CHAPTER 3

CLINICALLY RICH PRACTICES IN TEACHER EDUCATION

Review and Recommendations

Janna Dresden, Julie Kittleson, and Julianne Wenner

ABSTRACT

In response to growing criticism of teacher preparation programs, there is interest in the specific pedagogical strategies used in teacher education (National Council for Accreditation of Teacher Educaion, 2010). In this chapter, the authors describe practice-based pedagogy in teacher education and present a set of clinically rich practices they use in their undergraduate teacher preparation courses. These clinically rich practices include look and learn, teaching rounds, talks with teachers, scavenger hunts, and the supported collaborative teaching model. Such clinically rich practices are intended to help teacher candidates make connections between theory and practice. The authors also describe the vital role of professional development schools (PDSs) in implementing clinically rich practices in teacher education.

Recognizing the value of clinically rich practices in teacher education is certainly not a new idea. The "belief that all genuine education comes about through expe-
Clinically Rich Practices in Teacher Education

THE NEED FOR CLINICALLY RICH PRACTICES IN TEACHER EDUCATION

Teacher education has been subject to harsh critique in recent years (Darling-Hammond, 2000). This general dissatisfaction with teacher preparation, combined with a focus on the importance of connecting theory and practice, has led to a renewed interest in programs and practices that provide preservice teachers with clinically rich experiences. In addition, it is apparent that the field of teacher education must consider reform at all levels in order to refute the charges that the field has become out of touch with the realities of American schools, or worse, superfluous to the cause of improving educational access and attainment.

There have been strong worded criticisms of education in general and of teacher preparation in particular for nearly three decades. Most scholars view the 1983 publication of A Nation at Risk: The Imperative for Educational Reform (National Commission of Excellence in Education, 1983) as the beginning of a critical and politicized perspective on American education (Rutter, 2011). Since this time, there have been many calls for the improvement of teacher preparation (Darling-Hammond, 2000), but often the focus has been on suggested changes to the assessment and evaluation of teachers and their effectiveness (e.g., American Association of Colleges for Teacher Education [AACTE], 2011) rather than on recommended changes to programs of teacher preparation. When critiques of teacher preparation have included suggestions for specific reforms, they have generally highlighted the need for additional classroom experience for teacher candidates, and both scholars and policymakers have stressed the need for more field work in programs of teacher preparation (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005; Feiman-Nemser, 2001; Zeichner, 2010).

Participation in clinical experiences during teacher preparation has been shown to have an impact on the success of beginning teachers, as described by Boyd, Grossman, Lankford, Loeb, and Wyckoff (2008). According to these authors, “Teachers who have had the opportunity in their preparation to engage in the actual practices involved in teaching...show greater student gains during their first year of teaching” (pp. 26–27). Reports from teachers also indicate that they believe extensive clinical preparation is essential to their work as teachers (Levine, 2010). Finally, teachers report that their preparation programs generally did not provide them with sufficient clinical experiences. Levine (2010) reports, “New and experienced teachers repeatedly cite the opportunities to practice as being the most critical element of their preparation...[and typically] their preparation did not provide adequate opportunity for them to learn how to use what they knew” (p. 3). Given teachers’ assessment of the power of clinical experiences, the data about the impact of clinical experience on the ability of teachers to support the learning of their students, along with a strong theoretical rationale, scholars of teacher education have concluded that “practice must be at the core of teachers’ preparation” (Ball & Forzani, 2009, p. 497).

Despite the enormous importance of clinical experience for teacher preparation, just spending time in a classroom is not sufficient for the development of expertise (Levine, 2010). “Classroom experiences alone...cannot justify what teachers do, nor teach teachers to think about their work” (Feiman-Nemser, 2012, p. 176). Instead teacher candidates must learn to connect theoretical principles to their daily interactions with students in classrooms.

Professional preparation requires opportunities to master a solid knowledge base along with opportunities to learn when and how to use knowledge in practice. The relationship and interplay between these two necessary knowledge bases and ways of learning is at the heart of the design of a teacher education program for preparing professional practitioners. (Levine, 2010, p. 4)

The ability to integrate theory and practice is the hallmark of a competent professional, but gaining this ability is not easy to accomplish. The difficulty inherent in connecting theoretical principles taught on university campuses with the exigencies of daily classroom life is both the cause and consequence of the frequently noted disconnect between campus and school-based components of programs (Zeichner, 2010). This disconnect is often seen as a major culprit in our troubled system of education (NCATE, 2010). Perhaps most unfortunate of all, the difficulty of creating a seamless blend of theory and action is often underestimated or ignored. As Feiman-Nemser (2012) points out, there is an all too frequent and “false assumption that making connections between these two worlds is straightforward and can be left to the novice” (p. 177). Whether or not teacher educators recognize the arduous challenge that making these connections present to teacher candidates, it remains a task that teacher candidates themselves are typically expected to accomplish on their own (Zeichner, 2010).

Instead of expecting teacher candidates to independently construct an understanding of the relationship between theory and practice, teacher educators should provide an environment in which habits of inquiry into practice can be cultivated
Clinically Rich Practices in Teacher Education

Clinically rich practices that foreground the ways in which theory and practice interact can serve as exemplars of these new pedagogies. The authors view clinically rich practices as a subset of the larger group of practice-based approaches to teacher education. In this view, clinically rich practices are a specific type of practice-based education and are qualitatively different from the pedagogies employed in on-campus classes and also qualitatively different from traditional field experiences. Clinically rich practices are pedagogical strategies that place teacher candidates in real-world contexts with the expectation that they will engage with P-12 students, while they are also provided with direct and specific support and guidance from both mentors and teacher educators. In these situations, teacher candidates may be asked to do targeted observations of students and master teachers or implement specific teaching routines that have been carefully planned and rehearsed. In addition to thoughtful planning, structured review and reflection are essential elements of all clinically rich practices in teacher education. Through planning, action, and reflection, clinically rich practices both support new learning and make explicit the relationship between what is known and what is done. Thus, clinically rich practices enable teacher candidates to learn from their experiences and to develop the ability to act with intention and professional judgment in both routine and ambiguous situations.

In their pursuit of high-quality education and teacher preparation, some scholars have focused less on specific practices and pedagogies and have instead called for the creation of new systems or structures, such as John Goodlad’s “center for pedagogy” (Goodlad, 1994). A center of pedagogy was envisioned as a new organizational structure that would include faculty members from colleges of education, colleges of arts and sciences, and P-12 school districts. The purpose of this setting was to strengthen the connections among these three groups and thus improve teacher preparation and facilitate the renewal of education more broadly. As another example of the emphasis on large-scale infrastructure, Howey has recommended that professional development schools should receive additional federal support in the same manner as teaching hospitals (Howey, 2011). While such visionary approaches would be exciting and might support, extend, and institutionalize specific forms of practice, it is not clear how feasible or realistic such a goal might be. On the other hand, important changes can be made more immediately by reshaping teacher education pedagogy at the level of direct practice. Clinically rich practices offer an alternative route to reform that is more pragmatic and more responsive to the needs of specific schools and programs. It is possible that, in the quest to reinvigorate teacher preparation, what happens within programs and courses is more important than external structures.

In summary, clinically rich practices are essential for improving teacher education. Programs of teacher education have been criticized for not providing sufficient amounts of clinical practice and for not maintaining a clear focus on the connections between field experiences and the theories that can both explain and provide direction for practice. Clinically rich practices can fill a void in the field by creating opportunities for practice and, more importantly, by creating spaces in which the intersection of theory and practice is both evident and tangible. Finally, clinically rich practices provide an approach to the improvement of teacher education, which, because it is conducted locally, can be within the reach of all teacher educators.

CROSS-PROFESSIONAL PERSPECTIVES ON CLINICALLY RICH PRACTICES

A concern with helping teacher candidates make the transition from the world of tests used to measure factual knowledge and conceptual understanding to the world of complex professional practice is not unique to the field of teacher education. Teaching is one of many practice-based professions such as medicine, law, and social work that aim to develop in their students “the ability to use specific tools and skills of the field, and the capacity to make complex decisions based on informed judgments” (Levine, 2010, p. 5). These professions share an interest in clinical experiences designed to facilitate the growth of individuals from knowledgeable novices to competent professionals able to use their knowledge to solve complex problems of practice. “Underlying the assertion that teacher preparation be redesigned to include more clinical experiences embedded in school-university partnerships is the concept that teaching is a practice-based profession, akin to medicine, nursing, or clinical psychology” (Levine, 2010, pp. 3–4).

A review of the literature on other practice-based professions revealed that some professions have made more progress than teacher education towards the effective use of clinically rich experiences for their students; other professions are struggling to move beyond the textbook-driven and “practice-free” curricula so common on university campuses. Medical training is the gold standard for appropriate training of practitioners, and, in many cases, professions are urged to emulate medicine’s approach to practice-based education and use the teaching hospital as a model for the context within which to provide clinically rich training for novices. For example, a recent article in the *Chronicle of Higher Education* (Mangan, 2012) reported on a letter to university presidents written by the leaders of several major newspaper publishing companies and journalism foundations. In this letter, they critique the outdated approaches of most journalism schools and suggest a greater emphasis on clinical practice. “Journalism should take a page from medical schools by immersing students in hands-on, real life experi-
ence using teaching hospitals as models” (Mangan, 2012, p. 1). Law schools,
too, are generally considered to be bastions of tradition and far removed from
the actual work of practicing lawyers. Recent articles in the Wall Street Journal
(Lee, 2011) and New York Times (Segal, 2011) have commented on how the legal
profession suffers from a disconnect between the theoretical training proffered on
campus and the practical and personal skills lawyers need for successful careers.
Lee described how a number of law schools are attempting to rectify this situation
through changes to programs and course syllabi. What is perhaps most notable
about this discussion is that the inclusion of courses with “actual case work” is
seen as new, if not revolutionary.

Seen from this perspective, the field of teacher education would seem to be
“ahead of the game” as regular clinical experiences are a part of all programs
of teacher education. However, when compared with certain other professions,
teacher education appears to be sorely lacking in the quality of clinical experienc-
es included as part of professional training. This is especially true when teacher
preparation is compared to the preparation for other “relational practices” such
as clinical psychology and the clergy (Grossman, Compton, Igna, Ronfeldt, Shan-
han, & Williamson, 2009). Grossman and colleagues examined not the amount
of time spent in clinical experiences but rather the specific pedagogies used to
help students make sense of complex practices and the experiences designed to
help students develop the specific skills needed to engage in practice themselves.
Through extensive research with three professions, they found that novices in
the clergy and clinical psychology had more opportunities to engage in tightly “sca-
folded” clinical experiences (e.g., supported approximations of practice that
occur in authentic contexts) than did novice teachers (Grossman et al., 2009). Thus,
there is clearly a need for programs of teacher preparation to carefully consider
the construction of clinical experiences that successfully support the development
of teachers. The following section will review the current landscape of teacher
education with specific attention to the role of clinically rich practices.

THEORY AND RESEARCH ON CLINICALLY
RICH PRACTICES IN TEACHER EDUCATION

There are strong indications that practice-based approaches, and clinically rich
practices more specifically, have the potential to significantly improve the prepa-
ration of teachers. If the field of teacher education is to make sustained and sys-
temic changes in the direction of practice-based pedagogies it will be important
to base our course of action on a theoretical understanding of the value of these
approaches and the mechanisms by which they operate. To provide an operational
definition of these approaches to teacher education, the authors rely on the work
of Ball and Forzani (2009), who stated that a practice-based approach “means
unpacking and specifying practice in detail and designing professional educa-
tion that will offer novices multiple opportunities to practice the work and to fine
tune their skills” (p. 498). The characteristics of “clinical based programs,” as
explained by Levine (2010), include “opportunities for novice teachers to apply
all the knowledge they are acquiring…and a focus on students’ needs” (pp. 9–10).
Levine also discussed various types of clinical experiences and distinguished be-
tween laboratory experiences (simulations, observations, journaling, virtual pro-
fessional learning communities, etc.), and school-embedded clinical experiences
such as grand rounds, co-teaching, and study groups that utilize protocols for
analyzing student work.

One proposal for a theoretical understanding of practice-based approach is
found in the work of Hollins (2011) who described a “holistic practice-based
approach [which] integrates academic knowledge of theory, pedagogy, and curricu-
ulum across experiences in authentic contexts” (p. 395). To help novices focus on
salient aspects of teaching practice, Hollins described a model that encompasses
(1) essential knowledge, skills, and understandings believed to support quality
teaching, and (2) epistemic practices intended to support learning to teach. Hol-
llins (2011) argued that essential knowledge should include a focus on the topics
of learners, the learning process, subject matter, pedagogy, and accountability
and assessment. Hollins went on to explain that the epistemic practices that support
teacher development are focused inquiry, directed observation, and guided prac-
tice. Taken together, the elements articulated by Hollins highlight aspects of prac-
tice that should be used in the creation of a practice-based pedagogy.

Similarly, Grossman et al. (2009) used the concept of decomposition as a key
for understanding the pedagogies of practice in teacher education: “Decomposi-
tion makes visible the grammar of practice to novices…. By decomposing com-
plex practices, professional educators can help students learn first to attend to, and
to enact, the essential elements of a practice” (p. 2069). Specifically, Grossman
and colleagues have described three essential aspects associated with pedago-
gies of practice: representations, decomposition, and approximations of practice.
Representations “provide novices with opportunities to develop ways of seeing
and understanding professional practice” (p. 2065). However, simply witnessing
a representation does not guarantee that significant elements of practice are made
apparent to novices. One way to make elements visible is to name the parts of
practice, which is what Grossman and colleagues called decomposition. By de-
composing complex practice, teacher educators can turn novices’ attention toward
fundamental elements of practice. Further, these researchers note that decomposi-
tion allows novices to “practice a relatively narrow skill in a safe space” (p. 2072).
While isolating fundamental elements of practice is useful for learning particular
skills, translating these skills into authentic practice requires that novices be pro-
vided with opportunities to approximate practice, which is the third element of
Grossman et al.’s framework. Approximation, they note, “allows for the errors
that novices inevitably make when enacting complex practice” (p. 2077). In addi-
tion, “approximations are designed to focus students’ attention on key aspects
of the practice that may be difficult for novices but almost second nature to more
experienced practitioners” (p. 2078). Taken as a whole, this framework provides
a theoretical foundation and guide for designing practice-based approaches to teacher education. Yet another set of theoretical constructs is found in the work of Ball and colleagues (Ball & Cohen, 1999; Ball & Forzani, 2009). In recognition of the complexity of teaching, these scholars have postulated a continuum of practice settings that range from “virtual” settings to “designed” settings to “actual” settings (Lampert, 2006, cited in Ball & Forzani, 2009). This perspective extends the view that authentic contexts are necessary for learning to teach and highlights the reality that all contexts for practice are not the same, nor are they all equally productive for helping teachers learn the skills that are important for teaching (Ball & Forzani, 2009). Specifically, some contexts may be “too authentic” and present an overload of information (Ball & Cohen, 1999). The development of designed settings makes it possible for teacher educators to reduce the interference of extraneous information and makes it easier for novice teachers to focus on a few important skills or strategies at a time. “Novices need opportunities to try out and experiment, with support, aspects of complex practice, gradually increasing their complexity and reducing the scaffolding” (Ball & Forzani, 2009, p. 504). By conceptualizing practice as existing on a continuum from limited and defined to completely authentic, it is possible to create a context in which teacher candidates can be gradually introduced to the complexity of teaching.

Making the transition from what is known to what is done is perhaps the greatest challenge of teacher education; therefore, mapping the application of theory to practice is central to a practice-based pedagogy. In the work of Hollins (2001), Grossman and colleagues (2009), and Ball and colleagues (Ball & Cohen, 1999; Ball & Forzani, 2009), we find an emphasis on constructing specific learning environments that give teacher candidates an opportunity to try out defined elements of practice. The assumption underlying all three proposals is that it is easier to enact some elements of practice when one is not trying to implement all possible elements. Thus, teacher educators should create a scaffold that enables teacher candidates to experience success in the application of new ideas, methods, or strategies. Hollins (2011) calls this “guided practice” and describes it as “experimenting with planning and enacting a short sequence of learning experiences for a small group of students under the careful supervision of university faculty or an experienced teacher” (p. 404). Ball and Forzani (2009) used the term “designed setting” to explain a space which would “eliminate or reduce the need for students to engage with some aspects of the work of teaching while focusing attention on particular parts of the work” (p. 504). Grossman and colleagues (2009) claimed that structured experiences such as these can provide teacher candidates the opportunity to “experiment, falter, regroup, and reflect...through the use of approximations of practice” (p. 2077). The work of all these scholars emphasizes the importance of providing a clearly delineated pathway from theory to practice to support the development of novice teachers.

Finally, reflection as an act of inquiry into one’s own practice is seen as a critical element of a practice-based approach to teacher education as well as in the practice of excellent teachers (Feiman-Nemser, 2001; Hollins, 2011). While independent reflection is often beneficial, reflection supported by instructors or peers is more likely to be both meaningful and powerful (Ball & Cohen, 1999; Feiman-Nemser, 2001; Hollins, 2011). It is thus through experiences deliberately constructed by the teacher educator to encourage thoughtful conversations that teacher candidates can become more skilled in the “critical collegialship” and act of inquiry into practice that is so vital to becoming a reflective practitioner (Schön, 1983, 1987).

**The Role of PDSS in Supporting Clinically Rich Experiences**

By definition, clinically rich teacher education practices cannot be fully enacted in universities, isolated from schools and P–12 classrooms. While it may be possible to produce some types of practice-based strategies in university classrooms (e.g., micro-teaching and simulations), most practice-based pedagogies, especially that subset the authors have labeled clinically rich practices, require ready and consistent access to students. The kinds of experiences and activities discussed in the previous section will not simply occur randomly or “out of the blue”—they must be carefully planned and thoughtfully implemented, and they can only occur in the context of ongoing relationships between personnel from schools and universities. As several authors have noted, this will require a change in the relationship between schools and universities.

Levine (2010) noted that “the transformation of clinical preparation of teachers cannot be achieved by preparation programs acting alone. Intensive clinical preparation, especially when it is school embedded, requires the collaboration of preparation provider and schools, and the support of all the stakeholders in its success” (p. 12). Darling-Hammond (2006) concurred and stated that, in order to improve teacher education, “schools of education must design programs that transform the kinds of settings in which novices learn to teach...the enterprise of teacher education must venture further and further from the university and engage ever more closely with schools” (p. 302).

Close engagement with schools demands that colleges of education recognize school district personnel as their partners rather than viewing schools as locations for field experience and personnel as potential subjects for research studies. Darling-Hammond (2006) notes that pedagogical “strategies for connecting theory and practice cannot succeed without a major overhaul of the relationships between universities and schools” (p. 308). It is unreasonable to expect that it would be possible to integrate theory and practice for teacher candidates unless the institutions of theory (the university) and of practice (schools) have a strong relationship that allows for and encourages a dynamic exchange of resources and ideas.
The need for strong, collaborative relationships between colleges of education and P-12 schools has rekindled an interest in the teaching hospital model as a context for clinically rich practices. Howey (2011) suggested that the field of teacher preparation is moving toward an emphasis on partnerships between universities and schools, “in a parallel manner to other professions and especially the clinical type of preparation that occurs in teaching hospitals” (p. 327). The best developed and most well-known model of such partnerships in teacher preparation is that of the PDS, first proposed and described by the Holmes Group in the early 1980s (Rutter, 2011). This group advanced the idea that a PDS would be a teacher education version of medical school’s university teaching hospital, which embraces a broad group of stakeholders, including the partnering school sites. A PDS would be built on a mutuality of purpose and vision rather than imposed from above. They would be schools in which pre-service teachers could benefit from authentic settings, and in-service teachers would be treated as professionals undergoing simultaneous renewal, becoming collaborative field-based teacher educators partnering with the university faculty in their inquiry of teaching and learning. (Rutter, 2011, p. 298)

A PDS, like a teaching hospital, is a professional institution that takes on an additional responsibility and serves as a location for the preparation of the next generation of practitioners. These types of settings have been shown to be very successful. “The extensive experience of PDSs has taught us that a clinical preparation program that is grounded in collaboration, professional community, high standards of practice and is dedicated to student success can change an entire school, and can have a positive impact on the achievement of students in that school” (Levine, 2010, pp. 10–11). Because clinically rich practices require a clinical setting, a PDS, or other similar partnership, is a necessary factor in the reform of teacher education.

THE CHALLENGES INHERENT IN USING CLINICALLY RICH PRACTICES IN TEACHER EDUCATION

The purpose of clinically rich practices in teacher education is to provide a clear, meaningful and useful connection between theory and practice. Through the use of clinically rich practices, teacher educators delineate a well-marked pathway between theory and practice rather than leaving teacher candidates to blaze their own trail. Clinically rich practices enable teacher educators to support teacher candidates and show them how to use and apply theoretical principles as they encounter decision points throughout their day. However, the development and use of clinically rich practices is not without risk or difficulty.

The development of specific pedagogical strategies designed to integrate theory and practice should begin by recognizing that they are different. It is important to acknowledge “that the worlds of thought and action are legitimately different... and each has a potential for making a contribution to learning to teach...one does not overcome this duality by eliminating it. The goal of professional education is acting with understanding” (Feiman-Nemser, 2012, p. 178). The challenge for teacher educators then is to create specific experiences that assure that the lessons learned from clinical interactions will be truly educational. This is indeed a challenge, because despite the enormous benefits of experience in real-world settings discussed earlier in this chapter, there are also pitfalls associated with field experiences. Feiman-Nemser has explicated the specific pitfalls that may render various types of field experiences less beneficial than expected. For example, when teacher candidates are told simply to spend time observing in classrooms, as sometimes happens in early field experiences, they are subject to the “familiarity pitfall.” In these situations, teacher candidates may have a tendency to assimilate new observations into their existing schema of schooling and teaching. Teacher candidates may assume that they know what is happening and may continue to focus on those elements of classroom activity that were most salient to them when they were themselves students in K-12 classrooms.

People generally do not recognize that their experience is limited and biased, and future teachers are no exception. The ‘familiarity pitfall’ stems from the tendency to trust what is most memorable in personal experience. Classroom experience in itself cannot be trusted to deliver lessons that shape dispositions to inquire and to be serious about pupil learning. On the contrary, it may block the flow of speculation and reflection by which we form new habits of thought and action. (Feiman-Nemser, 2012, p. 170)

Teacher educators also need to be wary of the “two-worlds pitfall” that can occur in many types of field experiences and is the result of the differing goals and methods of classroom teaching and university coursework. For example, teacher candidates (TCs) are often asked by their university instructors to observe or engage in other activities that are related to, but very different from, the actions of the classroom teacher.

Classrooms are busy places, and Tom [a TC] sees that the teacher must attend to many things. The observational skills that he is developing are related to helping children learn. Without training in how to look and what to notice, it is easy to miss important clues about pupil response to instructional activities. Tom can afford to concentrate on mastering this way of looking precisely because he is not responsible for what goes on. But there is a pitfall. If Tom does well on this assignment, he will have the gratification of a good grade. The immediate reward, however, is indigenous to the university culture, not to the culture of schools and teaching. The very structure of Tom’s assignment shows that university learning and classroom teaching are worlds apart. (Feiman-Nemser, 2012, p. 173)

Not only are the goals of classroom teaching and university coursework different, but they may, at times, even be contradictory. Classrooms are complex places, and asking teacher candidates to focus on one aspect may make it difficult or impossible for them to attend to other issues or carry out other responsibi-
ties. Thus, teacher educators may inadvertently put their teacher candidates in the position of feeling caught in the middle between their mentor teacher and their university instructor.

Finally, there is the “cross purposes pitfall,” which emphasizes the fact that the purpose of a classroom is to educate the children in that classroom rather than to serve as a training ground for new teachers (Feiman-Nemser, 2012). Therefore, the structure and routines that are best for the pupils in the classroom may not always give teacher candidates the necessary opportunities to try out new forms of practice, and the exploratory approach best suited to an emerging professional may have negative consequences for pupils.

There is no easy solution or quick fix to the challenges inherent in attempts to foster clinical approaches to teacher preparation. However, several scholars of teacher education provide direction as they have pointed out that there are a variety of types of clinically rich practice—each with different benefits and potential pitfalls. Grossman and colleagues (2009) recommended that we study approaches such as “microteaching, model lessons, unit planning, simulations, role-plays, and student teaching…and investigate the affordances and constraints of these different approximations in preparing novices for different aspects of practice” (p. 18). The work of Lampert (cited in Ball & Forzani, 2009) postulates a continuum of “designed settings” for teacher education and further explicates the need for a range of clinical experiences in programs of teacher preparation. Not all designed settings, practice-based pedagogies, or clinically rich practices need have the same educational goal. No one strategy will meet all the goals that are necessary for the development of competent teachers—it would be unreasonable to expect that any one strategy could fulfill so large a mission. Therefore, the authors suggest that in order to have successful practice-based programs of teacher preparation, it will be necessary to employ an intentionally designed array of clinically rich strategies within courses and programs. By using an assortment of approaches, it is possible to maximize the benefits and counterbalance the negative consequences or pitfalls of some clinical experiences. The following section describes the set of clinically rich practices the authors use in courses for teacher candidates.

**EXAMPLES OF CLINICALLY RICH PRACTICES IN ELEMENTARY TEACHER EDUCATION**

The first and second authors teach, respectively, Integrated Curricular Practices in Early Childhood Education and Elementary Science Methods to the same cohort of students in their third semester of a four-semester undergraduate teacher education program. After completing the program, the teacher candidates will be certified to teach in grades P–5. The science methods course was taught on campus, and the early childhood course was taught on-site at an elementary PDS. However, the authors collaborated to prepare and carry out a number of clinically rich practices designed to help teacher candidates develop both competence and confidence. The authors used some widely known strategies and created several new ones in order to take advantage of the opportunities made available through the partner school. The authors’ use of clinically rich practices evolved over four years and currently includes five distinct pedagogical strategies—each with a clear purpose and benefit.

**Look and Learn**

This brief activity is essentially observation training and was precipitated by two occurrences. First, it was found that when teacher candidates were asked for her state of affairs after time spent in a classroom, they would typically comment on the “bad” behavior of one or more students. They seemed unable to look beyond, or underneath, these “acting out episodes” to see what other students were doing or how the classroom was organized and how student activity was orchestrated. In addition, some teacher candidates commented that they were often asked to observe but didn’t really know what or how to do so—a common problem for beginning teacher candidates (Feiman-Nemser, 2012).

“Look and learn,” an example of the directed observation recommended by Hollins (2011), was designed to show teacher candidates two methods for observation and to require them to look beyond the dramatic behaviors of a few students. Early in the semester, pairs of teacher candidates are sent into classrooms for about 20 minutes with clipboards and observation forms (based on protocols for research in *The Subject Matters* by Stodolsky, 1988). One teacher candidate is asked to focus on the activity structure of the classroom (How many children? How are they grouped? What materials are being used? Where is/are the teacher(s) located? What is the topic/goal of the lesson?). The other teacher candidate is told to pick three students in the classroom and to observe them in rotation for about 20 seconds at a time, recording on their form exactly what the student is doing, saying, and so on. When the teacher candidates return to the university’s area, they debrief with one another, talking about what struck them as important and examining the relationship between activity structure and student behavior. Teacher candidates and course instructors then debrief as a whole group. The following week the exercise is repeated, except that the teacher candidates change roles for the observation period.

Anecdotally, the authors have found this activity to be quite successful. Teacher candidates quickly realize that they are seeing student behaviors that they might otherwise have ignored—for example, the quiet child who is more off-task than his noisy peer. They also begin to be aware of the impact of activity structure on student behavior. Significant, this pedagogical strategy helps to interrupt teacher candidates’ typical ways of viewing classrooms, thus avoiding the familiarity pitfall, and does not alter the activity of the classroom, thus minimizing the negative consequences found in the cross purposes pitfall. Finally, this activity provides an experience that helps teacher candidates learn to observe with more intention and...
purpose with the aim to “foster [their] capacity to learn from future experience” (Feiman-Nemser, 2012, p. 168).

Teaching (Grand) Rounds

Grand rounds, a pedagogical strategy borrowed from the practice of medical training, is now a common occurrence in many professional development schools (PDSs). In this strategy, the entire class of teacher candidates files into a classroom to watch a volunteer master teacher conduct a 20-minute lesson. Following the lesson, the teacher returns with the course instructor to the classroom assigned to the university and responds to questions from the teacher candidates. Because the teacher candidates have been instructed to be thinking of questions to ask following the observation, this strategy also helps to disrupt the sense of familiarity, and, because there is minimal change to the daily routine for the elementary students, there is only a small risk of the cross purposes pitfall. In contrast, there are notable benefits to this strategy. As Thompson and Cooner (2001) explain, “Grand Rounds provides pre-service teachers firsthand experience in observing, questioning, and reflecting upon the ‘best practice’ strategies of master teachers in a collaborative and supportive environment” (p. 87).

Scavenger Hunts

Scavenger hunts are another brief and nonintrusive pedagogical strategy that nonetheless guides teacher candidates to make direct links between course discussion and what is going on in the classrooms all around them. For example, if the course discussion focuses on the value of graphic organizers with the requisite examples as slides or hand-outs, it is still critical for teacher candidates to see this strategy in action. Therefore, during a break in class, the teacher candidates are asked to go around the school, looking for examples of various types of graphic organizers. The authors or course instructor then compiles this information and looks for differences by grade level or subject matter. Though quite simple, this is a clear example of a clinically rich practice as it connects the theory and research about why graphic organizers are useful with the plentiful examples found around the school at any given point in time. Further, this strategy is an example of the decomposition noted by Grossman and colleagues (2009), as the attention of teacher candidates is directed to one specific element of practice.

Talks with Teachers

Another simple strategy, “talks with teachers,” offers teacher candidates an avenue for determining a portion of the course content. At the beginning of the semester, the course instructor asks the teacher candidates what they are interested in or would like to learn more about and then arrange with teachers from the partner school to come to class to make very brief presentations or just come in to answer questions. Although the teacher candidates are not present in the school’s classrooms for this strategy, they are interacting as novice professionals with their more experienced colleagues. The teacher candidates are able to have professional conversations with practicing teachers and are thus engaged in a critically important clinical practice. In this way, talks with teachers are a concrete manifestation of one aspect of the focused inquiry advocated by Hollins (2011). Importantly, this strategy also recognizes the expertise and professionalism of the practicing teachers and supports their growth and development.

Supported Collaborative Teaching Model

The “supported collaborative teaching model” (SCTM), known colloquially as “science centers,” is the most complex of the clinically rich practices used by the authors. Science centers are held three times each semester with one grade level at a time so that each grade level in the school (K–5) participates once each year. During science centers, small groups of teacher candidates teach activity-based science lessons to small groups of elementary students. The teacher candidates are in groups of three and take on the roles of lead instructor, supporting instructor, and observer. The elementary students rotate to three different centers (for about 15 minutes per center), and, as the elementary students rotate to new centers, the teacher candidates rotate roles. This entire rotation is then repeated with new elementary students so that each pre-service teacher has a chance to take on each role twice. Between rotations, the authors have deliberately built in time for group reflection—a crucial element of the SCTM. (For a more thorough description of the SCTM see Kittleson, Dresden, & Wenner, 2013). The SCTM exemplifies the designed setting discussed by Lampert (2006, cited in Ball & Forzani, 2009) and was developed to offer the guided practice discussed by Hollins (2011), as well as to give teacher candidates the space to engage in the approximations of practice suggested by the work of Grossman et al. (2009).

CONCLUSIONS AND RECOMMENDATIONS

The review of the literature on clinically rich practices in teacher education, along with personal experiences, has led the authors to conclude that no one strategy, no matter how well-designed or how deeply rooted in the practice of the profession, can fully prepare teacher candidates for their future careers. Instead, it is necessary to investigate the range of possible practice-based approaches and clinically rich practices, and then assemble a group of strategies that meets the needs of a particular group of teacher candidates. This must also be feasible within the context of the class. Teacher educators should consider not only the benefits and possible pitfalls of each strategy but should pay careful attention to the way in which these strategies work together. There are a number of pedagogies of teacher education that “are intended to support teachers’ abilities to learn in and from practice…” However, the interrelationship of these pedagogies to one another is also impor-
tant. It is possible that these pedagogies may work more powerfully in relationship to one another” (Darling-Hammond, et al., 2005, p. 441).

It is also evident from the literature that clinically rich practices demand a clinical setting. While this may seem obvious, it is far from trivial. Clinically rich practices that engage teacher candidates in direct experiences with P–12 students while under the watchful eye and with the supporting hand of teacher educators cannot occur on a university campus, nor can they occur in a traditional field placement setting. Clinically rich practices require settings that combine the best of “real-life” teaching and a theoretical perspective.

While there are many individuals who possess these dual qualities, institutions must be intentional about attending to both theory and practice—at times, they do not automatically do so. It is this intention that distinguishes PDSs from other schools, no matter how excellent they may be, and it is this focus on the connection of theory and practice that makes PDSs not only an ideal site for the implementation of clinically rich practices but the fertile ground in which these practices can be created and nurtured.

The authors’ experiences have clearly shown that it would not be possible to engage teacher candidates in the pedagogical strategies described in this chapter if they were not fortunate enough to have a close working relationship with their partner school, a PDS. For example, it is difficult to imagine schools that were not proud PDSs, allowing 25 teacher candidates to roam their halls with clipboards on a regular basis. Nor is it likely that teachers would volunteer to be observed during teaching rounds if they did not see themselves as integral members of an institution that was profoundly connected to the reform of both P–12 education and teacher education. Thus, the reform of teacher education cannot be achieved in isolation; it is dependent upon close, mutually supportive, and mutually beneficial relationships between schools and universities.

Finally, there is cause for optimism: The current review of the literature has shown that the implementation of well-known clinically rich practices and efforts to create new examples of these pedagogical strategies provide a compelling lesson for teacher educators. It is possible to improve teacher education without dramatic changes to the structure or funding of teacher preparation programs. Through the use of specific clinically rich practices embedded in collaborative contexts, the development of teaching expertise can be facilitated and teacher educators can make a meaningful contribution to the improvement of our nation’s educational system.

REFERENCES


STUDENT ACHIEVEMENT FROM ANCHOR ACTION RESEARCH STUDIES IN HIGH-NEEDS, URBAN PROFESSIONAL DEVELOPMENT SCHOOLS: A META-ANALYSIS

William Curlette, Robert Hendrick, Susan Ogletree, and Gwendolyn Benson

ABSTRACT

Clinical teaching employed through anchor action research (AAR) studies helps to evaluate teacher preparation efforts in professional development schools (PDSs) through K–12 student achievement. As a part of the teacher–intern–professor (TIP) group, the intern participates in the planning and delivery of a unit of instruction that uses a pretest and posttest as assessments. This study contributes a summary of 10 AAR studies in PDSs which overall have a statistically significant effect size for student achievement using meta-analysis. The results show that Cohen’s $d$ effect size...