

PIAGET'S COGNITIVE DEVELOPMENT THEORY

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➤ INTRODUCTION:

- Jean Piaget's theory of cognitive development suggests that children move through **four** different stages of **mental development**. His theory focuses on not only on understanding how children acquire knowledge; but also on understanding the nature of intelligence.

➤ Contd...

- Human mind has two types of structure-

I. Cognitive structure.

II. Cognitive functioning.

Here in this theory one of the most important word is '*Schema*'.

Principles Basic Themes of the Theory:

- **1. Organization:** Ongoing process of arranging information and experience into mental system or categories.
- **2. Schema:** Mental system or categories of perception and experience. An unit of intellect. Such as, sucking, looking, reaching, grasping etc. all are a particular schema which are developed by birth.

▶ Contd...

- 3. Assimilation: Fitting new experience or information into existing schemes.
- 4. Accomodation: Altering existing schemes or creating new ones in response to new information.
- 5. Equilibration: Search for mental balance between cognitive schemes and information from the environment.

▶ Contd...

- 6. Dis-equilibrium: In Piaget's theory, the '*out of balance*' state that occurs when a person realizes that his or her current ways of thinking are not working to solve a problem or understand a situation.

Assimilation → Equilibration → New situation
→ Dis-equilibration → Accommodation

Stages of Cognitive Development:

- Through his observations of his children, Piaget developed a stage theory of intellectual development that included four distinct stages:
 - 1. The Sensorimotor stage (Birth to 2 Years):
 - ❖ The infant knows the world through their movements and sensations.
 - ❖ Children learn about the world through basic actions such as sucking, grasping, looking and listening.

➤ **Contd...**

- ❖ Infants learn that things continue to exist even though they cannot be seen (object permanence).
- ❖ They are separate beings from the people and objects around them.
- ❖ They realize that their actions can cause things to happen in the world around them.

2. The Pre-Operational Stage (2 to 7 years):

- Major characteristics and developmental changes are:
 - ❖ Children begin to think symbolically and learn to use words and pictures to represent objects.
 - ❖ Children at this stage tend to be egocentric and struggle to see things from the perspective to others.
 - ❖ While they are getting better with language and thinking, they still tend to think about things in very concrete terms.

3. The Concrete Operational Stage (7 to 11 Years)

- Major characteristics and developmental changes are:
 - ❖ During this stage, children begin to think logically about concrete events.
 - ❖ They begin to understand the concept of conservation; that the amount of liquid in a short, wide cup is equal to that in a tall, skinny glass, for example.

▶ Contd...

- ❖ Their thinking becomes more logical and organized, but still very concrete.
- ❖ Children begin using inductive logic or reasoning from specific information to a general principle.

▶ 4. The Formal Operational Stage (12+ years):

- Major characteristics and developmental changes are:
 - ❖ At this stage, the adolescent or young adult begins to think abstractly and reason about hypothetical problems.
 - ❖ Abstract thought emerges.

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- ❖ Teens begin to think more about moral, philosophical, ethical, social and political issues that require theoretical and abstract reasoning.
- ❖ Begin to use deductive logic or reasoning from a general principle to specific information.

➤ Educational Implications:

- A focus on the process of children's thinking not just its products.
- Recognition of crucial role of the children's self – initiated, active involvement in learning activities.
- A de-emphasis on practices aimed at making children adult like thinking.
- Acceptance of individual differences in developmental progress.

Contd...

- Emphasis on discovery approach in learning.
- Curriculum should provided specific educational experience based on children's developmental levels.
- Arrange classroom activities so that they assist and encourage self learning.
- Social interaction have a great educational value for Piaget. Positive social actions, therefore should be encouraged.

Contd...

- Instruction should be geared as per the level of students capacity.
- Simple to complex concepts.
- Co-curricular activities has equal importance as the curricular experiences for cognitive development.
- Major goals of Piaget's cognitive development are- a. Crucial thinking. b. Creative thinking.



THANK YOU

