Chapter 2
Knowledge Sharing in a Learning Management System Environment Using Social Awareness

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ABSTRACT

The premise for this chapter is that learning and knowledge sharing is a human-to-human process that happen independent of space and time. One of the essential facets of learning is the social interaction in which personalized knowledge support is an outcome of learners sharing experiences. To this point, this chapter does not directly address a specific learning management system (LMS) platform but addresses forms of communication that can be encountered as tools of LMS platforms. The chapter argues that LMS ought to be able to facilitate the social interaction among learners not confined to particular places. Learners, because of their mobility, perform tasks in three varied locations or contexts: formal contexts, semi-formal contexts, and informal contexts. In this chapter, learners use social awareness to determine the appropriateness of an LMS tool to engage in a knowledge activity, as they traverse the varied contexts. Thus, the chapter posits that a ubiquitous personalized support and on-demand sharing of knowledge could be realized if a learning management system is designed and adopted cognizant of learners’ social awareness.

INTRODUCTION

This chapter does not directly address a specific learning management system (LMS) platform but addresses forms of communication that can be encountered as tools of LMS platforms, as learners share knowledge. The chapter argues that to be able to design LMS that ought to enable social interaction among learners not confined to particular places, we must first understand how learners interact and the tools they use. In this chapter, learners use social awareness to determine
the appropriateness of an LMS tool to engage in a knowledge activity, as they traverse the varied contexts. Knowledge is not a fixed commodity, but a function of our interactions with external resources including tools, media, and other humans (Ryder & Wilson, 1997). This suggests that human knowledge transforms as people socially interact with others and the surrounding environment. Consequently, the chapter is premised on the notion that knowledge is created and transferred through the dynamic interactions among individuals and between individuals and their environments (Nonaka, 1994). Thus, knowledge sharing is social and sensitive to context.

It is inferred from the notion of knowledge creation, sharing or transfer that knowledge can be perceived to transform when context and social presence awareness interact. In this regard, context and presence awareness influences the interaction and the problems that could be solved and how they are solved. In this chapter, social awareness is synonymous with context and social presence awareness. Although a great number of studies (e.g., Shariq, 1999; Polanyi, 1966; 1958) have shown that knowledge creation and transfer is essentially a human-to-human process or an outcome of social interaction (Nonaka, 1994), the relationships or roles of context and social presence awareness as catalysts for knowledge sharing and transformation in a learning environment has not been explored. This chapter aims to contribute to that effect.

This chapter is about exploring and understanding how, through a learning management system environment, a learner uses social awareness to leverage personalized knowledge sharing. It reveals the actual nature of ubiquitous learning through social interaction where awareness of context and social presence is argued to be the underlying process of the activity. The chapter is on how varied forms of communication for knowledge sharing in an LMS learning environment are an outcome of social interaction coordinated by social awareness. Social awareness is synonymous with awareness of context and social presence. Context is understood as the situation in which a learner or a group of learners find themselves. Accordingly, context is defined as any information that can be used to characterize the situation of an entity. An entity is a person, place, or object that is considered relevant to the interaction between a user and an application (Dey and Abowd, 1999). Social presence is re-defined and understood to be the mediated presence of another learner who could provide personalized on-demand knowledge support for a learning problem as the learner traverses varied learning contexts.

Learners in contact universities come from varied social backgrounds, with diverse languages and cultures. To this point, one of the prevailing educational challenges is that of providing personalized academic support to under-prepared learners (Jaffer et al, 2006). Awareness of the social environment and social resources is, therefore, fundamental to the provision of personalized academic support to a learner. Learning is made easy when a learner has consistent awareness of context and presence of social resources (Kekwaletswe, 2009; 2007). Ubiquitous personalized knowledge support refers to the provision of context sensitive and anywhere, anytime help as learners traverse varied locations.

Learners use awareness of context and social presence as a means to access ubiquitous learning support, interpret and adjust their knowledge – sharing what they know with others through social interaction. The chapter, thus, focuses on the peer-to-peer interaction and the learning environment. The social interaction whose outcome is transformed knowledge and provision of support is location and time independent. Since sharing learning experiences is a ubiquitous phenomenon, learners continuously use awareness of the environment and awareness of available social resources they can draw upon to facilitate knowledge consultation (Kekwaletswe, 2009: 2007).

This chapter is about the advancement of the human-centric approach to knowledge creation