

Designing a Curriculum for Clinical Experiences

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Introduction

In recent decades, teacher education programs around the world have placed an increasing emphasis on the role of practice in learning to teach. This global trend in teacher education is exemplified by the use of practice-based methods in France, the emphasis on partnerships and school-based learning experiences in the Netherlands and Great Britain, and the worldwide expansion of student teaching experiences (Maandag, Deinum, Hoffman, & Buitnk, 2007; Ronfeldt & Reininger, 2012; Villegas-Reimers, 2003). In the United States, the movement in

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this direction has received further impetus by the recent Blue Ribbon Panel Report calling for “clinically based teacher education” (NCATE, 2010). A primary purpose of the Blue Ribbon Panel report is to set a national reform agenda by putting “practice at the center of teaching preparation” (p. 3).

In the wake of the recent NCATE Blue Ribbon Panel report, five teacher preparation programs in Southeastern Ohio are responding to the call to “turn teacher education upside down,” a challenge that we find compelling (NCATE, 2010). We agree with the Panel’s report that learning through practice should be the foundation of a teacher preparation program, and each of our five programs is committed to that goal. We also recognize that learning to teach is an individualized, situated, and contextualized activity; consequently, we believe the very core of a teacher preparation program should consist of quality experiences in clinical settings (Korthagen, 2010; Lave & Wenger, 1991).

Like many other teacher preparation programs, we have already implemented a number of the recommendations outlined in the Blue Ribbon Panel report. For example, all five of our teacher preparation programs have created and supported partnerships, strengthened candidate selection, implemented rigorous accountability systems, and revamped our curriculums based on data (NCATE, 2010). Nevertheless, our group felt that we had not yet satisfactorily conceptualized what is meant by “clinically-based teacher education,” nor that we had taken the necessary steps to operationalize the phrase turning “teacher education upside down.” Thus, we felt compelled to ask ourselves: what distinguishes clinically based teacher education from our current programs and how can we implement the necessary changes to move to clinically based teacher education?

The purpose of this article is to describe a collaborative effort among five teacher preparation programs to create a conceptual tool designed to put clinical experiences at the center of our programs. We refer to the resulting product as a clinical curriculum. The clinical curriculum describes a developmental sequence of clinical experiences that move from simpler to more complex teaching skills, from working with fewer to larger numbers of students, and from requiring less to more planning and decision-making. In this paper, the authors will explicate the process used for the development of a clinical curriculum, describe the resulting product and its elements, and show how a clinical curriculum can be used as an catalyzing agent for designing and implementing a clinically based teacher preparation program.

Theoretical Framework

Traditional teacher education programs are organized around a series of courses that are often accompanied by early field experiences and that eventually culminate with student teaching. Teacher educators introduce new concepts through coursework, which teacher candidates are expected to apply and internalize through practice in field settings. Historically, however, a number of problems have been associated with this traditional course-based approach to teacher preparation, chief of which is a lack of coordination between clinical experiences and coursework (Darling-Hammond, 2006; NCATE, 2010).

The NCATE Blue Ribbon Panel Report is a call to reverse the theory-to-practice approach to teacher education. Such a reversal would involve changing from a course-based, field applied traditional model to a clinically based, course-supported model of teacher education. In the new paradigm, practice constitutes the core of teacher preparation and serves as a basis for developing new concepts through reflection and exposure to theoretical knowledge (e.g., Ball & Cohen, 1999; Ball & Forzani, 2009; Cochran-Smith & Lytle, 1999; Korthagen & Kessels, 1999).

This reversal is theoretically supported by Korthagen's (2010) description of a three-tiered model of teacher learning. At the first level, teaching experiences coalesce into gestalts, which consist of "momentarily triggered images, feelings, notions, values, needs or behavioral inclinations" that may remain an instinctive level of teaching (p. 101). By engaging in systematic reflection, the relationships in a gestalt can be refined and made explicit in the form of a cognitive schema, a "network of concepts, characteristics, and principles, and so on, helpful in describing practice" (p. 102). Schemas can rise to the level of theories at the third level of Korthagen's model, if they are organized and articulated in a way that is logically consistent with accepted theoretical knowledge. In summary, learning occurs through experience, which can be enhanced by reflection and exposure to theoretical ideas.

Korthagen's three tiers of teacher learning align well with Cochran-Smith and Lytle's (1999) description of three domains of teacher knowledge: knowledge-in-practice, knowledge-of-practice, and knowledge-for-practice. Knowledge-in-practice refers to learning acquired through the experience of teaching; knowledge-of-practice is developed through reflection on experience; and knowledge-for-practice is associated with theoretical knowing that can be acquired through coursework or reading. Each of these domains should be addressed in a teacher preparation program: for example, knowledge-in-practice through clinical experiences, knowledge-of-practice through mentoring and seminar discussions, and

knowledge-for-practice through more formal learning in content courses, methods courses and other college coursework.

The acquisition of knowledge-in-practice is essential to ensure teacher candidates acquire the foundational experiences needed to foster reflection and theoretical development. Thus, articulating a developmental sequence of clinical experiences is a first step in designing a clinically based teacher education program. These experiences should be arranged in a sequence of increasingly more complex K-12 classroom experiences, beginning with activities that are appropriate on the very first day of clinical experience and continuing through successive experiences to the completion of student teaching.

The Process

The process for developing the clinical curriculum occurred through collaboration among representatives from five teacher preparation programs. Together these institutions constitute the Southeast Ohio Teacher Development Collaborative (SEOTDC, for more information, see <<http://www.coras.org/seotdc/index.html>>), a partnership dedicated to improving teacher preparation. In this section, we describe the similarities and differences among the participants, the design principles used to create the clinical curriculum, and the process employed to create the final product.

Participants

All participants were members of the Southeastern Ohio Teacher Development Collaborative (SEOTDC), a partnership among five teacher preparation programs, including Ohio University, Shawnee State University, Muskingum University, Marietta College, and the University of Rio Grande. SEOTDC was organized in 2006 in southeastern Ohio, a primarily rural region located in Appalachia. Although the five programs share a geographical region, they vary in their size, the types of teacher candidates they serve, and their partnership arrangements, as described below.

1. *Ohio University* is a public university that serves approximately 1200 teacher candidates in the following programs: Early Childhood (from birth to age 8), Middle Childhood (grades 4-9), Adolescent to Young Adult (grades 7-12), Special Education/Intervention Specialist, and Multi-Age (Music, Physical Education, Modern Languages). Because Ohio University is a residential campus, most teacher candidates are from urban or suburban areas in other parts of Ohio and are therefore unfamiliar with rural settings. The university has strong partnership relationships with

Athens City schools and several other local districts, as well as making placements in over 130 other districts to accommodate larger numbers of teacher candidates in a primarily rural setting. Partner schools are distributed over a wide area so driving distances to clinical placements can be 30 to 60 minutes and sometimes farther.

2. *Shawnee State University* is a regional state university for southern Ohio that graduates approximately 50 teacher candidates in five areas of licensure each year: Early Childhood, Middle Childhood, Adolescent to Young Adult, Intervention Specialist, and Deaf Studies (certificate). Teacher candidates at Shawnee State are primarily from the eight rural counties in both Ohio and Kentucky. Most partner districts are classified as rural or small town and are located within a 60 minute radius from campus.

3. *Muskingum University* is a privately funded university that offers teacher licensure to approximately 500 candidates in nine areas, including Early Childhood, Middle Childhood, Adolescent to Young Adult, Special Education and Multi-Age (Music, Physical Education, Health, World Languages, and Visual Arts). Six foreign countries and 23 states are represented in the student population of approximately 1700 undergraduate students and 1400 graduate students. Muskingum University offers diverse clinical experiences in rural, urban, and suburban settings within a 60-mile radius.

4. *Marietta College* is a private, nonsectarian, residential, contemporary liberal arts college that serves approximately 200 undergraduate candidates located in Early and Middle Childhood, Adolescent to Young Adult, and Special Education. The teacher preparation programs in Marietta maintain clinical partnerships with K-12 schools within a 20-mile radius in both Ohio and West Virginia. Clinical sites serve students from low to middle to upper-middle class socioeconomic levels, with a large percentage of students from Appalachian backgrounds.

5. *The University of Rio Grande / Rio Grande Community College* is a unique institution that consists of both a two year community college and a four year private college. The university serves approximately 250 teacher candidates Early Childhood, Middle Childhood, Adolescent to Young Adult, Intervention Specialist, Multiage (Health Music, Physical Education, Visual Arts), Early Childhood Associate and Career Technical. Many teacher candidates are non-traditional students from the Appalachian region of Southern Ohio. Due to the rural location of the university, the majority of field and clinical placements sites are 30-60 minutes from the campus.

Process

To develop the clinical curriculum, a single representative of the five teacher preparation programs (the authors) met three times and also communicated further via email. Each of the representatives served in some type of leadership capacity in their respective institution, three were department chairs and two were responsible for program coordination. Our collaboration on this project was facilitated by previous shared initiatives during the past seven years, many of them concerned with the implementation of clinically based teacher education, a SEOTDC priority. Some examples include offering an online workshop on mentoring for cooperating teachers, online workshops on standards-based teaching, and sponsoring the annual the Appalachian Assets Conference on rural education, the most recent of which featured the implementation of clinically based teacher preparation. Thus, the participants have become increasingly familiar with the shared issues relevant to our respective teacher preparation programs. So we began our collaboration on the Developmental Curriculum for Clinical Experiences with a number of previously shared experiences and conversations related to the implementation of clinically based teacher education.

The five representatives began their discussions by reviewing their institution's respective institutional documents, procedures, and initiatives related to clinical practice. These included but were not limited to field experience handbooks, field experience hours and requirements, and initiatives related to extending and supporting clinical experiences. Each representative spoke of different course numbers and titles, all of which served a broad spectrum of different purposes. These differences in the organization of the respective programs made communication during this initial phase of the discussion somewhat challenging.

Part of the problem was our initial orientation to a more traditional perspective of teacher education. From this perspective, teacher preparation programs are organized around courses, each course serves a different purpose, and field experiences serve as applications of the concepts learned in the course. In order to create a clinical curriculum, representatives had to reverse their perspective by imagining clinical experiences to constitute the center of a teacher preparation program. From this perspective, clinical experiences are organized and sequenced independently of courses and coursework. The clinical curriculum is intended to describe a developmental progression of clinical experiences that is organized independently of course sequence.

Design Principles for a Clinical Curriculum

Second, we created a shared vision of clinically based teacher educa-

tion by developing a set of design principles for establishing a developmental curriculum for clinical experiences. These design principles were intended to serve as a guide to our thinking so that the final product would be:

- (1) standards-based
- (2) organized in a developmental sequence
- (3) simple and easily communicable
- (4) stated in language universally familiar to practitioners

Refining the Clinical Curriculum

Third, we shared the initial draft of the clinical curriculum widely. The initial draft was presented at SEOTDC and other partnership meetings, the five representatives presented it at the state conference for teacher education, and each representative shared it with the faculty from their institution. Feedback from these various groups enabled many productive revisions, fostered a sense of collective ownership, a shared vision of clinically based teacher preparation, and the creation of a broadly based document with appeal across multiple teacher preparation institutions. Now in our second year of implementation, the document has been well received by stakeholders, and to date, the final version has seemingly proved flexible enough to apply to a wide variety of contexts.

The Product

The result of our collaboration was a concise document entitled the *Developmental Curriculum for Clinical Experiences*. The document is fully displayed in Tables 1 and 2. The horizontal axis of the document is defined by the Ohio Standards for the Teaching Profession (Ohio Educator Standards Board, 2010). Because these are the standards used for inservice teachers, the developmental continuum creates an unbroken sequence of activities for teacher candidates from preparation to inservice. The vertical axis moves provides a description of three levels of development in a teacher preparation program. The bottom row, which is entitled “Exploring,” consists of the most introductory experiences in clinical settings, such as learning names, recording grades, and taking the lunch count. The second level is entitled “Engaging” and is located at the midpoint of the vertical axis. Associated with the Engaging level are activities consonant with teaching single lesson plan, such as creating a formative assessment tool, creating scaffolds to support learning, and reflecting on an individual lesson. The top row of the chart, which is entitled “Emerging,” describes activities associated with designing and implementing teaching units, such as developing an evaluation plan,

Table 1
Developmental Curriculum for Clinical Experiences:
Ohio Standards for Teaching 1-3

	Standard 1 Students	Standard 2 Content Knowledge	Standard 3 Assessment
Emerging	Differentiate instruction according to all students' needs. Develop plan for building relationships during the first week of school. Create culturally relevant lesson and unit plans.	Students use a variety of sources. Design activities that encourage students to integrate information from multiple content sources. Engage students in thinking at all levels of Bloom's taxonomy.	Use summative assessment data to adjust unit teaching strategies. Develop, implement, and evaluate multiple formative assessments. Develop a nine weeks grading plan.
	Plan adaptations for a unit of instruction. Adapt lesson for a few students. Create individualized materials. Provide individualized feedback. Create alternative assessments. Evaluate some students individually.	Use a variety of content sources. Use Ohio content standards to develop unit plans. Engage students in thinking about the content at the analysis and synthesis levels of Bloom's taxonomy.	Develop unit instructional goals. Use pre and post assessments. Design new strategies based on formative assessment data. Design, collect, and analyze summative assessment data.
Engaging	Design a developmentally appropriate instruction. Develop motivational strategies. Design and deliver differentiated instruction for an individual student.	Use content standards. Engage students in thinking about the content at the application level of Bloom's taxonomy. Use content specific instructional strategies.	Design implement & evaluate a formative assessment consistent with Ohio standards. Develop a pre assessment. Co-assess student work with the mentor teacher.
	Collect data on individual student behavior. Collect data on learning preferences. Examine and compare student work for individual differences. Provide environment for small groups.	Develop and use real life examples. Become familiar with curriculum and instructional plan for the class. Develop questions that lead students from their previous knowledge to new content.	Develop objective test questions. Develop essay questions. Create a checklist. Grade essays. Develop a rubric. Know school grading policies.
Exploring	Talk with every student. Learn names. Help students make up work. Sit near student with behavioral needs. Deliver predetermined behavioral support plan.	Find information to answer student questions. Provide students w/ assistance in finding information. Answer individual questions. Assist individual students with technology. Assist with finding resources.	Check or grade papers with a key. Record grades. Record and comment on student writing. Develop a student interview or survey. Make objective observations. Record participation patterns.

Table 2
Developmental Curriculum for Clinical Experiences:
Ohio Standards for Teaching 4-7

Standard 4 Instruction	Standard 5 Learning Environment	Standard 6 Communications	Standard 7 Professional Development
Design new strategies based on formative summative assessment. Design unit with multiple instructional strategies (e.g., discussion, inquiry, project-based learning)	Design a classroom management plan. Develop a plan for establishing routines/classroom procedures. Develop proactive and reactive classroom management plans.	Communicate with parents and administrators about student performance. Conduct home visits. Attend community events.	Develop resumes and portfolios in preparation for professional life. Develop a teaching philosophy. Complete Teacher Performance Assessment.
Co-plan unit instruction with mentor teacher. Plan multiple lessons based on formative assessment data. Integrate technology into instruction. Co-teach with mentor teacher.	Organize effective grouping arrangements. Create a variety of scaffolds to support independent learning. Plan and execute effective classroom transitions.	Interact with professional staff. Attend data assessment meetings. Attend parent teacher conferences. Attend athletic events/extracurricular activities.	Reflect on multiple lessons. Adjust teaching strategies based on an analysis of data. Provide a rationale for new strategies. Analyze teaching video.
Create and implement a single lesson plan. Assume leadership of the class for short periods of time. Create and lead classroom activities.	Create supporting materials. Use appropriate classroom management (e.g., proximity control). Explain a new classroom routine.	Give clear instructions both verbal and written. Develop materials to support student learning at home. Visit local community agencies	Reflect on individual lessons. Objectively describe student behavior. Develop new strategies based on reflection.
Create new learning center. Supervise students during group times. Review assignments w/ small groups. Facilitate small group discussions. Create and implement a lesson for a small group.	Become familiar with emergency procedures. Know school discipline policies. Give directions and explain procedures. Explain the reason for rule or policy.	Attend faculty meetings. Attend in-service meetings. Attend parent/teacher conferences. Collaborate with mentor teacher	Collaborate with mentor teachers to improve instruction. Write reflective journal entries. Reflect on instructions with students. Accurately and objectively describe student performance.
Write notes on whiteboard. Operate technology. Create materials with teacher. Model appropriate language & share a personal interest or skill. Teach a routine part of lesson to whole group.	Take attendance/stuff mailboxes. Collect lunch count. Organize or file. Pass out papers or assignments. Create/ Construct a bulletin board.	Speak clearly & project voice. Give directions to individual students. Give concise communications to students. Take lunch count.	Model appropriate language & behavior. Dress professionally. Be punctual. Call in absence. Be respectful of mentor and colleagues.

designing activities that encourages students to integrate information from multiple sources, and designing and implementing multiple formative assessment strategies for the purpose of adjusting instruction.

These experiences are in alignment with the Ohio Continuum of Teacher Development, which describes teacher development as it occurs over the course of a career. The “Emerging” level is the last level of the *Developmental Curriculum for Clinical Experiences* and the first level of the Ohio Continuum of Teacher Development. Thus, the last level of our clinical curriculum is consistent with the description of the skills a beginning teacher should have upon graduation from a teacher preparation program. Four other levels follow on the Ohio Continuum of Teacher Development, including “Developing,” “Proficient,” “Accomplished,” and “Distinguished.” When combined, both documents provide a continuous description of teacher development from a teacher’s very first clinical experience until they are accomplished enough in their career to reach the “Distinguished” level of teaching.

Redesigning Teacher Preparation

Clinical experiences are central for learning in a clinically based teacher education program. That is why the word “curriculum” is used in the title of the *Developmental Curriculum for Clinical Experiences*. The experiences described on this document constitute the foundation for teacher candidate learning and are therefore an essential part of the teacher preparation curriculum.

Accordingly, the *Developmental Curriculum for Clinical Experiences* has become a catalyst for implementing clinically based teacher education in the five SEOTDC institutions that developed it. Although all five institutions are at different places with their implementation of clinically based teacher education, all are using an approach to design that places the clinical curriculum at the center of their teacher education program. Below we describe how the clinical curriculum can be used to facilitate partnership arrangements, to strengthen clinical practices, to develop mentoring programs, create clinical seminars, reform assessment practices, reorganize coursework, and to promote research.

Partnerships

The *Developmental Curriculum for Clinical Experiences* supports partnerships by facilitating communication and collaboration. Two features of the design have made it especially helpful for communication: first, it is an explicit statement of expectations for clinical experiences across the entire teacher preparation program, and second, it is a concise

statement that uses commonly recognized practitioner language rather than terminology that is specific to a teacher preparation program. Rather than sorting through multiple syllabi for descriptions of field experiences that pertain only to individual courses, stakeholders can refer to one concise document that summarizes program expectations and is expressed in practitioner language.

Because communication is not hindered by differences in course sequences, titles, and numbers, it is easier to enact changes across a particular region. For schools that partner with multiple teacher preparation programs, a clinical curriculum that is common across teacher preparation institutions lessens the confusion caused by competing expectations. It also facilitates communication across programs within individual teacher preparation institutions by helping teachers and professors better understand their role within the larger activities of the teacher candidate and the larger goals of the program.

Clinical Experiences

The *Developmental Curriculum for Clinical Experiences* elevates the importance of development in clinical settings in a way that suggests teacher candidates cannot progress in their programs unless they are developing performance-based skills in a clinical setting. Thus, the clinical curriculum graphically illustrates the need for continuous clinical experiences and provides a stimulus for expanding clinical experiences and associated requirements. The resulting awareness has stimulated our efforts to extend the length and increase the continuity of our clinical experiences.

Currently, the five institutions are piloting yearlong experiences that include 10-15 hours of clinical experience per week in the semester immediately preceding the full time professional internship (student teaching) that occurs during the second semester. Teacher candidates are encouraged to begin their yearlong experience on the first day of school and to follow the school calendar as closely as possible. Throughout the experience, their progress is guided by the *Developmental Curriculum for Clinical Experiences*. Feedback about the yearlong experience has been very positive. Teacher candidates report they have better relationships with their students, fewer discipline problems, a smoother transition to the professional internship, and increased confidence and preparation.

Mentoring Program

The *Developmental Clinical Curriculum* can also serve as a useful guide for developing a mentoring program to support teacher candidate learning during their clinical experiences. For each of the three levels on

the *Developmental Curriculum for Clinical Experiences*, we have identified corresponding mentoring strategies that include the coaching and co-teaching strategies that mentors can use at the Exploring, Engaging, and Emerging levels. At the Exploring level, teacher candidates should engage in fairly simple, low risk activities that are limited to individuals or small groups of students. At this stage, the coaching strategies used by mentor teachers should be more directive, as teacher candidates need strong guidance at the Exploring level of learning. Co-teaching strategies could include One Teach, One Assist; One Teach, One Observe; and Station Teaching. For the most part, the teacher leads the classroom while the teacher candidate assists.

At the Engaging level, mentoring strategies should support teacher candidates' ability to develop and teach a whole class lesson. The mentor teacher should continue to provide more directive coaching strategies, much as she did during the Exploring stage. As the teacher candidate's relationship with the mentor teacher becomes stronger and she becomes more capable, co-teaching strategies could be expanded to include parallel teaching and alternative teaching.

At the Emerging level, teacher candidates should be given opportunities for more sustained engagement with students, such as teaching successive lessons during consecutive days or teaching an entire unit of instruction in multiple classes. At the Emerging level, mentor teachers can be less directive in their strategies by asking questions and encouraging teacher candidates to reach their own conclusions through reflection. When co-teaching, the teacher candidate and the mentor teacher should reverse roles. The teacher candidate should now be leading during One Teach, One Observe; One Teach, One Assist; and Team Teaching. The mentor teacher's role is to make observations, provide individual assistance, lead small groups, and partner during co-teaching.

Clinical Seminars

The *Developmental Curriculum for Clinical Experiences* can serve as a guide for facilitating teacher candidate reflection during clinical seminars. Clinical seminars are process oriented courses devoted to helping teacher candidates connect practice to theory by providing time and space for reflection. Organizing teacher candidate reflection around the clinical curriculum ensures teacher candidates an opportunity to reflect on every aspect of their experience. At the Exploring level, the reflection of teacher candidates could be encouraged to describe and interpret their experiences, a process intended to help them develop their schemas for teaching. At the Engaging level, they could be asked to connect their experiences in the classroom to concepts they are learning

in their methods courses. At the Emerging level, they could be asked to design new strategies and justify them by citing best practice or theories of pedagogy (Korthagen, 2010).

The clinical curriculum also provides teacher candidates with a conceptual map of their development as a teacher. Consequently, they can use the clinical curriculum as a tool for setting goals, measuring progress, and monitoring their learning in clinical settings, thus enabling them to be more deliberate in shaping their own experiences, more systematic about developing their craft, and more accurate in charting their development across their courses.

Assessment

Because the *Developmental Curriculum for Clinical Experiences* provides a ready reference to the expected skill level of teacher candidates at various points in the program, it makes a useful tool for assessing teacher candidates' progress as they move through the program. Work has begun to reform the assessment systems of the five programs so they are aligned with the development of the dispositions and skills at the Exploring, Engaging, and Emerging levels. For example, performance assessment at the Exploring level should focus on how successfully the teacher candidate engages with her students and the fundamental attitudes that are critical for professional success, such as attendance, punctuality, responsibility, initiative, and appropriate dress. The Engaging level should focus on the skills needed to plan and teach an individual lesson and a somewhat more advanced set of dispositions, such as responsiveness to constructive feedback, effective and appropriate communication, commitment to reflection, and their willingness to collaborate with other professionals. At the Emerging level, teacher candidates should be able to demonstrate their acquisition of a complex integration of multiple skills and higher level dispositions, such as an appreciation that knowledge includes multiple perspectives, that students' have a fundamental need to develop a sense of self worth, a deep belief that all children can learn, and a willingness to examine personal prejudices and biases.

Coursework

The *Developmental Curriculum for Clinical Experiences* can be used as a guide for reorganizing both courses and their content around the clinical experiences of teacher candidates. Instead of regarding a field experience as an application of specific course concepts, blocks of courses can be organized around clinical experiences that are designed independently of the coursework and serve as the central feature and

foundation of the program. Instead of teaching a concept in a campus based course and then asking teacher candidates to apply it in their field experiences, instructors can use the clinical curriculum to connect the course content to their students' practice knowledge.

Research and Development

Extended placements provide a new opportunity for research that carefully observes and documents the thinking, growth, and development of teacher candidates in clinical settings. The descriptions of teacher candidate development in the previous sections are derived from ongoing research projects associated with our implementation of clinically based teacher education. Such research is closely related to investigations that attempted to establish the appropriate sequence of experiential learning, the conditions that speed or impede its development, and the process that best serves both the skill development and reflection of emerging teachers.

Conclusion

The purpose of this article was to describe a process for creating a clinical curriculum, to share the resulting product, and then demonstrate how it could be used to design and implement a clinically based teacher education program by facilitating partnership arrangements, strengthening clinical practices, developing mentoring programs, creating clinical seminars, reforming assessment practices, reorganizing coursework, and promoting research (NCATE, 2010). Our intent was to show how defining and articulating the sequence of clinical experiences provides the basis for developing a more unified, cohesive teacher education program.

The *Developmental Curriculum for Clinical Experiences* described in this article was presented only as a single example for the purpose of illustrating the concept of a clinical curriculum. In light of the situated nature of teacher learning, the variations in state standards, and the different missions of teacher preparation programs, the *Developmental Curriculum for Clinical Experiences* presented in this article may need to be modified or completely revised to fit other programs. Even within programs, the clinical curriculum may need to be adapted to serve to serve specific sites and purposes, although adjustments should be well aligned with the framework of experiences outlined in the original. The SEOTDC partner institutions do permit and encourage faculty to adapt the clinical curriculum to their settings as they see fit. For example, Ohio University is currently pilot testing online clinical experiences for their undergraduate students. A design team consisting of teach-

ers, administrators and professors has recently developed a draft of a clinical curriculum that enhances and better expresses the expectations for an online environment originally expressed in the *Developmental Curriculum for Clinical Experiences*.

We acknowledge the efficacy of this particular clinical curriculum has not yet been demonstrated. Currently, we are collecting data from both mentor teachers and teacher candidates to stimulate further discussions and revisions as we work through full implementation in our respective programs. Though much work needs to be done as we continue to move forward, we are excited by the possibilities of this conceptual tool as we move into this new paradigm of clinically based teacher education.

References

- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco, CA: Josey Bass.
- Ball, D. L., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497-511.
- Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24, 249-305.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: John Wiley & Sons.
- Korthagen, F. A. J. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrated view of teacher behavior and teacher learning. *Teaching and Teacher Education*, 26, 98-106.
- Korthagen, F. A. J., & Kessels, J. P. A. M. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(4), 4-17.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Maandag, D. W., Folkert Deinum, J., Hoffman, A. W. H., & Buitink, J. (2007). Teacher education in schools: an international comparison. *European Journal of Teacher Education*, 30(2), 151-173.
- National Council for Accreditation of Teacher Education. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Report of Blue Ribbon Panel on clinical preparation and partnerships for improved student learning. Washington, DC: NCATE.
- Ohio Educator Standards Board. (2010). *Ohio standards for the teaching profession*. Retrieved from http://esb.ode.state.oh.us/PDF/Rev_TeachingProfession_aug10.pdf
- Ronfeldt, M., & Reiningger, M. (2012). More or better student teaching? *Teaching and Teacher Education*, 28, 1090-1106.

Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. Paris, France: UNESCO: International Institute for Educational Planning.