Introduction

Piaget concluded that there were four different stages in the cognitive development of children.

Sensory Motor Stage (Birth - 2yrs)

Piaget's ideas surrounding the Sensory Motor Stage are centered on the basis of a 'schema'. Schemas are mental representations or ideas about what things are and how we deal with them. Piaget deduced that the first schemas of an infant are to do with movement. Piaget believed that much of a baby's behavior is triggered by certain stimuli, in that they are reflexive. A few weeks after birth, the baby begins to understand some of the information it is receiving from it's senses, and learns to use some muscles and limbs for movement. These developments are known as 'Action Schemas':

- Egocentric', Unable to consider anyone else's needs, wants or interests.
- Gains Knowledge about objects & how they can be manipulated.
- Acquiring information about self and the world, they begin to understand how things can cause/affect another.
- Develops simple ideas about time and space.
- Objects - Ability to build up mental pictures of objects around them, and what can be done with the object. Large amounts of their experience is surrounding objects. What the objects are is irrelevant, more important is the baby ability to explore the object and see what can be done with it. At age of 8-9 months, they're more interested in an object for it's own sake.
- 'Object Permanence' Around 8-12 months, begin to look for objects hidden. This view has been challenged by Tom Bower, who showed that babies from 1-4 months have an idea of Object Permanence.

Piaget discovered that in the initial stage of this development, when an object is taken from their sight, babies act as though the object has ceased to exist.

Pre-Operations Stage (2yrs-7yrs)

- Develops "Vocabulary", although far from 'logical thought'.
- 'Egocentric', meaning they only consider things from their own point of view, and imagine that everyone shares this view.
- Gradual 'Decentering' occurs, where they stops believing they are the center-of-attention and understand that others can be at the center.
- 'Animism' is where they believe that everything has some kind of consciousness. Example child often believes that a car won't start because it is tired or sick. They simply assumes that everyone/everything is like them. And since they feel pain and emotions, so must everything else.
- Develops 'Symbolism' where a thing can symbolize something else.
- Develops 'Moral realism', where they understanding the difference between right and wrong (shared by everyone else). Due to this aspect they begin to respect and insist on obedience, but are still unable to take motives into consideration.

Diagram

![Diagram Image]

By David Pollack (Davidpol) cheatography.com/davidpol/
Published 16th August, 2015.
Last updated 12th May, 2016.
Page 1 of 2.

Sponsored by Readability-Score.com
Measure your website readability!
https://readability-score.com
### Concrete Operations Stage (7yrs-11yrs)

During this stage, the thought process becomes more rational, mature and ‘adult like’, or more ‘Operational’. The process is divided by Piaget into two stages; the Concrete Operations, and the Formal Operations. The child develops logical thought about an object, if they are able to manipulate it. Piaget claims that prior to this stage, children’s ideas about different objects are formed and dominated by the appearance of the object. For example, there appears to be more blocks when they are spread out, than when they are in a small pile. Children gradually develop the ability to ‘conserve’, or learn that objects are not always the way that they appear to be. This occurs when children are able to take in many different aspects of an object, simply through looking at it. Children are able to begin to imagine different scenarios, or ‘what if’ something were to happen. This is because they now have more ‘operational’ thought. Children are generally first able to conserve ideas about objects with which they are most comfortable.

- **Conserves**. This means that if things are changed, they may still remain as they used to be. For example, if they spread out the pile of blocks, there are still as many blocks as before, even though it looks different!
- Develops logical thoughts about an object, if they are able to manipulate it. By comparison, however, in the Formal Operations stage, the thoughts are able to be manipulated and the presence of the object is not necessary for the thought to take place.
- Decline in belief in animism and egocentric thought.

### Formal Operations Stage (11yrs-16yrs)

- The structures of development become the abstract, logically organized system of adult intelligence. When faced with a complex problem, the adolescent speculates about all possible solutions before trying them out.
- "Abstraction", permitting reasoning beyond a world of concrete reality and to operate logically on symbols and information that are not real.
- There are 2 major characteristics of formal operational thought.
  - ‘Hypothetic-deductive Reasoning’. When faced with a problem, adolescents come up with a general theory of all possible factors that might affect the outcome and deduce from it specific hypotheses that might occur. They will systematically treat these hypotheses to see which ones do in fact occur in the real world. Thus, adolescent problem solving begins with possibility and proceeds to reality.
  - ‘Propositional’ where Adolescents can focus on verbal assertions and evaluate their logical validity without making reference to real-world circumstances.

---

**By David Pollack (Davidpol)**  
cheatography.com/davidpol/  
Published 16th August, 2015.  
Last updated 12th May, 2016.  
Page 2 of 2.  

Sponsored by **Readability-Score.com**  
Measure your website readability!  
https://readability-score.com