

# Contents

<b>Foreword</b> .....	ix
-----------------------	----

<b>Preface</b> .....	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
--	-----

<b>Chapter IX</b>	
Internet Chatrooms: E-Space for Youth of the Risk Society / <i>Cushla Kapitzke</i> .....	158
<b>Chapter X</b>	
Re-Schooling and Information Communication Technology: A Case Study of Ireland / <i>Roger Austin and John Anderson</i> .....	176
<b>Chapter XI</b>	
Transforming the K-12 Classroom with ICT: Recognizing and Engaging New Configurations of Student Learning / <i>Colin Baskin</i> .....	195
<b>Chapter XII</b>	
The Complexities of Measuring Technological Literacy / <i>Marcie J. Bober</i> .....	217
<b>Chapter XIII</b>	
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**

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

<b>Chapter XXII</b>	
Integrating Computer Literacy into Mathematics Instruction / <i>Allan Yuen and Patrick Wong</i> .....	394
<b>Chapter XXIII</b>	
Teaching and Learning with Tablet PCs / <i>Wee Hin Leo Tan and R. Subramaniam</i> .....	410
<b>Chapter XXIV</b>	
Using Technology to Create Children’s Books for Students by Students / <i>Lyn C. Howell</i> .....	425
<b>Chapter XXV</b>	
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**

<b>Chapter XXVI</b>	
Teachers and Technology: Engaging Pedagogy and Practice / <i>Karen Cadiero-Kaplan</i> .....	452
<b>Chapter XXVII</b>	
Literacy in K-12 Teacher Education: The Case Study of a Multimedia Resource / <i>Kristina Love</i> .....	469
<b>Chapter XXVIII</b>	
Demystifying Constructivism: The Role for the Teacher in New Technology Exploiting Learning Situations / <i>Paul Adams</i> .....	493
<b>Chapter XXIX</b>	
K-12 Educators as Instructional Designers / <i>Kendall Hartley</i> .....	515
<b>Chapter XXX</b>	
Creating a Virtual Literacy Community between High School and University Students / <i>Tamara L. Jetton and Cathy Soenksen</i> .....	531
<b>Chapter XXXI</b>	
Online Learning Communities: Enhancing Learning in the K-12 Setting / <i>Chris Brook and Ron Oliver</i> .....	552
<b>Chapter XXXII</b>	
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
<b>Chapter XXXIII</b>	
The Emerging Use of E-Learning Environments in K-12 Education: Implications for School Decision Makers / <i>Christopher O’Mahony</i> .....	586
<b>Chapter XXXIV</b>	
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