

## Chapter 6

# A Maturity Model for Digital Literacies and Sustainable Development

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### ABSTRACT

*As the world becomes increasingly digitized, a key aspect of digitization is the notion of “digital inclusion,” the empowerment of individuals through digital participation, as enabled through the functional, socio-economic, and transformational dimensions of digital literacies. This chapter recounts the role of digital literacies in supporting participative and therefore sustainable development. Taking a historical, development perspective, this chapter describes a digital literacies maturity model (DLMM) to examine the relationship between knowledge societies, digital inclusion, and digital literacies. This model combines the World Bank’s four knowledge policy pillars with the four stages of digital development to link digital policies with socio-economic wellbeing and serves as a framework for the creation of sustainable knowledge societies.*

## **INTRODUCTION**

It is a given that the world is now becoming increasingly digitalised. However the speed at which this digitisation has occurred, has led to unequal progression amongst societies. A key aspect of digitisation is the notion of “digital inclusion”; the empowerment of individuals through digital participation. Successful initiatives, supported by digital literacy, have enabled those that are isolated to gain on a social and economic front (Sharma & Mokhtar, 2006). This paper recounts the role of digital literacies in supporting participative, and therefore sustainable, development. Taking a historical development perspective, the paper concludes with a maturity model that links digital policies with socio-economic well-being.

Building on the pioneering work of Gilster (1997), Belshaw (2012) offers a comprehensive definition of modern literacies in digital society:

*Literacies involve the mastery of simple cognitive and practical skills. To be ‘literate’ is only meaningful within a social context and involves having access to the cultural, economic and political structures of a society. In addition to providing the means and skills to deal with written texts, literacies bring about a transformation in human thinking capacities. This intellectual empowerment happens as a result of new cognitive tools (e.g. writing) or technical instruments (e.g. digital technologies). (p.90)*

It has been suggested that digital inclusion and participation enables the grassroots to be engaged, bridging some of the prevailing socio-economic disadvantages (SEDs) that exist within societies, as well as across countries (Armenta et al., 2012). This is the fundamental premise of digital literacies – the set of skills and tools that will empower individuals and groups to participate fully in the increasingly digital future and hence bridge the disparities in socio-economic opportunities.

## **BACKGROUND**

### **The Evolution of Digital Literacy**

Lanham (1995) first conceptualised digital literacy as the ability to comprehend information, regardless of the medium. This definition focused on the user’s ability to navigate between the various online and offline mediums. Since this original conceptualisation, the term digital literacy has evolved along with pervasive Information and Communication Technology (ICT) in society. While Lanham created awareness of the need to comprehend the transformations brought about by the incorporation of ICTs, it was Gilster (1997) who popularised the concept of digital literacy and its emergence as a critical skill. His portrayal of digital literacy as “mastering ideas, not keystrokes” (1997, p.15), positioned the concept to focus more on cognitive ability, as opposed to competencies. This was considered a milestone, as society rapidly digitised and network effects arising from social media led to the development of social capital as a socio-economic advantage.

Building on this, Eshet-Alkalai (2004) presented five survival skills for the digital era: photo-visual literacy, reproduction literacy, information literacy, branching literacy and social-emotional literacy. Of these five digital literacies, four of them are largely based on specific digital skills. As the contrasting element, socio-emotional literacy is of particular interest. The definition of socio-emotionally literate users offered by Eshet-Alkalai (2004) is individuals who are able to work with others, sharing and evaluating

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