Chapter 9
Technology Aspects of Information Literacy in the Workplace

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ABSTRACT
Workplaces need information literate employees in order to manage the increasing quantity and complexity of information that impacts their organizations, yet they provide uneven information literacy education. Information and technology literacy are also imperative for the organization as a whole. Decision makers should systematically identify key information and technology literacy processes within the organization, and assess the learning gaps of their employees. Employers should allocate human and material resources to facilitate a variety of formal and informal learning venues, incorporating technology. Such education should also reflect andragogical principles and authentic collaborative learning activities, which can be facilitated by technology-based collaborative tools.

INTRODUCTION
As the workplace has become more complex, the work force has needed to deal more effectively with ever-increasing amounts and types of information. As workplace employers consider tool-based literacy, they can incorporate such technology skills to train employers to be more information competent. This chapter explains the symbiotic relationship between technology and information literacy in the workplace, and explores associated training issues.

BACKGROUND
To address technology aspects of information literacy in the workplace, each of these key terms needs to be discussed. To start with, information literacy needs to be couched in the context of the Information Society.

The Information Society
This time in history has been designated as the Information Society, the Knowledge Society, even the Post-Information Age. No matter the term, information continues to explode, and the
workplace sometimes has little structure to manage it. At the World Summit on the Information Society, leaders “made a strong commitment towards building a people-centred, inclusive and development-oriented Information Society for all, where everyone can access, utilise and share information and knowledge” (United Nations, 2006, p. 6). Even back in 1993, the SCANS (Secretary’s Commission on Achieving Necessary Skills) Report asserted that employees needed to deal with information and technology individually and as a work team. In 2001, Beam listed a number of the drivers of today’s workplace that involve information:

- Globalization of commerce, which requires communicating across cultures and languages.
- Less vertical integration, which requires more peer-to-peer business planning and communication.
- “Flatter” organizational structure, which requires more peer and cross-function communication.
- Less work stability, which requires employees to adapt and be retrained efficiently.
- More sophisticated equipment and processes, which require employees to have more knowledge and analytical ability.
- Lower cost digital technology, which may reduce the need for lower- and mid-management, but increase the need for highly literate (including technologically) employees.

In this environment, information literacy needs to be incorporated into workplace learning.

As noted above, information increasingly depends on technology for its creation and dissemination. International work teams use technology to share ideas and create information products in a cost-effective manner. Outsourcing requires timely information and seamless service that is possible only through technology. Governments depend on technology to provide services and manage functions. The majority of jobs now involve technology and information, which can be overwhelming especially for digital immigrants. How can workers can the skills and knowledge to deal with these new workplace realities?

**Information Literacy**

The term “information literacy” was created in the 1970s, expanding the notion of library or bibliographic skills. The general principle states that the information literate person can locate, evaluate, use, and share information effectively and purposefully. Librarians have vanguarded the concept of information literacy, particularly academia. As such, the Association of College and Research Libraries (ACRL) (2000) listed the following indicators of information competency:

- Determine the extent of information needed.
- Access the needed information effectively and efficiently.
- Evaluate information and its sources critically.
- Incorporate selected information into one’s knowledge base.
- Use information effectively to accomplish a specific purpose.
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

However, information literacy transcends the academic domain to include lifelong skills needed to successfully navigate the workplace, socio-political environment, and personal life.

UNESCO Bangkok has identified communication and information as a major program, with information literacy constituting a major thread.