Jean Jacques Piaget
Theory of Cognitive Development and Constructivist Theory

Background

- Jean Piaget was born in 1896 in Neuchatel, Switzerland and died in 1980.
- He is known for his enormous contribution to the study of developmental psychology.
- His work is divided into four periods.

FIRST PERIOD (Early to late 1920’s)

- Studied children’s language, conception of physical world and evolution of moral judgments.
- Found children to be egocentric in their thinking.
- Developed the semi-clinical interview.

SECOND PERIOD (Late 1920’s to early 1930’s)

- Looked closely at the development of intelligence in infancy and early childhood.
- Developed ingenious non-verbal tests to explore young children’s conceptions of reality.
- Saw children constructing reality through the processes of assimilation and accommodation, creating conservations.

THIRD PERIOD (Late 1930’s to the 1960’s)

- Introduced a logical model to describe the course of mental development.
- Sensorimotor stage: first two years of life. Child established constants (conservations) through physical explorations of her environment.
  - Sub-stage
    - (i) Reflexive Actions: (0-1 month)
    - (ii) Primary Circular Reactions: (1-4 months)
    - (iii) Secondary Circular Reactions: (4-8 months)
    - (iv) Co-ordination of Secondary Circular Reactions: (8-12 months)
    - (v) Tertiary Circular Reactions: (12-18 months)
    - (vi) Inventive Abilities via Mental Combinations: (18-24 months)

- Pre-operational stage: From about age 2 to 6 or 7. The child reconstructs the world at a symbolic level with language.
- Concrete operational stage: From about six or seven to about eleven or twelve. Child again reconstructs the world on the basis of rules, classes, numbers and relations.
- Formal Operations stage: From about eleven or twelve. Child starts to deal with abstractions and how things might be but are not.

FOURTH PERIOD (1960’s through death in 1980)

- Looked at memory and imagery.

IMPORTANCE OF HIS WORK

- Intelligence develops in a series of age related stages that cannot be hurried.
- Knowledge is always a construction. It always involves both the mental activity of the child and information from the environment.

Constructivist Theory

- Teaching actively engages a child in tasks designed to create personal meaning.
- Knowledge is constructed by the learner rather than transferred from the teacher to the child.
- Individuals learn through adaptation.
  - (Gordon and Browne page 147)

Constructivist Theory

- The teacher's role is to build an environment that is stimulating and conducive to the process of constructing meaning and knowledge.
- The teacher becomes the facilitator.
  - (Gordon and Browne page 147)

Applying Cognitive Theory

- Materials
  - Open ended
  - Sand activities
  - Water activities
  - Basic art and construction materials
  - Guided
    - Cooking with recipes
    - Conducting experiments
    - Classification and seriated materials
  - Self-correcting
    - Puzzles
    - Matching games

Applying Cognitive Theory

- Scheduling
  - Lots of time to explore
  - Lots of time to play
  - Lots of time for children to “act out” their own ideas
  - Lots of time for imitation of adult given ideas
  - Songs, fingerplays, stories
Applying Cognitive Theory

Teachers
- Need to understand and agree with a developmental point of view.
- Need to encourage thinking and learning
- Need to refrain from telling children exactly how to solve a problem

Awareness
- Believe that ALL children have the capability to reason and be thinkers if they are given appropriate materials for their stage of development.
- Remember that young children:
  - Think differently from adults.
  - Need many materials to explore.
  - Think in a concrete manner and often cannot think our things in their heads.
  - Come to conclusions and decisions based on what they see, rather than on what is sensible
  - Need challenging questions and the time to make their own decisions and find their own answers.

Piaget’s Key Ideas
- Work with your group to “construct” your understanding of Piaget’s Key Ideas.
- Task 1
  - Match each term to the description.
- Task 2
  - Match the developmental stage with what happens at that stage.