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Book Review: Recent Advances in Assistive Technologies to Support Children with Developmental Disorders

Sunagul SANI-BOZKURT*
* *Anadolu University, Eskisehir, Turkey.*

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Book Review

Abstract

Recent Advances in Assistive Technologies to Support Children with Developmental Disorders is edited by Nava R. Silton. The editor of the book, Nava R. Silton, a developmental psychologist, received her B.S. from Cornell University in 2002 and her M.A. and Ph.D. from Fordham University in 2009. The book was published in 2015 by IGI Global. The book has xxvi+424 pages. The ISBNs of the book for different versions are; ISBN13: 9781466683952, ISBN10: 1466683953, EISBN13: 9781466683969. DOI number of the book is 10.4018/978-1-4666-8395-2.

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1. INTRODUCTION

Recent Advances in Assistive Technologies to Support Children with Developmental Disorders is edited by Nava R. Silton. The editor of the book, Nava R. Silton, a developmental psychologist, received her B.S. from Cornell University in 2002 and her M.A. and Ph.D. from Fordham University in 2009. The book was published in 2015 by IGI Global. The book has xxvi+424 pages. The ISBNs of the book for different versions are; ISBN13: 9781466683952, ISBN10: 1466683953, EISBN13: 9781466683969. DOI number of the book is 10.4018/978-1-4666-8395-2.

Technology has been a main driver for many developments in different fields including special education. The term, assistive technology, is a broad concept and it is defined in *The Individuals with Disabilities Education Improvement Act of 2004* (Pub. L. No. 108-446, Part A, Sec 602, pp. 11–12) as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain or improve the functional capabilities of a child with a disability.” The recent developments in digital technologies resulted with increase in capacity and the reflections of these developments were seen in assistive technologies with learners with special needs. A many of publications covered assistive technologies from different aspects for learners with special needs (Bryant & Bryant, 2011; Bozkurt et al., 2015; Caliskan et al., 2016; Green, 2014), and this edited book by Silton (2015) contributes to the field with a special focus on mobile devices and technologies.

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2. REVIEW OF THE BOOK

Chapter 1, *iPods and iPads as AAC Devices for Children with Developmental Disorders*, by Larah van der Meer, discusses the potential of the instructional strategies of using iPods and iPads.

Chapter 2, *Implementing iPad and Mobile Technologies for Students with Intellectual Disabilities*, by Cathi Draper Rodríguez, Iva Strnadová, and Therese M Cumming deals with issues about how to use mobile technologies from the perspective of Universal Design for Learning (UDL).

Chapter 3, *Using iPads and Mobile Technology for Children with Developmental Disabilities: Facilitating Language and Literacy Development*, by Lisa A. Proctor and Ye Wang is about mobile technologies and, through a comprehensive review of the literature, it provides challenges and opportunities of using such technologies.

Chapter 4, *Early Literacy and AAC for Learners with Complex Communication Needs*, by Janis Doneski-Nicol and Jody Marie Bartz focuses on Augmentative and Alternative Communication (AAC) systems.

Chapter 5, *The Use of Mobile Technologies for Students At-Risk or Identified with Behavioral Disorders within School-Based Contexts*, by Frank J. Sansosti and Peña L. Bedesem explains benefits and challenges of using mobile technologies, present current state of the art and offers suggestions in this regard.

Chapter 6, *Recent Advances in Augmentative and Alternative Communication: The Advantages and Challenges of Technology Applications for Communicative Purposes*, by Toby B. Mehl-Schneider examines mobile technologies and provides suggestions on how to use for augmentative and alternative communication (AAC) purposes.

Chapter 7, *Selecting Computer-Mediated Interventions to Support the Social and Emotional Development of Individuals with Autism Spectrum Disorder*, by Kristen Gillespie-Lynch, Patricia J. Brooks, Christina Shane-Simpson, Naomi Love Gaggi, Deborah Sturm, and Bertram O. Ploog designed to provide parents, professionals, and individuals with Autism Spectrum Disorder (ASD) with tools to help them evaluate the effectiveness of computer-mediated interventions to support the social and emotional development of individuals with ASD.

Chapter 8, *Avatars, Humanoids, and the Changing Landscape of Assessment and Intervention for Individuals with Disabilities across the Lifespan*, by Emily Hotez is about virtual reality and robots. The chapter provides suggestions for future research directions.

Chapter 9, *Microswitch-Based Programs (MBP) to Promote Communication, Occupation, and Leisure Skills for Children with Multiple Disabilities: A Literature Overview*, by Fabrizio Stasolla and Viviana Perilli presents the overall outlook of microswitch-based programs (MBP) through a comprehensive literature review.

Chapter 10, *Improving Students' Academic Learning by Helping Them Access Text*, by Michael Ben-Avie, Régine Randall, Diane Weaver Dunne, and Chris Kelly reports findings of 3-year pilot of CRISKids projects.

Chapter 11, *Video Modeling for Learners with Developmental Disabilities*, by Peggy J. S. Whitby, Christine R. Ogilvie, and Krista Vince Garland covers issues on video modeling for learners with autism spectrum disorders (ASD).

Chapter 12, *Assistive Technologies at the Edge of Language and Speech Science for Children with Communication Disorders: VocalID, Free Speech, and SmartPalate*, by Joséphine Anne Genèvieve Ancelle explains recent developments on augmentative and alternative communication (AAC) devices with text-to-speech (TTS) by introducing specific systems.

Chapter 13, *Telehealth Technology and Pediatric Feeding Disorders*, by Taylor A. Luke and Rebecca R. Ruchlin discusses the prevalence of feeding disorders among infants, toddlers and children with developmental disorders.

Chapter 14, *Music and Developmental Disabilities*, by Michelle Renee Blumstein presents a compilation of research about various types of technology that are employed by music therapists to benefit children with developmental delays.

Chapter 15, *Dissemination of Assistive Technology Devices for Children with Disabilities through Realabilities*, by Senada Arucevic reviews a variety of technologies that have been used to improve the quality of life of individuals with varying disabilities

Chapter 16, *Using Technology to Support Social Competence*, by Brenda Smith Myles, Jan Rogers, Amy Bixler Coffin, Wendy Szakacs, and Theresa Earles-Vollrath reviews the concept known as social competence and offers a variety of practices to support its development.

3. CONCLUSION

In conclusion, this book offers up-to-date knowledge on assistive technologies and serve as a reliable source for researchers from the field of special education. On the other hand, considering that technology-oriented practices subject to constant changes, other researchers should work on similar books that examine assistive technologies from different aspects of the fields and learners with special needs.

About the Author

Sunagul Sani-Bozkurt

Sunagul Sani-Bozkurt holds an MA and a Ph.D. degree in Special Education. Sani-Bozkurt is an assistant professor in the Department of Special Education at Anadolu University, Turkey. Her research interests are topics related to universal design, inclusive learning environment, evidence-based practices, assistive technology, technology-supported practices, and use of ICT in special education.

Mailing Address: Anadolu University, Faculty of Education, Special Education Department, 26470, Eskişehir, Turkey.
Mobile: +90 222 335 0580
E-mail: ssbozkurt@anadolu.edu.tr
ORCID: https://orcid.org/0000-0001-6648-9636

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