

## Chapter 20

# Joint Professional Development of Teacher Candidates and Mentoring Teachers in Using Project–Based Learning for 21<sup>st</sup> Century Learning Outcomes

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### ABSTRACT

*One teaching strategy that engages students and teachers in 21<sup>st</sup> century learning outcomes is project-based learning (PBL). This chapter documents two years of professional development with PBL involving 72 teacher candidates, 19 public schools, and 41 mentoring teachers who jointly created, taught, and evaluated 43 PBL units. An online teacher education course structured the professional development over the last semester for teacher candidates. The semester-long course used the state's professional development materials to structure the design, teaching, and evaluation of the PBL units. The chapter is organized around four main ideas. (1) PBL is an appropriate over-arching teaching approach for classroom teachers to address 21<sup>st</sup> century learning outcomes. (2) PBL teaching provides teachers a relevant setting for media and technology use. (3) PBL implementation requires ongoing professional development and mentoring. (4) Professional development and PBL teaching can involve both teacher candidates and their mentoring teachers learning from each other.*

### PROFESSIONAL DEVELOPMENT CONTEXT OF SCHOOLS

To understand the joint use of PBL by teacher candidates and practicing teachers, the context of the PDS model needs to be provided. While a PDS teacher education model requires substantial resources of funds and time, one value of the model is that teachers are “at the table” and simultaneous renewal is an explicit goal of teacher education and public schools.

DOI: 10.4018/978-1-5225-7305-0.ch020

## **Program Overview**

The program is an integrated five-year, dual-degree program in which students simultaneously pursue a Bachelor's degree in a content specialization and a Master of Arts in Education. In years 1 and 2 undergraduates volunteer to spend 60 hours in an approved educational setting and experience schools. Students enter the program in year 3 of their undergraduate program and begin six sequenced clinical experiences known as practica. Year 3 students spend 2 hours per week in a PDS. Year 4 students spend 5 hours per week in the fall semester and 14 hours per week in the spring semester. Year 5 students spend their entire fall semester engaged in full-time teaching responsibilities in a PDS. During their final spring semester, these fifth year students spend 135 hours engaged in their own professional development and assist in the professional development of their school's faculties. All decision-making rests primarily with the participants of the program; namely, the joint involvement of public school teachers and administrators, and university faculty. Localized PDS site-specific decision-making is key to the success of the development of teacher candidates and experienced teachers. The key to making a PDS model work well is a continual re-examination of program goals and features, a working principle in PDS work known as simultaneous renewal (Dempsey, Dempsey, Steel, & Shambaugh, 2007). The joint involvement of all stakeholders enables people to consider issues and subsequent decisions. To apply this philosophical orientation, a supporting organizational structure is necessary.

## **Organizational Structure**

Each PDS in the program includes a committee composed of educators. At each public school that has chosen to become part of this PDS network, a key teacher leader is the Teacher Education Coordinator (TEC), who manages the clinical placements, teacher candidate assessment, and documentation of teacher candidate work. Working with the school's TEC is another teacher who acts as a Professional Development Coordinator (PDC). Supporting educators are the school's principal and the university liaison. The program's executive committee brings together each school's liaison, PDC, TEC, and principal to strengthen theory-to-practice connections targeting both school improvement and teacher education. Each group meets regularly throughout the academic year. In combination, this PDS organizational structure creates a mechanism for distributed program leadership. Decision-making for the program rests primarily with the participants of the program, which include the joint involvement of public school teachers and administrators and university faculty. Localized PDS decision-making is key to the success of the development of teacher candidates, experienced teachers, and teacher educators.

The teacher education program is housed in a college of education. A program coordinator oversees the work of the program in both the university and clinical settings. As the content specialties for the students are housed in the university's college of arts and sciences, periodic meetings are held between faculty of the two colleges and the PDSs. In addition, issues facing teacher education across the college are discussed in a Professional Education Council (PEC). A student group also provides organized input into program decision-making. Coordination of faculty who contribute to the program is accomplished through a committee composed of liaisons who may be course instructors and/or work with one or more PDSs and other faculty teaching in the program. Typical activities for liaisons include mentoring of students' action research projects, teaching observations, and portfolio reviews. Liaisons may serve as brokers of services to professional development schools around their professional development needs, "critical friends" as PDSs engage in school renewal, and, in some cases, providers of professional de-

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