

## Chapter 42

# Digital Citizenship for All: Empowering Young Learners With Disabilities to Become Digitally Literate

**Quincy Conley**

*Boise State University, USA*

**Jessica Scheufler**

*Boise State University, USA*

**Gina Persichini**

*Boise State University, USA*

**Patrick R. Lowenthal**

*Boise State University, USA*

**Michael Humphrey**

*Boise State University, USA*

### **ABSTRACT**

*Digital literacy is important, particularly for young people as they prepare for college and a career in modern society. From computer-based tests used to measure student progress on college applications and online job applications, the transition to college and career requires the use of technology. Individuals must have digital literacy skills to fully participate and contribute on the job and at school. This includes people with disabilities. These young adults have aspirations for jobs and higher education just like others their age and therefore deserve to be taken seriously. This article is a review of literature that explores what it means to be digitally literate, the digital literacy experience for young adults with disabilities, and the implications for education and the workplace. It also proposes instructional solutions to aid in the preparation of young adults for college and career.*

DOI: 10.4018/978-1-5225-8356-1.ch042

## INTRODUCTION

Scholars have studied digital literacy for decades. As a result, multiple models have been developed to describe and explain the phenomenon. Margaret Spencer (1986) and then Paul Gilster (1997) were the first to introduce the concept of digital literacy (Buckingham, 2015). Subsequent researchers have since expanded upon this early work (Koltay, 2011; Knobel & Lankshear, 2006; Merchant, 2007; Russo, Watkins, & Groundwater-Smith, 2009). The early definitions focused mostly on technical skills because computer use at the time was primarily for basic “operational skills” (e.g., calculations and word processing). Now that computers are more advanced, mobile, and used in a variety of ways day-to-day, more recent definitions often include higher-level cognitive processes such as communication skills and critical thinking skills (Belshaw, 2012; Dede, 2010; Ferrari, 2012; Janssen et al., 2013; Neumann, Finger, & Neumann, 2017; O’Connor et al., 2002; Scott, 2007). An often cited more expansive definition by Eshet-Alkalai (2004), claims that “digital literacy involves more than the mere ability to use software or operate a digital device; it includes a large variety of complex cognitive, motor, sociological, and emotional skills, which users need to function effectively in digital environments” (p. 93). Along with expanding the definition, experts have argued that digital literacy is not a singular entity, but instead a combination of intertwined skill sets, competencies, and attitudes (Bawden, 2008; Hattie, 2009).

More recently, though, Belshaw (2012) has argued that Eshet-Alkalai’s conception of digital literacy does not account for how digital literacy changes as digital tools and contexts change over time. Belshaw instead conceptualizes digital literacy as lying on a continuum with skills broken down into levels, akin to The Levels of Digital Literacy Model created as part of the DigEuLit Project (Martin & Grudziecki, 2006). Low-level skills, sometimes called functional digital literacy skills, are learned quickly with practice and feedback. Higher level-skills are more complex and take time to develop. Belshaw believes that these skills are difficult to develop in a one-time, non-contextualized instructional experience. In parallel, Eshet-Alkalai (2012) updated the model to include “real-time-thinking”; this update recognizes that people need to be more adept at processing and evaluating large quantities of information due to the pervasive nature of the internet.

It is clear from the literature that digital literacy is complex and evolving, and, as such, a difficult concept to pin down. Two recurring themes arise in the literature. One theme is that digital literacy changes as technology changes; therefore, it must be continually defined and redefined. The second theme suggests that no definition accurately defines digital literacy for every organization and setting (Belshaw, 2012, p. 44). Given this, we summarize simply that digital literacy is the acquisition of skills and abilities necessary to communicate and navigate within current and emerging technologies. Albeit brief, as new technologies produce new skills, this definition is sustainable and is applicable in the career and the workplace context congruent with the focus of this paper (Buckingham, 2015; Gilster, 1997; Reed, 2010; Spencer, 1986; U.S. Department of Labor, 2016).

## WHY DO DIGITAL LITERACY SKILLS MATTER?

In the United States, recent legislation called the Workforce Innovation and Opportunity Act (WIOA), has highlighted the importance of digital literacy skills in the workplace (U.S. Department of Labor, 2016). The skills used to read, understand, and navigate information online have become essential in recent years because the tools in the workforce continue to change. According to a report conducted by

20 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/digital-citizenship-for-all/226596](http://www.igi-global.com/chapter/digital-citizenship-for-all/226596)

## Related Content

---

### Strategic Uncertainty in the Guessing Game and the Role and Effects of a Public Common Noise Player

Tetsuya Kasahara (2017). *International Journal of Applied Behavioral Economics* (pp. 23-36).

[www.irma-international.org/article/strategic-uncertainty-in-the-guessing-game-and-the-role-and-effects-of-a-public-common-noise-player/180709](http://www.irma-international.org/article/strategic-uncertainty-in-the-guessing-game-and-the-role-and-effects-of-a-public-common-noise-player/180709)

### Neuroeconomics and Agent-Based Computational Economics

Shu-Heng Chen (2014). *International Journal of Applied Behavioral Economics* (pp. 15-34).

[www.irma-international.org/article/neuroeconomics-and-agent-based-computational-economics/113837](http://www.irma-international.org/article/neuroeconomics-and-agent-based-computational-economics/113837)

### Intention to Adopt AI-Powered Online Service Among Tourism and Hospitality Companies

Yi-Hui Ho, Syed Shah Alam, Mohammad Masukujjaman, Chieh-Yu Lin, Samiha Susmitand Sumaiya Susmit (2022). *International Journal of Technology and Human Interaction* (pp. 1-19).

[www.irma-international.org/article/intention-to-adopt-ai-powered-online-service-among-tourism-and-hospitality-companies/299357](http://www.irma-international.org/article/intention-to-adopt-ai-powered-online-service-among-tourism-and-hospitality-companies/299357)

### Adaptation and Personalization of User Interface and Content

Christos K. Georgiadis (2009). *Human Computer Interaction: Concepts, Methodologies, Tools, and Applications* (pp. 393-403).

[www.irma-international.org/chapter/adaptation-personalization-user-interface-content/22263](http://www.irma-international.org/chapter/adaptation-personalization-user-interface-content/22263)

### ARCO: Building Virtual Museum Exhibitions with Flex-VR

Krzysztof Walczak (2011). *Handbook of Research on Technologies and Cultural Heritage: Applications and Environments* (pp. 427-445).

[www.irma-international.org/chapter/arco-building-virtual-museum-exhibitions/50282](http://www.irma-international.org/chapter/arco-building-virtual-museum-exhibitions/50282)