### **OUTLINE:**

### **INTRODUCTION**

## STAGES OF DEVELOPMENT

- 1. What is development?
- 2. Constructive Rhythm of Life and Bulb
- 3. The observations of Dr. Montessori in a child's development
  - Infancy 0-3
  - Childhood 6-12
  - Adolescence 12-18
  - *Maturity 18-24*
- 4. Metamorphosis
- 5. Unique to humans who take 24 years to completely mature
- 6.  $1^{st}$  and  $3^{rd}$  planes major transformations occur,  $2^{nd}$  and  $4^{th}$  plane comparatively calm phases.

## **INFANCY**

- **\*** PHYSICAL CHARACTERISTICS:
- 1. Head
- 2. Vision
- 3. Teeth
- 4. Digestion
- 5. Hair
- **PSYCHOLOGICAL CHARACTERISTICS:**
- 1. Powers of the Absorbent mind and sensitive Periods
- **❖** TASK
- **1**. To lay the foundation of his personality this is a special trait of the human being.
- **2.** Make an initial adaptation to the world and immediate environment.
- **ROLE OF ENVIRONMENT AND ADULT:**
- **1.** Preparation of the environment

- 2. The adults should guide and support him
- 3. CASA- Caters to the child's needs-language, movement and independence
- **4.** To observe and alleviate obstacles

### **CHILDHOOD**

#### PHYSICAL CHARACTERISTICS

- 1. Child loses milk teeth; texture of the hair is coarser.
- 2. becomes larger and leaner and loses chubbiness and baby fat.

### PSYCHOLOGICAL CHARACTERISTICS

- 1. Powers of imagination and the reasoning mind
- 2. Moral characteristics are taking shape
- 3. "Herd Instinct"

## \* TASK

1. Social adaptation, understanding how society is organized and functions

## **❖** ROLE OF ENVIRONMENT AND ADULT

- 1. Guide and a companion for this child.
- 2. Dr. Montessori suggests 'Cosmic Education' for this child.
- 3. An outdoor environment along with classroom is essential.

### **ADOLESCENCE**

# **\*** PHYSICAL CHARACTERISTICS:

- 1. Sudden spurt of growth in height
- 2. Hormonal and chemical changes
- 3. Changes in boys and girls

# **PSYCHOLOGICAL CHARACTERISTICS:**

- 1. Hormonal changes in the body-mood swings
- 2. aware of the self
- 3. *Empathy*

### TASK

1. To establish Identity and sense of self

## ROLE OF THE ADULT AND THE PREPARED ENVIRONMENT

- 1. Erd Kinder
- 2. Role of nature in the human survival and aware of human origin and civilization.
- 3. Self expression
- 4. Financial independence and real responsibility

## **MATURITY**

- **❖ PHYSICAL CHARACTERISTICS**
- **1.** Well built musculature
- **2.** Defined facial bone structure
- **PSYCHOLOGICAL CHARACTERISTICS:**
- 1. Strength of character
- **2.** Willing to work for his own good and that of others
- **3.** Deep sense of Morality
- **4.** Ready to take responsibility towards a future generation
- **\*** TASK:
- **1.** Making a contribution to society
- 2. Awareness of cosmic task
- **❖** ROLE OF EDUCATION
- **1.** *University life*
- 2. Financial independence
- 3. Individual is enabled

### **DETAILED THEORY EXPLANATION**

### **STAGES OF DEVELOPMENT:**

#### INTRODUCTION:

Humans are natural beings, we are similar to apes, but we have evolved and that's what makes us unique and we have an important role to play in the society. Human beings are unique because of their intelligence.

Newborns are entirely dependent on their parents/primary caregiver, also the child is getting used to the new environment, but we see that some children who live on the roads, go through many experiences and learn to be independent very soon, but we as parents restrict the child and overprotect them and totally underestimate them.

We also think that this journey is because of our teaching, but the truth is the enormous potential to create lies within the child.

It is true that a human child needs lot of care from his family, but nature has some intentions for a child. If we obey the laws of nature, the childhood needs will be met smoothly, nature guides the process of development.

We devote our life for our child and it is important for us to raise sensible individuals as it is important for the society and people around us.

The role of childhood is to create a responsible adult, because the child is the line that joins generations at each stage, and this immature human needs great care.

It is said that 24 is the age that a man becomes fully independent and it is considered THE LONGEST CHILDHOOD. These 24 years are used to prepare themselves for adulthood.

#### WHAT IS DEVELOPMENT?

Development is an irreversible and permanent change. It is a process of maturation. It is not just physical change; it is a reference to a change which allows for a new way of life. In human development, physical and psychological changes go hand in hand. There are 4 planes of development which we will further discuss in detail.

## CONSTRUCTIVE RHYTHM OF LIFE AND BULB

Every stage in a child's life is a REBIRTH, and Maria Montessori called the 4 planes a "constructive rhythm of life" where rhythm is equivalent to TIME. Every 6 years represent a plane/stage bound by time. She described it with a diagram which

represents the 4 planes of development; there is a significant number between every 6 years. She compares the beginning of life to a flame burning with potential; since its in red it represents heat (energy of nature within the child) she uses an even stronger and meaningful word called POTENTIAL and that represents the unlimited inept capacity of the child.

In every stage, the child's need is different and we have to adjust accordingly and support them to arrive at a happy adulthood

She also says that we need to help the child become good humans who will take up the responsibility for humanity and the world, because the main goal of the child is "TO SUPPORT AND HELP OTHERS AROUND THEM"

We must always pave a path for their development and never be an obstacle in it.

### THE OBSERVATIONS OF DR. MONTESSORI IN A CHILD'S DEVELOPMENT

As briefly discussed in the above paragraph Dr. Montessori explained a child's Development through 4 planes and an illustration of a bulb, now we'll further See about it in detail.

There are 4 stages/planes:

- A) Infancy 0-3
- B) Childhood 6-12
- C) Adolescence 12-18
- D) Maturity 18-24

## **METAMORPHOSIS**

It is a complete and total change, but the conditions they go through is different at each Stage, The child does not grow in a uniform way day by day, at the same rate, in growth There are crises, somewhat like the metamorphosis of the insects.

*In the child the changes are not so obvious but the process is similar.* 

The child passes through certain phases, each of which has its own particular needs.

The characteristics of each are so different that the passages from one phase to the other

Has been described by certain psychologists as "rebirth" (NEW LIFE)

# **HUMANS ARE UNIQUE: WE TAKE 24 YEARS TO COMPLETELY MATURE**

We are natural beings, we are similar to apes but we have evolved and we are unique and So is the role we play in the society. Human beings are unique because of our intelligence And ability to perceive the world, other animals and few mammals take very less time to Mature and live independently, ex; the calf starts walking and playing actively within Hours of birth and is ready to face the world, where as we humans when we are born are Entirely dependent on our parents and family, the newborn is literally helpless.

The human child needs a lot of care and attention, it takes 24 years for us to become Independent, it is considered as a LONGEST CHILDHOOD.

The child takes time to get used to the environment, but every child is guided by nature

To grow towards adulthood, Nature has some intentions for a child, and nature guides the

Process of development, if we obey the laws of nature the childhood needs will be met

Smoothly, these 24 years is preparation that's needed to become an adult.

Montessori's vision was to see a cohesive society and she believed a lot in peace and she

Believed that it can be achieved solely through a child.

This is such a marvelous vision of humanity. After passing all the stages, the child arrives At 24, and support those around him and this process is called ADAPTATION.

# 1st and 3rd PLANES MAJOR TRANSFORMATION OCCUR

The first plane is INFANCY (0-6) and lots of major changes occur like:

Self construction, birth of the personality, development of human movement, human

Language and this is the stage the child starts to wonder about his environment and starts

To ask lots of questions as to WHAT is that, what is this? They become quite inquisitive.

They also go through physical changes (Head, hair, teeth, digestion and skin)

Some of the psychological changes that they go through are (Intelligence information,

Powers of the child, absorbent mind and sensitive periods)

Major transformation also occurs in the 3<sup>rd</sup> plane too, which is Adolescence (12-18)

In this stage the child is entering teenage which is a crucial stage, this stage is quite Similar to infancy. They go through experiences like, the search for the self, creation of Identity, preparation for parenthood,

Roles in family and society and the major question that arises is "Who am I?

And the physical transformations that occur are hormonal changes, sleep patterns,

Rapid growth in bones and puberty; the psychological changes are deep empathy,

Emotional sensitivity, vulnerability, creativity, and search for respect

In both these planes major transformations occur.

# 2<sup>nd</sup> and 4<sup>th</sup> PLANES ARE COMPARITIVELY CALM PHASES:

In these two planes there are no major transformations, but they are comparatively Calm phases.

2<sup>nd</sup> plane emphasizes on creation of a social being, period of uniform development,

Human society, intellectual exploration, and the main question of this plane is why?

Head, hair, teeth, strength, robust are the physical transformations that are seen,

And the psychological transformations are a reasoning mind and creative imagination.

The  $4^{th}$  plane is quite similar to the  $2^{nd}$  plane and there is an evident sense of calm present here too. Some of the physical transformations that occur in this plane are responsibility for the self and others, capable of living alone, search for self confidence and stability, and the main question of this plane is WHAT MY CONTRIBUTION TO THE SOCIETY IS?

And by the time they find out that answer their identity is established.

The psychological transformations are choice of human work, birth of responsibility and role in family and society.

*Now let us see the four planes more extensively:* 

#### **INFANCY:**

*Infancy is the first stage of life (0-6)* 

At first the physical characteristics are formed:

**HEAD**: A baby is born with a huge head and a smaller body; it is not proportionate at birth.

So the child takes time to balance itself. There is a soft spot at the top of the skull and is not

Completely developed and there fibrous membranes that separate the cranial bones.

These membranous areas are called fontanels. They allow free movement between the bones and facilitate vaginal birth.

**VISION:** A baby's vision at birth is blurred, they can't see much during the initial days.

Later on at until 3 months they can see variations of dark and light shades of gray; also they can focus only up to 10 inches.

**TEETH:** Usually babies are born with no teeth, in some rare cases we see that some babies are born within one or two teeth. Babies are born with strong gums with a set of teeth underneath which later erupts to form their primary teeth.

**DIGESTION:** When a baby is born its digestive system is inefficient, so the digestion is also not that great, but breast milk is easily digested, it is also a great laxative which relaxes the bowels. After 6 months their digestive system is more improved.

**HAIR:** Some babies are born with lots of hair, while some are born with scanty or no hair at all, their hair comes in later. Some baby's loose hair during first 6 months, some don't and later hair starts growing well.

## **PSYCHOLOGICAL CHARACTERISTICS:**

#### POWERS OF THE ABSORBENT MIND AND SENSITIVE PERIODS:

"Before the children turn 3, the functions are being created; after 3 they develop."

Maria Montessori, the Absorbent Mind

Montessori believed the period from birth to 6 is the most important time of life.

The child learns more in this period than any other, but she believed that the child possessed an internal pattern of development.

Sensitive periods and the absorbent mind are two aids to the child's pattern of development.

Between 3-6 years the conscious slowly takes over establishing memory, the power to understand, and the ability to reason.

We call this process the absorbent mind, because the child absorbs information about his or her environment unconsciously. These two periods, birth to 3 and 3 to 6, are called sensitive periods. The sensitive period is the pattern the phenomenon of the absorbent mind follows. The joy in which the child has in these sensitive periods is his internal motivation to learn and development.

TASK: To lay the foundation of his personality-this is a special trait of the human being,

And make an initial adaptation to the world and immediate environment.

### ROLE OF ENVIRONMENT AND ADULT:

As adults we need to prepare a suitable and a comfortable environment for the child, we should guide and support them.

We ought to cater to the child's needs-language, movement and independence.

We also have to observe them well and remove any obstacles in their path to development.

### **CHILDHOOD:**

PHYSICAL CHARACTERISTICS: The milk tooth (first tooth) falls of and this is a sign of moving on from being an infant to entering childhood.

His body changes rapidly, he is a new capable human with missing teeth, and hard bones, his body becomes long and lanky, larger and leaner, loses chubbiness and fat.

They constantly keep challenging themselves, they keep jumping, exploring.

# PSYCHOLOGICAL CHARACTERISTICS

They move on from taking interest in the environment towards the whole world.

The get two powers – power of limitless imagination and this is an age of reasoning,

They seem to have a lot of questions and tend to argue a lot, also they have a solution to every problem.

This is an age of intellect and they ask why? How?

They need to know the source of power.

They learn to live in the society ,figure things out, being fair minded, very able and capable of expressive language.

They are attracted to jokes and grand stories and love to laugh without any reason.

Morals are being built, and they also tend to follow and work with their peers or any group that they follow, this is what is called "HERD INSTINCT"

TASK:

Social adaptation,

*Understanding how society is organized and functions.* 

ROLE OF ENVIRONMENT AND ADULT:

We need to be a guide and a companion for the child

Montessori suggests" COSMIC EDUCATION" for this child, it means the interconnectedness of all things.

She also says an outdoor environment along with classroom is essential for the child to pique their interest.

### **ADOLESCENCE:**

In this stage they start worrying about themselves a lot, the focus shifts from outer world to their self and looks. The shift is inward.

# PHYSICAL CHARACTERISTICS:

There is a sudden spurt of growth in height, which indicates the onset of puberty.

Hormonal and chemical changes occur, their body parts develop, their intellect is failing and their hormones are flushing.

We can see changes in girls, which is very evident and in boys as well, which isn't clearly evident but the process is natural.

### PSYCHOLOGICAL CHARACTERISTICS

They start worrying about themselves, the focus shifts from outer world to their self and looks. The shift is inward, they ask WHY? They need an identity they need to know WHO AMI?

Their intellect is failing, hormones are flushing, the don't sleep well.

Most often, teenagers are misunderstood, all they want is to be respected for their choices, opinions, appearance, they are very much like infants who need more love, care and affection. They just need unconditional acceptance.

They are incredibly moody and have episodes of mood swings, because of the hormonal changes.

Their interest move towards the opposite sex, and sexual identity, and also co-existence is very important to learn about respecting either gender.

Forcing makes them hate adults, friendly attitude is what works with them.

They have heroes and role models they look up to.

They are ready to take upon new challenges of the new generation, also ready to be guided by an adult who understands and trusts them.

They feel the need to be independent and experience life on their own.

They are quite aware of themselves and learn to empathize with those around them.

TASK:

To establish identity and sense of self.

ROLE OF THE ADULT AND THE PREPARED ENVIRONMENT:

As adults we need to teach them the role of nature, human survival, and to be aware of human origin and civilization

We also need to support them and ask them to be expressive.

We need to teach them about how to be financially independent and the real responsibilities of the world.

## **MATURITY:**

This plane is a calm plane of growth and development.

PHYSICAL CHARACTTERISTICS:

At this stage our body is well developed, we have a well built musculature, and a defined facial bone structure.

Physically they are ready to take up any challenge, ready to take up responsibility for work.

PSYCHOLOGICAL CHARACTERISTICS:

We realize the strength of our character at this age, we are able to control are emotions.

We learn to deal with the realities of life.

We understand the value of money and learn to empathize with people around us.

We are willing to work for our own good and that of others.

We gain a deep sense of morality, ready to take responsibility towards future generations.

TASK: To make a contribution to society.

# **ROLE OF EDUCATION**

We choose the subject of our interest, go to our chosen university, study that and make a career out of it, which leads to financial independence.

This way the individual is fully enabled to start living full fledged ADULT LIFE.

## **CONCLUSION:**

The 4 planes of development is thoroughly explained in the above assignment.

Starting from birth and towards adulthood.

It is the holistic frame work upon which Montessori built her vision of development psychology

Montessori education encourages the development of the whole child, children are on a pathway. The theory of the planes of development recognizes that path, and supports their journey, it supports human development.

# QUOTE

"THE CHILD IS ENDOWED WITH UNKNOWN POWERS WHICH CAN GUIDE US TO A RADIANT FUTURE. IF WHAT WE REALLY WANT IS A NEW WORLD, THEN EDUCATION MUST TAKE AS ITS AIM TO DEVELOP THESE HIDDEN POSSIBILITIES.

- THE ABSORBENT MIND, MARIA MONTESSORI.