Contents

Preface

	Robert Glaser	ix
	Higher Cognitive Goals for Education: An Introduction Susan F. Chipman and Judith W. Segal	l
	Introduction to Volume 2 Susan F. Chipman	19
	Knowledge Acquisition	
1.	Techniques Available to Author, Teacher, and Reader to Improve Retention of Main Ideas of a Chapter Lynne M. Reder	37
2.	Cognitive Coping Strategies and the Problem of "Inert Knowledge" Carl Bereiter and Marlene Scardamalia	65
3.	The Social Context and Socialization Variables as Factors in Thinking and Learning Anderson J. Franklin	81

4. The Structure of Knowledge in Complex Domains Edwina L. Rissland	107
Problem Solving	
 The Relation of Knowledge to Problem Solving, with Examples from Kinematics Bert F. Green, Michael McCloskey, and Alfonso Caramazza 	127
6. Understanding, Problem Representations, and Skill in Physics Jill H. Larkin	141
7. Encoding and the Development of Problem Solving Robert S. Siegler	161
8. Influences of Language Skills on Bilinguals' Problem Solving Richard P. Duran	187
 Looking Across the River: Views from the Two Banks of Research and Development in Problem Solving James G. Greeno 	209
Intelligence and Reasoning	
 Instrumental and Componential Approaches to the Nature and Training of Intelligence Robert J. Sternberg 	215
 The Language-Minority Child: A Psychological, Linguistic, and Social Analysis Edward A. De Avila and Sharon Duncan 	245
12. Comprehension Monitoring: Developmental and Educational Issues Ellen M. Markman	275

13.	Logical Thinking: Does it Occur in Daily Life? Can it Be Taught? Philip N. Johnson-Laird	293
14.	Mental Orthopedics, the Training of Cognitive Skills: An Interview with Alfred Binet Ann L. Brown	319
	The Generality and Specificity of Cognitive Skills	
15.	General Cognitive Skills: Why Not? David N. Perkins	339
16.	What Kinds of Intelligence Components are Fundamental? Jonathan Baron	365
17.	Three Problems in Teaching General Skills John R. Hayes	391
18.	Teaching Thinking: A Cognitive-Behavioral Perspective Donald Meichenbaum	407
	Learning and Development in the Acquisition of Cognitive Skills	
19.	The Development of Science Explanations in Children and Adolescents: A Structural Approach Michael P. Krupa, Robert L. Selman, and Daniel S. Jaquette	427
20.	Interactive Roles of Knowledge and Strategies in the Development of Organized Sorting and Recall Michelene T. H. Chi	457
21.	Are Children Fundamentally Different Kinds of Thinkers and Learners Than Adults? Susan Carey	485

22.	Social Class and Ethnic Differences in Cognition: A Cultural Practice Perspective	
	Warren Simmons	519
23.	The Developmental Perspective on the Problem of Knowledge Acquisition: A Discussion Rochel Gelman	537
	Approaches to the Teaching	
	of Cognitive Skills	
24.	A Developmentally Based Approach to the Problem of Instructional Design	
	Robbie Case	545
25.	Fostering the Development of Self-Regulation in Children's Knowledge Processing	
	Marlene Scardamalia and Carl Bereiter	563
26.	Teaching Reasoning Skills Allan Collins	579
27.	On Meeting the Challenge	
	Mary Carol Day	587
	Two Perspectives	
28.	On Teaching Thinking: An Afterthought Jerome Bruner	597
29.	Learning and Instruction: A Letter for a Time Capsule Robert Glaser	609
	Author Index 619	
	Subject Index 633	