

## Chapter 76

# Professional Development through Web 2.0 Collaborative Applications

**Indi Marie Williams**  
*Arizona State University, USA*

**Bolanie A. Olaniran**  
*Texas Tech University, USA*

### ABSTRACT

*This chapter presents a fresh look at collaborative applications and their use in professional development and informal learning. The chapter addresses some of the cultural challenges impacting collaborative technologies, especially given the fact that these technologies are transplanted from developed countries into regions of the world that are only beginning to understand their significance. Therefore, the chapter points to the importance of and the needs to allow cultural variation and differences in usage. The chapter acknowledges the fact that collaborative technologies possess great potential for both professional development and informal learning, but cautions that external factors, such as culture and community, be taken into account to realize potential benefits.*

### INTRODUCTION

The twenty-first century has marked a profound shift in how individuals, gather, evaluate, manage, and disseminate information. Many individuals do not desire to learn in isolation, but yearn for social connections that allow for sharing ideas and providing support to their colleagues. Glo-

balization, changes in world market economies, and information glut have challenged traditional methodologies of learning. This is especially true, as employees are becoming more computer savvy, challenging organizations to rethink the importance of professional development, and in turn, informal learning opportunities afforded to their workforce (Hanley, 2009). Some organizations have turned to the construction of online professional development learning communities

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(Glowacki-Dudka & Brown, 2007). Fortunately, the formation of these communities is just one way in which informal learning can occur. These communities also create an arena where self-development can take place, connecting professionals with opportunities to continue cooperative and lifelong learning. This continued development is essential to organizational success because as employees strive to enhance their skills, they ultimately demonstrate improved job performance (Kukulska-Hulme & Pettit, 2008).

The emergence of Web 2.0 has brought a host of cloud-based applications, all of which create a myriad of new approaches to communication and collaboration. Yet, it is still unclear how these technologies will impact professional development. Some futurists predict that Web 2.0 applications will cause a paradigm shift comparable to the institution of the printing press (Graham, 2004; Liu, 2004). This still remains to be seen. However, if indeed 75% of learning by adults occurs informally (Hanley, 2009), then professional development models must be re-conceptualized in order to account for changes in technology and information immediacy.

Thus, areas fertile for the development of Web 2.0 collaborative applications are e-learning and distributive learning. However, an area that is often overlooked is professional development. As the growth and development of newer technologies increases, academicians, companies, and individual scholars find themselves in positions where they are constantly pushed to adopt and apply these technologies in their disciplines. Professional informal learning is also increased, and by nature, a byproduct of technology accessibility. Therefore, these learning environments and areas of knowledge dissemination, at times, may challenge the fabric of how learning can occur, and it is for this reason that adoption of Web based technologies is not always successful.

However, and despite resistance, the twenty-first century marks a profound shift in how adults regard Web 2.0 applications. For example, the

Pew Internet and American Life Project (2011) discovered that by 2003, 44% (i.e., 53 million) American adults had used Web 2.0 technologies to publish thoughts, share files, and interact with others. As of 2011, the current estimate of adult Internet users is 78% (i.e., 94 million). Collectively, these users contribute to the wealth of information freely available online (Lenhart, Horrigan, & Fallows, 2004), solidifying the fact that digital media are central in almost every aspect of daily life, most notably in how we learn, communicate, reflect, (co-) produce, consume, create identities, share knowledge, and understand political issues.

Unfortunately, a newer way of communicating and co-creating knowledge presents significant challenges that must be addressed before these technologies can be properly implemented into learning environments, informal or otherwise. Some of these concerns include how an individual's creation, or co-creation, of knowledge affects identity and a general sense of self in terms of socio-cultural and socio-technical underpinnings at both micro and macro levels. In other words, knowledge acquisition in the digital age extends beyond well-designed instruction, or even the simple offering of courses and curriculum via modern communication technologies (Olaniran, 2007a, 2007b). How we communicate online incorporates the essence of who we are as social beings within an information society. Therefore, communicative technologies allow an individual to actively and intentionally construct knowledge and engage in learning on his/her own terms.

Currently, there remain realistic challenges to the use and implementation of Web 2.0 technologies, even within professional development and informal learning environments. Cox (2009) states that Web 2.0 collaborative applications encourage learning and development in new and different ways. Another great advantage to their use is that they are not only cost effective but also easy to implement into learning environments. Although, Cox's analysis is based upon K-12 experiences, his observations are equally applicable to institutions

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