

Contents

Preface ix

Credits xi

- 1** The Field of Complex Cognition: Overview and Methods 1
- 2** History of the Field of Complex Cognition 12
- 3** Concepts: Structure and Acquisition 31
- 4** Knowledge Representation and Acquisition 58
- 5** Deductive Reasoning 87
- 6** Inductive Reasoning 116
- 7** Problem Solving 144
- 8** Decision Making 168
- 9** The Nature of Language 196
- 10** Language and Thought 217
- 11** Human and Artificial Intelligence 243
- 12** Creativity 276
- 13** Expertise 292
- 14** Development of Complex Cognition 304
- 15** Teaching Thinking 328

Glossary 356

References 384

Author Index 432

Subject Index 440