

Part I

Memory Strategies Across the Life Span

The first four chapters in this volume are concerned with memory-strategy development. They represent a good sampling of the paradigms, theories, and research approaches of investigators interested in memory development. The four chapters provide information on strategy usage and training during childhood, adolescence, early adulthood, and late adulthood, with the chapters ordered in a life-span chronological fashion. The authors of these chapters convey both traditional positions and novel perspectives on memory development.

Waters and Andreassen's chapter on children's memory-strategy usage deals with the acquisition and generalization of memory strategies. These authors make the point that strategies are at first usually confined to a very few situations and are often applied ineffectively. With increasing age, broader and more effective usage of strategies occurs. Waters and Andreassen make a number of suggestions about how to increase the likelihood of generalized strategy usage and how to study its development. They also offer interpretations of strategy development with reference to theories (e.g., perceptual learning theory) and aspects of data (e.g., sex differences) that workers in children's memory have traditionally ignored.

Pressley, Levin, and Bryant provide an overview of memory-strategy development during adolescence, a period of the life span often neglected by memory-development researchers. The authors discuss developments in strategy usage that occur between 10 and 20 years of age. Pressley and his colleagues consider a number of rather complex strategies that first appear only after middle childhood. Individual differences in spontaneous strategy usage and the susceptibility of adolescents to strategy instruction are also considered. The authors conclude the chapter by providing answers to questions about memory development which have

been posed to them frequently. In doing so, they touch on both theoretical implications of strategy research (incorporated into what they refer to as the *developmental strategy hypothesis*) and practical issues (e.g., the feasibility of cognitive strategy instruction in the classrooms).

Bellezza provides a summary of mnemonic-device instruction with adults. In doing so, he discusses both list learning and prose learning, emphasizing the linkages between studies of purely laboratory tasks and the more ecologically valid prose-learning research. The author considers in-depth the nature of the representations constructed during mnemonic mediation, touching on such diverse positions as dual coding and schema theory. Bellezza reviews many imagery-based mnemonics, including the method of loci, the pegword method, the use of graphic locations, and the keyword mnemonic. In considering the various techniques, the author reviews situational and personological (e.g., information-processing capacity) variables that may constrain the effects of mnemonic aids on learning.

For many years little attention was paid to the cognitive-skill differences between college-age learners and older adults. Recently, however, there has been a substantial increase in interest in the cognitive competencies of the elderly. To complete the overview of life-span memory development presented in this volume, Roberts summarizes some of the more visible work on memory-strategy usage by the elderly. She provides extensive commentary on the use of imagery strategies by the elderly and on prose learning by the elderly. Thus, the author adds to the discussion of several topics considered by Bellezza and by Pressley, Levin, and Bryant in their chapters. In general, Roberts offers a justifiably optimistic summary of evidence that older people are quite capable of executing memory strategies, and that they benefit from using those strategies. Importantly, the case is cogently developed that the elderly perceive that their memories are not what they used to be, thereby focusing attention on an important human need that strategy instruction can help to fill. Roberts then discusses motivational aspects of memory-strategy instruction with the elderly, and she provides concrete suggestions for addressing this issue. The chapter offers good reason for skepticism about generalizing procedures and paradigms used with younger populations to the elderly.