

## Reading Passage (253 words ): Piaget's Stages of Cognitive Development

The first of Piaget's stages of cognitive development is the "sensorimotor stage". This stage occurs around 0-2 years. It is essentially a stage of practical discovery, which occurs by interaction with the environment through the senses and by using motor skills. Piaget contends that a baby is born with no sense of "object permanence". This is the understanding that objects continue to exist in their own right when they are not being directly manipulated or immediately perceived. Piaget conducted a number of experiments to defend the conclusion that babies have no sense of object permanence.

The second of Piaget's stages is the "pre-operational stage". This stage lasts from around 2 - 7 years. Piaget contended that at this time a child fails to "conserve". This is basically the understanding that things remain constant in terms of number, quantity and volume regardless of changes in appearance.

The next stage is the "concrete operations" stage which lasts from about age 7 - 11 years. In this stage, children can perform operations requiring logic such as conservation. But this ability only holds for what he called concrete situations. That is, the child is only able to perform mental actions on actual objects and not in abstract terms.

Beyond 11 years the child is said to enter the final stage in cognitive development which is the "formal operations" stage. In this period, the child is able to think and reason scientifically. The child is also able to imagine and deliberate that which has never actually been encountered.

Writing Prompt: How does the information in the lecture contradict the points made in the reading passage?

## Lecture (371 words): Criticisms of Piaget's Theories

With such a brilliant mind as Piaget, there are those who will challenge his ideas. Among others, there are three criticisms of Piaget's Stages of Cognitive Development.

Piaget claimed that failure of object permanence is characteristic of the sensorimotor stage, which can be observed until eighteen months. However, many studies have been conducted to dispute this finding. Baillargeon (1987) conducted one such experiment in which four and a half-month-old babies were shown a model of a stage upon which was a box. In front of the box was a screen which was initially laid flat so that the box could be seen clearly. The screen was lifted upwards to hide the box while the experimenter secretly removed the box. The infant showed expressions of surprise when the screen moved backwards passing through the space where the box was supposed to be.

In reference to Piaget's ideas that children are not able to conserve during Piaget's second stage of cognitive development which he called the Pre-Operational Stage, some critics argue that the instructions given to the children during the experiments were perhaps difficult to understand and easily misunderstood. Piaget asked the same questions more than once, and it has been argued that this could quite possibly have caused confusion as it may have led the children to believe that the original answer they gave was incorrect. In fact, Samuel and Bryant recreated Piaget's conservation experiments and asked only questions, and both experiments produced very different results,

And with respect to Piaget's concrete and formal operations stages which last from 7 to 11 and 11 years and beyond respectively, Piaget saw cognitive development as happening in discrete stages at discrete time lines. This has been widely disputed in contemporary psychology. Even Piaget himself, in 1970, said that cognitive development was more like a "spiral" process of changes than one of discrete stages. Meadows found inconsistencies in the performance of children within the stages of development. Her findings showed that cognitive progression does not necessarily occur at exactly the ages Piaget predicted. Some cognitive processes may in fact develop at different speeds. The stages are now seen by many psychologists as overlapping and therefore more continuous than discrete in nature.