Chapter 1
Digital Literacy

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ABSTRACT

The chapter provides a comprehensive overview of digital literacy, looking at the theoretical and ideological construct of the term from functional and critical perspectives. Digital literacy as a heterogeneous concept is claimed by diverse stakeholder disciplines such as education, communication studies, English, media studies, library information studies, and computing. The chapter underlines the complementary notions of digital literacy couched in both "conceptual" as well as "standardized operational" definitions and sheds light on the shifting implications of global digital literacy. From this perspective, it scans the global landscape to understand the diffusion of digital literacy and to show how the concept is tackled within disparate contexts of use. The chapter also highlights contemporary issues associated with the spread of digital literacy, including challenges of cross-cultural digital literacy and digital divide.

INTRODUCTION

Decoding digital literacy is a descriptive act of interpreting, reinterpreting, and understanding the relationship between the terms digital and literacy in the expanding space of information and communication technologies (ICTs). While the idea of literacy reveals a long evolutionary past associated with the term literate, the construct of digital, as we use it today, is shaped by the use of the digits, 0 and 1, in the 1930s and 1940s to represent computer data—a practice that eventually came to be known as digital . With the emergence of the Internet and the Web as the dominant systems of information organization and knowledge creation, the concept of literacy was broadened from its original notion of skills in reading and writing to developing cultural, historical, social, and technical awareness— a shared assumption critical to and closely associated with the understanding of ICTs and their use as well. The shift has influenced the definition of literacy as "primarily a technology of which records are the end products" (Clancy, 1993, p. 20). Although contemporary discourse in digital literacy assumes a much expanded scope of understanding than a product view of technology, the deterministic tendencies are evident in instances in which digital literacy is viewed as a set of benchmark skills. Broadly speaking, digital literacy is couched in both "conceptual" as well as "standardized operational" definitions (Lankshear &

Knobel, 2008, p. 2), the key distinction being the former places digital literacy within the multiplicity of frameworks and models, while the latter measures and observes skills and performances that advance the "standards" of being digitally literate.

BACKGROUND

In 1981 *The Washington Post* first pioneered the concept that demanded "special skills" to use and manage computers (Warschauer 111) and invented the term "computer literacy." Later, extension of the term "literacy" included "information literacy," "digital literacy," and "media literacy" to broaden the idea of skills. Paul Gilster (1997) in his pioneering book, *Digital Literacy*, popularized digital literacy as a shorthand for understanding and using information in multiple formats "from a wide range of sources presented via computers" (p.33). He operationalized and extended the term throughout the book, postulating that "digital literacy is about mastering ideas, not keystrokes" (p.1)—a call to attention between a "special kind of mindset or thinking" and "limited technical skills" (Bawden, 2008, p.19) premised on tasks and performances on the other. According to Gilster, digital literacy is about developing a critical approach toward using digital sources and forming awareness about our "expanded ability" (p.31) to connect with people and information using these sources. Over the years, digital literacy has addressed the split through skill and knowledge perspectives. Evidently, the skill construct affirms the neutrality thesis of technologies in which technologies are understood as means or instruments that need to be learned; conversely, the knowledge model ascertains technologies as more complex systems, not free of social, cultural, and political biases.

Despite these prevalent articulations, the challenges of defining digital literacy stem from a lack of consensus building among stakeholder disciplines, including education, communication studies, English, media studies, library information studies and computing. The problem is further compounded by competing interpretive frameworks and theoretical models (Boechler et al., 2014) that stake claims on the scope and application of digital literacy. Considering the value of addressing the diverse views, the scholars have framed a discourse around digital literacy to accommodate dominant perspectives. These perspectives coalesce the domain-specific views into two broad categories that are identified as conservative, sometimes called traditional, and skeptical (Aviram & Eshet-Alkalai, 2006; Boechler et al., 2014). The former is uncritical of existing literature and accepts it in face value, privileging an instrumental view of digital literacy implicated in the notion of acquiring threshold or generic set of technical skills. This perpetuates the standardized paradigm of skill acquisition, a method common in educational institutions that aligns pedagogy through traditional conceptualizations of computer literacy (Ferrari, Punie & Redecker, 2012), information literacy (Mackey and Jacobson, 2011), and network literacy (McClure, 1994). Notwithstanding the widespread adoption of the view in curricular mapping and technology developments, the assumption is challenged as a didactic model that stabilizes teaching and learning as a set of prescriptive and durable practices that have fixed unities of time and place in which the role of technology is regarded as neutral.

The skeptical or functional approach, on the other hand, gained prevalence as a reaction to the conservative approach. The underlying thesis favors contextualization of digital literacy and by extension digital technologies, reframing digital literacy as a plural concept. As an alternative strategy, it recognizes that digital literacy cannot replace traditional learning but can enhance the learning environment. The thinking here is that the functional approach potentially erases the dichotomies between digital and

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