

Details of Module and its structure

Module Detail	
Subject Name	Education
Course Name	Understanding the learner
Course Code	EDU502
Module Name/Title	<i>Human development and its educational implications: Growth and development: meaning, difference and importance for teachers; principles of growth and Development, Factors influencing growth and development</i>
Module Code	UTL001
Pre-requisites	Nil
Learning Outcomes	<p>After going through this lesson, the learners will be able to</p> <ul style="list-style-type: none"> • Differentiate growth and Development • Applying the knowledge of growth and Development in classroom • Explore educational implications of knowledge of growth and Development
Keywords	Growth, Development, heredity & environment, Individual differences, change, qualitative and quantitative

1. Development Team

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1. Introduction

Have you seen your childhood photo? Have you thought about the changes that happened to you by now? You have experienced changes in size, appearance, emotions and other psychological characteristics. But individual differences exist in the process of change. Thus the change pattern differs from individual to individual which determines uniqueness of the individual. But the fundamental process of change remains the same as each and every person passes through the same stages of development. The changes are basically determined by two major factors- heredity and environment. Each trait and response of an individual depends upon his heredity and environment. Behavior is the product of organic and environmental factor which work hand in hand. To understand and explain the behavior of an individual at any stage of his development, we must know about interacting factors, the organic (nature) and the environment (nurture). It is only with the knowledge of growth and development of the children for the teacher to guide the individual so that he can grow up to be a citizen who understands his rights and responsibilities.

2. The concept of growth and development

The terms 'growth and development' have different meanings, but are often used synonymously, to mean increased amount or complexity or both (Smart, 1967).

2.1. CONCEPT OF GROWTH

2.1.1. Meaning of Growth

Growth means increase (change) in physical quantifiable aspects of human such as in size, height, length, and weight. The changes which can be observed and measured directly. It is simply a quantitative change in child's body.

2.1.2. Definitions of growth

- **According to Hurlock**
- Growth is change in size, in proportion, disappearance of old features and acquisition of new ones.
- **According to Profit**
- Growth usually refers to an increase in size and number.
- **According to Moss**
- Change in any morphological parameter which is measurable.
- **According to Moyers**

-
- Growth may be defined as the normal change in the amount of living substance.

2.1.3. Characteristics of Growth

- It is indicative i.e. increase in body, size, weight.
- It is quantitative in nature.
- It is a physical change.
- It is external in nature.
- It stops at a certain stage.

2.2. Concept of development

2.2.1. Meaning of Development

Development refers to change in shape, form or structure and improvement in functioning or working. Development includes processes like maturation and learning which are qualitative in nature. The totality of these changes is known as 'development' which is the emergence and expansion of the capacities of the individual. Development includes both quantitative as well as qualitative changes.

2.2.2. Definitions of Development

- **According to Webster's dictionary**
 - Development is defined as "the series of changes which an organism undergoes in passing from an embryonic stage to maturity."
- **According to Crow and Crow**
 - 'Development' is concerned with growth as well as those changes in behaviour which results from environmental situations. These changes are not merely adding inches to one's height or improving one's ability. Instead development is a complex process of integrating many structures and functions.
- **According to Hurlock**
 - Development means a progressive series of changes that occur in an orderly predictable pattern as a result of maturation and experience.
- **According to Skinner**

Development is continuous and gradual process.

2.2.3. Characteristics of Development

- It is wider and comprehensive.
- It is continuous.
- It is not indicative.
- It is qualitative and quantitative progress.
- It is psychological change.
- It is internal in nature.
- It is continuous process.
- It is cognitive progress.
- Product of heredity and environment.

3. Relationship between growth and development

Generally, Growth and Development go hand in hand. Growth without development is meaningless. Development is a wider term and growth is a part of development as shown in fig 1. For example, when body grows in structure, it also develops in function, that means growth helps in development. Though the terms growth and development have been differentiated, in a wider sense, growth and development may be used as synonymous terms, as is often done in the field of education.

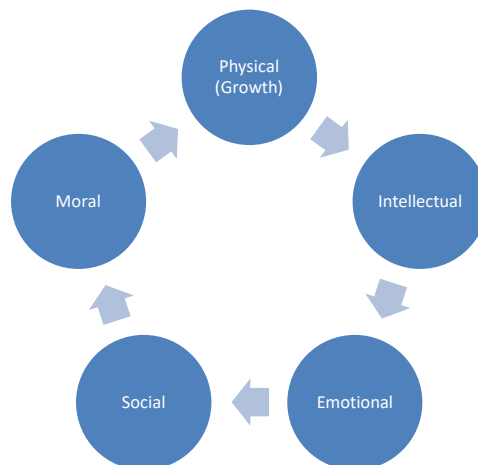


Figure 1: Various Dimensions of Development

3.1. Difference between growth and development

GROWTH	DEVELOPMENT
Part	Comprehensive
Growth is a part or an aspect of	Development is a wider and

<p>development process of Human being.</p>	<p>comprehensive term. It includes growth and covers all those changes which take place within the organism. It includes physical as well as intellectual, emotional, social, aesthetic and moral aspects of development.</p>
<p>Discontinuous</p> <p>Growth is not a continuous process of change like development. It starts from conception and stop around last of teenage/ when the person attain maturity.</p>	<p>Continuous</p> <p>Development is a continuous and life long process. It starts from conception (womb) to death(tomb). It covers the whole life span of the individual.</p>
<p>Improvement in Structure</p> <p>Structure means composition of parts arranged together in a specific way. Biologically it is mode of organization or construction and arrangement of tissues, parts or organs.</p>	<p>Improvement in Structure and Functioning</p> <p>Functioning is a kind of purposeful action or activity development. It implies for improvement in structure of body as well as functioning of all domains. Hence it includes improvement i.e. becoming better of physical activities, cognitive activities, emotional and social activities.</p>
<p>Non Integrated</p> <p>Growth is not integrated because Growth has not multi-dimensions like development. Growth is related with physical parts. Hence growth has only one dimension i.e. physical.</p>	<p>Integrated</p> <p>Integration is process of combining parts or elements so that they work together or form as a whole in development physical, emotional, social, cognitive language, moral, motor, aesthetic are parts of development. They work together and not separately.</p>
<p>Quantitative</p> <p>Growth refers to increase in size,</p>	<p>Quantitative and Qualitative</p> <p>As growth is part of development. It</p>

<p>height and weight which can be measured. It can be measured in kg, pounds, centimeters. It refers to quantitative changes.</p>	<p>includes qualitative changes. When change in any domain result in improvement of functioning it is qualitative. Actually quality indicates to good, bad or better. For example not only increasing the size of hand but the functioning of hand is also going to be impounded.</p>
<p>Cellular</p> <p>Growth is multiplication of cells. It refers to changes in the particular aspects of the body.</p>	<p>Organizational</p> <p>Development is an organization of all the parts which grow and differentiation have produced. It implies the organization as a whole.</p>
<p>Uni-dimensional</p> <p>Growth is explanation of change in one dimension i.e. physiological (or physical).</p>	<p>Multidimensional</p> <p>Development is multidimensional. It includes cognitive, affective and conative (Psycho-motor and physical)</p>
<p>Specific</p> <p>Growth indicates change or increase in specific aspect of body and not behavior. Weight is one aspect height is another aspect. We can observe, Growth of specific parts of body like growth of head, hands, feet, legs, arms, chest etc.</p>	<p>Total</p> <p>In development change occur as whole or with interrelations of domains. If mind is under stress it will disturb our cognitive, Social, physical, development. Development is change in total organism.</p>
<p>Genetic</p> <p>Growth is mostly determined by heredity. Height size of organs, hair texture, color of eyes, complexion etc. are dominantly determined by genes. Environment plays relatively less</p>	<p>Genetic and Environment</p> <p>The heredity and environment both play important role in the development. Heredity provide raw material and sets limits and good environment achieve the limits as achieved in.</p>

role.	
<p>Subject of Measurement</p> <p>The changes produced by growth are the subject of measurement. we can measure our height weight and size in centimeter, kilogram etc.</p>	<p>Subject of assessment</p> <p>Development implies changes in structure as well as improvement in functioning and behavior. Qualitative changes brought by development are very difficult. These changes are the subject of assessment.</p>
<p>Concrete</p> <p>Growth is concrete. It means change in cells, tissues, organs, systems and whole body can be observed.</p>	<p>Concrete and abstract</p> <p>It is both concrete and abstract change in motor aspects, social behavior can be observed. But change in thinking, emotions cannot be observed with senses. It is indirectly i.e. through behavior or situational problem solving behavior.</p>
<p>Possibility without development</p> <p>Increase in size, height and proportion may not result in improvement in functioning. Mentally challenged children grow physically but they almost fail in improving their functioning in cognitive, emotional, social and linguistic.</p>	<p>Possibility without growth</p> <p>Sometimes development is also possible without growth. A dwarf child has better cognitive, emotional, social, aesthetic, imagistic moral development without increase in height size and weight.</p>

4. Principles of growth and development

a. Principle of Continuous process

It is a fact that growth continues from the moments of conception until the death. It takes place at a slow regular pace. Development of both physical and behavioural traits continues gradually until these traits reach their maximum growth. For example, speech does not come over-night. It has

steadily developed from the cries and other sounds made by the baby at birth. The first teeth seem to appear suddenly, but they start developing as early as the fifth foetal month: they cut through the gums about five months after birth. There may be a break in the continuity of growth due to illness, starvation or malnutrition or other environmental factors or some abnormal conditions in the child life.

b. Rapid development in early years

Growth and development proceed more rapidly in early years. Height and weight grow rapidly in infancy. Growth rate proceeds rapidly in pre-natal, infancy and adolescence. For example, 95% brain is developed up to first five years.

c. Principle of development directions

Peculiar of the species **Development** occurs in orderly manner and follows a certain sequence and directions as follows:

d. Principle of Cephalo-caudal

By Cephalo-caudal tendency of development means that development proceeds in the direction of longitudinal axis (Head to Foot). For Example, first child gain control over his head then upper trunk, then on his legs so that he can stand.

e. Principle of Proximodorsal

According to proximodorsal development tendency of development means that development proceeds from the center to the periphery. This means that the spinal cord develops prior to outer parts of the body. For example, the child's arms develop before the hands and the hands and feet develop before the fingers and toes.

f. Principle of change

Development involves change. The change which results in improvement of working or functioning in any area/domain/dimension of development. The change in physical (For example, change in size and proportion), motor (For example, learning of skills), cognitive (For example, change in thinking process; learning of mental skills), social (For example, change in relationship), emotional (For example, change in emotional understanding), linguistics (For example, change in vocabulary, speaking, reading etc.), and moral areas need to occur for development.

g. Principle of interaction

An individual is the result of heredity and environment. In other words, the interaction takes place within and outside forces of the child. As we know the individual standing before the society is not the sole product of heredity rather it is due to combination of what s/he is and what s/he receives from the environment. **For** example, if a child is deficient in mental capacity it is due to his/her genetic disposition but if s/he is capable of doing some household activities then it is possible due to the environment. In the society also some people are successful enough but some are not. The reason behind it may be due to the difference in individual's environment.

h. Principle of interrelation

Development is multidimensional. It does not solely mean physical aspect of human life rather it includes cognitive, affective, social, and moral aspects also. Thus the development of an individual is reflected through the balanced interrelation of all the aspects of life. Development in any aspect affects the other aspects also. For example, a person with good physique will have healthy cognitive abilities. High cognitive abilities affects positively to emotional development to balanced emotional development possess good social development and vice versa.

i. Principle of integration

The individual we are observing is not the sole reflection of any one aspect rather it is the integration of all dimensions of development. Although we have already studied that the change in any dimension affects other dimensions also but the personality of a child is the product of balanced integration of all the aspects. For example, a child who is performing brilliantly in any examination is not only the reflection of his / her mental development rather the performance is the balanced reflection of all aspects of development.

j. Principle of predictable

Prediction means to known in advance about something (physical, cognitive development). It is knowing that what will happen in future especially on the basis of special knowledge. Here special knowledge is definite pattern of development and knowledge of present cognitive, physical, emotional, linguistic, knowledge of learner. For example, the traits shown by the child during infancy stage can to certain extent predict his future prospects regarding his profession.

k. Principle is product of heredity and environment

Heredity and environment jointly affect the growth and development of the learner. The child is born with some genetically endowments (raw material) and develops by interacting with his environment. For example, if a child gets good quality of genes and also gets best environment, then there is possibility that s/he will be a successful individual and vice versa.

l. Principle of differentiation in rate

Differentiation in rate indicates that individuals differ in the rate of development. We can observe that there is difference in rate of development in girls and boys, like girls grow faster than the boys at early stage of development. Another aspect is that the rate of the development process also differs stage wise and dimension wise. For example, feet, nose, hands develop at early age of adolescence but the shoulder grows gradually. In the same way, the nature of mental development is also not a uniform pace. For example, a child starts memorizing concepts or fact at in stage of development, but later on s/he starts thinking logically.

m. Principle of individual difference

With respect to development, the rate and the quality of development in various dimensions differ from person to person, as two individuals will not react similarly to stimuli. Hence, differences are due to genes, emotions (schema) cognition, social, moral, linguistic aspects. This difference indicates individual and social progress. One of the direct evidence of difference is gender differences in growth. For example, every human being is unique.

n. Principle of maturation and learning

Growth and development occur as a result of both maturation and learning process. Interaction between two is necessary. Maturation sets the limits of learning however, hastening in the process of learning does not help much to the child in having better development. For example, a child cannot learn to write before his hand is mature enough to hold pencil.

o. Principle of cumulative and recapitulatory

Our behaviour is a result of previous experiences and hence it is cumulative which means to add up. In this development the child behaviour is influenced by the experience of the past. Development is also recapitulatory

because characteristics of one state can be established in another stage. For example, in infancy stage the child exhibits kiddish habits and later on during old age these kiddish habits develop again.

5. Factors affecting human growth and development

Right from conception, the beginning of life in a mother's womb, the growth and development of human beings is influenced by a variety of factors categorized broadly as internal and external factors.

5.1. Internal Factors

- a.** Heredity Factors
- b.** Biological Factors
 - Physical Structure
 - Nervous system
 - Sex differences
 - Endocrine Glands
- c.** Intelligence
- d.** Emotional Factors

5.2. External Factors

- a.** Pre-Natal
 - Health of the mother
 - Diet
 - Medical care
 - Drugs
- b.** Post-Natal
 - Social Factors
 - Family*
 - School*
 - Community*
 - Socio-Economical Factors
 - Cultural Factors
 - Religious Factors
 - Physical Factors

INTERNAL FACTORS

All those factors which lie within the individual are designated as internal factors. They may include the following-

1) Heredity factors

Heredity plays an important role in growth and development of the individual. Heredity factors are those that reside in the child from moment of conception. What is transferred to the offspring from the immediate parent in the form of genes and chromosomes at this time constitutes the heredity contribution. This contribution is real starting point and base of all the growth and development that takes place later in the life of the child. It is like a base for the structures of one's total personality. For example, the height, weight, colour of the eyes, colour of the skin, the characteristics of the hair etc. are just decided by these hereditary influences. The physical structure, nervous system and other things related with one's constitutional makeup, body chemistry and physical development are to a great extent, decided by the hereditary factors.

2) Biological and Constitutional (Physical) factors

- **Physical Structure:** A child who has a good health, strength, energy and vigorous generally leads a healthy life. Deformities of the body, deafness, dumbness and blindness have adverse effects on environment. Similarly, biologically weak or defective constitutional makeup like ugly face, short stature, complexion, colour of the eyes and hair, overweight or underweight etc. may develop a feeling of inferiority if other person teases him.
- **Nervous System:** Nervous system plays a vital role in the various aspects of development of the person. It acts as base of cognitive development. Good nervous system promotes healthy physical and cognitive development.
- **Sex differences:** Sex is a very important factor which influences human growth and development. There is lot of difference in growth and development among girls and boys. Physical growth of girls in adolescence is faster than boys. In general, the body structure and growth of girls differ from boys.

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- **Endocrine Glands:** The endocrine or ductless glands are potent factors affecting the growth and development of an individual from his birth. The chemistry of the body is governed by these glands. These glands secrete its chemicals known as hormones. These hormones get to the bloodstream and circulated throughout the body. For balanced functioning of growth and development the usual functioning of these glands are essential. For example, imbalance in pituitary gland may lead to an abnormal increase or decrease in height.

3) Intelligence

The intelligence is the capacity to learn, adjust and take a significant role at right time in the overall growth and development of a child. It affects his social behavior, moral adjustment and emotional growth. An intelligent person is said to have a reasonable control over his emotions and is found to carry on well his personal and social adjustments. Therefore, the physical, social, emotional and moral development of a child is greatly depending upon and controlled by the level of his intelligence. We cannot look forward to problem-solving behaviour, creative, imaginative and inventive ability from a child having subnormal intelligence.

4) Emotional factor

Emotional factors like emotional in adjustability and maturity play a big role in influencing one's overall growth and development. Lack of emotional maturity has adverse effect on physical, intellectual, emotional, social and moral and language development. If one cannot exercise control over his emotions, he is sure to suffer in terms of his growth and development.

EXTERNAL FACTORS

The factors lying outside the individual in his environment are said to be external factors for influencing his growth and development. These are the following:

1. Pre-Natal (Environment before birth)

The baby's pre-natal environment is the womb of the mother or mother's body. If mother is in good physical condition and eat a well-balanced diet the baby will grow and develop normally. Some of the factors influencing growth and development associated with pre-natal environment are as under:

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- Health of the mother during pregnancy
 - Diet taken by mother
 - Medical care
 - Use of Drugs
 - Diabetic mother
 - Exposure to radiation
 - Excessive smoking
 - Excessive use of alcohol

2. Post-Natal (Environment after birth)

Post-natal environmental conditions influence the growth and development of the child in so many ways. Some of the factors influencing growth and development associated with post-natal environment are as under:

Social Factors

Social environment is constituted by the family, school and society-individuals and institutions, social laws, customs by which human behavior is regulated.

Family

School

Community

Family

The child's family is the most important factor in his development. Whether he/she is reared by parents, grandparents, or others, the family provides bonding and first relationships. The family preserves the innocence of the child by nurturing and protecting him, or on the flip side, allows him to be exposed to negative experiences which can harm his development. Styles of parenting have a great effect on child development, as well. The most effective growth is seen when families devote time, energy and love in the development of the child such as reading to them, playing with them and having deep meaningful conversations. Family that abuse or neglect children would detract them from a positive development. Helicopter parenting also has negative effects as they render children dependant on the parents even as young adults and unable to deal with difficulties in life on their own.

School

Formal education affects the personality of the child to a great extent. That is why today no person from average socio economic status wants to send his child to government schools. Even Government school teachers send their child to private schools. Because they know that school shapes the personality of the child. Various factors determine the personality of the child like teachers, facilities, learning resources, curriculum, co-curricular activities, evaluation system, discipline and general environment of the school.

Community

The community has a great influence on the growth and development of our children. The school, neighbourhood, opportunities offered by the community and peer circles of the children are some of the social factors affecting child development. Living in a community that has parks, libraries and community centres for group activities and sports play an important role in child development.

- **Socio-Economical Factors**

The socio-economic status of a family determines the quality of the opportunity a child gets. Studying in best schools that are more costly definitely has benefits in the long run. Well-off families can also offer better learning resources for their children and afford special aid when they need. Children from poor families may not have access to educational resources and good nutrition to reach their full potential. They may also have over working parents who cannot invest enough quality time in their development.

- **Physical Factors**

Physical environment consists of all outer physical surroundings both inanimate and animate which have to be manipulated in order to provide food, clothing and shelter. Geographical conditions i.e. weather and climates are physical environment which has significant impact on individual child.

- **Religion**

Religious institutes also play a significant role in personality development by affecting learner to listen discourses doing services etc. Religion is a factor that affects personality development in general and child-rearing

practices. Knowledge, attitudes and problem solving methods may be influenced by religion affiliation. Even if a religion does not play a particularly important role in family's child rearing practices, it still can have a profound influence on the development of moral and ethical standards.

- **Cultural factors**

Culture involves consistency in the actions of a large number of people that does social class. Our behavior and personality is also shaped by culture. Culture regulates our lives at every term. Culture exerts constant pressure upon us to follow certain types of behavior. From culture we learn the values and norms. In spite of many differences culture provides the society a sense of uniqueness and common individuality, common understanding and thoughts that have common attitudes, values, and behavior.

6. Educational implications/importance for teacher

a. Individualization

Principle of individual differences reminds us to understand the wide individual differences that surface at all period of growth and development among children. Each child should be supported along the developmental process within the domain of his own strengths and limitations. This also suggests that individualization of teaching learning process is required.

b. Emphasis on all round development

All round development of a child refers to how a child is supposed to develop in his emotional, cognitive and social platform. Every child transforms as he physically and emotionally develops. School plays the vital role to make a child adapt in the society, to inculcate values and tradition and imbibe valuable virtues. All round development of a child starts with his parents in infancy but it takes the required shape in school. A child acquires knowledge of various disciplines and to socialize with other children. The most important thing that he learns is to cope up in a group of students of different mentality and social status. A lot depends on the teachers of the child, since they are the ones who impart and inculcate the best virtues and be like a role model for the child so that he is encouraged to become a better individual every day.

c. Principle of predictability

It is possible for teachers and parents to predict at an early age the range within which the mature development of the child is likely to fall. Foresight of development trends is of great significance for parents and teachers. It may help them to know as to what extent children can be expected to learn specific skills and at what stage of development.

d. Enrich environment

By creating meaningful experiences for the child on a daily basis, we encourage them to reach milestones in social skills and learning. We cater to the individual needs of each student, who continue to grow and learn at a pace that is suitable for their unique needs.

e. Minimizing over expectation

It helps us to know what to expect and when to expect from an individual child with respect to his physical, mental, social development etc. at different stages of development. Parents and teachers should not over ambitious about their children. They must have a realistic view about their learning capabilities. They should not under or overestimate the future competency or expectancy of their child. It helps the teachers in knowing what they should expect from the children.

f. Evaluation

Principle of uniqueness, individual differences, gender difference suggest formative evaluation in which feedback is given to each learner on the basis of individual performance in order to reduce his weakness and increase his strengths. It also rejects rigid group norms to evaluate learners. A learner should not be compared with other like with his/her brother, classmates by parents, teachers and principal of school.

g. Treating children sympathetically

The knowledge of the principle of growth and development helps the teacher in treating the children sympathetically and also solving their problem in realistic way. It helps the parents and teachers in knowing what they should expect from the children and also in knowing the importance of creating the healthy and good environment.

h. Giving proper guidance

Guidance and counselling is an important implication of all principles of development. Guidance is process of learning in which the counselor try not only to solve learners problems but also to make them independent problem solver. The educational and vocational guidance should be provided to the all the children.

i. Framing Educational Programme

It helps the teachers in adjusting the school programmes and practices of the basis of developmental level. Teachers can have proper planning of the programmes for learning of the skills by making adequate arrangement or creating proper environmental conditions.

j. Framing curriculum

Curriculum is the appropriate mean of overall development of students. Teacher is mediator between curriculum and students. He knows various needs of students, educational institutions and parents. This helps the teachers to frame syllabi and curriculum to the developmental level of the child and by doing so, the learning and teaching may become quite effective.

k. Principle of interrelation

The various aspects of human growth and development physical, emotional, social and mental are interrelated and interdependent. Poor development in one aspect would affect development in others. Principles of interrelation and interdependence of the various aspects of growth and development help us to aim for the harmonious growth and development of the personality of the child.

l. Facilities to integrate experience

Principle of integration suggests that teacher need to facilitate integration of experiences. Integration means to combine two or more things so that they work together. Teacher needs to help to combine two or more learning experiences so that advanced problem may be solved by the learner. As infant have reflexes like grasping and reaching (by pulling thing or by moving). Sometimes after he combined reach + grasp = integrate (in Piaget's words coordination). Same way learner at each stage has a number of separates learning experiences, the work of teacher is to

help to combine them meaningfully to use for problem solving. He may arrange specific activities for this purpose.

m. Uniformity of pattern

The knowledge of the uniformity of pattern with respect to growth and development makes it possible for parents and teachers to plan ahead of time for the changes that will take place in their children.

7. Summary

- Development has been the most important issue in education. Human Development is dynamic in nature. There are two processes involved in the development process of the individual growth and development. The two terms are sometimes used interchangeably. But they both connote different meaning.
- Growth basically refers to the quantitative changes and body proportion like change in height, weight, internal organs etc. In other words, growth means increase in size of not only the overall dimension of the body in terms of height and weight but also the part of the body such as head, arms, trunk, heart and muscles.
- Development reflects the qualitative changes in the individual. It may be defined as a progressive series of orderly coherent changes.
- There are many underlying principles of development- Principle of continuous process, Rapid development in early years, Principle of development directions, Principle of change, Principle of interaction, Principle of interrelation, Principle of integration, Principle of predictable, Principle of heredity and environment, Principle of differentiation in rate, Principle of struggle, Principle of individual difference, Principle of maturation and learning, Principle of cumulative and capitulatory and Principle of spiral.
- There are some factors which affects the growth and development of the child. Internal factors include Heredity Factors, Biological Factors, Endocrine Glands, Intelligence, Emotional Factors, Sex Difference and Nervous system. The factors lying outside the individual in his environment are said to be external factors for influencing his growth and development. These include Pre-Natal Factors (Health of the mother, Diet, Medical care, Drugs), Post-Natal Factors (Social Factors, Socio-

Economical Factors, Cultural Factors, Religious Factors, Physical Factors).

- The knowledge of concept of growth and development, principles and factors of growth and development may prove quite useful to parents and teachers for ensuring the harmonious growth and development of the personality of the children.
- The principles of development have highlighted the importance of individual differences from one child to the other and from one stage to another. Each child should be supported along the developmental process within the domain of his own strengths and limitations. This also suggests that individualization of teaching learning process is required.
- The school should focus on all round development of the children. A child acquires knowledge of various disciplines and to socialize with other children in a school. A lot depends on the teachers of the child, since they are the ones who impart and inculcate the best virtues and be like a role model for the child so that he/she is inspired to become a better individual every day.
- School programmers, procedures and practices should be adjusted to the growth and maturational levels of children, bearing in mind the individual variations in rates of growth.
- Each child grows in his own unique way, it is but opposite that parents and teachers should treat each child as a unique individual and provide for this special needs and interests. It helps the teachers in adjusting the school programmers and practices of the basis of developmental level of every child. Teachers can have proper planning of the programmers for learning of the skills by making adequate arrangement or creating proper environmental conditions.
- Principles of interrelation and interdependence of the various aspects of growth and development help us to aim for the harmonious growth and development of the personality of the child. This helps the teachers to frame syllabi and curriculum to the developmental level of the child and by doing so, the learning and teaching may become quite effective.
- The teacher should know what to expect from the child (student), and what he needs physically, socially and emotionally. The routine teacher-

taught relationship would not benefit him unless the students are dealt with empathetically as a social being, as an individual self, and as a biological organism.

- In conclusion, development describes the growth of humans throughout the lifespan, from conception to death. Development does not include the biological and physical aspects of growth only, but also the cognitive, emotional and social aspects associated with development throughout life.

By better understanding how and why children change and grow, the parents and teachers can then apply this knowledge to helping children live up to their full potential and to develop into responsible citizen of the nation.

EDU502

Understanding the Learner

UTL001

Quadrant-III

**Learn More / Web Resources / Supplementary
Materials**

Books, articles, research papers, journals, case studies etc.:

Singh, T. (2018). *Growth and development of the learner*, Jalandhar: SG Publisher.

Birk, L.E. (2001). *Child Development* (3rd ed.). New Delhi: Prentice Hall.

Links to web sites giving additional readings, Wikipedia, blogs, open source content etc.:

Study material of Indira Gandhi National Open School of education (Distance education)

<https://www.slideshare.net/vijay143manoj/principles-of-growth-and-development-64896340>

<https://www.scribd.com/doc/26348022/Principles-of-Growth-and-Development>

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Quadrant-IV

Self-Assessment

Description: In self-assessment Question No. 1 to 15 consist of multiple choice questions in which learners are required to select the correct one out of the four alternatives

1. What are the factors that influence a person's development?

- a) Learning environment
- b) Nutrition and healthy lifestyle
- c) Heredity and biological characteristics
- d) All of the above

2. Which of the following principles reflect what happens with growth and development?

- a) Progressive attainment of skills is known as developmental achievements
- b) Developmental milestones are times when certain behaviors and events occur.
- c) Gross motor skills develop before fine motor skills
- d) All of the above

3. An example of a universal change that influences an individual's development would be

- a) Unexpected events that influence development
- b) Biological changes related to our makeup
- c) Changes that happen related to a specific historical event
- d) Individual changes that occur because of life situations

4. Which one of the following is the true statement corresponding to Cephalocaudal Principle of Child's Development?

- a) Development is from head to foot
- b) Development is from foot to head
- c) Development is from middle to periphery
- d) None of these

5. Determinants of Individual differences in human beings relate to-

- a) Differences in Environment
- b) Differences in Heredity
- c) Interaction between Heredity and Environment

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- d) Both Heredity and Environment interacting separately

6. What are the factors related to learner that effects the learning?

- a) Physical and Mental health of the learner
- b) Level of aspiration and achievement motivation
- c) Readiness and Willpower
- d) All of these

7. Which of the following are the External Factors affecting the interest of students in classroom?

- a) Emotions and Sentiments
- b) Culture and Training
- c) Attitudes of students
- d) Goals and motives

8. The limits of growth are fixed by

- a) Internal factors of organism
- b) Nutrition and exercise
- c) Both 'A' and 'B'
- d) None of these

9. Development is

- a) Maturation
- b) Learning
- c) Synthesis of abilities
- d) All the above

10. The main element of growth

- a) It affects behavior
- b) It is measurable
- c) Both 'A' and 'B'
- d) It is also mental

11. The main principles of development are

- a) Individual difference
- b) Continuity
- c) Same pattern
- d) All the above

12. Which of the following is not a principle of development?

- a) Principle of continuity
- b) Principle of individual differences
- c) Principle of proceeding from specific to general response
- d) Principle of integration

13. Most important factor (s) in the development of child are

- a) Physical and moral environment of the child
- b) Social and economic status of the family
- c) Education and social status of parents
- d) Socio-economic and intellectual environment of the child

14. A child is born with some

- a) Qualities
- b) Ego
- c) Innate drive
- d) All the above

15. The child's development takes place

- a) Fast
- b) Slow
- c) Gradually
- d) None of these

Answer Key

Sr.no.	Answer
1	D
2	D
3	B
4	A
5	C
6	D
7	D
8	C
9	D
10	C
11	D
12	C
13	D
14	D
15	C