Chapter 14
Intentional Communities of Practice, the Challenge of Interactivity

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ABSTRACT
This chapter examines the support of social interaction in a cooperative, situated online learning environment, and the cultural barriers that hinder such intention and interactivity. The findings of a literature review suggest that the greatest challenge to intentional Community of Practice (CoP) is a sense of interdependence among CoP members, the authenticity of the practice or purpose, and a trajectory for the CoP’s future. This case study attends to these issues with a cohort of practicing teachers. It explores an initiative to nurture CoP with cooperative projects and with the support of an online community portal. The case challenges CoP theory from an intentional or instructional standpoint, and informs design and technology in support of CoP.

INTRODUCTION
According to Jonassen, Peck, and Wilson (1999), human learning involves community and true life experiences lacking in the classroom:

In the real world, when people need to learn something, they usually do not remove themselves from their normal situations and force themselves into sterile rooms to listen to lectures on formal principles about what they are doing. Rather, they tend to form work groups (practice communities), assign roles, teach and support each other... learning results naturally from becoming a participating member of a community of practice. (p. 177)
Community of practice (CoP) is a “set of relations among persons, activity, and the world” (Lave & Wenger, 1991, p. 98) “created over time by the sustained pursuit of a shared enterprise” (Wenger, 1998, p. 45). Lave (1996) holds that learning is a social collective, rather than individual, psychological phenomenon. The extent to which this is the case may be the crux of the problem found in this study. The development and strength of a CoP hinges greatly on the degree of interactivity and interdependence of the CoP members, the extent to which knowledge is published to a broader audience and CoP members access and interact with this knowledge artifact and its author(s). Of course, such access is greatly facilitated by computer networks.

Teacher learning community is a main proposition of the NBPTS (National Board for Professional Teaching Standards, 2002). Teachers “cannot work and learn entirely alone or in separate training courses after school” (Hargreaves, 2003, p. 25). Rather, “It is vital that teachers engage in action, inquiry, and problem solving together in collegial teams or professional learning communities” (p. 25). There is a need for new teacher preparation and professional development strategies and for teachers to take more control of them through CoP (Stuckey, Hedberg, & Lockyer, 2001).

Darling-Hammond (1996) found that teachers who have “access to teacher networks, enriched professional roles, and collegial work feel more efficacious in gaining the knowledge they need to meet the needs of their students” (p. 4). Similar arguments are made for other fields in general; the early literature and studies in this area were influenced by knowledge management in the corporate world, where there is a clear value in capturing the collective knowledge of a workforce (Hannum, 2001; Zahner, 2002).

Researchers (Moore & Barab, 2002; Schlager & Fusco, 2004) acknowledge that the current climate of teacher practice in the U.S. works against CoP. Indeed, teaching has been found to actually be a private practice (Riel & Becker, 2000; Schlager & Fusco, 2004). This was confirmed by a pilot study (Powell & Evans, 2006) that examined the nature of community among a preservice teacher cohort during the last semester of their program, their practicum, at a large southern U.S. state university. It explored the degree of physical and online interaction between peers and with faculty and staff, and how knowledge artifacts were shared, or how accessible they were to others in the group. Outside of course work, there was very little communication between members of this cohort, let alone exchange of lesson plans and the like. When such cooperative work took place, it was random and one-to-one; it was private. And the preservice teachers, with one exception, observed a similar lack of cooperation between supervising teachers and their colleagues. The study found that activities provided little opportunity for cooperative work, academic competition individualized practice, paper-based artifacts limited accessibility and revisability, and a private portfolio process lacked consideration of a public audience.

The privatization of teacher practice likely starts with teacher preparation, which could lack the crucial interactivity required to support a thriving teacher CoP. If professional knowledge and practice are private when teachers enter the field, how can they become public later, per the NBPTS standards, and how do we ensure professional development in general? The study detailed herein was initiated by the main purpose of exploring how teacher participation in CoP facilitated with technology might contribute to a more public and cooperative professional development for teachers.

THEORY

Researchers on school learning and instructional design and technology (IDT) continue to rely more on socio-cultural, situated learning theories, in a move away from the strictly cognitive and psychological (Palloff & Pratt, 1999; Scardamalia...