

## Chapter 9

# A Model for Professional Development in Technology Integration

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### **ABSTRACT**

*The change in any instructional practice requires an effective professional development plan that best addresses the needs of the teachers. This chapter is an attempt to conceptualize a research-based multi-dimensional model for professional development of teachers with respect to technology integration. The purpose of this study was to use the current literature to determine the characteristics of high quality professional development that focuses on the integration of instructional technology into teaching practices. This study developed as a result of the findings and recommendations from a previous quasi-experimental study. Following a thorough review of related literature to illuminate the recommended professional development practices, a model was developed based on the TPACK framework. The proposed model includes (1) TPACK as the central framework to design the teacher technology integration curricula, (2) the use of online discussion and support platforms to ensure the sustainability component of the training, and (3) on-site professional collaboration and partnership to provide teachers with opportunities to model, share their experiences.*

DOI: 10.4018/978-1-5225-3223-1.ch009

## **INTRODUCTION**

A number of studies have been carried out to capture the key knowledge, skills, and learning supports needed for the 21<sup>st</sup> century. Each one was different in its categories and lists of essential skills, but none comprehensively succeeded in capturing the 21st century student outcomes needed and the school reforms necessary to support those outcomes. However, they all agree that one of these skills is Information and Communication Technologies literacy. As Kotrlik, Harrison, and Redmann (2000) stated, “Technological advances and the accelerated transfer of information, along with related knowledge, skills, and abilities, are of paramount importance in an information society” (p. 396). The challenge now is how to prepare teachers for these demands. In fact, many studies concluded that teacher preparation is the most important factor that could help teachers develop positive attitudes toward technology and integrate it in the ESL classroom for both traditional and non-traditional learners (Abouabdelkader & Fatmi, 2012; Fatmi, 2011; Guzman & Nussbaum, 2009; Larouz & Fatmi, 2010; Reynolds & Morgan, 2001; Yildirim & Kiraz, 1999; Yildirim, 2000).

The purpose of any professional development program is to inform and change teacher behavior as a result of new information. Fullan (1995) defines professional development as “the sum total of formal and informal learning pursued and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change” (p. 265). Bredeson (2000) defines professional development as learning opportunities that engage teachers’ creative and reflective capacities to strengthen their practice. These learning opportunities tap into a teachers’ natural inclination to reflect on, personalize, and transform new knowledge and skills in ways that fit their personal style as well as the context of their work. Professional development is each teacher’s dedication to maintaining excellence over the course of his or her career. This commitment is guided by several factors including “the individual’s own needs, the environment in which teaching occurs, the type and quality of the providers, and the incentives to continue to develop as a professional” (Glenn, 2005, p. 143).

Professional development plays an important role in shaping teacher use of ICT in the classroom (Gao et al., 2009; Lim et al., 2010). Teachers “need to know why they do what they do” (Hubbard & Levy, 2006, p. 11) in the technology enhanced EFL classroom, which lends itself to the importance of teacher education in technology integration. According to Creighton (2003), “the technological changes we face currently, compared with the changes of the past, require much more attention to staff development and support” (p. 91). In the same line of thought, Mouza (2002) postulates that teachers need opportunities to discover what the technologies can do, learn how to operate them, and experiment with ways to apply them in order to use new technologies effectively. Therefore, one of the most important dimensions

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