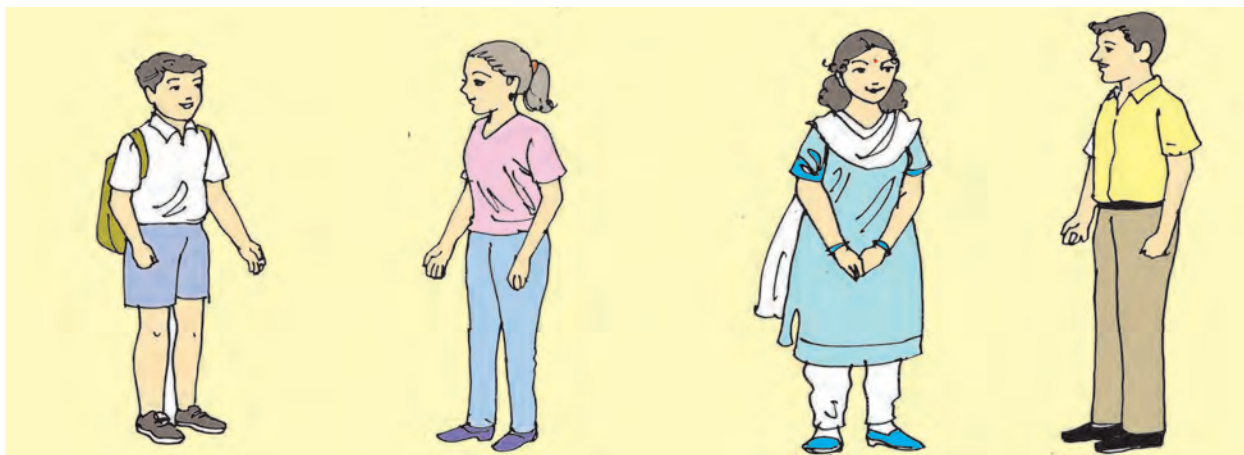
3. Adolescence stage - (12 to 21 years)

Age between 12 to 14/16 years is called puberty. This is the most important period in human life. According to psychology this is a transformational period. A new tendency and new approach develops in this stage. Many physical changes are observed in this stage. There is a radical change in thoughts, feelings

and behaviour becomes unstable. This period is considered to be of mental storms and emotional stress. There is constant comparison between reality and idealism.

Educational importance of Adolescence stage

- Some responsibilities need to be entrusted for boys and girls of this age group. However, teachers and parents should guide them.
- At this stage, adolescents have adapted to the culture, so their opinions should be taken into account. Avoid nagging constantly, rather give them some freedom.
- Teachers and parents should realize and understand the problems of adolescents. Talk to them freely for solving the problems.
- Environment of the school should be favourable to solve the problems of children.
- Do not disrespect the personality of children of this stage. Conducive environment should be created at home and school for effective skill development.
- This stage is very delicate and sensitive. Over pampering, over protection, liberalization, money laundering, addiction can affect the children negatively. Teachers and parents should show right way of life, so that they can become responsible citizens.



4.8 : Adolescence Stage

Physical	Motor	Mental	Social	Emotional
<ul style="list-style-type: none"> • Vigorous growth in weight and height in boys and girls. Height increases by nearly 10 cm to 12.5 cm and increase in weight by 6 to 7 kg. • Pimples are seen on face of boys and girls. • Changes in voice ,becomes coarse. • Growth of pubic hair. • Moustache is seen in boys. • In girls physical and bodily changes are seen. • Girls attain puberty 2 years before than boys. • In adolescence complete development of sex organs in boys and girls. • In girls menstruation cycle starts. 	<ul style="list-style-type: none"> • Motor development helps children self reliance. • Increase in confidence, as child can perform the activity independently. • Is able to jump, run can perform many skills with help of hands. • Can perform work of his own. • Need to give work experience at this stage. 	<ul style="list-style-type: none"> • Child memorises meaningful and meaningless things. • Child can recite without knowing the meaning. • Can express the incidences in past sequentially. • In this age reasaning develops. • Children are more practical than being dreamer. • Various concepts are developed. 	<ul style="list-style-type: none"> • Enjoy in company of peer group. • Increase in social contact and friends. • Experiences all mental processes, dislikes ups and downs, appreciation develops. • Tries to maintain good image among the people. • Likes to play more disciplined outdoor games. 	<ul style="list-style-type: none"> • Among children different emotions are seen. • Boys and girls become emotional quickly. • They can not control anger. • Still emotional maturity has not been attained. • Enjoys company of opposite sex, enjoys fantasy. • Expresses themselves by creating new poems,shayaris etc.

4.9 : Charcteristics of Adolescence Stage



Q.1. Fill in the blanks by choosing correct answer from following options.

- (1) Concept of growth is utilised from _____ measurement point of view.
(a) mental (b) physical (c) emotional (d) social
- (2) _____ is called as stage of storms and stress.
(a) adolescence (b) childhood (c) youth (d) puberty
- (3) During _____ stage boys and girls use symbolic language.
(a) toddlerhood (b) childhood (c) puberty (d) adolescence

Q.2. Tick for correct answer, from the following options.

- (1) What is studied in Educational Psychology?
(a) Persons ☐
(b) Society ☐
(c) Educational institutions ☐
(d) Animals ☐
- (2) What are the objectives of Educational Psychology?
(a) To study the effect of environment on behaviour of students. ☐
(b) To study the social condition of student behaviour. ☐
(c) To study economic status of student. ☐
(d) To study cultural factors of the society. ☐
- (3) What is the application of Educational Psychology?
(a) To study economical status of teachers ☐
(b) To understand individual differences ☐
(c) To study physical status of school ☐
(d) To study social status of parents ☐

Q.3. Write answers in brief.

- (1) Write any three characteristics of developmental process
- (2) Write physical characteristics of childhood stage.
- (3) Write emotional characteristics of adolescence age.

Q.4. Write a short note.

- (1) Development process
- (2) Stage of emotional disturbances
- (3) Social development in adolescence age.
- (4) Educational Psychology.
- (5) Application of Educational Psychology

Q. 5. Answer in detail. (any one)

- (1) Write objectives of Educational Psychology in detail.
- (2) Write the scope of Educational Psychology in detail.

Q. 6. Find out and write minimum 5 definitions of Educational Psychology from different reference books.