Chapter 14
Online Pedagogy Design and Development
New Models for 21st Century Online Teacher Professional Development

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ABSTRACT

The purpose of this chapter is to examine the shifting priorities of online teacher professional development design, particularly through the lens of online pedagogies. Whether one's purpose is to design an online teacher learning community or formal professional development program, decisions about technology use will mediate how the learning communities or training programs function. Designers, when choosing communication tools or digital media for inclusion in their program, ideally draw from their technological pedagogical content knowledge, or TCPK – that is, their understanding of which technologies will support pedagogy appropriate for the content and learners being targeted. The model we offer for online teacher professional development program design makes visible the interaction between the technology, the content, the pedagogy and the learner.

INTRODUCTION

The purpose of this chapter is to examine the shifting priorities of online teacher professional development design, particularly through the lens of online pedagogies. The teaching profession is changing as a response to multiple outside pressures and the rising importance of digital media and digital literacies in teaching and learning. United States federal policy mandates, such as the No Child Left Behind Act (United States Department of Education, 2002), now require evidence of teacher quality, thereby pushing the profession to become more data-driven in terms of providing empirical evidence of the efficacy

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of teacher professional development programs. Additionally, there are new standards, such as the second edition of the *National Educational Technology Standards for Teachers(*NETS-T*)* published by the International Society for Technology in Education (International Society for Technology in Education, 2009), that state, among other things, that teachers should be able to teach and model the effective uses of digital media such as blogs, wikis, and other social networking tools. At the same time, the global workplace and the Information Age economy are demanding new skills of graduates (Dede, 2000b), which require the shifting of priorities within K12 curricula and challenge teachers to teach new content in new ways to help students develop those skills. For example, we have seen a shift in the role that the Internet occupies in education. At first, the Internet (now known as Web 1.0) was exalted for its copious amounts of information that provided new worlds of knowledge and content created for our consumption. The Internet has evolved, however, from a simple information source to a communicative and creative platform. Now we find ourselves immersed in a world of Web 2.0, where we create our own digital media, build and maintain a participatory culture through social networking, and communicate instantly in real-time through chat and instant messaging (Jenkins, 2006; Solomon & Schrum, 2007).

As a result, NETS-T (International Society for Technology in Education, 2009) also states that 21st century teachers must be lifelong learners and reflective practitioners who are able to adjust to rapidly changing expectations. Where teachers from previous generations strove to develop a core set of relatively static skills that would serve them well in their professional lives, today's teachers need to keep learning and developing new skills to adjust for these changing needs and expectations (Darling-Hammond & Bransford, 2005). Emerging research on how children learn impacts our understanding of how teachers learn, as well as what it means to think, write, and teach as a professional educator (Bransford, Darling-Hammond, & LePage, 2005). Changing patterns in Internet usage, new understandings about how teachers and students learn, and shifting priorities about what is important to teach raise a crucial question: What might 21st century teacher professional development (TPD) look like if it is to respond to these trends and concerns? TPD programs that are delivered online assume new importance in this changing landscape, offering the potential to expand beyond the traditional 'sit and get' model of professional development to embrace a model that utilizes and targets 21st century tools, skills and learning styles in order to reach 21st century students and learning goals. Offering TPD online and nothing more, however, does not guarantee relevance to those goals, alignment with how people learn, or an updated approach. Development of online TPD programs has proliferated extensively as designers, providers and funders have seen its potential to address a variety of priorities for teachers' and students' learning. Research in the field of online TPD is also expanding rapidly, with early findings pointing the way to empirical research models that guide the design of online teacher professional development programs. This chapter explores the question of 21st century teacher professional development from the perspective of online pedagogy, exploring the unique territory that emerges when technology and pedagogy intersect and offering a model for online pedagogy to consider when designing teacher professional development in the digital age.

BACKGROUND

Until recently, as with many online learning environments, online TPD was characterized by the simple transfer of face-to-face pedagogy and text-based materials to a web-based container, frequently with an asynchronous discussion tool and archival databases (Stevens-Long & Crowell, 2002). Today, however, more sophisticated