

PREMIER REFERENCE SOURCE

TECHNOLOGY ENHANCED LEARNING FOR PEOPLE WITH DISABILITIES

Approaches and Applications



Patricia Ordóñez de Pablos, Jingyuan Zhao & Robert Tennyson

Table of Contents

Preface.....	xiv
Chapter 1	
Benefits of CSCL for Learners with Disabilities	1
<i>Robert D. Tennyson, University of Minnesota, USA</i>	
<i>Robert L. Jorcak, University of Minnesota, USA</i>	
Chapter 2	
Computer Interventions for Children with Disabilities: Review of Research and Practice	10
<i>Robert D. Tennyson, University of Minnesota, USA</i>	
Chapter 3	
China Special Education: The Perspective of Information Technologies	34
<i>Jingyuan Zhao, Harbin Institute of Technologies, China</i>	
Chapter 4	
Learning Applications for Disabled People	44
<i>Athanasios Drigas, N.C.S.R. Demokritos, Greece</i>	
<i>Dimitris Kouremenous, N.C.S.R. Demokritos, Greece</i>	
<i>John Vrettaros, N.C.S.R. Demokritos, Greece</i>	
Chapter 5	
A Paradigm in Transition: From a Teaching Focused Education to a Learning One—The ICT Contribution to the Acquisition of Social and Individual Skills in High Education.....	58
<i>Pablo Murta Baião Albino, Universidad Pública de Navarra, Spain</i>	
<i>Fernando González Gatica, Universidad Diego Portales, Chile</i>	
<i>José Enrique Armendáriz-Iñigo, Universidad Pública de Navarra, Spain</i>	

Chapter 6

Personal Learning Environments: Meeting the Special Needs of Gifted Students 67

*Jaime Ribeiro, University of Aveiro, Portugal**Diogo Casanova, University of Aveiro, Portugal**Fernanda Nogueira, University of Aveiro, Portugal**António Moreira, University of Aveiro, Portugal**Margarida Almeida, University of Aveiro, Portugal***Chapter 7**

Automatic Speech Recognition to Enhance Learning for Disabled Students..... 89

*Pablo Revuelta, Universidad Carlos III de Madrid, Spain**Javier Jiménez, Universidad Carlos III de Madrid, Spain**José M. Sánchez, Universidad Carlos III de Madrid, Spain**Belén Ruiz, Universidad Carlos III de Madrid, Spain***Chapter 8**

School of the Future: E-Tools and New Pedagogies to Build Up and Inclusive Learning Community 105

*Michela Otta, Consiglio Nazionale delle Ricerche, Italy***Chapter 9**

Public Information Services for People with Disabilities: An Accessible Multimedia Platform for the Diffusion of the Digital Signature 121

*Ángel García-Crespo, Universidad Carlos III de Madrid, Spain**Fernando Paniagua-Martín, Universidad Carlos III de Madrid, Spain**José Luis López-Cuadrado, Universidad Carlos III de Madrid, Spain**Israel González Carrasco, Universidad Carlos III de Madrid, Spain**Ricardo Colomo-Palacios, Universidad Carlos III de Madrid, Spain**Juan Miguel Gómez-Berbis, Universidad Carlos III de Madrid, Spain***Chapter 10**

Elderly People with Disabilities in the Internet Age..... 137

*Panagiotis Kyriazopoulos, Technological Educational Institute of Piraeus, Greece**Irene Samanta, Technological Educational Institute of Piraeus, Greece**Rania Christou, Technological Educational Institute of Piraeus, Greece**Anastasios Ntanios, Technological Educational Institute of Piraeus, Greece***Chapter 11**

Supports for and Barriers to Implementing Assistive Technology in Schools 154

*Susanne Croasdale, Virginia Commonwealth University, USA**Sharon Jones, Virginia Commonwealth University, USA**Kelly Ligon, Virginia Commonwealth University, USA**Linda Oggel, Virginia Commonwealth University, USA**Mona Pruett, Virginia Commonwealth University, USA*

Chapter 12

Theory of Mind in Autistic Children: Multimedia Based Support 167

*Tariq M. Khan, Brunel University of West London, UK***Chapter 13**

M-Learning: Accessibility and Limitations for People with Disabilities 180

*Saif alZahir, University of Northern British Columbia, Canada***Chapter 14**

Applying Virtual Reality (VR) to the Detection and Treatment of Clinical

Problems in Educational Settings 194

*José A. Carmona, University of Almería, Spain**Adolfo J. Cangas, University of Almería, Spain**Luis Iribarne, University of Almería, Spain**Moisés Espinola, University of Almería, Spain***Compilation of References** 203**About the Contributors** 225**Index** 233