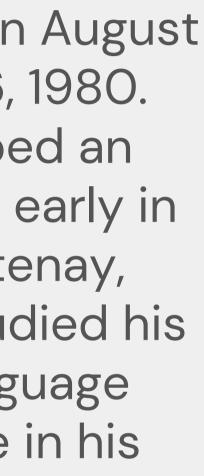
# JEAN PIAGET THEORY & STAGES OF COGNITIVE DEVELOPMENT

Presentation by Yvette Rock

KNOWLEDGE CANNOT BE CONCEIVED AS PREDETERMINED EITHER IN THE INTERNAL STRUCTURES OF THE SUBJECT--THEY ARE DUE TO **AN EFFECTIVE AND CONTINUOUS CONSTRUCTION; OR IN THE PRE-EXISTING CHARACTERISTICS OF OBJECTS, SINCE THEY ARE ONLY KNOWN** THROUGH THE MEDIATION OF THESE STRUCTURES AND THE LATTER ENRICH THEM B INCORPORATING THEM..." (PIAGET, 1972 P. 14).

# ABOUT

Piaget was born in Neuchâtel (Switzerland) on August 9, 1896, and died in Geneva on September 16, 1980. He was brilliant as a young child and developed an interest in epistemology and psychoanalysis early in his career. In 1923, he married Valentine Châtenay, and the couple had three children. Piaget studied his own children's intellectual, cognitive, and language development which played an important role in his search on cognitive development.



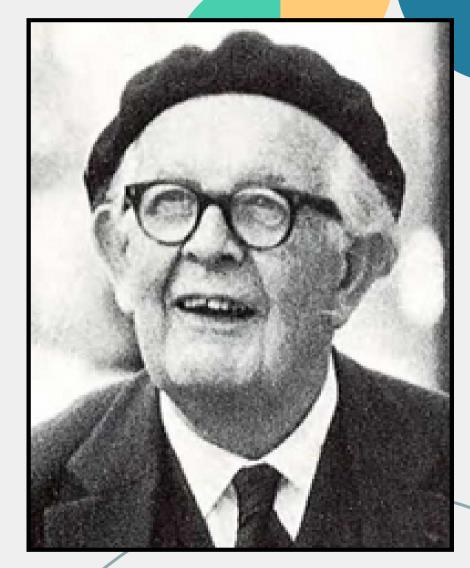
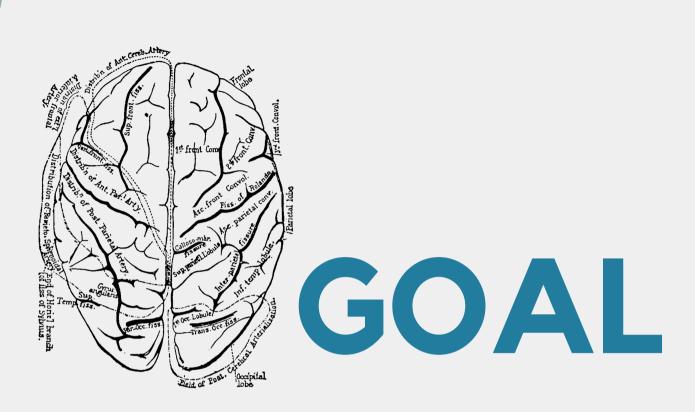


Fig. 1 www.wikipedia.org



Piaget's one main goal when he researched genetic epistemology and developmental psychology was to uncover how humans grew in knowledge from childhood to adulthood.



## **4 STAGES OF DEVELOPMENT\***

SENSORIMOTOR (BIRTH - 18-24 MONTHS)

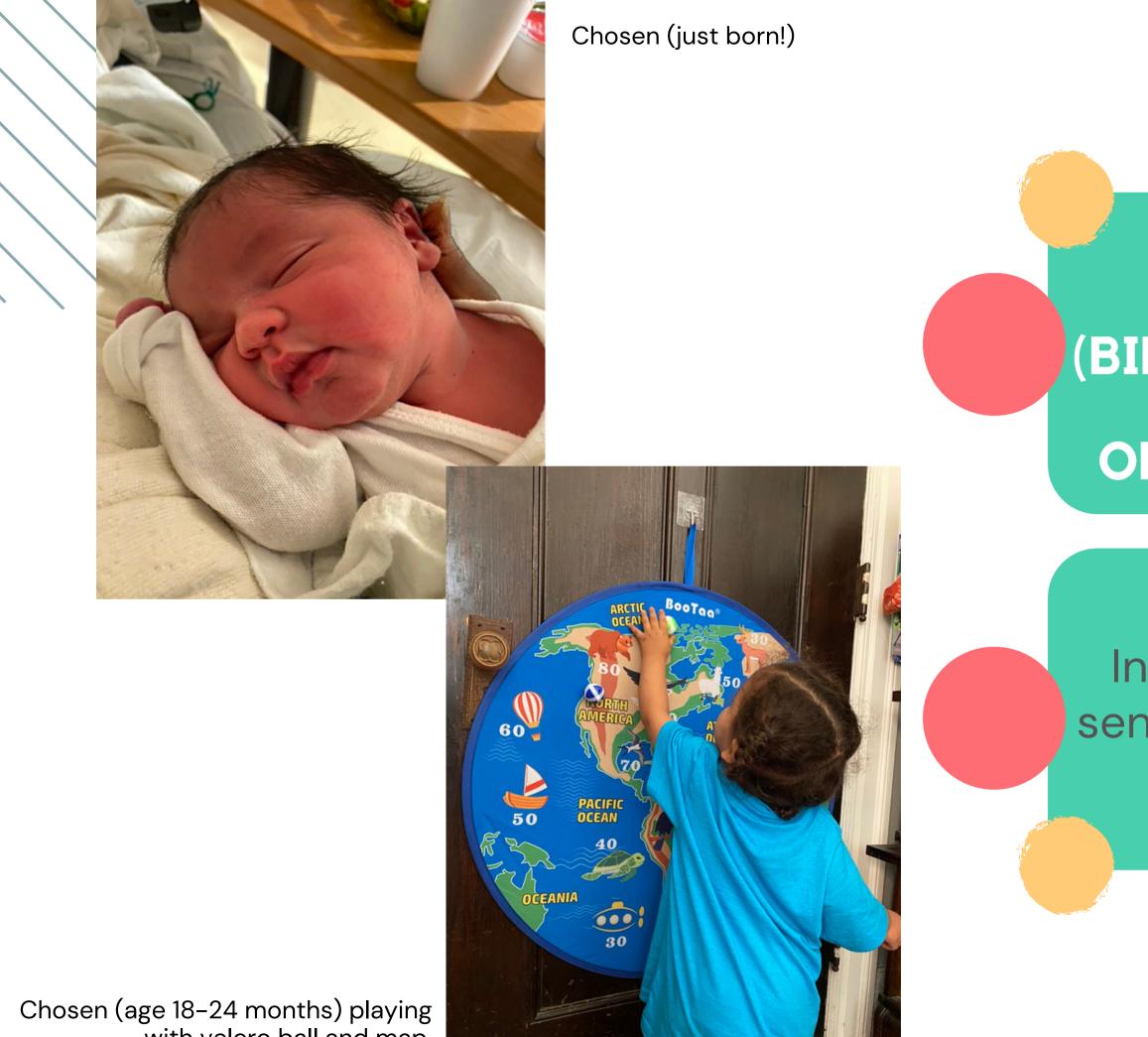
> PREOPERATIONAL (2 - 7 YEARS OLD)

CONCRETE OPERATIONAL (7 - 11 YEARS OLD)

FORMAL OPERATIONAL (11-15 YEARS OLD) "Jean Piaget's theory of cognitive development suggests that children move through four different stages of intellectual development which reflect the increasing sophistication of children's thought" (McLeod, 2024).

Contemporary psychologists will attest that Piaget's contributions revolutionized the field and that his ideas are very complex and are often simplified for our general understanding.





with velcro ball and map.

#### **STAGE 1 SENSORIMOTOR** BIRTH - 18-24 MONTHS) **GOAL OBJECT PERMANENCE**

Infant focuses on physical sensations and on learning to coordinate their body.

McLeod, 2024.



Chosen (age 2.5 playing with a friend).

> Chosen (age 2 creating forms using dry erase marker).





Toddlers and young children begin to use imaginary play, think about things symbolically, and enjoy playing with other children.

**Piaget spent much of his life studying "how** children form their knowledge structures in the world." (Peterson, 2017).

> STAGE 2 PREOPERATIONAL (2 - 7 YEARS OLD)GOAL **SYMBOLIC THOUGHT**

> > McLeod, 2024.

#### "PIAGET CONSIDERED THE CONCRETE STAGE A MAJOR TURNING POINT IN THE CHILD'S COGNITIVE DEVELOPMENT BECAUSE IT MARKS THE BEGINNING OF LOGICAL OR OPERATIONAL THOUGHT." McLeod, 2024.



Child can use logical rules to think about concrete events and begin to understand concept of conservation. They also become less egocentric.

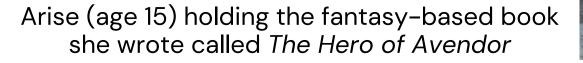
Light (age 11) assembling train and learning how to operate it.

STAGE 3 CONCRETE OPERATIONAL (7 - 11 YEARS OLD) GOAL SYMBOLIC THOUGHT

#### "ACCORDING TO PIAGET, CHILDREN ARE NOT PASSIVE RECIPIENTS OF INFORMATION; INSTEAD, THEY ACTIVELY EXPLORE AND INTERACT WITH THEIR SURROUNDINGS." McLeod, 2024.



Light (age 13) and Temple (age 11) using Legos to create a portrait.





STAGE 4 FORMAL OPERATIONAL (11-15 YEARS OLD) GOAL FORMAL OPERATIONAL

Adolescents begin to think in abstract manner and have capacity for higher-thinking reasoning.

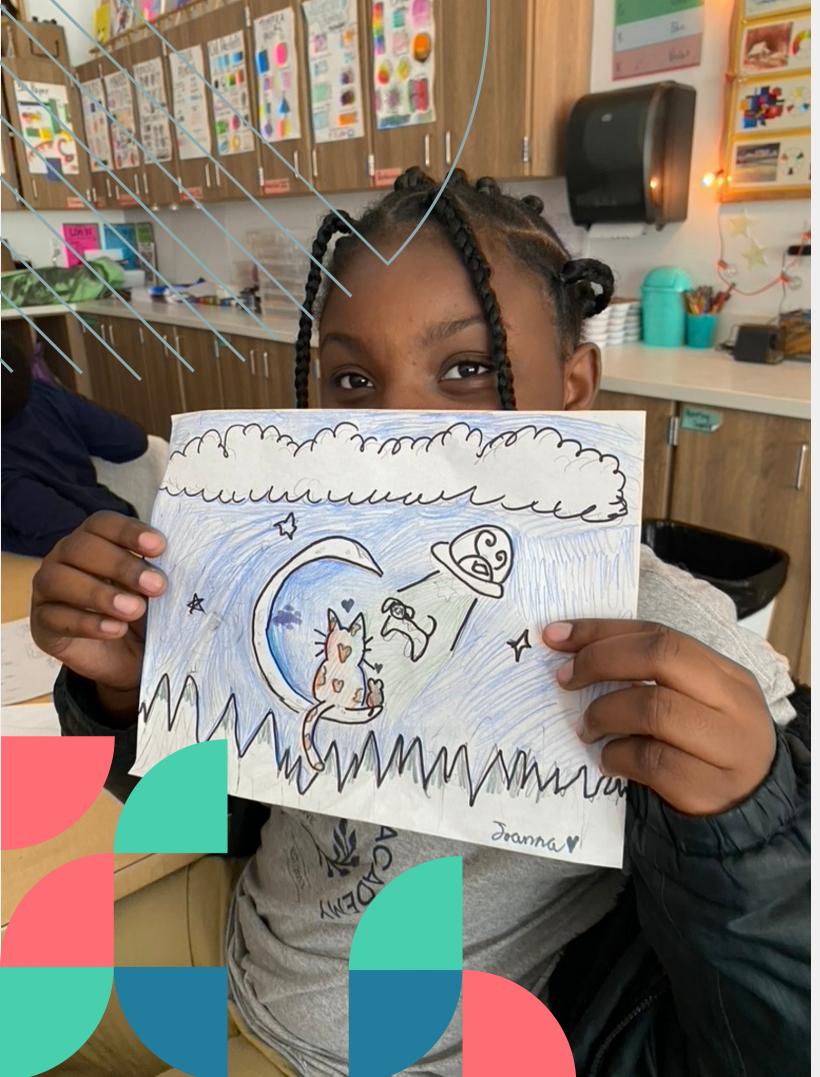
McLeod, 2024.

# WHAT IS **COGNITION?** WHAT DO **OTHERS SAY ABOUT PIAGET?**

- "The mental action or process of acquiring knowledge and understanding through thought, experience, and the senses."\* Cognitive development is affected by the relationship between our environmental effects and inborn abilities.
- Cognition has two "complementary aspects, which Piaget called assimilation and accommodation." (Flavell, 2022, p. 5). Assimilation has to do with the application of known knowledge whereas accommodation means shifting or adapting known knowledge to make room for new information, often triggered by external events or objects.

\*Definition of cognition from Google/Oxford Languages.

• There are some challenges to Piaget's theories (even Piaget would later question his ideas)! Fundamentally, it is no longer thought that the changes that occur throughout childhood are "stagelike and dramatic," as Piaget thought, but instead can be unpredictable and less methodical. (Flavell, 2022 p. 8.)



## HOW CAN WE APPLY PIAGET'S **THEORIES IN THE CLASSROOM?**

Elementary student from Detroit Achievement Academy holds up her imaginary landscape drawing.

• Many of his theories are currently being put into practice, including through curriculum development. According to Piaget, teachers should aid children in navigating each stage of development by challenging their known schemas using concrete materials and creating opportunities for discovery.

• We can apply Piaget's theories by being aware of our students' cognitive stage of development so that we can create relevant and accessible lesson plans that both challenge and nurture their learning.



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#### **NICKERSON**

#### PETERSON



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