

Champion of Children's Ideas

By Jean Piaget

The legacy of Jean Piaget to the world of early childhood education is that he fundamentally altered the view of how a child learns. And a teacher, he believed, was more than a transmitter of knowledge — she was also an essential observer and guide to helping children build their own knowledge.

As a university graduate, Swiss-born Piaget got a routine job in Paris standardizing Binet-Simon IQ tests, where the emphasis was on children getting the right answers. Piaget observed that many children of the same ages gave the same kinds of incorrect answers. What could be learned from this?

Piaget interviewed many hundreds of children and concluded that children who are allowed to make mistakes often go on to discover their errors and correct them, or find new solutions. In this process, children build their own way of learning. From children's errors, teachers can obtain insights into the child's view of the world and can tell where guidance is needed. They can provide appropriate materials, ask encouraging questions, and allow the child to construct his own knowledge.

Piaget's continued interactions with young children became part of his life-long research. After reading about a child who thought that the sun and moon followed him wherever he went, Piaget wanted to find out if all young children had a similar belief. He found that many did indeed believe this. Piaget went on to explore children's countless "why" questions, such as, "Why is the sun round?" or "Why is grass green?" He concluded that children do not think like adults. Their thought processes have their own distinct order and special logic. Children are not "empty vessels to be filled with knowledge" (as traditional pedagogical theory had it). They are "active builders of knowledge—little scientists who construct their own theories of the world."

For more information about the work of Jean Piaget: *A Piaget Primer: How a Child Thinks* by Dorothy G. Singer and Tracey A. Revenson (Plume Books, 1996; \$12.95).

Piaget's Four Stages of Development

SENSORIMOTOR STAGE:

Approximately 0–2

Infants gain their earliest understanding of the immediate world through their senses and through their own actions, beginning with simple reflexes, such as sucking and grasping.

PREOPERATIONAL STAGE:

Approximately 2–6

Young children can use symbols for objects, such as numbers to express quantity and words such as mama, doggie, hat and ball to represent real people and objects.

CONCRETE OPERATIONS:

Approximately 6–11

School-age children can perform concrete mental operations with symbols—using numbers to add or subtract and organizing objects by their qualities, such as size or color.

FORMAL OPERATIONS:

Approximately 11–Adult

Normally developing early adolescents are able to think and reason abstractly, to solve theoretical problems, and answer hypothetical questions.

Applying Piaget's Theory in Your Program

The art of applying Piaget's theories in your program is in making children's experiences hands-on and concrete. Remember that children need to explore the nature of things through trial and error.

- Introduce unusual materials to encourage exploration.
- Add aluminum foil and flashlights to the block area. How can you use these with the blocks?
- Encourage children to talk about changes they notice when manipulating objects.
- Invite children to learn more about the world through field studies and trips