Chapter VIII

Instructional Design and Technology Implications for Indigenous Knowledge: Africa’s Introspective

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Abstract

It is fairly accurate to assume that societies are facing a paradigm shift from industrial to information society, and a transition from information to knowledge society. This shift has impacted the nature of the relationship between society, knowledge and technology. It is also valid to assume that knowledge is a resource. This chapter discusses instructional design and technology from Africa’s indigenous knowledge perspective. It is not the intent necessarily to dichotomize indigenous and non-indigenous knowledge structures. Rather, the objective is to rationalize the place of indigenous knowledge by addressing the context of usage, challenges and dilemmas, and provide a rationale and suggestions for instructional integration.
Introduction

In Africa, as elsewhere, much has been written about information and communication technology (ICT), even though it has been too expensive, complicated or outside everyday culture for many indigenous peoples (Adam & Wood, 1999; Herselman & Britton, 2002; Sonaike, 2004). Specifically, ICT (mis)application is well noted, as is the direct and indirect influence that it has on society (Gibson, O’Reily, & Hughes, 2002; Liberman, 2003; Reiser, 2001). These dynamics influence the distribution of knowledge and its (mis)application. While a persuasive argument is presented here for the integration of indigenous knowledge (IK) into the curriculum and for proposed instructional and pedagogical practices, no suggestion is made that either will go uncontested or will be seamlessly validated. It is, however, argued that when making instructional decisions it is pertinent to acknowledge IK structures.

Instructional design and technology (IDT) is guided by theories and models that direct the development of instructional sequencing. It encompasses analysis of learning and performance problems, design, development, implementation, evaluation and management of instructional and non-instructional processes and resources. Instructional goals are accomplished through systematic procedures and various instructional media (Reiser, 2001). ICT, on the other hand, refers to computers, software, networks and related systems that allow users to access, analyze, create, exchange and use data, information and knowledge. If successfully implemented and maintained, the infrastructure brings together people in different places and time zones with multimedia tools for data, information and knowledge management (Herselman & Britton, 2002). Interestingly, the growing awareness of IDT has coincided with increased ICT application (Dillon, 2004; Reiser, 2001). However, as Dillon observes, ICT has no theoretical foundation of its own and has applied theories developed in education, while IDT utilizes both educational and technological theories.

In this chapter, the term “indigenous peoples” is used holistically to refer to multiple groups in Africa and their interaction with introduced Western-influenced education systems. The term is contrasted with “non-indigenous” knowledge. While the term “knowledge” is used singularly, the position of this chapter is that there is not a single ideal of “knowledge” and that each group has its own understanding and interpretation of “knowledge.” Likewise, the term “peoples” reflects multiple groups. Although the term “Africa” is also used broadly, the diverse nature of the continent is recognized, as are the shared histories and processes. Therefore, this chapter is written with the recognition that many “knowledges” exist in the context of Africa’s “peoples”

It is not the intention of the chapter to diminish the role of “Western” education. Rather, it is an attempt to contextualize IDT within a context of IK that utilizes
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