

Contents

Foreword	ix
-----------------------	----

Preface	xii
----------------------	-----

Section I Perspectives on Technological Literacy

Chapter I

New Paradigm of Learning and Teaching in a Networked Environment: Implications for ICT Literacy / <i>Yin Cheong Cheng</i>	1
---	---

Chapter II

Technologies Challenging Literacy: Hypertext, Community Building, Reflection, and Critical Literacy / <i>Agni Stylianou-Georgiou, Charalambos Vrasidas, Niki Christodoulou, Michalinos Zembylas, and Elena Landone</i>	21
--	----

Chapter III

Technological Literacy, Perspectives, Standards, and Skills in the USA / <i>Jared V. Berrett</i>	34
--	----

Chapter IV

Globalization, At-Risk Students, and the Reconceptualization of Technological Literacy / <i>Leonard J. Waks</i>	55
---	----

Chapter V

ICT in Schools: What is of Educational Value? / <i>Aidan Mulkeen</i>	73
--	----

Chapter VI

Web-Based Technologies, Technology Literacy, and Learning / <i>Wan Ng</i>	94
---	----

Chapter VII

New Media Pathways: Navigating the Links between Home, School, and the Workplace / <i>Helen Nixon, Stephen Atkinson, and Catherine Beavis</i>	118
---	-----

Chapter VIII

Responsible Technologies and Literacy: Ethical and Legal Issues / <i>Elizabeth A. Buchanan and Tomas A. Lipinski</i>	137
--	-----

Chapter IX	
Internet Chatrooms: E-Space for Youth of the Risk Society / <i>Cushla Kapitzke</i>	158
Chapter X	
Re-Schooling and Information Communication Technology: A Case Study of Ireland / <i>Roger Austin and John Anderson</i>	176
Chapter XI	
Transforming the K-12 Classroom with ICT: Recognizing and Engaging New Configurations of Student Learning / <i>Colin Baskin</i>	195
Chapter XII	
The Complexities of Measuring Technological Literacy / <i>Marcie J. Bober</i>	217
Chapter XIII	
Systemic Innovations and the Role of Change-Technology: Issues of Sustainability and Generalizability / <i>Chee-Kit Looi, Wei-Ying Lim, Thiam-Seng Koh, and Wei-Loong David Hung</i>	234

Section II
Teaching and Learning with Technology

Chapter XIV	
Digital Video in the K-12 Classroom: A New Tool for Learning / <i>Christopher Essex</i>	247
Chapter XV	
Technology as a Classroom Tool: Learning with Laptop Computers / <i>Ann E. Barron, J. Christine Harmes, and Katherine J. Kemker</i>	271
Chapter XVI	
Tapping into Digital Literacy: Handheld Computers in the K-12 Classroom / <i>Mark van 't Hooft</i>	287
Chapter XVII	
Digital Literacy and the Use of Wireless Portable Computers, Planners, and Cell Phones for K-12 Education / <i>Virginia E. Garland</i>	308
Chapter XVIII	
Using WebQuests to Support the Development of Digital Literacy and Other Essential Skills at the K-12 Level / <i>Susan E. Gibson</i>	322
Chapter XIX	
Let Them Blog: Using Weblogs to Advance Literacy in the K-12 Classroom / <i>David A. Huffaker</i>	337
Chapter XX	
Information Problem-Solving Using the Internet / <i>Steven C. Mills</i>	357
Chapter XXI	
How to Teach Using Today's Technology: Matching the Teaching Strategy to E-Learning Approach / <i>Moti Frank</i>	372

Chapter XXII	
Integrating Computer Literacy into Mathematics Instruction / <i>Allan Yuen and Patrick Wong</i>	394
Chapter XXIII	
Teaching and Learning with Tablet PCs / <i>Wee Hin Leo Tan and R. Subramaniam</i>	410
Chapter XXIV	
Using Technology to Create Children’s Books for Students by Students / <i>Lyn C. Howell</i>	425
Chapter XXV	
Electronic Portfolios and Education: A Different Way to Assess Academic Success / <i>Stephenie M. Hewett</i>	437

Section III
Issues Related to Teacher Education and School-Based Matters

Chapter XXVI	
Teachers and Technology: Engaging Pedagogy and Practice / <i>Karen Cadiero-Kaplan</i>	452
Chapter XXVII	
Literacy in K-12 Teacher Education: The Case Study of a Multimedia Resource / <i>Kristina Love</i>	469
Chapter XXVIII	
Demystifying Constructivism: The Role for the Teacher in New Technology Exploiting Learning Situations / <i>Paul Adams</i>	493
Chapter XXIX	
K-12 Educators as Instructional Designers / <i>Kendall Hartley</i>	515
Chapter XXX	
Creating a Virtual Literacy Community between High School and University Students / <i>Tamara L. Jetton and Cathy Soenksen</i>	531
Chapter XXXI	
Online Learning Communities: Enhancing Learning in the K-12 Setting / <i>Chris Brook and Ron Oliver</i>	552
Chapter XXXII	
Knowledge Management, Communities of Practice, and the Role of Technology: Lessons Learned from the Past and Implications for the Future / <i>Wee Hin Leo Tan, Thiam Seng Koh, and Wei Loong David Hung</i>	573
Chapter XXXIII	
The Emerging Use of E-Learning Environments in K-12 Education: Implications for School Decision Makers / <i>Christopher O’Mahony</i>	586
Chapter XXXIV	
A Socio-Technical Analysis of Factors Affecting the Integration of ICT in Primary and Secondary Education / <i>Charoula Angeli and Nicos Valanides</i>	604

Chapter XXXV

Teaching English as a Second Language with Technology: Making Appropriate Pedagogical Choices / *Kate Mastruserio Reynolds, Ingrid Schaller, and Dale O. Gable* 626

About the Authors 649

Index 657