

## Chapter 16

# Modeling Online Teaching and Learning to Pre- and In-Service Teachers through the use of the Web 2.0 Social Networking Tool NING

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### ABSTRACT

*The rise of the Internet and Web 2.0 tools for “anytime, anywhere” learning is impacting K-12 and teacher education programs. Many teacher education (TED) faculty and professional development (PD) providers are now encouraged or required at a minimum to incorporate an online learning component into courses. Not only are they teaching the required course content to pre- and in-service teachers in an online environment, but are also modeling the use of that environment to teachers who will ultimately be required to design, develop, and provide online instruction to their future students. The purpose of this chapter is to discuss: (1) transitioning instruction from face-to-face to an online learning environment, (2) examples of learning activities to implement with the Web 2.0 social networking tool NING, and (3) implications the NING has for those instructing pre- and in-service teachers.*

### TRANSITIONING TO ONLINE INSTRUCTION

#### Why the Need for a Transition?

The National Educational Technology Plan for 2010, released by The United States Department

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of Education’s Office of Educational Technology, centers many of its goals on preparing future leaders for engagement in a global economy through incorporating the Internet in daily educational tasks (U.S. Department of Education, 2010). A central focus of the plan is aimed at creating online learning environments that support collaboration among students and teachers. The plan claims to guide the U.S. in achieving two main goals by

2020: (1) raise the proportion of the U.S. population that holds a 2 or 4-year degree from 39% to 60%, and (2) ensure that all high school graduates, regardless of race or income, are ready to succeed in college and careers (U.S. Department of Education, 2010). The New Media Consortium's Horizon Project, which was established to identify emerging technologies potentially altering education around the globe, also report online learning and social networking as factors that will impact teaching and learning between 2010-2015 (Johnson, Smith, Levine, & Haywood, 2010). For any student to succeed in college today it is imperative that K-12 students are prepared to attend classes in an online environment. Allen and Seaman (2008) estimated approximately 4 million college students were enrolled in at least one online course during the fall 2007 term. As information becomes more readily available learners will continue to desire anytime, anywhere instruction and universities need to be prepared to meet those needs and desires of online learning.

K-12 schools throughout the U.S. are taking the necessary steps to ensure students are prepared for online learning in higher education. Picciano and Seaman (2009) estimated over 1,000,000 K-12 students were engaged in online learning, during 2007-2008, and 75% of school administrators report having at least one or more students enrolled in a fully online or blended course. Some states, with Michigan leading the way in 2006, incorporated an online learning graduation requirement. Michigan students can meet the requirement in one of three ways: (1) complete an entire online course, (2) complete, at a minimum, twenty hours of an online learning experience in an existing course, or (3) participate in an online course or learning experience that is incorporated into each course of the required curriculum (Michigan Department of Education, 2006). To require students to participate in online learning, teachers need to be prepared to provide online instruction. The International Society for Technology in Education (ISTE), an association

focused on improving teaching and learning by advancing the effective use of technology in PK-12 and teacher education programs, developed National Education Technology Standards (NETS) for students, teachers, and administrators. The NETS for teachers (NETS-T) encourage teachers to model and apply the NETS for students (NETS-S) in their instructional practice. The NETS-T advise that all teachers: (1) facilitate and inspire student learning and creativity in both face-to-face and virtual environments, (2) design and develop digital-age learning experiences and assessments, (3) model digital-age work and learning of an innovative professional in a global and digital society, (4) promote and model digital citizenship and responsibility, and (5) engage in professional growth and leadership through promoting and demonstrating the use of digital tools (ISTE, 2010).

While standards from ISTE are an excellent guide for educators, states, teacher education (TED) programs, and K-12 administrators need to make online learning a priority in today's educational system. Watson, Gemin, Ryan and Wicks (2009), in their annual review of state-level policy and practice of K-12 online learning, noted all but fifteen states have a state virtual school or state-led online initiative. Michigan, in 2008, proposed two standards to be added to the Entry-Level Standards for Michigan teachers, which impacts all teachers:

*Successfully complete and reflect upon collaborative online learning experiences;*

*Demonstrate an understanding of and the ability to create an online learning experience and demonstrate continued growth in technology operations and concepts, including strategies for teaching and learning in an online environment (Michigan State Board of Education, 2008, p.3.).*

These additional standards also impacted the State's Educational Technology endorsement, which recognizes the accomplishments of educators who gain expertise in Information Age knowl-

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