EDUCATIONAL PSYCHOLOGY SERIES

LEARNING AND STUDY STRATEGIES

Issues in Assessment, Instruction, and Evaluation

Edited by

CLAIRE E. WEINSTEIN ERNEST T. GOETZ PATRICIA A. ALEXANDER

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Issues in Assessment, Instruction, and Evaluation

EDUCATIONAL PSYCHOLOGY

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To those who have taught us a zest for living and a zest for learning—our parents and our mentors

Mama and Papa Weinstein Burton and Meredith Goetz Memaw and Honey Mullins Richard C. Anderson Ruth Garner Arthur W. Melton Wilbert J. McKeachie Frank W. Wicker Merlin C. Wittrock

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Research into the cognitive strategies required for effective knowledge acquisition, storage, and use has exploded during the past few years. Work on study strategies, once an isolated and largely atheoretical area of prescriptive manuals and race-horse training studies, has suddenly blossomed into an interdisciplinary topic of considerable theoretical and practical concern. Drawing upon advances in fields such as cognitive, developmental, educational, and social psychology, current research on learning and study strategies reflects concerns about cognitive, metacognitive, and affective aspects of the learner and the instructional task and interactions between learners and tasks.

Learning and Study Strategies reflects the theoretical diversity and interdisciplinary nature of current research on the cognitive strategies of autonomous learning. Topics such as metacognition, attribution theory, selfefficacy, direct instruction, attention, and problem solving are discussed by leading researchers of learning and study strategies. Further, the contributors to this volume acknowledge and address the concerns of educators at the primary, secondary, and postsecondary school levels. This blend of theory and practice is an important feature of this volume.

Learning and Study Strategies is organized around three critical issues: assessment of an individual's strategic behaviors, delivery of strategy instruction, and evaluation of strategy instruction and research. The discussion begins with two stage-setting chapters. McKeachie examines the need for strategy training in terms of current conditions in our schools and colleges. Mayer examines the conceptual bases of learning strategies, drawing particularly on cognitive psychology.

In the section on assessment, Weinstein, Zimmermann, and Palmer review assessment instruments and describe the development and evaluation of the Learning and Study Strategies Inventory (LASSI). Palmer and Goetz argue that in order to understand studiers' selection and use of strategies we

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must examine their beliefs about self and strategies. Garner cautions about the use of self-reports of strategy selection and implementation. Reynolds and Shirey report studies that circumvent Garner's concerns by the use of on-line measures to examine the role of attention in studying.

The section on instruction represents a variety of approaches. Dansereau outlines his research on cooperative learning, in which the students teach each other (and themselves). Winograd and Hare review work on direct instruction of strategies, in which the teacher delivers explicit information about strategy use to the students. McCombs calls for strategy instruction that combines cognitive, metacognitive, and affective components. Schmeck discusses the consideration of individuals' strategies in the context of his model of learning styles in order to reconcile strategy instruction with individuals' differing styles and personalities. Schallert, Alexander, and Goetz examine implicit strategy instruction provided by instructors and texts in college courses. O'Malley, Russo, Chamot, and Stewner-Manzanares examine the role of strategies in the learning of English as a second language. Jones describes efforts to develop curriculum for the Chicago Public Schools that translates advances in "laboratory" research into gains in the classroom.

Evaluation of strategy instruction and research is considered from methodological, theoretical, and applied perspectives. Willson critically examines experimental designs and statistical techniques employed in the area and suggests alternative procedures that address some of the problems and gaps. Rothkopf ponders what effective strategies are "really like" and what is required to get students to use them. Wittrock views the work on learning and study strategies as reflective of current theoretical views in cognitive psychology, notably his generative process model. Paris considers the theoretical models and metaphors that have guided strategy research and the ways in which they have constrained this research. The chapters by Wilson and Miles express the need to provide information and instructional techniques for learning and study strategies to the educational practitioners in primary, secondary, and postsecondary schools. Wilson and Miles also discuss the pitfalls that threaten such translation and implementation.

The intended audience for this volume is primarily educators and researchers in higher education. More specifically, this book should be of interest to individuals whose areas of interest include comprehension, instruction, learning, and memory. Instructors of study skills and developmental reading courses should also profit from reading this volume, as should teacher trainers and public school resource personnel.

The chapters included in this volume were originally presented at a conference funded by the Basic Research Program of the Army Research Institute, jointly sponsored by the University of Texas and Texas A&M University, and held at the Texas A&M University campus during October 1984.

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The editors and authors would like to express their deep appreciation to the members of these institutions who worked so hard to help make the conference and the book a success and, we hope, an important contribution to the field. In particular, we would like to thank Robert Sasmor and Judith Orasanu from the Army Research Institute, Mollie Banks and Michael Thomas from the University of Texas, and Michael Ash and William Peters from Texas A&M University.

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