Reforming Teaching and Teacher Education
Bright Prospects for Active Schools
Eija Kimonen
University of Eastern Finland, Finland
and
Raimo Nevalainen (Eds.)
University of Jyväskylä, Finland

What are the prerequisites for reforming education, and how can these reforms be seen in school development and culture? How should teacher education support this reform process? What are the principles and practices underlying the functioning of the schools of tomorrow? These questions are examined in this unique volume.

The authors in this book argue that the central function of teacher education and education in general is to respond to the challenges brought on by the twenty-first century. According to this approach, the competencies and skills needed in the future are not merely a new addition to school activities, but rather something requiring a comprehensive reform of school culture encompassing teacher education, curricula, and teaching methods. Such a fundamental process of change in the action and thinking models used by schools would be an effort to achieve a complete transformation, the result of which would be schools developing into organizations that are both creative and imbued with a strong sense of community. A central attribute is that the creation of new knowledge is not just restricted to the classroom but also takes place in out-of-school environments. This would link learning to its natural context, eventually leading to an ideal instruction that is actively problem oriented, holistic, and life centered.

This reform-minded volume is divided into three parts. The first part focuses on the reform processes in teacher education, the second on the reforms of pedagogics at schools and teacher education institutions, and the third on the processes of reculturing schools. New prospects for active schools in the United States and Europe, as well as in Japan and China, are discussed.
Reforming Teaching and Teacher Education
Reforming Teaching and Teacher Education

Bright Prospects for Active Schools

Edited by

Eija Kimonen
University of Eastern Finland, Finland

and

Raimo Nevalainen
University of Jyväskylä, Finland

SENSE PUBLISHERS
ROTTERDAM / BOSTON / TAIPEI
# TABLE OF CONTENTS

Foreword
Understanding Reforms in Teaching and Teacher Education: Education in Transition ................................................................. vii
*Congman Rao and Xin Chen*

Preface
The Importance of Education Reform: Toward Active Schools ......................... ix

## Part 1. Reforming Teacher Education

1. Transforming Teacher Education in the United States: A Clinically-Based Developmental Approach ................................................. 3
   *Susan K. Johnsen, Krystal K. Goree, and Tracey N. Sulak*

2. The Seven Principles of Learner-Centered Professional Education Programs: Teacher Education for Students with Exceptionalities in Texas, U.S.A. ........................................................................................................... 35
   *Tracey N. Sulak, Rachel Renbarger, Robin D. Wilson, and Rebecca J. Odajima*

## Part 2. Transforming School Pedagogics

3. Children Experiencing the Outdoors: A Natural Setting for Science Learning in the United States .............................................. 67
   *Sarah J. Carrier and Kathryn Stevenson*

4. Inquiry and Creativity Approaches in Early-Years Science Education: A Comparative Analysis of Finland and Romania ............ 89
   *Sari Havu-Nuutinen, Dan Sporea, and Adelina Sporea*

5. Future-Oriented Reform of Craft Education: The Cases of Finland and Latvia .................................................................................. 117
   *Sinikka Pöllänen and Māra Urdziņa-Deruma*

6. Pedagogics in Home Economics Meet Everyday Life: Crossing Boundaries and Developing Insight in Finland and Japan .......... 145
   *Anna-Liisa Elorinne, Noriko Arai, and Minna Autio*
### TABLE OF CONTENTS

7. *Drama Boreale* – Perspectives on Drama Education in Finland and Norway: Struggling for a Place in the Educational System .......... 169  
   Anna-Lena Østern, Tapio Toivanen, and Tuija Leena Viirret

**Part 3. Reculturing Schools**

8. Educational Change and School Culture: Curriculum Change in the Finnish School System ......................................................... 195  
   Raimo Nevalainen, Eija Kimonen, and Thomas L. Alsbury

9. Active Learning for Educational Change: Finnish Students and Teachers as Active Learners .......................................................... 225  
   Eija Kimonen, Raimo Nevalainen, and La Tefy Schoen

**Afterword**

Empowering Teachers and Students for Active Schools: In Search of a Pedagogy for the Twenty-First Century .................................................. 253  
*Eija Kimonen, Congman Rao, Raimo Nevalainen, and Xin Chen*

**Contributors** .......................................................................................................... 257

**Index** .................................................................................................................... 261
As more countries move from the industrial to the information age, they are exploring ways of reforming their educational systems to best respond to this complex challenge. Globalization, new technologies, and changing demands both at work and elsewhere present individuals, communities, and societies with problems that can only be resolved by reforming systems of education and schooling (Ng & Renshaw, 2009). That is why reforms have become the normal course of events in world education development. As we all know, the ability to participate in lifelong learning, the core of which is active learning, is one of the most necessary competences for people living such a period characterized by rapid and total changes. Consequently, more and more countries have been reforming their education, especially their schooling, since the beginning of this century for the purpose of building active schools and promoting active learning. This is taking place globally, even if the reform policies or strategies differ with respect to national contexts and situations.

As the subtitle of this enlightening book shows, its main topic is active schools. In fact, the active learning that takes place at such schools has long been the focus of the two editors’ research. This book consists of three parts and nine chapters. Its first part is devoted to reforms in teacher education. The second and third parts, a total of seven chapters, approach teaching reforms for active learning from the two dimensions of school pedagogics and school culture. We stress the importance of pointing out that most of the chapters in the second part focus on pedagogical reforms in such areas as craft education, home economics, and drama education. These areas are important for active learning, but they have rarely received attention by researchers.

The age we are living in is not only one of education reforms, but also one of teacher education reforms. Teacher education reform in many countries constitutes a crucial part of a broader educational reform intended to improve teaching practice and student performance. The underlying assumption is that teacher quality is the key to the success of education reforms, and that teacher education is a major factor in improving teaching quality. Teacher education reform has thus become an international trend (Bates, 2008; Garm & Karlsen, 2004), which, different national contexts and traditions notwithstanding, shares a set of similar expectations, foci, and even policy interventions (Loomis, Rodriguez, & Tillman, 2008). The first part of
this book consists of two chapters. It deals with innovative teacher education reforms in the United States based on case studies. It illustrates not only the commonalities but also the complexities of teacher education reforms in that country.

We are living in an age full of great uncertainty about the future and global problems. Exchange and cooperation among different nation-states or organizations seem more important and necessary than ever before. International studies of teaching and teacher education reforms are essential elements of these valuable exchanges. As comparative education and teacher education researchers, we are very pleased to see this unique book published because it deals with issues such as teaching and teacher education reforms from an international perspective. The book is based on intensive and informative studies covering several countries and offers an insightful account of teaching and teacher education reforms.

We have known the two editors, Eija Kimonen and Raimo Nevalainen, since 2010. They have paid several teaching visits to us in China, and we have visited them in Finland. We have also met at international conferences elsewhere. Additionally, one of us, Congman Rao, has the experience of cooperating with Eija Kimonen and Raimo Nevalainen in contributing a book chapter for their edited volume Transforming Teachers’ Work Globally: In Search of a Better Way for Schools and Their Communities (2013). In the process of exchange and cooperation, we are extremely impressed by their enthusiasm for research on educational reforms, as well as by their in-depth insights into education in general, and teacher education and comparative education in particular. We are greatly honored to be part of this project. We firmly believe that this book will be warmly received by specialists in education, particularly those interested in reforming teaching and teacher education.

REFERENCES


Congman Rao
Institute of International and Comparative Education
Northeast Normal University

Xin Chen
Faculty of Education
Northeast Normal University
PREFACE

THE IMPORTANCE
OF EDUCATIONAL REFORM

Toward Active Schools

The school as an institution has been criticized throughout the twentieth century. According to this criticism, the school isolates itself from the rest of the culture, thus forgetting its function as educator of future citizens. This critique gained further support at the beginning of the twenty-first century. Then globalization was considered to confront the national school systems with a wide range of serious and intertwined problems, these including commercialization, competition, the brain drain, cultural diversity, inequality, social exclusion, and loss of resources (see, e.g., Neubauer, 2007, pp. 36–48). Kubow and Fossum (2007) stated that among many other responsibilities, an important challenge for a schooling system is “to help students understand cultural, economic, political, and social convergence and divergence in a globalizing environment” (p. 295).

This book argues that the central function of teacher education and education in general is to respond to the challenges brought on by the twenty-first century. According to this approach, the competencies and skills needed in the future are not merely a new addition to school activities, but rather something requiring a comprehensive reform of school culture encompassing teacher education, curricula, and teaching methods. Such a fundamental process of change in the action and thinking models used by schools would be an effort to achieve a complete transformation, the result of which would be schools developing into organizations that are both creative and imbued with a strong sense of community. A central attribute is that the creation of new knowledge is not just restricted to the classroom but also takes place in out-of-school environments. This would link learning to its natural context, this eventually leading to an ideal instruction that is actively problem oriented, holistic, and life centered.

OVERVIEW

What are the prerequisites for reforming education, and how can these reforms be seen in school development and culture? How should teacher education support this reform process? What are the principles and practices underlying the functioning of the schools of tomorrow? These questions are examined in this three-part volume. Its first part focuses on the reform processes in teacher education, its second part on the
reforms of pedagogics at schools and teacher education institutions, and its third part on the processes of reculturing schools. The individual chapters discuss new prospects for active schools in the United States and Europe, as well as in Japan and China. Some of the highlights of the contributions are presented in the following summaries.

Part One is devoted to reform in teacher education. Its chapters show that reforming teacher education needs a comprehensive re-conceptualization of a traditional university program. The authors discuss how to develop new learner-centered and field-based models for teacher education. The first chapter, *Transforming Teacher Education in the United States: A Clinically-Based Developmental Approach*, by Susan K. Johnsen, Krystal K. Goree, and Tracey N. Sulak, addresses the transformation of a traditional course-based, candidate-centered university program into a field-based, learner-centered program. Beginning with a description of the external pressures influencing the change effort, the authors examine specific details within each of the stages used in the actual redesign process. These include an initial faculty retreat focusing on teacher education standards, assessments, and challenges; the development of an infrastructure and timeline; and the creation of design teams and professional development schools. The authors conclude that while the clinical model created a new set of challenges, specifically among faculty who found themselves in unfamiliar roles and among university administrators with their own agendas, it also had positive effects on students in their future teaching roles.

Chapter 2, *The Seven Principles of Learner-Centered Professional Education Programs: Teacher Education for Students with Exceptionalities in Texas, U.S.A.*, by Tracey N. Sulak, Rachel Renbarger, Robin D. Wilson, and Rebecca J. Odajima, presents the seven tenets of a pre-service teacher education program that focuses specifically on teaching children with exceptionalities. Within each principle, the authors include conceptual foundations and empirical research along with aligned current practices. Details are given such as the history and organization of the program, field-based requirements, assessment techniques, and methods of instruction. The chapter concludes with a comprehensive summary of the principles and benchmarks to highlight how this learner-centered professional education program was restructured and now incorporates the new National Council for the Accreditation of Teacher Education (NCATE) standards.

Part Two explores educational reforms on the basis of a unique collection of pedagogical innovations in schools and teacher education institutions from an international perspective. The section begins with an introductory chapter, presenting us with the ideas of student-centered science instruction in out-of-school environments. In this chapter, *Children Experiencing the Outdoors: A Natural Setting for Science Learning in the United States*, Sarah J. Carrier and Kathryn Stevenson provide an overview of outdoor education research, identifying past and current calls for reform that support connecting natural settings to student learning about the natural world. The authors examine various learning designs and settings for outdoor education, including various modalities and authentic settings. Furthermore, they discuss challenges that limit outdoor education, opportunities for diverse audiences.
as well as the role played by social factors in outdoor learning. The discussion
summarizes the potential for outdoor education to capitalize on children’s curiosity
about the natural world and its impact on student development.

The last four chapters of Part Two continue the focus on alternative forms of
active-learning pedagogy with respect to science education, craft education, home
economics, and drama education. The countries treated are, respectively, Finland,
Romania, Latvia, Japan, and Norway. These learning processes may take place
within or outside of the school. In Chapter 4, *Inquiry and Creativity Approaches in
Early-Years Science Education: A Comparative Analysis of Finland and Romania*,
Sari Havu-Nuutinen, Dan Sporea, and Adelina Sporea examine the perceptions
of teachers concerning the use of inquiry-based science education and the role of
creativity in two countries, Finland and Romania. Their study treats the teachers’
own viewpoint as documented by a detailed survey across the two countries. It
also utilizes observations and interviews to analyze the teaching approaches used
to determine whether and how students’ inquiry skills and creativity are fostered
in science education. Attention is further focused on the emergence of appropriate
learning outcomes, including student interest.

Chapter 5, *Future-Oriented Reform of Craft Education: The Cases of Finland and
Latvia*, by Sinikka Pöllänen and Māra Urdziņa-Deruma, analyzes craft education in
Finland and Latvia, countries with differing educational and cultural histories. In
both countries, craft education has had a permanent place, either as a separate school
subject or in combination with other subjects. In this chapter, craft education in the
two countries will be described from three perspectives: current craft education and
science-based craft teacher education, the challenges craft education will face in
the future, and the possibilities offered by two future-oriented pedagogical models.
Additionally, some examples that may reform craft education are examined.

Chapter 6, *Pedagogics in Home Economics Meet Everyday Life: Crossing
Boundaries and Developing Insight in Finland and Japan*, by Anna-Liisa Elorinne,
Noriko Arai, and Minna Autio, reveals that home economics as a school subject has
a history dating from the late nineteenth century in both Finland and Japan. However,
home economics as an independent academic discipline has been developing in both
countries since the 1980s. The research tradition in home economics focuses on the
everyday life and welfare of homes and households. Yet, the pedagogical approach
in the field has been insufficiently discussed. Modern pedagogy stresses authentic
and inquiry-based learning, this being important for the further development of both
home economics as a discipline and of learning by doing as pedagogical practice.
The purpose of this chapter is to discuss the nature of home economics as a science,
offering insight into pedagogical solutions in students’ learning in a home economics
context.

In Chapter 7, *Drama Boreale – Perspectives on Drama Education in Finland and
Norway: Struggling for a Place in the Educational System*, Anna-Lena Østern, Tapio
Toivanen, and Tuija Leena Viirret provide an overview of the extensive attempts
carried out for the purpose of establishing a knowledge base for drama and theatre
education throughout the school system in two Nordic countries, Finland and Norway. The authors have chosen to study contemporary history from the perspective of both countries. They ask how drama education has been incorporated into education in these two countries from the 1970s until 2016. They describe the ups and downs in the struggle to obtain a place for this art subject and its esthetic work forms. The authors discuss how this knowledge base is constructed through supporting reforms aiming at including the subject in curricula, through practice and research, through associations for drama and theatre education, and, finally, through the development of study programs and curricula.

Part Three discusses the processes of reculturing schools in the framework of curriculum change and active learning. This part begins with a chapter looking at the educational change process in the context of national curricula reforms. Chapter 8, Educational Change and School Culture: Curriculum Change in the Finnish School System, by Raimo Nevalainen, Eija Kimonen, and Thomas L. Alsbury, gives a contextual outline of curricula in the Finnish comprehensive school, and of the changes made in them during the past four decades. It examines educational change from the standpoint of curriculum change, particularly focusing on the implications of the changes for different dimensions of school culture. The study considers the manner in which the changes in the Finnish national curricula for the comprehensive school can be seen in school pedagogy and teachers’ work. The features of curricula as well as of their implementations are also evaluated and commented on in the light of previous qualitative research projects.

In the final chapter, Active Learning for Educational Change: Finnish Students and Teachers as Active Learners, Eija Kimonen, Raimo Nevalainen, and La Tefy Schoen discuss the process of active learning in the context of changing school culture. The findings reported in this chapter form part of a wider comparative research project investigating the active learning of students and teachers in the educational practices of eight countries. It aims to describe the manner in which the process of change is seen in the activities of students and teachers in one small Finnish school. The chapter focuses on the process of active learning: its goals, activities, information, outcomes, and assessment. The data allows for an analysis of the teacher’s transformative learning process within the changing school culture.

ACKNOWLEDGMENTS

We would like to express our gratitude to all those who in one way or another contributed to the realization of this book. Our special appreciation is due to our co-authors for their inspiring and creative contributions.

The editing process was carried out at the Universities of Eastern Finland and Jyväskylä. We would like to take this opportunity to extend our sincerest thanks particularly to Professor Pertti Väisänen, Professor Tuula Keinonen, Dr. Timo Tossavainen, and Dr. Ritva Rouvinen from the University of Eastern Finland and Dr. Pekka Ruuskanen from the University of Jyväskylä for their encouragement.
during all phases of the work. We express our warmest thanks to Dr. Elizabeth Hammerman for her support and encouragement in this project. We gratefully acknowledge the cooperation of Professor Congman Rao and Associate Professor Xin Chen of Northeast Normal University. We are thankful to the reviewers who kindly commented on the chapters of this volume providing constructive feedback. We are also indebted to Mr. Eugene Holman of the University of Helsinki for his invaluable contribution editing the entire text, and to Ms. Niina Pohjola of the Central Finland Graphic Design Agency for her work preparing the graphic layout. We express our sincerest appreciation to Publishing Director Michel Lokhorst and Managing Director Peter de Liefde for making the publication of this book possible.

REFERENCES


PART ONE

REFORMING
TEACHER EDUCATION
In the United States, teacher education programs have been under increasing pressure to focus more on outputs such as their candidates’ effects on student performance on state, national, and international tests rather than on inputs such as content described in course syllabi or the number of hours of field experiences. To address these external pressures and increase their focus on outputs, a university faculty transformed a traditional course-based, candidate-centered university program into a field-based, learner-centered program. This teacher education program eventually became a model for other universities because of its intensive clinical experiences and its positive effects on students (NCATE, 2010, p. 14).

The transformation process was systematic and advanced through multiple stages that incorporated many of the principles important to effecting change (Fullan, 2009; 2010; Hall & Hord, 2015). First, high-quality people were involved at all levels in the School of Education. Beginning with an initial faculty retreat that examined standards, assessments, and possible challenges through the implementation of the new program, administrators and faculty at both the university and K–12 school levels participated in the plan and its adoption. Second, the change focused on specific outcomes, guided by a conceptual framework and delineated by assessment benchmarks, where each individual had specific roles that worked together to form a comprehensive, cohesive program. Third, a Professional Development School (PDS) where university and school faculty formed a learning community had been piloted over a period of seven years and provided a successful model for other newly formed PDS and partner schools to emulate. Fourth, a financial model was developed and supported by the university that reduced class sizes and allowed for more field supervision, collaboration, and support. Finally, an evaluation system was built to examine and address challenges. This chapter will elaborate this systematic redesign process that led to the transformation and the development of a successful teacher education model.
RATIONALE FOR TRANSFORMING TEACHER EDUCATION

Teacher education as a field faced unprecedented external forces in the late 1990s and 2000s, such as commodification of the field, new federal accountability guidelines, and demands for more collaboration with local education agencies (Zeichner, 2010). The push for a “new teacher education” began with the passage of the Higher Education Amendments of 1998, which tied not only the reporting of results of teacher education programs to state funding and grants but also allowed funding for certification routes outside the typical university setting (Cochran-Smith, 2005a; see DoEd, 1998). In addition, comparisons between nations on international exams such as the Third International Math and Science Study (TIMSS) and the National Assessment of Educational Progress (NAEP) led to the development of standards and highlighted the need for teacher education and school reform in the United States (Rampey, Dion, & Donahue, 2009).

Commodification

Commodification describes a process where a commodity is created out of something that was not available for trade previously. This commodification or market approach to education has exposed traditional teacher education programs at universities to competition from external entities offering alternative certification routes (Cochran-Smith, 2005a). Various metaphors have compared this exposure to “the cleansing waters of competition” (Hess, 2001, p. 22) or the “discipline of the market” (Ballou & Podgursky, 1999, p. 67), language which underscores a movement from a humanist view of education to a market-based philosophy (Cochran-Smith, 2005b). New external teacher preparation programs in the United States have included non-profit agencies such as school districts, regional service centers, and state agencies, as well as for-profit institutions that often pander canned interventions and curricula aimed to meet federal U.S. standards (Morey, 2001). To remain competitive, traditional university teacher education programs must now be able to demonstrate their impact on candidates and the students they teach, which has encouraged a movement toward more school-based settings. Moreover, university teacher education programs, which are often expensive, must now show the value added by their programs and respond to economic concerns (Sleeter, 2008). They are expected not only to prepare future educators but also to assume a larger role in society’s response to fundamental questions about the purpose of schooling and how this purpose impacts the nation’s workforce (Helsby, 1999; Smyth & Shacklock, 1998; Zeichner, 2010).

Accountability

The current wave of transformation in teacher education in the United States originates from movements in the 1960s, which led to greater accountability
through accreditation, and in the 1980s, which initiated reforms to close educational achievement gaps between races and ethnicities (Cochran-Smith, 2005b). The transformation through accountability can be reduced to two connected issues: professionalization through regulation and teaching as a policy problem.

Before the advent of accreditation bodies like the National Council for Accreditation of Teacher Education (NCATE) in the 1950s, teacher education in the United States was grounded in field-based practice in local schools, which meant the teacher preparation programs differed in content, clinical components, and duration (Whitford & Villaume, 2014). This local control combined with the deregulation of teaching created concerns over the meaning of certification and the ability of accreditation bodies to oversee the quality of schools of education (Cochran-Smith, 2005a). To address inconsistencies in quality, the United States turned to a context of standards and professionalization, which created the need for regulatory bodies like NCATE – now called the Council for the Accreditation of Educator Preparation (CAEP) (Grimmett & Chinnery, 2009). As the professionalism of teaching increased through accreditation by national associations, states began to monitor university education programs to determine if they were meeting educator preparation standards. While initially, these professional standards focused more on inputs – what was being taught in courses – eventually the focus changed to outputs – what effects were teacher education candidates having on student progress in school classrooms. As a response to the new emphasis on outputs, NCATE (2002) and now CAEP (2015) identified standards related to the accreditation of educator preparation programs that included factors that are “likely to have the strongest effects on outcomes for students: content knowledge, field experience, and the quality of teacher candidates” (p. 2). To be nationally accredited, therefore, teacher preparation programs need not only to show that they have selected quality candidates who have acquired the knowledge, skills, and dispositions indicated in professional standards but also that their candidates’ performance in the classroom influences the achievement of students, particularly those from diverse backgrounds who are struggling academically and showing gaps in performance (e.g., students of different races, ethnicities, and socio-economic classes). Student achievement is now measured by state tests, which are related to state or national curriculum standards. While these state-mandated tests reduce local control over what is taught, they create a more efficient system for accountability with standardized tests to measure student progress. As control over the curriculum has become more centralized, the content in education programs has had to change to meet educator preparation standards as assessed by professional and national accreditation associations and curriculum standards as assessed by state and nationally-designed tests that measure overall student progress as well as progress for each subgroup of students.

Teacher education framed as a policy problem rose in popularity as the federal government’s role in matters of education expanded (Cochran-Smith, 2005a). The premise was that better policy would produce better teachers who would then produce better outcomes in students and possibly reduce the achievement gap created by a
teacher education system that did not address issues of diversity in the field. Legal pressures from *No Child Left Behind Act of 2001* (NCLB) emphasized a change in the federal government’s role in education, which moved from a primarily financial role to a regulatory role in instruction, teacher education, and teacher quality (Cochran-Smith, 2005b; see DoEd, 2002). NCLB’s sweeping reforms included a mandate to close achievement gap for all subgroups by 2014 and more stringent evaluation procedures for teachers and students (Apple, 2005).

**Collaboration**

Traditionally, teacher education programs operated almost independently from the schools by front-loading coursework and then supplying a short field-based assignment at the end of all the courses (Darling-Hammond, 2014). In 2010, the NCATE published the Blue Ribbon Panel Report on teacher preparation, which emphasized the need to move teacher education out of the university laboratory schools and into the public school setting. To be effective at changing practices and attitudes of teacher candidates, field-experiences needed to be embedded in school contexts with instruction and feedback on performance that is developmental, purposeful, and well-articulated (Futrell, 2010; Griffin, 1987). In addition, teacher education programs were encouraged to form partnerships with local schools where all constituents share the responsibility for training a new generation of teachers (Larson & Kyle, 2014). The emphasis on shared responsibility and rights to the teacher education programs prompted the creation of professional development schools organized around five guiding principles:

1. The school is a learning community.
2. All stakeholders agree to use accountability to ensure the quality of the program.
3. The school and university collaborate on decision-making.
4. Equity and diversity are included in measurements of achievement, opportunities, and conversations.
5. The partnership creates structures, shares resources, and defines roles of each constituent (NCATE, 2001).

These NCATE principles provide teacher candidates with a realistic experience by encouraging active practice in the schools and shared responsibility between the university and the school district. Professional development schools act as laboratories for teacher candidate training, research, and professional development (Whitford & Villaume, 2014). By experiencing the complex interplay between theory and practice in PDS schools, teacher candidates are able to connect learning at the university and theory with fieldwork and practice (Conroy, Hulme, & Menter, 2014).

Movement to a clinical model of teacher preparation provided answers to some of the external pressures on teacher education – commodification, accountability, and collaboration. Baylor University is one of the programs highlighted as a model in NCATE’s 2010 *Blue Ribbon Panel Report*. Its partnership “provides an intensive
clinical experience for prospective teachers in an urban setting. … Results from a pilot study show that students with multiple exposures to Baylor University interns perform better than students that have no exposure to the teacher candidates in the clinical preparation program” (NCATE, 2010, p. 14). The remainder of this chapter will describe how this program was transformed from a traditional university program to a clinical model of teacher preparation.

BAYLOR UNIVERSITY’S TRADITIONAL EDUCATION PROGRAM

Baylor University is located in Waco, Texas, U.S.A. Chartered in 1845 by the Republic of Texas, it is a private Christian university and a nationally recognized research institution. Its total enrollment is 16,787 with 14,189 undergraduate and 2,598 graduate students (Baylor University, 2016, Discussion section, para. 1, “Fall 2015 Enrollment,” para. 6).

The School of Education (SOE) is one of thirteen academic units with approximately 450 undergraduate students (i.e., candidates) who are in the teacher education program. Founded in 1919, the SOE currently has three departments: Curriculum and Instruction (C&I), Educational Administration (EDA), and Educational Psychology (EDP) (SOE, 2015a, “SOE at a Glance,” para. 1). The C&I and EDP Departments are primarily involved with the undergraduate teacher education program, with C&I focusing on the preparation of candidates who will teach mainly general education students, and EDP on those candidates who will teach mainly special education students (e.g., those with disabilities, as well as the gifted and talented).

Until 2001, the School of Education offered a more traditional program to prepare most of its teachers. This program offered foundational courses in the history of education, educational psychology, assessment, and exceptionalities beginning in the sophomore or second year of college. Depending on the pre-service teachers’ interests, they would then major in elementary (grades K–8), secondary (grades 6–12), or special education (grades PK–12). If they majored in elementary or secondary education, they would enroll in methods courses in the content areas they would be teaching (e.g., science, mathematics, social studies, language arts, and/or the visual and performing arts). For the most part, all of these courses were offered on the university campus with the exception of student teaching during the last semester of their senior year. During this semester, they would teach in a general education classroom with a cooperating teacher and be supervised by a faculty member who would observe them teaching two or three times.

If they majored in special education, they would enroll in courses beginning in their sophomore or second year of college that were more specialized and field based. In this program, most of the candidates’ courses had a classroom component that was closely supervised. Candidates were placed in a variety of school settings (e.g., special schools, self-contained classrooms, resource rooms, general education classrooms) so that they would have opportunities to teach students with the full range of disabilities.
Beginning in 1993, the School of Education decided to partner with the Waco Independent School District (ISD) in creating its first Professional Development School (PDS). The school known as Hillcrest PDS was an elementary magnet school – all students within the Waco ISD were eligible to enroll in the school – and focused on serving all students within inclusive environments. An important characteristic of the school was the involvement of teachers, parents, community representatives, University faculty, and the school principal in decisions ranging from budget allocations to curriculum. When challenges arose, clusters of professionals and parents worked together to identify solutions to present to the whole school. Within each pair of classrooms, there was a special education teacher, a gifted education teacher, two special reading teachers, and two general education teachers. These learning environments provided extensive supervised experiences for candidates beginning in their sophomore year in classrooms that modeled effective practices with diverse learners. Working together, novice and experienced teachers identified and addressed the diverse learning needs of children resulting in high levels of performance among all participants – candidates and students. Keys to the success of the school were a spirit of collaboration, individualization, and extended classroom experiences for candidates (Proctor, 2001; Yinger, 2001).

Given the field-based success of the special education field-based program and of the Hillcrest PDS, the new dean of the SOE wanted to expand these types of experiences to all teacher candidates. Yinger (2001, p. 3) envisioned:

[A] network of approximately a dozen Professional Development Schools with three to five partner schools connected to each. ... Much of our professional instruction will be conducted in these schools during the Teaching Internship year (senior year) and the Teaching Associate year (junior year). Accomplished teachers will be appointed as lead teacher mentors and as clinical faculty to provide continuous, on-site mentoring, supervision, and instruction. Campus-based faculty will work side-by-side with these teachers to provide an integrated academic and professional curriculum that is committed to putting knowledge into practice.

REDESIGN PROCESS

Stage 1: Initial Faculty Retreat

Using the infrastructure of preparing candidates in professional development schools, the dean scheduled a faculty retreat in 1999 to focus on the characteristics of the new program, which included national and state standards in teacher education programs, assessments to measure progress, and possible challenges.

Teacher Education Standards

National and state standards were used to define the teacher education curriculum. These standards, similar but now revised since 1999, included NCATE’s Unit
The standards were to be used to define the desired knowledge and skills that would be developed in the candidates. These standards included both pedagogy and content knowledge in specific teaching fields, the characteristics of the teacher education faculty, and the quality of the teaching environments (e.g., the classroom and the teacher).

Assessments

As the standards were reviewed and aligned with one another, the faculty also considered how the effectiveness of the teacher education program would be measured. Some of these questions were generated:

1. How do we screen candidates’ strengths and weaknesses?
2. How do we assess the candidates’ knowledge and skills?
3. How might the assessments adapt to candidates’ changes in knowledge and skills?
4. How will we assess the quality of the field-based teaching environment?
5. How will the assessments accommodate diversity and respond to local needs?
6. How will we assess the overall effectiveness of the program – its strengths and weaknesses?

Some specific instruments considered during the discussion of assessments included grade point averages, structured interviews, critical thinking tests, writing samples, portfolios, and classroom observation instruments such as those currently used by faculty and the Texas Beginning Educator Support System (TxBESS) (Texas SBEC, 2005).

Possible Challenges

The faculty also identified these challenges (or possibilities) that might influence the transformation of the teacher education program from a more traditional delivery of courses to a more field-based approach:

1. How might we develop a cohesive program with Arts and Sciences and strengthen the core academic areas by assessing students’ understanding of major concepts and generalizations?
2. How might we assess pre-service students so that we can develop instructional plans, individually or in cohorts, and design a cohesive sequence of field-based experiences that match their proficiency levels? Should we raise entry-level standards? Should we have teaching experiences before the senior or intern year?
3. How might we make our courses more performance-driven rather than time or course-driven? What performance benchmarks might we use?

4. How might students build portfolios that include evidence of their progress in what they know and are able to do? How do we build time for critical reflections?

5. How might student reflections and their collaborations with others during their field experiences stimulate and lead to problem-based learning and action research?

Stage 2a: Develop Administrative Infrastructure and Timeline

The faculty retreat became the impetus for the next stage of the redesign process. This stage included the creation of a university-wide Teacher Education Faculty (TEF), which eventually included an Executive Committee (TEFX). The development of this infrastructure was important so that all faculty and those involved in teacher education felt that they had a voice in the redesign process.

Teacher Education Faculty

During the 2000–2001 school year, the SOE faculty had initial conversations with the Arts and Sciences faculty about ways of preparing teachers in science, mathematics, English, foreign languages, and other subject areas. These positive interactions led to a proposal for developing an all-university Teacher Education Faculty (TEF) that would facilitate discourse and actions needed to address problems facing the educational system. The purpose of the TEF was to create a forum and a means for coordinated action in teacher education across the School of Education as well as other departments in the university. It would be responsible for the design, decision-making, and implementation of teacher education programs at Baylor. The TEF faculty would be responsible for planning and overseeing all aspects of teacher education, including program and curriculum design, instruction, admissions, advising, and assessment. The TEF would also approve all course and curriculum proposals or changes. Appointments to the TEF were based on assigned teaching responsibilities in the Baylor teacher education program and on demonstrated professional interests and scholarly activity in teacher education. In addition, school partners were eventually added to the TEF to ensure a seamless communication with the involved professional development schools and school districts.

Given the size of the All-University Teacher Education Faculty that included members not only from other administrative units within Baylor University but also outside of Baylor, an executive committee was formed during 2003–2004 (i.e., the Teacher Education Faculty Executive Committee – TEFX) to ensure that each group had a representative voice. The purpose of TEFX was to serve as a coordinator, catalyst, and interpreter in improving and enhancing the teacher education program. The Executive Committee also made recommendations to the TEF for changes
in the teacher education program. The TEFX was comprised of the chair of the Teacher Education Faculty, the director of the Office of Professional Practice, the Professional Development School and school district liaisons, and coordinators of certificate levels and special programs (EC–4, 4–8, 8–12, special education, ESL, and the gifted and talented). The Teacher Education Faculty Executive Committee:

1. coordinated curriculum implementation across certificate levels and program specialties;
2. assessed the need and the coordination of faculty assignments across certificate levels and program specialties;
3. represented the faculty in identifying and discussing important issues that need to be examined within the teacher education program;
4. recommended action plans that address important issues;
5. reviewed and made decisions regarding proposals for new or revised programs within the teacher education program;
6. reviewed and made recommendations regarding administrative areas such as scheduling of courses, sequencing courses, and handbooks;
7. coordinated evaluation and research across PDS and partner schools;
8. established meeting agendas for the Executive Committee and the Teacher Education Faculty; and
9. met regularly to address adequately the concerns of the teacher education faculty and ensure the overall quality of the undergraduate teacher education program.

Timeline

To ensure that students who were in the traditional program had opportunities to complete their degrees within a four-year period, a calendar was developed. The calendar included a number of courses that were being phased out over a two-year period and important components that needed to be developed simultaneously and sequentially. This helped coordinate the activities of the assessment, course, and professional development school design teams.

Overall students who graduated prior to September 1, 2002 finished under the old program, those graduating before September 1, 2004 finished under the old program with a mix of old and new courses, and those graduating after September 1, 2004 finished under the new program requirements.

Stage 2b: Creation of Design Teams

Concurrently with the development of the administrative infrastructure and decision-making body, design teams were formed to develop the conceptual framework for the School of Education, assessments, courses, and professional development/partner schools. As faculty collaborated in creating its various components, they were reviewed by the TEF, revised, resubmitted, and eventually approved by TEF.
or eventually TEFX. Using this cyclical process, faculty began implementing components of the teacher education program in the fall of 2002. They continue to use this infrastructure to review and evaluate components on a regular basis.

**Design of the Conceptual Framework**

A conceptual framework, Learner-Centered Professional Education Programs, was developed to describe the important components of the overall teacher education program (see Figure 1). The conceptual framework was based on seven principles of learner-centered instruction that were aligned to the national teacher education standards (Borko & Putnam, 1996; Bransford, Brown, & Cocking, 1999; Darling-Hammond, 1998; Feiman-Nemser & Remillard, 1996; Shulman, 1990):

1. **Classrooms and schools must be learner centered creating a positive environment for learning.** At the conceptual framework’s core is the PK–12 student (Bransford, Brown, & Cocking, 1999). The teacher candidates’ primary focus must be on learner progress. School of Education faculty are
also learner-focused with each candidate providing evidence of their progress. The faculty and the candidate’s mentors use this information in planning the candidate’s experiences.

2. *Formative assessment provides information about the student and assists in designing and adapting instruction.* Knowing that each student is different, the teacher candidates must identify these differences to be effective. Student differences may occur in these areas: what is to be learned, how it is to be learned, how quickly it can be learned, and how the new learning is to be shared. Formative assessment, which includes assessment that occurs in planning prior to teaching and assessment that occurs during instruction, must address these areas of student differences. Assessment is therefore broad based and relies on multiple sources and strategies. These strategies may include performances, products, process-focused observations, and traditional paper-pencil assessments (McTighe & Ferrara, 1998).

3. *A deep foundation of factual knowledge must be organized conceptually to facilitate its retrieval, application, and transfer.* Pedagogical skills are built on a strong foundation of subject matter in the teacher candidates’ fields of study. While the organization of curriculum varies, a firm grasp of the declarative, procedural, and strategic knowledge in a particular field or discipline is needed to design learning activities for instruction. For example, the teacher candidate may identify more complex concepts, combining multiple disciplines, or the teacher candidate may analyze tasks in a single discipline for easier acquisition. This understanding of the knowledge base is particularly important for the teacher when organizing larger units of study around major concepts, principles, and theories. Once the candidates’ knowledge is firm, they need to provide the conditions that will increase the likelihood that each student will learn efficiently and effectively (Darling-Hammond, 1998; Shulman, 1990). Specifically, as teacher candidates are taking courses in the Baylor Interdisciplinary Core, liberal arts, and in specific academic disciplines, they are learning how to organize their knowledge for retrieval, application, and transfer within the professional studies strand. Transfer is an extremely important principle for those students who must be taught directly the similarities across contexts. This principle, a foundation of knowledge, emerges from the research comparing experts to novices (Donavan, Bransford, & Pellegrino, 1999). Experts always draw on a rich knowledge base and have a deeper conceptual understanding of the field of study. At the same time that the teacher candidates are learning the major concepts of their disciplines, they will be organizing the information into conceptual frameworks for their students in their field-based experiences. While the teacher candidates are learning their specific disciplines, they are also organizing the knowledge for PK–12 students in professional development schools, these being located in an urban, diverse community. This type of community provides opportunities for teacher candidates to examine the variations in beliefs, traditions, and values found in different cultures and find ways to develop culturally-responsive curriculum.
4. **Strategies are important in learning to solve problems and in becoming an independent, effective teacher.** Teacher education candidates use problem-solving strategies in four performance areas that emphasize the continual improvement of all students’ learning. These strategies are used consistently and specifically when solving problems related to the classroom environment, curriculum planning, assessment, and professional development and communication. Practice in these strategies helps the teacher candidates transfer to new classroom settings and situations (Borko & Putnam, 1996; Feiman-Nemser & Remillard, 1996; Palincsar & Brown, 1982; Scardamalia, Bereiter, & Steinbach, 1984; Schoenfeld, 1984; 1991).

5. **Learning is developmental and influenced by the context in which it takes place.** These experiences are developmental and layered within progressively more complex situations, which provides candidates with sustained opportunities to deepen and expand their knowledge of the subject matter and effective teaching practices (Borko & Putnam, 1996). For example, beginning with the novice experiences (i.e. freshman and sophomore years), candidates initially tutor elementary, middle school, and secondary students; during the associate or junior year, they teach small groups in identified fields of specialization; and, finally, during the intern or senior year, they teach the whole class. Being in urban settings, the teacher candidates have experiences with students from different ethnic, religious, and socio-economic backgrounds and with varying levels and types of aptitudes, interests, achievement, and exceptionalities. In this way, the teacher candidate is able to examine variations within and across cultures and their effects on students, their families, and schooling.

6. **Collaboration is important in creating a diverse learning community.** The candidates’ classroom experiences occur in diverse urban and suburban professional development and partner schools to ensure collaboration among peer cohorts, mentor teachers, professionals in the schools, university faculty, parents, and other members of the community. This builds partnerships that assist in providing more authentic educational experiences for the students and requires that the teacher candidates understand and have a positive regard for different cultures, exceptionalities, and religions (Burnstein, Kiretschmer, Smith, & Gudoski, 1999).

7. **Reflection deepens the understanding of effective instructional practices.** Given the cyclical and progressive nature of the field experiences within the professional studies strand, the candidate has time to reflect about personal and others’ classroom experiences, deepening their understanding of effective instructional practices. With reflection combined with practice, the candidate develops a greater repertoire for resolving problems arising in the classroom (Tatto, 1998), improves teaching and self-efficacy (Freese, 1999; Kruse, 1997), and develops professionally (Bell & Gilbert, 1994).

The framework was designed to be a visual representation of these seven principles. Each of the seven principles is integrated systematically into the courses and learning
experiences of all teacher education candidates on the basis of the framework. At the central intersection of the overlapping elements of Figure 1 is the P–12 learner. This represents the learner-centered focus of all certificate programs in the School of Education. The four professional studies areas – positive classroom environment, assessment, curriculum planning and instruction, and professional development and communication – are represented by the four intersecting circles, illustrating the inter-relatedness of the four areas.

The first circle around the professional studies areas represents the candidates’ fields of study that serve as the base of content knowledge for teacher candidates. The outer circle indicates that while the teacher candidates are learning their specific disciplines, they are also organizing the knowledge for P–12 students in professional development, partner schools and other types of settings, which are located in diverse contexts.

The staggered squares encompassing the circles visualize the developmental nature of the conceptual framework. Since the acquisition of new knowledge and skills take time, the teacher candidates begin their classroom experiences during the freshman and sophomore years (novice), and continue building upon their experiences during the associate (junior) and intern (senior) years. These experiences are layered with increasing responsibility and diversity. For example, the teacher candidate conducts case studies with individual students during the novice years, differentiates instruction for small groups of students in specific discipline specialties during the associate years, and teaches entire classes in specific content areas during the intern years. At each level, faculty assess the candidates’ knowledge and skills, thus assisting them to move from developmental to competent to proficient levels.

While the conceptual framework has been modified slightly by broadening the focus to include an advanced layer to the novice, associate, and intern levels within a variety of diverse contexts, the four professional areas, which are based on content knowledge and acquired within a diverse learning context, have remained constant since its inception in 2001.

**Design of Assessments**

To design assessments for the teacher education program, the Assessment Design Team (ADT) began by asking, “What do we want the candidates to value (i.e., dispositions) and to do (i.e., performance outcomes) when they graduate?” Once these dispositions and outcomes were established and approved by the teacher education faculty, the ADT then identified observable classroom instructional behaviors that might show candidate progress (i.e., benchmarks). The benchmarks were then elaborated by defining levels of performance (i.e., developing, competent, proficient) for each benchmark characteristic within the format of a rubric. All of the rubrics were placed online so that candidates were able to upload evidence and faculty were able to rate the quality of the evidence as it related to the characteristics of each benchmark. In addition to measuring candidate performance, the teacher education faculty also identified assessments for admission and continuation in the
program. This development process and the types of assessments are elaborated further in this section.

**Identification of Performance Outcomes**

Using the conceptual framework as a foundation, the Assessment Design Team identified dispositions (i.e., professional attitudes, values, and beliefs) and performance outcomes in each of the four professional studies areas and for each of the developmental levels (i.e., novice, associate, intern) (see Table 1).

<table>
<thead>
<tr>
<th>Developmental Level</th>
<th>Context</th>
<th>Professional Studies Area</th>
<th>Dispositions</th>
<th>Performance Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novice</strong></td>
<td>Tutoring and individual instruction</td>
<td>Positive classroom environment</td>
<td>Social behaviors are learned and can be taught. The role of the novice includes teaching appropriate social behaviors.</td>
<td>– Implementation of strategies that create a learning environment of respect and rapport fostering a positive climate for learning, equity, and excellence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Management of student behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Use of Curriculum-Based Assessment (CBA) to adapt instruction for one student</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Selection and use of CBA, including technology, and criterion-referenced assessments to adapt instruction for each student and small groups of students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Keeping records of student progress and sharing information with students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Writing reflections explaining how standards were met</td>
</tr>
<tr>
<td><strong>Associate</strong></td>
<td>Small-group and individual instruction</td>
<td>Positive classroom environment</td>
<td>A classroom with clear expectations and positive feedback for appropriate behavior creates an atmosphere for optimal learning.</td>
<td>– Creation of a learning environment of respect and rapport that fosters a positive climate for learning, equity, and excellence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Management of student behavior in groups</td>
</tr>
<tr>
<td>Developmental Level</td>
<td>Context</td>
<td>Professional Studies Area</td>
<td>Dispositions</td>
<td>Performance Outcomes</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>---------------------------</td>
<td>--------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Associate</td>
<td>Small-group and individual instruction</td>
<td>Assessment</td>
<td>Multiple assessments across settings ensure transfer.</td>
<td>– Selection and use of CBA, criterion, and norm-referenced assessments to adapt instruction for each student&lt;br&gt;– Design of CBA assessments and selection of other related assessments, such as real-world applications, to adapt instruction for each student and small groups of students with similar strengths&lt;br&gt;– Sharing student records of progress with parents</td>
</tr>
<tr>
<td>Curriculum planning and instruction</td>
<td></td>
<td></td>
<td>The flexible use of a repertoire of methods is needed to meet assessed student needs, the requirements of the task, and the discipline. The organization of curriculum uses important information from the disciplines, such as facts, concepts, generalizations, strategies, and processes, promotes purposeful learning.</td>
<td>– Design of instruction based on assessment&lt;br&gt;– Design and implementation of a curriculum that is based on facts, concepts, generalizations, strategies, and procedures from the area(s) of specialization&lt;br&gt;– Use of multiple methods and strategies to promote high academic achievement and to make connections within and across disciplines&lt;br&gt;– Use of technological tools to promote learning and expand instructional options&lt;br&gt;– Use of flexible grouping to meet assessed student needs and the requirements of the task&lt;br&gt;– Selection and use of instructional materials that match student needs and promote academic achievement</td>
</tr>
<tr>
<td>Professional development and communication</td>
<td>Parents and guardians are partners in the development of effective programming for their children.</td>
<td></td>
<td>– Writing reflections explaining how standards were met and/or what needs to be done differently</td>
<td></td>
</tr>
</tbody>
</table>

For example, in the assessment area novice candidates would be able to select and use different forms of assessment and keep track of student progress (outcomes) and would understand that every task could provide information about student learning, and assessment should be linked to what students learned (dispositions). Associate candidates would build on the knowledge and skills of their novice years and be able not only to select and use different forms of assessment but also to design assessments to adapt instruction, sharing this information with parents (outcomes).
They would understand that multiple assessments were needed across settings to ensure transfer (disposition). Finally, intern candidates would use their knowledge of assessments from their novice and associate years to form flexible groups and identify students who might need special program services (outcomes). They would understand that assessments assist in grouping students for instruction.

Identification of Benchmarks
Next, the teacher education faculty established eighteen benchmarks that described candidate performance criteria, which were aligned to the dispositions and performance outcomes. The benchmarks were organized by the four professional study areas.

Table 1. (Continued)

<table>
<thead>
<tr>
<th>Developmental Level</th>
<th>Context</th>
<th>Professional Studies Area</th>
<th>Dispositions</th>
<th>Performance Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern</td>
<td>Large-group, small-group, and individual instruction</td>
<td>Positive classroom environment</td>
<td>Routines and procedures for the management of classroom time, space, materials, and activities promote efficiency and safety.</td>
<td>– Creation of a learning environment in a whole classroom setting of respect and rapport that fosters a positive climate for learning, equity, and excellence &lt;br&gt;– Management of student behavior when they work in small and large groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment</td>
<td>Assessment assists in grouping students for instruction.</td>
<td>– Design of CBA assessments and selection of other related assessments to adapt instruction for each student within a whole classroom setting &lt;br&gt;– Use of assessments to form flexible groups of similar interests, strengths, or weaknesses &lt;br&gt;– Use of assessments for placement of students into special programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curriculum planning and instruction</td>
<td>A range of instructional methods promotes and develops high academic achievement.</td>
<td>– Planning and implementation of an articulated curriculum for a designated group of students &lt;br&gt;– Selection and implementation of instructional models and strategies for a designated group of students to promote high academic achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional development and communication</td>
<td>A teacher is part of a larger professional community that is nurtured through collegial relationships, and contributes to the system as a whole.</td>
<td>– Writing reflections that explain how standards were met and/or what needs to be done differently</td>
</tr>
</tbody>
</table>
study areas (positive classroom environment, assessment, curriculum planning and instruction, and professional development and communication) (SOE, 2015b):

Creating a positive classroom benchmarks
1. establishes expectations;
2. arranges space for safety and effective learning;
3. establishes small and large-group procedures and routines, and manages transitions (this may vary for novice, associate, and intern levels);
4. prepares and manages materials and technology for effective learning;
5. keeps progress records to match, thus adapting the curriculum to the characteristics of each student;
6. uses reinforcement and correction to increase learning, thus showing respect for students; and
7. paces lessons and activities to engage students.

Assessment benchmarks
8. select the assessment method that matches knowledge and student characteristics;
9. use formative assessment to provide information regarding student achievement levels; and
10. communicate assessment information to students, parents, and other professionals.

Curriculum planning benchmarks
11. focus attention on the information;
12. organize the knowledge when planning instruction;
13. present information for instruction related to assessment;
14. guide students in their application of knowledge; and
15. provide opportunities for students to use information independently.

Professional development and communication benchmarks
16. direct professional development;
17. facilitate communication with students, parents, and other professionals; and
18. enhance collaboration with parents and other caregivers.

Each benchmark was then elaborated into observable and measurable characteristics. Each of these characteristics was further delineated into progressive levels of performance: developing, competent, and proficient (see ibid.). Descriptions within each of the performance levels addressed varying degrees of complexity, frequency, variety, and/or consistency in the candidates’ performance. This delineation between performance levels allowed faculty to examine each candidate’s strengths and weaknesses, and to plan experiences accordingly. Furthermore, each of the performance levels was rated on a nine-point scale, allowing for comparisons of candidates as well as programs. A program coordinator could use the information to make adjustments in course content and time that might be needed to develop a particular benchmark characteristic.

Each of the certificate teams (i.e., elementary, middle, and high school levels; physical education; gifted and special education; English as a second language), then identified evidence that would address each of the benchmarks. Some of the evidence examples included case studies of students, teacher work samples, instructional
units, lesson plans, observations of classrooms, student or class records of progress, action research, photos of students following expectations, management plans, and written reflections.

To share different types of evidence obtained from this information with faculty, a web-based portfolio (e-folio) was created. Candidates were able to upload different types of evidence for each benchmark and describe in a narrative format how the evidence showed that they were competent or had become proficient on a particular benchmark characteristic. Faculty, in turn, would rate the performance level of the candidates’ evidence and provide written feedback so that the candidate would have an opportunity to improve their classroom performance. To achieve inter-rater reliability, all faculty were provided professional development on the critical aspects of each benchmark, on the types of evidence candidates might provide to demonstrate proficiency, and on what to look for in their evaluations (see Table 2 for an example professional development for the Assessment Benchmarks).

The e-folio was also used for the university’s national accreditation to show how the teacher education program assessed its candidates and used the information for not only improving candidate performance but also the overall program.

Creation of Gates for Admission, Retention, and Program Completion
The Baylor Teacher Education Program identified five gates (i.e., admission, novice level, teaching associate level, intern level, induction level) to identify quality candidates and to monitor criteria for admission, retention, and program completion. Applicants who meet the entrance requirements to Baylor are able to select one or more certificate programs at the novice level (e.g., gifted education and elementary education; special education, elementary, and ESL) and complete any applications needed for a specific certificate. If the candidates meet an overall grade point average (GPA) of 2.75 on a 4.0 scale, successfully complete the courses required for the certificate(s) and provide evidence that indicates competency on nine benchmarks, they are able to progress to the Teaching Associate (TA) level (i.e., junior level or third year in the program). At the end of the Teaching Associate level, the candidates are able to enter a full year of classroom teaching (i.e., their intern year) if they have a 2.75 GPA, successfully complete the TA courses, post evidence that indicates competency on all of the benchmarks (i.e., greater than 4 on a 10-point scale), and score eighty percent or better on the state content and pedagogy diagnostic tests (i.e., TExES PPR and content tests). The final gate or the induction level is achieved if the candidates meet GPA requirements, have completed all courses required by the certificate(s), passed all state certificate tests, and have provided sufficient evidence to indicate competency on all of the benchmarks. Collaboration is apparent in this final review, which includes faculty and staff from the Office of Professional Practice, Office of Advising, Associate Dean, faculty from the professional development schools, and faculty from the University who review each candidate’s e-folio, state assessments, and degree plans. In addition to these school-wide Teacher Education Program Gates, certificates also have additional requirements that relate to program
TRANSFORMING TEACHER EDUCATION

Table 2. Professional Development for the Assessment Benchmarks

<table>
<thead>
<tr>
<th>Critical Aspects of the Benchmark</th>
<th>What Do Candidates Do to Demonstrate a Benchmark?</th>
<th>What Do Faculty Do to Evaluate a Benchmark?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eight</strong></td>
<td>Show the variety of assessments used and how they relate to students. Show assessments that you have designed that relate to student characteristics.</td>
<td>Look at assessments to see if they match student characteristics and presumed knowledge level. Look for assessments you have created or organized.</td>
</tr>
<tr>
<td>- Varied assessments that relate to student characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Selection of an assessment that matches knowledge and student characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Organization or creation of an assessment that matches knowledge and student characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nine</strong></td>
<td>Show the progress records that are used throughout the semester. Show the assessments that specify performance for each student and show the progress of all students. Show the data used for referral to special programs.</td>
<td>Examine assessment to make sure they indicate that each student is able to show progress. Look for progress records that show continuous assessment and are shared with students.</td>
</tr>
<tr>
<td>- Multiple assessment methods identify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Student involvement in self-assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Continuous assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Referral to special programs with specific information</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ten</strong></td>
<td>The narrative shows how information is shared on an ongoing basis.</td>
<td>Look for information shared across all three groups. Determine how specific and how frequently it is.</td>
</tr>
<tr>
<td>- Assessment given to professional, students, and parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Communicated frequently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Information is specific</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

outcomes and national recognitions. These vary but may include the Texas Beginning Educator Support System (TxBESS) observation, curriculum units, lesson plans, case studies, reflections, student progress records, teacher work samples, surveys, student engagement data, and other observation forms.

Redesign of Courses

Three types of courses were redesigned or newly designed for the clinically-based teacher education program: courses for all candidates, courses related to pedagogy, and courses specific to a particular certificate. Along with the required university courses, the initial set of courses in the teacher education program focused on technology and the teaching process, which was learned by tutoring students. The faculty decided that all students would take these initial courses.

In terms of designing other sets of courses, faculty, either together or in certificate teams, adhered to these criteria:
1. The content should be learner centered. The student in the K–12 classroom needs to be the focus in determining the effectiveness of the curriculum and the instructional methods.

2. Learning should take place in the school setting (i.e., task-embedded learning).

3. Learning is developmental. The candidate moves from simple to complex situations with increasing group size, greater group diversity, expanding professional responsibilities, greater choices of methods, and more variations in content field or domain.

4. The curriculum is based on national and state standards.

5. The curriculum is interdisciplinary and connected through major concepts, generalizations, principles, and theories.

6. Content is evidence-driven. Assessments of candidates and students are used in adapting courses and curriculum.

7. Instruction is informed by empirical evidence and student performance.

In redesigning or designing courses related to these criteria, faculty members followed a six-step process.

Step 1
During the first step, faculty examined state and national standards and related empirical research to identify important knowledge and skills that needed to be addressed. For example, one of the standards on the TxBESS observation instrument examined this competency: “Assessment is aligned with the lesson, and the candidate uses the data to plan instruction and to help students monitor their own learning” (TxBESS Standard 3d). This same competency was also tested on the state certificate test: “The teacher can best ensure accurate assessment of the students’ learning by permitting the students to determine on their own when they are ready to be assessed in particular areas of instructional content” (TExES, Competency 002). Related research indicated that assessment was an important part of the instructional process and that students needed to be involved in receiving feedback regarding their performance (Brown, 1994; Kluger & DeNisi, 1996; NRC, 2001; Sadler, 1989). The standards and related research validated the need for this knowledge and related skills to be included in course content.

Step 2
During the next step, faculty identified benchmarks that were related to the research and standards and elaborated the characteristics for their particular certificate. For example, to address the previous standards in Step 1 and show how students monitored their own progress, faculty identified Benchmark 10 (“Communicates assessment information to students, parents, and other professionals”) and Benchmark 5 (“Keeps progress records to match and adapt the curriculum to the characteristics of each student”) as highly relevant to this set of standards. For the intern year, they noted that the candidate and the students needed to keep progress records. The records needed to show the declarative and procedural knowledge that is being learned and could be
used to form flexible instructional groups. The progress information would be shared with students, parents, and in meetings related to special education placements.

**Step 3**
In the next step, faculty identified the evidence that would be needed so that candidates and the students in their classrooms could demonstrate their competence related to the standards and the benchmarks. In the above example, kinds of evidence to show monitoring of student progress included candidate progress records with identified instructional groups, student progress records, reflections, interviews with students and parents, video clips of conferences, individual plans from conferences, and performance rubrics. Beyond the candidate, other sources of information might include evidence from student, peers of students, mentors, and specialists in the school, such as special education teachers, university faculty, and parents.

**Step 4**
Next, content and assessments were aligned to the specific knowledge and skills identified in the previous steps. University and school-based faculty described specific characteristics so that assessment rubrics could be designed, and foundational knowledge and skills could be provided in the course and practiced in related field experiences. Using the previous example standards, faculty needed to teach candidates how to:

1. develop rubrics (descriptive, clear criteria, assesses well-structured declarative, and/or procedural knowledge);
2. keep progress records (clear criteria; individual student progress demonstrated across time, tasks, and situations; criteria relate to organization of knowledge [i.e., declarative and procedural] that matches students’ aptitude and achievement);
3. form flexible groups (use of class progress records to form groups around students’ strengths and weaknesses);
4. provide information in special education meetings (relate progress records to students’ strengths and needs);
5. provide feedback to students and parents (use detailed comments [i.e., criterion based with clear criteria] about students’ strengths and weaknesses and strategies for learning); and
6. listen to Student Self-Assessments (understanding quality work; connections made within and between subject areas).

**Step 5**
In this step, the specific knowledge and skills were placed in courses within a developmental sequence. In the previous example, faculty inserted the knowledge and skills related to student monitoring throughout all of the courses beginning with the candidates’ monitoring one student’s progress during the novice years, students
placed in small groups during the teaching associate year, and all of the students in a classroom during the intern year.

**Step 6**
The final step, involved observing candidate performance and making adjustments to the course content and sequence to address any weaknesses. This step was ongoing and involved certificate team members and school-based faculty.

Courses for the new clinical program were phased in by year, beginning in 2001 with the introductory courses in teaching offered the first year and the introductory courses to different certificates offered the following year. By 2003, the TA courses were implemented and in 2004, the intern courses were implemented. The first candidates graduated from the new program in 2004.

**Design and Expansion of Professional Development School**

Upon completing the redesigning of the teacher education program, organization of the PDS governance structure and selection of new PDS sites were the next steps.

**Development of Governance Plan**

Expanding from one PDS to ten or more PDSs involved the creation of a more complex governance structure to ensure decision-making and accountability (NCATE, 2010). Two governing bodies, the Oversight Council and the Coordinating Council, were established for the purposes of establishing expectations, setting goals, planning professional development, and assessing program effectiveness.

The PDS Oversight Council is responsible for providing broad policy, operational leadership, and budgetary decisions for the partnership. It is composed of representatives from both the university (the Dean of the School of Education, the Associate Dean of the School of Education, the Chair of the Department of Curriculum and Instruction, and the Director of Professional Practice/University Partnership Liaison) and from the partner school district (Superintendent, Associate Superintendents, Program Directors, and the School District Liaison).

The Coordinating Council, jointly managed by Baylor University faculty and PDS school faculty, is responsible for practical planning and implementation of partnership goals and initiatives. This Council meets a minimum of four times each year. Coordinating Council members include the Site Coordinator and University Liaison from each PDS as well as a PDS principal representative. The group is co-chaired by the partnership liaisons from the university and the school district. University Liaisons share recommendations from the Coordinating Council with campus leadership teams in an effort to communicate partnership issues in a timely and effective manner. Partnership liaisons serve as the conduit for sharing information and recommendations with the Oversight Council.