

Chapter 7

Serving Rural Teachers Using Synchronous Online Professional Development

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ABSTRACT

This chapter describes the design and implementation of a blended online synchronous teacher professional development course that was developed to meet the needs of rural educators. The author discusses how research on teacher learning influenced both the course design and instruction and then describes course activities and the ways in which the participants engaged in them. Specific features of the course that supported teacher learning are discussed, the instructor's and participants' perspectives on the course are shared, and evidence of teacher learning is presented. The chapter concludes with lessons learned and a discussion of potential areas of research related to supporting teacher learning in online environments.

INTRODUCTION

In an era when teacher qualifications and accountability for student achievement have increasingly come into the public view, providing high-quality teacher professional development has become more critical than ever. Fortunately, many teacher education programs have recognized this need and have taken on the challenge of developing high-quality, long-term learning experiences that build on what is known about teacher learning and effective

professional development (e.g., Jacobs, Franke, Carpenter, Levi & Battey, 2007; Silver & Stein, 1996). Unfortunately, these programs often reach only a limited number of teachers, typically those who teach in larger urban schools where teachers participate as a school-based team or those who have easy access to a university where such programs are offered. Meeting the educational needs of rural teachers has been a greater challenge.

To address this need, a course was developed in which a group of rural secondary school mathematics teachers met in an online synchronous videoconference over one university semester. This

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chapter discusses the design, implementation and outcomes of this course. In particular, the chapter: (1) makes explicit the thinking behind the course—the course goals, design and content, including the research literature that influenced each; (2) describes the ways in which teachers participated in the course; (3) presents both the instructor's and the participants' perceptions of how the course supported learning; (4) describes the outcomes of the course in terms of teacher learning; and (5) discusses how the course could be redesigned to better support teacher learning.

BACKGROUND

To meet the needs of teachers who cannot easily travel to a university to complete coursework or attend professional development sessions to satisfy licensure requirements, teacher education programs have increasingly turned to distance education as a means of providing teacher learning opportunities. Many of the online courses described in the literature are asynchronous in nature; this model is beneficial in that it allows participants to complete coursework at their convenience, but may limit the kinds of professional development that can be offered and the sense of community that can be developed (Lock, 2006; Parr & Ward, 2006). Synchronous online courses tend to most often use text chats (e.g., Anagnostopoulos, Basmadjian & McCrory, 2005; Jin, 2005) or video conferencing (e.g., Rovai & Lucking, 2003) for real-time interactions among participants. Although these models might offer some advantages over asynchronous courses, there are still substantial limitations. Text chats, for instance, leave the participants essentially anonymous to one other, while traditional video conferencing often requires travel to a site where the necessary technology is available—which may be a substantial distance for some rural educators. Furthermore, all of these online models pose challenges to teacher educators who wish

to engage teachers in substantive discussions about content and pedagogy in ways that are responsive to research on teacher learning (e.g., Ball & Cohen, 1999).

Although research on online learning has generally found no significant differences between student learning in online and on-campus courses (e.g., Caywood & Duckett, 2003; Phipps & Merisotis, 1999), it has also found that technology-based professional development is likely to be ineffective if it does not include substantial instructor-participant and participant-participant interaction (Lock, 2006; McLoughlin, 2002; O'Hanlon, 2007). This finding is not particularly surprising, as it parallels research findings on characteristics of quality teacher professional development in general that suggest there should be a focus on developing a strong learning community among the professional development participants (Darling-Hammond, Wei, Andree, Richardson & Orphanos, 2009). As Parr and Ward (2006) note, however, “(b)uilding a professional learning community is difficult to achieve within a school, let alone across schools, let alone virtually” (p. 790). To develop an effective learning community in an online environment, considerable groundwork must be laid and an intentional ongoing effort must be made to continuously promote this development. The establishment of trust and respect, in particular, are critical if teachers are to work collaboratively to advance their learning and improve their practice with others they know only virtually—especially in situations where teachers are asked to share artifacts of their own practice as part of the learning process.

In addition to the development of a professional learning community, a recent review of research on teacher professional development (Darling-Hammond et. al, 2009) found a number of other characteristics that are critical to teacher learning, which have also been echoed by others in the field (e.g., Ball & Cohen, 1997; Loucks-Horsley, Love, Stiles, Mundry & Hewson, 2003; Putnam & Borko, 1997). One major finding is

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