

## **Part II**

# **Cognitive Strategies and Special Populations**

There has been a rapid growth in knowledge in recent years about the psychological lives of retarded and learning disabled children, with concomitant increases in understanding about how to devise strategies that will aid these types of children. Borkowski and Büchel, Worden, and Day present here the most recent thinking on the use of strategies with the intellectually handicapped. In doing so, they survey a broad range of theory that has been offered about cognitive functioning in the intellectually handicapped, presenting evaluative commentary about potential directions that follow from these theories.

Borkowski and Büchel discuss research efforts aimed at producing durable and general memory skills in the retarded, noting that efforts to date have generally failed. The authors offer a compelling critique of traditional research approaches to the use of strategies by the retarded, arguing that previous studies have not been very analytical and were often poorly controlled. On a more optimistic note, they review recent research that has been more successful in promoting strategy maintenance and generalization. Borkowski and Büchel discuss a number of studies that suggest that knowledge about strategies is related to continued strategy use by retardates. Transfer research in a variety of areas—mathematics, prose comprehension, vocational training, and language acquisition—is discussed in order to emphasize the importance of determining how to produce generalizable strategies.

Worden's discussion of strategy usage by learning-disabled children begins with a review of the definitions of learning disability, and then proceeds to review studies of learning disabled children's perceptual and linguistic skills, selective attention, short-term memory, long-term memory, and metamemory. Worden concludes that the memory deficits of learning-disabled children are often due to short-term

memory disabilities. She makes the case that a critical task for memory researchers during the next decade will be to determine the nature of short-term memory deficits (e.g., metastrategic versus structural). Worden also discusses how memory strategy research may help to reveal more about these short-term problems.

Day outlines a Soviet-based perspective on children with learning problems. With a little help from another person, a child can often do more than (s)he could do without assistance. Vygotsky has argued that what a child can do today with assistance (defined as the “zone of proximal development”) is a good indication of tomorrow’s accomplishments by the child. According to this Soviet perspective, measures of the zone reflect the intellectual potential of a child better than any measure based solely on the child’s unassisted performance. Day considers how zone ideas might be useful in assessing retarded and learning-disabled children. She considers research that has already been conducted within a zone framework, and she also makes suggestions for additional work that is needed to validate zone-of-proximal-development notions. In doing this, she makes many suggestions about potential evaluations of Vygotsky’s theory of cognitive development, which is based on social interactions and their internalization as the foundation of intelligence.