Chapter 2
Digital Literacy for the 21st Century

Hiller A. Spires
North Carolina State University, USA

Casey Medlock Paul
North Carolina State University, USA

Shea N. Kerkhoff
North Carolina State University, USA

ABSTRACT

Digital literacy involves any number of digital reading and writing techniques across multiple media forms. These media include words, texts, visual displays, motion graphics, audio, video, and multimodal forms. There are myriad cognitive processes at play, along a continuum from consumption to production when a reader is immersed with digital content as well as with print text. The purpose of this chapter is to (1) define digital literacy from multiple theoretical viewpoints, (2) illustrate how the definition continues to evolve in light of emerging technologies, and (3) discuss the cognitive, social, and affective dimensions of digital literacy as it is a key requirement in contemporary K-12 education.

INTRODUCTION

In the past few decades, technology has spanned the globe, connected people in a whole new way. As a result, citizens of all countries have not only had to learn to use new technology, but also learn how to interact with one another. Skills that comprise these abilities have been combined under the term "digital literacy." The purpose of this chapter is to (a) define digital literacy and its changing nature, (b) discuss implications of digital literacy on contemporary schooling, (c) demonstrate the impact of digital literacy on digital citizenship, and (d) analyze the implications of digital literacy on educational equity.

BACKGROUND

Almost two decades ago, Gilster (1997) defined digital literacy as the "ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (p. 1). At this time, the Internet was in its infant stages. More than a decade later with Internet usage in full swing, Fieldhouse and Nicholas (2008) asserted that terms like *literacy* and *fluency* can be used to describe how users find and evaluate information within digital environments. Digital literacy involves any number of digital reading and writing techniques across multiple media forms, including: words, texts, visual displays, motion graphics, audio, video, and multimodal forms. In the same way that literate individuals can negotiate print text through the processes of reading and writing, literate users of technology are able to consume and produce digital compositions. There are many cognitive processes at work, along a continuum from *consumption* to *production* when a reader is immersed with digital content. The digital context is challenging for all readers due to the fluid nature of the Web and the demand for critical judgments (Spires & Estes, 2002) as the reader makes decisions about how to locate information as well how to discern the reliability and credibility of that same information.

WHAT IS DIGITAL LITERACY?

Spires and Bartlett (2012) have divided the various intellectual processes associated with digital literacy into three categories: (a) locating and consuming digital content, (b) creating digital content, and (c) communicating digital content (see Figure 1). Learners must develop evaluative dispositions as they navigate digital content. A discerning mindset is essential in order to interact with online resources with accuracy. Without critical evaluation, the learner may easily be directed by the technology rather than the learner directing the inquiry.

Figure 1. Digital literacy practices involve the ability to locate and consume, create, and communicate digital content, while simultaneously employing a process of critical evaluation
Adapted from Spires & Bartlett (2012)
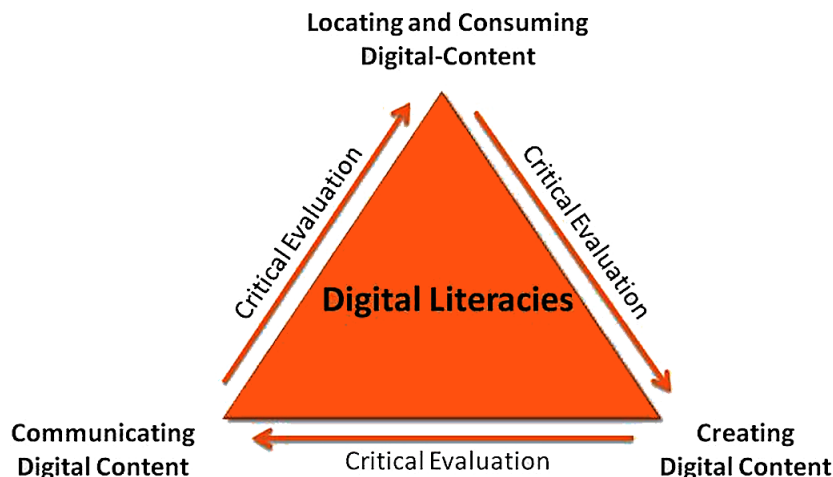
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