

abilities, will feel some degree of inferiority when they encounter specific skills that they cannot master.

Children need and want real achievement. Children achieve a sense of industry when they have access to tasks that need to be done and they are able to complete the tasks well despite individual differences in their innate capacities and emotional development.

Cognitive Development (Piaget)

When children enter the school years, they begin to acquire the ability to relate a series of events to mental representations that can be expressed both verbally and symbolically. This is the stage Piaget describes as **concrete operations**, when children are able to use thought processes to experience events and actions. The rigid, egocentric view of the preschool years is replaced by thought processes that allow children to see things from another's point of view. Their steady reduction in egocentricity helps form the basis for logical thought and the development and maturation of morality.

During this stage, children develop an understanding of relationships between things and ideas. They progress from making judgments based on what they see (perceptual thinking) to making judgments based on what they reason (conceptual thinking). They are increasingly able to master symbols and to use their memories of past experiences to evaluate and interpret the present.

One of the major cognitive tasks of school-age children is mastering the concept of **conservation** (Fig. 14-3). There is a developmental sequence in children's capacity to understand conservation. Children usually grasp the conservation of numbers (ages 5 to 6) before conservation of substance. For example, they first recognize that 7 remains 7 whether it is represented by $3 + 4$, $2 + 5$, 7 buttons, or 7 stars. Conservation of liquids, mass, and length usually is accomplished at about ages 6 to 7. At this time, they recognize that changing the shape of a substance, such as a lump of clay, does not alter its total mass. They learn conservation of weight sometime later (ages 9 to 10) and conservation of volume or displacement last (ages 9 to 12). For example, they no longer perceive a tall, thin glass of water as containing a greater volume than a short, wide glass; they can distinguish between the weight of