

# Chapter 102

## A Distributed Community of Practice to Facilitate Communication, Collaboration, and Learning Among Faculty

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### ABSTRACT

*Recent research suggests that professional development initiatives within the framework of a community of practice are more likely to have an effective result than traditional forms of professional development. The overall objective of this chapter is to present a study that aims to improve the understanding of how a distributed community of practice approach affects communication, collaboration, and professional development of faculty, and whether this leads to promote a transformation in teaching practices. The results indicate that a community approach to professional development in higher education is feasible but requires careful design if it is to work with a wide range of faculty staff. Findings also show that while the approach has been successful in many areas, there are aspects that require further work and research.*

### INTRODUCTION

Higher education worldwide is facing cultural, social and technological changes that require new forms of communication, interaction and learning. New models of teaching and learning have evolved producing changes in the way the faculty face the educational process. Principles of long-learning, online learning and blended learning involve new demands for them, so they need to be prepared to cope with these developments and with the increasing expectations to be competent, in terms of integrating content, pedagogy and technology (Crawford, 2008).

In general, the task of preparing faculty to meet these challenges relies in faculty professional development programs. Literature stresses that these programs must address changes in beliefs, knowledge, and habits of practice, in order to achieve changes in the quality of teaching and learning (Gibbs & Coffey, 2004; Kember & Kwan, 2000; Light & Calkins, 2008; Putnam & Borko, 2000; Smyth, 2003). Lloyd and Cochrane (2006) also argue that theory and practice must be interwoven in order to provoke

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changes in faculty's conceptions of learning, thus "theory informs practice and practice informs theory in reflexive and constructivist ways" (p.17).

Literature also shows that traditional professional development (event-based, one-hit training workshops) has been shown ineffective in impacting on teaching practice (Lock, 2006; Schlager & Fusco, 2004). According to Lock (2006), the use of the transmission model from experts to faculty; the one-shot and one-size-fits all workshops; and the failure to address context-specific differences are some of the reasons for the low impact of professional development programs in supporting change in teaching practices. These shortcomings have provoked an interest towards community inspired models.

In the last decade, research has shown that communities of practice (Wenger, 1998) can be a catalyst to improving faculty' professional practice (Schlager, Fusco, & Schank, 2002; Sherer, Shea, & Kristensen, 2003). The notion of building learning communities has become a very valuable mean for engaging faculty in meaningful and effective professional learning. (S. A. Barab, MaKinster, & Scheckler, 2004; Gallant, 2000; Lisewski, 2005; Schlager & Fusco, 2004; Wing Lai, Pratt, Anderson, & Stigter, 2006).

Moreover, the technological infrastructure currently available in many higher education institutions have the potential of creating online and distributed learning environments that can facilitate and expand faculty professional development. According to Lock (2006), for this to occur it is necessary a provision of ongoing opportunities for professional growth based on faculty needs and a shift in the current perceptions of faculty about professional development.

Despite its potential, there are many obstacles that inhibit this kind of professional learning. Many of the faculty members do not have the knowledge, experience and skills necessary to work as a productive member of a community of practice. They are very pressed for time, with growing demands of teaching and research, and not always receive incentives or support from the institution for participating in professional development activities.

Under this context, this chapter presents some partial results of a research which aims to investigate whether a community of practice-oriented professional development model is able to open up to a new practice for faculty and provide the ongoing support which is needed for transforming their pedagogical beliefs and practice (Coto, 2010). The study took place in the Universidad Nacional (UNA) in Costa Rica during 2008 – 2009, with a group of 27 participants from five geographically distributed campuses. The study was the first initiative of UNA in the field of online teacher professional development, and it was focus on the introduction of ICT and POPP (problem-oriented project pedagogy) as agents to change teaching practice (Coto, 2010).

## **THEORETICAL FRAMEWORK**

The study has its roots in the interlacing of two main theoretical areas: professional development in higher education and learning in communities of practice.

### **Professional Development**

There are several understandings of professional development. According to Bligh (2005), professional development aims to improve practice, to develop strengths and skills, and to manage change. It is expected to result in improved teaching performance and better learning outcomes for students. For Dall' Alba and Sandberg (2006), professional development comprises formal and structured courses or

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