

# Growth and Development |Pedagogy| CTET&STETs| KVS| Teaching Exam

## Development-

- Progressive+Orderly+Sequential Changes
- Can be modified but not reversible.



## Comparison of Growth and Development

Aspect of Comparison	Growth	Development
<b>Meaning</b>	It refers to dimensional and quantitative changes which are known as physiological changes.	It refers to systematic changes which lead an individual from dependency to self-reliance throughout his lifetime i.e. going from <b>womb to tomb</b> .
<b>Scope</b>	It tells about one aspect of personality but in <b>limited</b> scope.	It deals with all aspects of personality and has a <b>vast</b> scope. An individual grows in many ways such as physically, mentally, emotionally, etc.
<b>Nature</b>	It is <b>quantitative</b> .	It is <b>quantitative</b> as well as <b>qualitative</b> .
<b>Continuity</b>	It is for a <b>limited time period</b> . It stops when maturity has been attained. It is not a lifelong process	It begins before birth i.e. from prenatal period and continues till an individual dies. (womb to tomb) It is a <b>continuous/lifelong</b> process that includes growth, maturation and learning in itself.
<b>Measurement</b>	It can be measured.	It can only be assessed. It is a subjective interpretation of one's change.

<b>Components</b>	It comprises height, weight, size and shape of body, etc. (restricted to physical aspects only)	It includes all aspects such as physical, cognitive, emotional, social, etc. (more on the mental aspect)
<b>Characteristic Feature</b>	It is the change in shape, form, structure and size of the body. (structural change)	It includes both structural and functional changes.
<b>Aspect</b>	It is a part of development.	It includes growth.
<b>Influence</b>	It may or may not bring development. (A child may grow in terms of weight but this growth may not bring any functional improvement)	It is possible without growth. ( A child that does not gain weight but he/she do experience functional improvement or development in social or intellectual aspects)
<b>Example</b>	Increase in size, length, height and weight.	Development of creativity, aptitude in dancing profession; emotional control; understanding of self; learning of moral relativism and acquisition of social skills, etc.

## Aspects/Types of Development

**1) Physical development-** It refers to the development of body structure including muscles, bones and organs.

- It includes motor development which means to gain better control over bones, muscles, bones and other parts of our body which help us to manipulate the environment.
- Motor development is of **two** types:
  1. **Gross motor development:** It includes the development of large muscles of the body. These muscles help us in walking, climbing, standing, sitting, running, cycling, skipping, jumping, etc.
  2. **Fine motor development:** It includes the development of small muscles of the body. These muscles help us in writing, drawing, throwing, chopping, grasping, stitching, etc.

**2) Cognitive or Intellectual Development-** It includes the development of our intellectual abilities such as thinking, reasoning, imagination, memory, problem-solving, etc.

- It includes language development, in this we acquire the ability to learn, use, comprehend and manipulate skills of language. It is the process by which children come to understand and communicate language during early childhood.
- The first five years of a child's life are the most important in terms of language development.

- Language is made up of four areas:
  1. Phonology- The way sounds are structured and sequenced in speech
  2. Semantics- How vocabulary is used to express concepts.
  3. Grammar- Involves syntax (the way words are arranged to form a sentence) and morphology (use of grammar to express tense or the active voice).
  4. Pragmatics- The skills used to communicate effectively such as waiting your turn to speak, adapting language based on the person you are speaking to, etc.

3) **Social Development-** It refers to how people develop social and emotional skills across the lifespan, with particular attention to childhood and adolescence.

- It is the ability to accommodate oneself according to the needs, values and norms of the society, such as cooperation, and leading healthy relations with people in our surrounding.
- Emotional and Moral Development come under social development.
- Emotional Development- It refers to the ability to recognize, express and manage feelings at different stages of life and to have empathy for the feelings of others.
- Moral Development- It means the development of one's ability to make decisions about right and wrong.

## Stages of Development

S.No.	Stage	Age Group	Characteristics
1	<b>Prenatal Stage</b>	From conception to birth	9 months before birth or 40 weeks or 280 days
2	<b>Infancy Stage</b>	Birth to 2 or 2 and half years	Senses are teachers
3	<b>Early Childhood Stage</b>	2 to 5-6 years	Preschool age
4	<b>Later Childhood Stage</b>	6-7 to 12 years	Gang age
5	<b>Adolescence</b>	12 to 19 years	Identity Crisis
6	<b>Adulthood</b>	20 to 60 years	
7	<b>Old Age Stage</b>	60 years onward	

1) **Infancy (birth to 2 years) :**

- First 15-20 days after birth is called neonatal period.
- Average weight and height is 3 kg and 15-20 inches respectively.
- Body proportion (head and rest of the body) - 1:4
- The development of language starts from this stage.

- Use reflex actions such as sucking, rasping, eye blinking, etc and use their senses and own motor activities to explore their new environment.
- In terms of physical development, this stage records the most growth.

## 2) Early Childhood (2-6 years) :

- Growth in height > weight.
- Body proportion - 1:6
- Go to pre/play school and spend a lot of time playing with toys.
- Children are self-centric at this stage.
- It is a sensitive period for language development and also important from the aspect of personality development.

## 3) Later Childhood (7-11) :

- Go to elementary school.
- Children spend more time with their friends/peer group that's why this age is also known as gang age.
- Also known as troublesome age.
- Children are capable of logical and rational thinking.
- Development of children's creative potential begins.
- Experiences of this period influence the child throughout his life.

## 4) Adolescence (12-19 years) :

- This period begins with puberty and ends with the growth of a more matured personality.
- The most critical stage.
- Onset of puberty leads to many changes. (physical, social, personal, etc)
- Transitional stage ( between child and adult)
- Adolescents face adjustment problems, get aggressive easily, more inclined to friends than family, etc.
- Development of logical, abstract, and rational thinking.

**“ Adolescence is the stage of stress and storm” - Stanley Hall**

## Principle of Development:

### 1. Principle of Continuity/Change:

- It has a definite pattern and is continuous in nature.
- It doesn't stop until death. (womb to tomb) (unending process).
- For example- gradual change of sitting with support to sitting without support, change from concrete thinking to abstract thinking, or change in physical appearances, etc.

## 2. Principle of Proceeding from General to Specific:

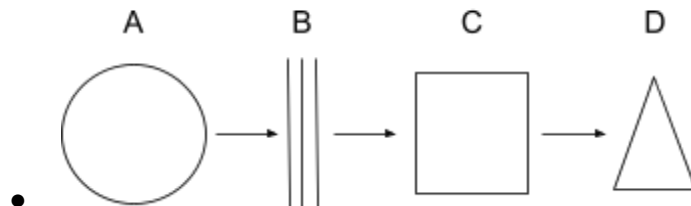
- Children exhibit general responses at first and learn to show specific and goal directed responses later.
- From holding a pen with the whole hand or fist to using only fingers and thumb later. Here, the development occurs from large muscles to fine muscles.

## 3. Principle of Individual Difference:

- Every child is unique and no two individuals are alike.
- These differences are the byproduct of heredity and environment.
- These differences are caused by the genes one inherits and the environmental conditions like food, medical facilities, psychological conditions and learning opportunities.
- There are two types of twins:
  - **Identical Twins:** Also known as Monozygotic twins (mono means one). They develop from one ovum. They resemble each other and are always of the same sex while having almost the same interests. IQ similarity- ~ 0.83-0.86
  - **Fraternal Twins:** Also known as Dizygotic twins ( di means two) They develop from two separate ova. They can be of the same sex or different sex.

## 4. Principle of Uniform Pattern/Sequence:

- Here 'Uniformity' stands for order, for example - 1, 2, 3, 4.... Here 2 comes after 1, 3 comes after 2, 4 comes after 3 and so on.
- It is an orderly or sequential process.
- The development starts from the head. The milk teeth fall first.
- At the embryo stage, first the head develops, then the lower portion of the body.
- Order = Creep → Crawl → Sit



## 5. Principle of Direction:

- Development is sequential and has a definite pattern.

- All follow a more or less similar pattern but at their own pace.
- For example- the child starts crawling before walking, babbling before talking and scribbling before writing, etc.

Development takes place in **two** directions:

- **Cephalo-caudal sequence:** 'Head to Toe' sequence
  - **Head to Toe** sequence shows development in the head region first, then in trunk region and leg region thereon.
  - That's why the child first starts sitting before standing and attains head balance before the trunk.
  - Vertical development is also related to this.
- **Proxi-modistal sequence:** 'Near to Far' sequence
  - In this, development proceeds from the **central to peripheral** part called near to far sequence.
  - The spinal cord of the child develops first and then outward control is gained.
  - Example: Babies cut their front teeth before they cut their side ones.

#### 6. Principle of Integration:

- The development proceeds from general to specific or from **whole** to parts, it is also seen that specific responses are combined in the later process of development.
- It is the integration of the whole and its parts/ general and specific response that makes a child develop properly in the different dimensions.

#### 7. Principle of Interrelation (Development as a unified whole):

- All aspects of development (physical, mental, social, etc.) are interrelated and are interdependent on each other.
- Any change in one aspect will likely bring change in others. ( can be temporary or permanent)
- Example- If the child suffers from any kind of physical disorder, this may affect the social and emotional aspect of his personality.

#### 8. Principle of Maturation and Learning:

- **Maturation:** It refers to the programmed sequence of change that takes place with time and is influenced by experience and helps in learning. These changes are innate and are based on genetic frameworks and take place at appropriate age.

- **Learning:** It comes from efforts and practice or we can say a relatively desired permanent change in behaviour.
- If a child is keen to learn something and lacks maturity then he will not be able to learn it.
- Maturation sets limits to development.
- Maturation and learning work together to promote the development of an individual. (**Opposite line was said by Piaget**)

#### **9. Principle of Heredity and Environment:**

- Development is the product of heredity and environment.
- Heredity is the foundation of the personality of a child which sets the limit in the development.

#### **10. Principle of Spiral vs. Linear Development:**

- Development doesn't proceed in a straight line instead it goes back and forth.
- He makes advancement during a particular period but takes rest in the next period to consolidate his development.
- Therefore, development is spiral in nature.

#### **11. Principle of Significance of Early Development:**

- Early development is more critical than later development.
- From birth, the type of emotional bonding and fulfilment of one's physiological needs and pleasant environment prepare the base for a healthy personality.
- On the other hand the negative attitude of the parents, lack of emotional and social stimulation leads to poor adjustment.

#### **12. Development proceeds from heteronomy (dependance) to autonomy (independent)**

#### **13. Principle of Predictability of Development:**

- It suggests that we can predict many characteristics regarding social, moral, emotional and physical aspects by analysing the previous pattern of growth of the child.