Chapter 10

An Exploration of Learner-Centered Professional Development for Reluctant Math Teachers

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ABSTRACT

In recent studies, researchers found that, while 90 percent of teachers reported participating in professional development, most of those teachers reported that it was not effective for improving their practice (Darling-Hammond et al., 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Desimone, Porter, Garet, Yoon, & Birman, 2002; Corcoran & Foley, 2003). These findings indicate that the real issue is not that teachers are not provided with professional development, but that the typical modes of professional development are ineffective at changing teacher practices and/or student learning. Therefore, there is a need to explore new ways of conducting effective professional development for teachers. This study investigates a learner-centered model of professional development, which is designed to maximize the impact of teacher training on student learning.

INTRODUCTION

Studies have found that teachers do not necessarily find professional development workshops effective for changing their instructional practice, and this phenomenon appears to be related to the mode and design of current professional development workshops. This chapter will present current challenges to

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effecting change in teachers’ practice, and propose strategies for improving the effectiveness of professional development workshops, based on research that was conducted while executing a Teacher Quality State Grant Professional Development Initiative in two of Georgia’s high-needs public schools. We will first present complex, current challenges that inhibit the transformation of professional development experiences from traditional, random acts happening to teachers, to a systematic and collaborative process happening through teachers. We will then move to discuss the design of a particular form of the learner-centered model, namely, the differentiated instruction professional development model. Next, we will showcase insights gained by two faculty members during the professional development workshop, and we will also present the degree to which teachers effectively implemented differentiated instruction strategies in their practice. Finally, we will conclude with considerations that should be examined while executing learner-centered professional development.

BACKGROUND

Meeting Challenges to Professional Development for Teachers

In this section, we will first present complex, current challenges to professional development – those that inhibit the transformation of professional development from traditional, random acts happening to teachers, to a systematic and collaborative process happening through teachers (May & Zimmerman, 2003; NPEAT, 2000; Schmoker, 2005; Sparks, 2005b) and discuss ways of addressing those challenges. Some of these challenges include: 1) high-quality, job-embedded practice that is expensive, costing more than twice that of stand-alone workshops; 2) teachers’ need for more time to plan for the effective implementation of ideas and strategies gained from participation in professional development, while leadership needs to develop new ways of thinking about task allocation among existing, over-extended staff members; 3) educators’ reluctance to embrace new practices. The reluctance to embrace change in teaching practice is reflected in the body of research on this phenomenon. Individuals, and especially groups of individuals, were found to be reluctant toward change (Donaldson, 2001; Fullan, 2005a), especially when their habits, beliefs, or values were challenged (Fullan, 2003). The nature of systematic change in educational environments is that it is a difficult and stressful process (Fullan, 2005a). With the magnitude of their teaching and administrative workload, educators sometimes fall into what Sparks (2005a) describes as a “resigned state,” in which they feel overwhelmed with their workload, and feel powerless to improve teaching and learning. A problem in classroom practice, where teachers do not implement or act upon what they already know, is described by Schmoker (2005) as a “knowing-doing gap” (p. 149).

This third challenge (educators’ reluctance to embrace new practices) is therefore the main focus of this chapter, and we propose ways of meeting the challenge, based on experiential knowledge gained while conducting a professional development workshop entitled, “Technology Integration into Math Engagement (TIME): A Professional Development Workshop Integrating Technology Tools in Differentiated Math Instruction for Elementary Teachers.” The instructional design of this workshop is rooted in the learner-centered model approach, not only for the content (differentiated instruction), but for the delivery method. We will describe how a learner-centered model approach can help educators reduce barriers, such as fear, anxiety, and the “knowing-doing gap,” to the adoption of a new teaching method, while supporting teachers to meet the diverse needs of their students.
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