

Chapter 6

Ensuring Technology Integration in the Classroom Leads to Increased Accessibility: Using UDL as a Lens

Frederic Fovet

 <https://orcid.org/0000-0003-1051-4163>
Royal Roads University, Canada

ABSTRACT

Technology has been a revolutionary mean to offer students with disabilities the affordances they require to be able to access the mainstream classroom. It has been a groundbreaking tool to provide accommodations. While acknowledging the key role that assistive technology has played thus far, this chapter suggests the time has come to take a hard look at exactly how assistive technology has been integrated. Three concerns are examined: (1) assistive technology can be so specialized, non-user-friendly, and expensive that it stigmatizes students with disabilities; (2) while technology is often available in the classroom, it generally remains integrated very clumsily and fails to optimally serve pedagogy; (3) the notion of assistive technology may now be possibly obsolete since most operation systems include a wide array of accessibility tools. It is hence time to rethink our use of technology in the classroom with students with disabilities, and the chapter suggests that Universal Design for Learning is a particularly pertinent framework to shift educators' practices and beliefs.

DOI: 10.4018/978-1-7998-4736-6.ch006

INTRODUCTION

Technology has been a revolutionary mean to offer students with disabilities the affordances they require to be able to function just as their peers in the classroom, and to be fully included in mainstream education (Nordström et al., 2019). As a tool, assistive technology has been so ground breaking in the area of accommodations and retrofitting that most legal provisions, in jurisdictions that have educational inclusion case law or statutes, have often focused solely on the availability of technology to these students, rather than on any pedagogical practices (Karlsson et al., 2018; Chambers, 2019).

While recognizing the significant gains that have been achieved in the field of inclusive education, this chapter will suggest the time has come to re-examine how assistive technology is in fact integrated on terrain and to reconsider the effectiveness of this use. Three arguments will be put forward to support this premise: (i) first, it will be suggested that assistive technology can be so specialized, non-user-friendly, and expensive that it stigmatizes students with disabilities and hinders social inclusion (Perelmutter et al., 2017); (ii) second, the chapter will argue that while assistive technology is often available in the classroom, it frequently remains integrated very clumsily and fails to serve pedagogy in an optimal fashion (Hartman et al., 2019); (iii) third, the chapter will argue that the notion of assistive technology is now possibly obsolete since most operation systems include a wide array of accessibility tools in their regular user suite. It is therefore perhaps time to redefine the relationship the educational sector entertains with the accessibility features that are present in everyday technology tools so that they become universally and systematically used in instruction with all learners (De Couvreur & Goossens, 2011).

The second part of the chapter will encourage inclusion practitioners and advocates to use Universal Design for Learning (UDL) as a lens to address this changing landscape and tackle the concerns highlighted in the first part of the chapter (Dalton, et al., 2019). It will be suggested that UDL may help educators integrate technology in a more seamless way than previous frameworks, for the purpose of inclusion. First, because it is concerned with inclusive design as the blue print of all teaching and learning, UDL avoids the stigmatization of students with disabilities; (ii) second, UDL allows teachers to integrate technology smoothly for a pedagogical purpose and from a design perspective; it avoids an approach to educational technology that is excessively focused on the tech products themselves; (iii) third, UDL relies on common sense, every day tech features, present on most devices, rather than on expensive assistive technology that is onerous on resources. It will be argued furthermore that frameworks such as UDL lead us to question the very notion of assistive technology, and to redefine how regular technology features present on all devices more broadly widens access in the classroom.

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/ensuring-technology-integration-in-the-classroom-leads-to-increased-accessibility/305466

Related Content

Assistive ICT and Young Disabled Persons: Opportunities and Obstacles in Identity Negotiations

Sylvia Söderström (2014). *Assistive Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 1084-1105).

www.irma-international.org/chapter/assistive-ict-and-young-disabled-persons/80661

Real-Time Recoloring Ishihara Plates Using Artificial Neural Networks for Helping Colorblind People

Martín Montes Rivera, Alejandro Padilla, Juana Canul-Reich and Julio Ponce (2020). *User-Centered Software Development for the Blind and Visually Impaired: Emerging Research and Opportunities* (pp. 138-156).

www.irma-international.org/chapter/real-time-recoloring-ishihara-plates-using-artificial-neural-networks-for-helping-colorblind-people/231088

Camera-Based Motion Tracking and Performing Arts for Persons with Motor Disabilities and Autism

Alexandros Kontogeorgakopoulos, Robert Wechsler and Wendy Keay-Bright (2014). *Disability Informatics and Web Accessibility for Motor Limitations* (pp. 294-322).

www.irma-international.org/chapter/camera-based-motion-tracking-and-performing-arts-for-persons-with-motor-disabilities-and-autism/78642

Accessibility to Spa Experiences

Eleni Michopoulou and Sarah J. Hilton (2021). *ICT Tools and Applications for Accessible Tourism* (pp. 146-168).

www.irma-international.org/chapter/accessibility-to-spa-experiences/271072

Transport and Mobility

(2014). *Enhancing the Human Experience through Assistive Technologies and E-Accessibility* (pp. 112-132).

www.irma-international.org/chapter/transport-and-mobility/109951