CONT

Preface ix
About the Editor xi
List of Contributors xiii

Pa
I

THEORETICAL FOUNDATIONS FOR
AND TECHN

1 Behaviorism and Instructional Technology 3
John K. Burton, David M. (Mike) Moore, Susan G. Magliaro

2 Systems Inquiry and Its Application in Education 37
Bela H. Banathy, Patrick M. Jenlink

3 Communication Effects of Noninteractive Media: Learning in Out-of-School Contexts 59
Kathy A. Krendl, Ron Warren

ENTS

rt

EDUCATIONAL COMMUNICATIONS
OLOGY 1

4 Cognitive Perspectives in Psychology 79
William Winn

5 Toward a Sociology of Educational Technology 113
Stephen T. Kerr

6 Everyday Cognition and Situated Learning 143
Philip H. Henning

7 An Ecological Psychology of Instructional Design: Learning and Thinking by Perceiving–Acting Systems 169
Michael Young

8 Conversation Theory 179
Gary McIntyre Boyd

9 Activity Theory As a Lens for Characterizing the Participatory Unit 199
Sasha A. Barab, Michael A. Evans, Eun-Ok Baek

P
I
HARD TECHN

12 Research on Learning from Television 249
Barbara Seels, Karen Fullerton, Louis Berry Laura J. Horn

13 Disciplined Inquiry and the Study of Emerging Technology 335
Chandra H. Orrill, Michael J. Hannafin, Evan M. Glazer

14 Distance Education 355
Charlotte Nirmalani Gunawardena, Marina Stock McIsaac

15 Computer-mediated Communication 397
Alexander Romiszowski, Robin Mason

P
I
SOFT TECHN

20 Foundations of Programmed Instruction 545
Barbara Lockee, David (Mike) Moore, John Burton

21 Games and Simulations and Their Relationships to Learning 571
Margaret E. Gredler

10 Media as Lived Environments: The Ecological Psychology of Educational Technology 215
Brock S. Allen, Richard G. Otto, Bob Hoffman

11 Postmodernism In Educational Technology: update: 1996–2002 243
Denis Hlynka

art
I
OLOGIES 247

16 Exploring Research on Internet-based Learning: From Infrastructure to Interactions 433
Janette R. Hill, David Wiley, Laurie Miller Nelson, Seungyeon Han

17 Virtual Realities 461
Hilary McLellan

18 The Library Media Center: Touchstone for Instructional Design and Technology In the Schools 499
Delia Neuman

19 Technology in the Service of Foreign Language Learning: The Case of the Language Laboratory 523
Warren B. Roby

art
II
OLOGIES 543

22 Microworlds 583
Lloyd P. Rieber

23 Learning from Hypertext: Research Issues and Findings 605
Amy Shapiro, Dale Niederhauser

INSTRUCTIONAL DESI

24 Conditions Theory and Models for Designing Instruction 623
Tillman J. Ragan and Patricia L. Smith

25 Adaptive Instructional Systems 651
Ok-choon Park, Jung Lee

INSTRUCTIONAL

28 Generative Learning Contributions to the Design of Instruction and Learning 719
Barbara L. Grabowski

29 Feedback Research Revisited 745
Edna Holland Mory

30 Cooperation and the Use of Technology 785
David W. Johnson and Roger T. Johnson

INSTRUCTIONAL ME

33 Visual Representations and Learning: The Role of Static and Animated Graphics 865
Gary J. Anglin, Hossein Vaez, Kathryn L. Cunningham

34 Designing Instructional and Informational Text 917
James Hartley

Part IV
IGN APPROACHES 621

26 Automating Instructional Design: Approaches and Limitations 685
J. Michael Spector and Celestia Ohrazda

27 User-Design Research 701
Alison Carr-Chellman and Michael Savoy

Part V
STRATEGIES 717

31 Cognitive Apprenticeship in Educational Practice: Research on Scaffolding, Modeling, Mentoring, and Coaching as Instructional Strategies 813
Vanessa Paz Dennen

32 Case-Based Learning Aids 829
Janet L. Kolodner, Jakita N. Owensby, and Mark Guzdial

art VI
SSAGE DESIGN 863

35 Auditory Instruction 949
Ann E. Barron

36 Multiple-Channel Communication: The Theoretical and Research Foundations of Multimedia 981
David M. (Mike) Moore, John K. Burton, and Robert J. Myers

Pa
V

RESEARCH METHO

37 Philosophy, Research, and Education 1009
J. Randall Koetting, and Mark Malisa

38 Experimental Research Methods 1021
Steven M. Ross, Gary R. Morrison

39 Qualitative Research Issues and Methods: an Introduction for Educational Technologists 1045
Wilhelmina C. Savenye, Rhonda S. Robinson

40 Conversation Analysis for Educational Technologists: Theoretical and

rt
II
DDOLOGIES 1007

Methodological Issues for Researching the Structures, Processes, and Meaning of On-Line Talk 1073
Joan M. Mazur

41 Developmental Research: Studies of Instructional Design and Development 1099
Rita C. Richey, James D. Klein, Wayne A. Nelson

Author Index 1131

Subject Index 1175