Conceptual Framework for the Preparation of Teachers and Other School Personnel at Baylor University

(adopted by the Teacher Education Faculty, May 2008)

I. Introduction

This Conceptual Framework provides guidance for the design and implementation of all programs in the Unit at Baylor University. Regarding initial programs, the Unit provides for a rigorous academic environment where candidates are prepared for professional practice and leadership in one or more of a variety of teaching domains. At the advanced level, programs offer advanced educational opportunities intended to develop ethical and capable scholars and practitioner-leaders who contribute to their academic disciplines, professional fields, and society and emphasize development of an eclectic understanding of the educational process as well as advanced competence in professional education fields. Baylor encourages all of its students to cultivate their capacity to think critically, assess information from a Christian perspective, arrive at informed and reasoned conclusions, and become lifelong learners. In its "2005 Best Graduate School" survey, *U.S. News & World Report* ranked Baylor's School of Education 73rd among 189 of the nation's education schools with graduate programs.

II. Vision and Mission

The Conceptual Framework's overarching theme is a "Learner-Centered Professional Educator" and is based on theoretical and philosophical underpinnings that inform the Unit's daily practice to ensure that candidates graduate with the competencies that have a positive impact on K-12 student learning or the clients they serve. The Conceptual Framework defines and describes the philosophies, research, commitments, and outcomes expected of the Unit's faculty and candidates. As a Christian institution, Baylor University strives to educate men and women for worldwide leadership and service. The Unit's

Conceptual Framework supports the University's mission in guiding programs toward the development of independent, effective educators for diverse learning communities. Moreover, the Unit incorporates several "imperatives" identified in Baylor's ten-year vision (Baylor 2012) by establishing environments where learning can flourish (Imperative 1), emphasizing global education (Imperative 11), recruiting world-class faculty and top tier students (Imperatives 3 and 4), and guiding students in understanding life as a stewardship and work as a vocation (Imperative 6). The Unit advances the institution's mission through its own mission and vision statements and by developing state-of-the-art environments like laboratories, facilities, internships, and school partnerships for initial and advanced programs (Imperative 1); instituting collaborative international teaching experiences (Imperative 11); recruiting outstanding faculty and students who are engaged in grants and research (Imperatives 3 and 4); and preparing candidates to engage in professional practice, serving the wider community, in ways that reflect Christian values (Imperative 6). There is profound coherence among the ideals undergirding the Conceptual Framework, the work of the Unit, and the mission and work of the University.

III. Development of Conceptual Framework

The almost decade-long development of the Conceptual Framework, with its identified Candidate Proficiencies (i. e., Benchmarks) and the Dispositions, has been an ongoing process. During 1999-2000, design team leaders met weekly to discuss research on teacher preparation and later (fall of 2000) for a two-day retreat with the entire faculty to share their findings. Beginning in 2000, a Teacher Education Task Force of department representatives was formed to develop a Framework Proposal, which was reviewed by faculty members along the way and ultimately approved by the entire SOE Faculty in spring 2001.

That Conceptual Framework served the Unit well for a number of years, especially providing guidance for the development of a new undergraduate (initial) teacher education programs. By the summer of 2007, the SOE had

evolved organizationally to the point where a significant segment of School programs were no longer targeted at the preparation of school personnel. Yet there was an appreciation that the Conceptual Framework seemed to represent values with which programs throughout the School resonated. So in fall 2007, a process was initiated exploring potential modification in the Conceptual Framework to represent more broadly <u>all</u> programs in the School, undergraduate and graduate. In December 2007, School of Education faculty approved the establishment of a *School of Education* Conceptual Framework, with the expectation that once adopted, this "new" *School* Conceptual Framework would be subsequently "adapted" separately for specific application to school personnel preparation programs as well as non-school personnel programs.

In spring 2008, a special task force was assembled to review the existing *Unit* Conceptual Framework (i.e., for school personnel preparation programs) and propose changes implicated by the new *School* Conceptual Framework as well as through input from professional community partners and faculty secured from surveys of PDS partner/clinical and professional education faculty (April 2008). Ultimately, adjustments made in the Unit's Conceptual Framework included:

- a stronger emphasis on the student as the center or target of programs,
- the expansion of layers of candidate development and changes in some terminology and disposition statements to better fit the language and implementation of the framework for advanced programs,
- a more articulated distinction between content and professional knowledge,
- greater nuance in meaning for the term "diversity" to apply to both learning context and assessment,
- a tweaking of the number of Unit dispositions, and
- a revision of the one-page visual representation of the framework (see Figure 1). The resultant proposed new *Unit* Conceptual Framework was reviewed and approved by the Teacher Education Faculty in May, 2008.

After its approval, the task force continued its work to revise the Conceptual Framework narrative and update the associated Knowledge Base to

reflect current empirical research, informed theory, aggregated data from the Unit Assessment System, state and national standards, and wisdom resulting from practice. The framework is intended to inform the Unit's daily practice and reflect the Unit's commitment to align with the six NCATE standards, national professional standards, and standards set forth by the Texas State Board of Educator Certification.

IV. Purposes, Goals and Standards of the Unit

This Conceptual Framework is based on seven principles, derived from research, which underlie all Unit programs at Baylor University (Borko & Putnam, 1996; Bransford, Brown, & Cocking, 1999; Cochran-Smith, Feiman-Menser, McIntyre, & Demers, 2008; Darling-Hammond, 1998; Darling-Hammond & Brnasford, 2005; Feiman-Menser & Remillard, 1996; Shulman, 1990):

- 1. Classrooms and schools must be learner-centered, creating a positive environment for learning.
- 2. Formative assessment provides information about the student and assists in designing and adapting instruction.
- 3. A deep foundation of factual knowledge must be organized conceptually to facilitate its retrieval, application, and transfer.
- 4. Strategies are important in learning to solve problems and in becoming an independent, effective teacher.
- 5. Learning is developmental and influenced by the context in which it takes place.
- 6. Collaboration is important in creating a diverse learning community.
- 7. Reflection deepens the understanding of effective instructional practices.

These seven principles and their literature bases are addressed in more detail as part of the Knowledge Base presentation in Section V. Derived from these seven principles, this Conceptual Framework serves as the basis for the Unit's school

personnel preparation programs. Programmatically, these seven principles are integrated into four professional studies areas—Creating A Positive Classroom Environment, Assessment, Curriculum Planning and Instruction, and Professional Development and Communication—as defined by a set of 18 benchmarks (competencies) which collectively also reflect behaviors associated with the four dispositions and with state and national standards.

Program implementation (curriculum/course content and instruction) is organized to address these seven principles (as embodied in the benchmarks/proficiencies). Courses are flexibly designed so instructors teach candidates in ways that model the application of these principles with students (Borko & Putnam, 1996; Ertmer, 2003; Phillips & Hatch, 2000). Formative assessment, built on inquiry approaches to learning such as cases, simulations, anchored instruction, video-based problem solving, dynamic assessment situations, is used to determine each candidate's progress on specific benchmarks (Collier, 1999; Han, 1995; Hmelo-Silver, 2004), the results of which are translated into specific resources, teaching methods, and field experiences. Technology is present, both as an instructional tool to be demonstrated as well as part of program curriculum for working with P-12 students (Fuchs, Fuchs, Hamlett & Stecker, 1991, Darling-Hammond, Banks, Zumwalt, Gomez, Sherin, Griesdorn, Finn, 2005; Houston, 2008). Increasingly, candidate evidence benchmark mastery is accessible for review in a web-based format, which candidates develop and maintain.

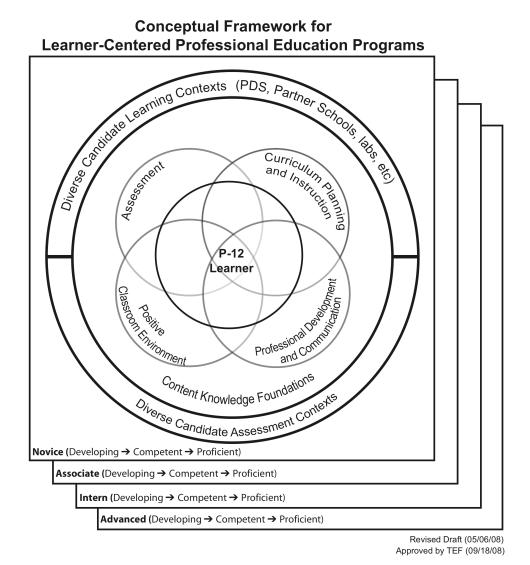
V. Framework Overview

The Unit's Conceptual Framework graphic is presented in Figure 1. In general the framework is represented as a series of concentric and overlapping circles on a set of four stacked squares. The stacked squares represent the developmental nature of learning and distribution of professional knowledge, skills and dispositions across phases of professional development. The "top" three layers represent level of initial preparation (i.e., teacher), where program

participants learn to apply professional knowledge, skills and dispositions progressively in one-on-one, small-group and large-group setting and, within each setting, as an ever-greater presence in professional behavior (developing, competent, proficient). The fourth layer represents the more advanced levels of knowledge and skill pursued in graduate programs for teachers and other school personnel.

The circles represent program elements or the areas of knowledge, skills and dispositions in school personnel preparation programs. Rather than circles on the top layer, however, these are more like cylinders that extend through the four development layers. The outer concentric circular region, divided into two halves, is programmatic in nature—one attesting to the importance of diverse learning contexts and the other to the importance of diversity in candidate/program assessments. The inner overlapping circles superimposed on a circular region represents the knowledge, skill sand dispositions addressed in programs. The inner overlapping circles identify the four areas of professional studies that form the professional content of programs. The circles overlap as an illustration of how these areas of professional knowledge, skills and dispositions not only interrelate but often are best learned when integrated. The base circular region on which the overlapping circles appear represents the knowledge, skills and disposition that are foundational to program professional content. At the center of the professional program, symbolized to be the central focus for all programs, is the P-12 student, the ultimate recipient of high quality evidencebased professional practice—and the heart of this learner-centered Conceptual Framework.

Figure 1. Baylor University Conceptual Framework Graphic



VI. Knowledge Base Undergirding the Conceptual Framework

Baylor's vision for educator preparation and other school personnel is based upon empirical research, informed theory, aggregated data from the Unit's assessment system, collaborative discourse, state and national standards, advisory committee input and wisdom resulting from practice. In this section, the seven principles that guide our educator preparation programs are described, and selected sources from an extensive literature that supports these principles are identified. To punctuate implications of these principles, we identify ways in which they are actualized in initial and advanced educator preparation programs.

Built on a strong foundation of pedagogical and content knowledge, candidates pursue professional studies through coursework and practical applications in a wide range of diverse professional settings. In the undergraduate initial teacher preparation programs, for example, all candidates participate in diverse, urban classrooms in which they examine the variations in beliefs, traditions, and values found in different cultures. Candidates who are completing their initial certificate at the master's level also have extensive exploration and application experiences with students from diverse backgrounds prior to their internship in a local school where they are mentored by a designated teacher in that school and supervised by Unit faculty. In advanced teacher education programs, candidates at the master's and doctoral levels study theory and research literature and, through reflection, apply their understanding to the educational setting.

Principle 1: Learner-centered

Baylor's vision for educator preparation is built upon a commitment to the centrality of the P-12 student. Theory, research, and pedagogical knowledge is inconsequential if P-12 students do not learn and develop. Unit programs therefore have as their core that candidates graduate with competencies having a positive impact on these P-12 learners, which is supported in the research literature (Bransford, Brown, & Cocking, 1999; Darling-Hammond, 2000).

In the initial teacher preparation programs, for example, candidates must provide evidence linked to student learning in each of the professional studies courses. Evidence of student learning is an important part of the candidate's webbased portfolio and is used to determine admission to the associate (junior) courses and intern (senior) courses and progress in the program. At the master's

level, all candidates who are seeking an initial certificate must complete a Teacher Work Sample project with students where they administer a pre-test, design and implement a series of three-five lessons, administer a post-test, evaluate written work completed by students as part of the lesson sequence, and reflect on the over-all experience. In advanced programs for teachers, graduate candidates continue to focus on the principles of learner-centered instruction by reading and discussing research related to teacher effectiveness. Throughout the School Psychology program, the candidates are acquiring and using knowledge to assess and plan interventions for students.

In the Unit, programs themselves are also learner-centered. For example, in initial teacher preparation programs at both the undergraduate and graduate levels, candidates provide evidence of their progress on a web-based portfolio. The faculty and the candidate's mentors use this information in planning each candidate's experiences. Similarly, the School Psychology candidates maintain portfolios that faculty use in assessing their progress and in guiding their program. Studies at the advanced levels, by their very nature, are learner-centered since candidates choose specializations and pursue topics and projects based on their interests and prior experiences.

Principle 2: Formative Assessment

Formative assessment is fundamental to educational practice for both teachers and other school personnel and is therefore basic knowledge for all educators. While the level of attention to assessment varies by the educator role, assessment is basic to educational planning and involves multiple sources and strategies to address areas of student differences. Student differences may occur in these areas: what is to be learned, how it is to be learned, how quickly it is learned, and how the new learning is 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; Shepard et al., 2005;). In the end, formative assessment is the educator's tool for constructively assessing individual differences in order to implement effective educational practices.

For example, in the initial teacher preparation programs candidates use formative assessment to design and adapt instruction for the P-12 students. Benchmarks in the professional studies strand emphasize the importance of formative assessment in identifying baseline behaviors and examining the effectiveness of interventions. Formative assessment is used throughout the program to design and adapt instruction for the candidates and the P-12 student. In advanced programs, teacher candidates continue to develop their knowledge of formative assessment by reviewing assessment systems, and their influence on instruction and student achievement. As a dominant feature in the School Psychology program, candidates learn how to use and interpret various assessment instruments to assist educators in designing effective learning environments for students. In the Principal Certification program, candidates organize and lead parent and teacher focus groups about high stakes testing and alternative methods of measuring student performance.

Faculty in the Unit's program also use formative assessment to design and adapt instruction for the teacher candidates who are seeking initial certificates based upon their benchmark performance. In addition, graduate faculty use formative assessment to inform advisement decisions and provide experiences to expand and enhance the students' knowledge and skills.

Principle 3: Foundation of Knowledge

This principle emerges from the research comparing experts to novices (Donavan, M. S., Bransford, J. D., & Pellegrino, J. W., 1999; Sternberg & Grigorenko, 2003). Experts always draw on a rich knowledge base and have a deeper conceptual understanding of the field of study. Therefore, a firm grasp of the declarative, procedural, and strategic knowledge in a particular field or discipline is needed to design learning activities for instruction. Once the

candidates' knowledge is firm, they are able to provide the conditions that increase the likelihood that each student will learn efficiently and effectively (Darling-Hammond, 1998; Hill, Rowan, & Ball, 2005; Shulman, 1990).

At the initial certificate level, candidates take courses in the Baylor Interdisciplinary Core, liberal arts, and/or in specific academic disciplines, to learn how to organize their knowledge for retrieval, application, and transfer in their field-based experiences. The benchmarks also address this competency. As the candidates organize the declarative, strategic, and procedural knowledge for the P-12 student, they are also learning specific dispositions that summarize the basic ideas that are to be learned (see Appendix A). In advanced programs, graduate candidates in Curriculum and Instruction programs explore the philosophical and historic foundations of educational principles, policy and practices. This study enables graduate candidates to participate in the development and implementation of programs and policies. In the School Psychology program, candidates acquire knowledge not only from their courses but also by shadowing other school psychologists, interviewing other psychologists in the United States, and attending School Board meetings to learn the culture of their profession. In the Principal Certification program, candidates spend their first 18 hours of a 36-hour program researching, learning and discussing the knowledge and skills needed by a principal, particularly within a increasingly more diverse population. Moreover, all graduate candidates become informed consumers of research related to their professional fields of study.

Principle 4: Strategies

Strategies that encourage reasoning and problem solving enable candidates to adjust and adapt their instruction to students who are living in changing environments. Research suggests that these strategies are essential in assisting the candidate's transfer of content and pedagogical knowledge to new classroom settings and situations (Borko & Putnam, 1996; Feiman-Nemser, 2008; Feiman-Nemser & Remillard, 1996; Palincsar & Brown, 1982; Scardamalia et al., 1984;

Schoenfeld, 1984, 1991). Through modeling strategies such as problem solving, candidates develop their students' higher order thinking and solid reasoning.

At the initial certificate levels, candidates teach students to identify strategies that are particularly useful across tasks and settings. These metacognitive strategies increase the degree to which students transfer information to new settings (Lampert, 2001; Palincsar & Brown, 1982; Schoenfeld, 1984, 1991). At the advanced program level, graduate candidates explore a wider range of instructional strategies as well as consider issues of implementation and practice.

Within the initial certificate programs, problem solving strategies are also integrated within the four professional strand areas that emphasize the continual improvement of all students' learning. For example, the candidate asks three questions when solving classroom environment problems: What comes before the student behavior? What does the student do in response to the antecedent? What occurs after the student behavior? These three questions are used to examine rules, space arrangement, materials organization, the match between the curriculum and the individual student, and feedback that motivates the students and creates a positive classroom environment. Similarly, graduate candidates use action research and reviews of existing research to formulate questions, solve problems, and make decisions about policies and practices. Candidates in the Principal Certification program also articulate and demonstrate counseling techniques, organize and lead groups, write vision statements, interview, and provide leadership in a variety of settings. Moreover, candidates in School Psychology develop a case study using a problem solving process in which they collect data, collaborate with others to develop an intervention plan, implement the intervention, observe the student's response, and monitor the student's progress in adjusting instruction.

Principle 5: Context for Development

Candidates and their students' development influence learning. The context in which candidates develop must therefore be planned carefully and

systematically to deepen and expand the candidates' knowledge of the subject matter and effective teaching practices (Borko & Putnam, 1996; Richardson & Placier, 2001). Similarly, candidates need to learn strategies for creating environments that encourage their students' development and active engagement in learning.

Candidates who are seeking an initial certificate must perform successfully on seven benchmarks that focus on developing a positive learning environment for their students. They learn how to establish expectations, arrange space for safety and effective learning, establish small and large group procedures, manage materials and technology, keep progress records, use behavior management procedures to increase learning and show respect, and pace lessons and activities to engage students. Graduate candidates read and study existing research on development and then become involved in their own action research projects. Similarly, School Psychology and Principal Certification candidates are engaged with faculty, students, and parents in school-based settings.

At the undergraduate initial certificate level, the candidates' learning experiences are also developmental and layered within progressively more complex situations, with candidates tutoring elementary and middle school students during their freshman year; teaching small groups in identified fields of specialization during their junior year; and teaching the whole class during their senior year. Being in diverse urban and suburban settings, the candidates have experiences with students from different ethnic, religious, and socioeconomic backgrounds and with varying levels and types of aptitudes, interests, achievement, and exceptionalities. In this way, the candidate can examine variations within and across cultures and their effects on students with exceptional learning needs, their families, and schooling. Similarly at the master's level, the candidates who are seeking an initial certificate have small group experiences within summer programs serving diverse students before advancing to their yearlong internship. The School Psychology program is also developmental with candidates initially having experiences with individual students within the Autism

Resource Center. Next, they work in a more controlled environment, the Counseling Center, before they begin their work in the schools under the supervision of practicing psychologists and faculty. The hours in their school practica gradually increase so that they are prepared for their full-time internship during the third year of their program. In the Principal Certification Preparation program, candidates have small group experiences within their first 18 hours as they research, learn, and discuss ways to serve diverse student needs before advancing to their 8-month long internship. Moreover, many of the Unit's graduate candidates serve as co-teachers with experienced faculty for undergraduate classes and then serve as an instructor of record for those courses.

Principle 6: Collaboration within a diverse learning community

Collaboration builds partnerships that assist in providing more authentic educational experiences for the students (Burnstein, Kiretschmer, Smith, & Gudoski, 1999; Oakes, Franke, Quartz, & Rogers, 2002). Relationships with professionals, parents, and the community make the classroom and the entire school a more productive learning environment.

Candidates at the initial certificate levels collaborate with other professionals (Benchmark 16) and with parents (Benchmark 18) in planning instruction for students. They also collaborate with special education teachers and other school professionals such as school psychologists by attending and contributing to Admission, Review, and Dismissal committee meetings (Benchmark 10). At the advanced program level, candidates in Curriculum and Instruction learn how to examine their professional practice in the area of diversity by studying the impact of culture and class on achievement and equity and in School Psychology collaborate with other professionals in designing interventions for students with disabilities.

At the initial certificate levels of the Unit's programs, 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. At both initial and advanced program levels, collaboration in different environments require candidates to understand and have a positive regard for different cultures, exceptionalities, and religions. In the Principal Certification Preparation program candidates present a multimedia report to a community forum, organize and lead parent and teacher focus groups regarding measuring student performance, and attend forums and conferences in a foreign country to evaluate their educational system.

Principle 7: Reflection

Reflection combined with practice helps develop a greater repertoire of solutions to classroom problems (Berliner, 2001; Hmelo-Silver, 2004; Tatto, 1998), improves teaching and self-efficacy (Freese, 1999; Kruse, 1997; Mitchell, 2008), and develops professionally (Bell & Gilbert, 1994; Bransford, Derry, Berliner, Hammerness, & Becket, 2005).

At the initial certificate level, the cyclical and progressive nature of the field experiences within the professional studies strand provides the candidates with time to reflect about personal and others' classroom experiences, deepening their understanding of effective instructional practices. In addition, the candidates are asked to reflect on how student data influenced their thinking about assessment, curriculum planning and instruction, and in creating a positive environment. Reflections for each benchmark are included in the candidates' web-based portfolios and provide visible evidence of their progress toward becoming an effective teacher. Similarly, candidates in the Principal Certification Program mark their transitions from teacher to administrator through reflections and with the use of portfolios. In the School Psychology program update their portfolios on an annual basis, reflecting on their philosophy as a psychologist, and meet twice a year with their supervisors and faculty to review their personal and professional strengths and weaknesses. Throughout the graduate program, candidates in Curriculum and Instruction are also encouraged to apply critical analysis skills and reflect upon practice in their professional settings.

VII. Candidate Benchmarks

The Unit has developed 18 benchmarks across the four main professional studies areas. These benchmarks define the required knowledge, skills, and professional dispositions identified in the professional and state standards. Each of the benchmarks has specific characteristics and criteria for meeting three levels of proficiency as demonstrated by the increased prevalence of relevant professional behaviors. For example, Benchmark 7, Paces Lessons and Activities to Engage Students, requires candidates to "allocate time and sequence classroom activities based on students' characteristics" and to demonstrate that "pacing within the lesson is based on students' characteristics" and student engagement. To be proficient, the student must base their classroom activities on "all of the characteristics of students" and must show how "all of the students are engaged."

Moreover, throughout the benchmarks, the candidates who are seeking initial certificates at both the undergraduate and graduate levels must pay attention to the full range of diverse learner characteristics. For example, in Benchmark 7, the candidate is expected to allocate time and sequence activities based on all of the characteristics of the students; in Benchmark 8, to select assessment methods that match the characteristics of all students. These characteristics include variations in race, ethnicity, socioeconomic status, gender, exceptionalities, culture, English facility, religious background, and sexual orientation.

These 18 benchmarks reflect the Unit's Conceptual Framework and provide documentation for the candidates' proficiency on each of the four dispositions (see Appendix A). At the same time that the candidates who are seeking initial certificates at both the undergraduate and graduate levels are providing portfolio evidence for each benchmark, they also are providing evidence for each of the indicators that are tightly linked to the dispositions. In this way, faculty are able to assess the candidates' development on the four dispositions throughout the entire teacher education program instead of a single point in time.

In addition to the seven research-based principles, the benchmarks are also aligned with state, institutional, and national standards (see Appendix B). The chart shows how the Unit's Benchmarks are aligned with the TExES certification test, the Texas Beginning Educator Support System (TxBESS), the Interstate New Teacher and Support Consortium core standards (INTASC), and the National Board for Professional Teaching Standards (NBPTS). From this evidence, it is clear that the benchmarks meet high and rigorous standards.

Strand One: Creating a Positive Learning Environment

- Benchmark 1. Establishes expectations
- Benchmark 2. Arranges space for safety and effective learning.
- Benchmark 3. Establishes small and large group procedures and routines, and manages transitions.
- Benchmark 4. Prepares and manages materials and technology for effective learning.
- Benchmark 5. Keeps progress records in order to match and adapt curriculum to students.
- Benchmark 6. Uses reinforcement and correction to increase learning and show respect.
- Benchmark 7. Paces lessons and activities to engage student.

Strand Two: Assessment

- Benchmark 8. Assessment method matches knowledge (curriculum) and student characteristics.
- Benchmark 9. Formative assessment provides information regarding student(s)' achievement level.
- Benchmark 10. Assessment information is communicated to students, parents, and other professionals.

Strand Three: Curriculum Planning and Instruction

- Benchmark 11. Focuses students' attention on the information.
- Benchmark 12. Organizes the knowledge when planning instruction.
- Benchmark 13. Presents information for instruction that is related to assessment.
- Benchmark 14. Guides students' application of knowledge.
- Benchmark 15. Provides opportunities for students to use information independently.

Strand Four: Professional Development and Communication

Benchmark 16. Participates in professional development.

Benchmark 17. Is proficient in communication with students, parents, and other professionals.

Benchmark 18. Collaborates with parents and other caregivers.

Underlying these benchmarks are fundamental commitments to diversity and technology. They are centered on the beliefs that it is the responsibility of the education professional both to employ appropriate technologies and create learning environments in which all students will be successful. The School of Education is committed to preparing educators who understand the potential of different technologies to promote learning, who appreciate and are knowledgeable of the rich ethnic and cultural diversity of our society, and who can meet the needs of all students, including English Language Learners and students with exceptionalities.

Diversity

Commitment to diversity is particularly important because many of our candidates lack first-hand experience with student from diverse backgrounds, In initial programs (for the preparation of teachers), candidates' preparation for being successful with diverse students is developed through specific components of the curriculum, structured experiences in a variety of instructional settings and involvement with a diverse University and public school faculty. The program is designed to provide candidates with a variety of direct, purposeful experiences with diverse faculty in the schools, diverse peers and diverse school age students. In the four years of field experiences the candidates are in a variety of instructional settings. Candidate placements vary by socio-economic status of students at the campus, by urban nature of the campus, by grade placement and by subject matter. All field experiences are directed by unit faculty and include structured experiences to develop proficiencies for working effectively with students and families from diverse populations and with exceptionalities to ensure that all students learn.

At the advanced level, the candidates are expected to demonstrate the ability to work effectively with students, families and peers representative of the diverse nature of our society. Specifically, the experiences are designed to develop candidates' abilities:

- to create an environment where every student can learn and develop.
- to use every task to acquire information that can optimize student learning and development.
- to use varied strategies and methods to help all students achieve those results, and
- to value collaboration with others as partners in planning/executing effective practices.

At the advanced level, critical analysis of research and practice is used to develop competent, socially conscious educators who are committed to using their knowledge of theories and best practices to improve education for all students.

Technology

The use of instructional technology is integrated into all initial/teacher preparation programs and courses. Training in the use of technology occurs in several ways: development of an electronic portfolio, required Instructional Technology Labs associated with the field experiences and preparation in methods classes and seminars. All candidates complete an Electronic Portfolio (Efolio) beginning with the first experience in the instructional program. The labs associated with development of the portfolio provide direct assistance in learning to use a variety of instructional media. In all methods classes and seminars provided in support of the field –experiences the candidates learn to use instructional technology relevant to being successful in the teaching experience. Other technology labs deepen candidates' understanding of useful instructional technologies.

Similarly, all graduate programs require the completion of a course in instructional technology and many courses and seminars include opportunities to develop candidate proficiency in the use of technology relevant to her/his professional role.

VIII. Unit Assessment System

As indicated in the Conceptual Framework graphic, assessment is a key element in the design of Unit programs (see Figure 2). Aside from the use of assessment data to guide decisions about candidate progress at defined program transition point/gates and toward attainment of program benchmarks, assessment data are also used by program faculties in decisions about refining programs. A critical element of the Conceptual Framework is the diversity in candidate assessments; indeed, the use of multiple assessments as a way to triangulate data in making decisions is an underlying principle for the Unit's assessment system.

The Unit's assessment system addresses initial and advanced program in different ways. While all programs define their assessments and transition points for reviewing individual candidate data and use that data in the aggregate to examine their programs, the locus for data and data aggregation and reporting differs for initial and advanced programs. With their generally small numbers of students and unique character, departmental offices, in cooperation with the Associate Dean for Graduate Studies and Research and the Graduate School manage assessment data for the three advanced programs in the Unit (master's, doctoral and specialist's degrees).

For the initial programs that tend to be large and share a variety of course and field experience structures, assessment data and its collection are managed through the office of the Associate Dean for Student and Information Services (SAIS), with support from the office of Enrollment Management and Advising (EMA), the Office of Professional Practice (OPP), and Technology Services and the technical assistance of a full-time web programmer/analyst whose primary responsibility is to manage the continuing efforts to integrate appropriate technology into the assessment system. For these programs, the system is currently a combination of various online and offline data gathering and reporting mechanisms.

For initial programs, the assessment system is developed around four major areas:

- candidate demographic information;
- program-specific assessments;
- post-graduation assessments; and
- unit assessments.

Demographic Information

Demographic information is downloaded from the University system on a semester basis after the 12th class day when University enrollment data are "locked" or on an "as needed" basis throughout the academic year. Due to high mobility, undergraduate candidates are asked to update residential and contact information annually; otherwise, University-provided data are used. The goal is to have these data ultimately provided through an active "live" connection rather than a static download.

Program-specific Assessments

Program-specific assessments include such items as the Teacher Work Sample (TWS) used by the elementary program or the end-of-year surveys based on the national standards of the professional organizations such as NCTM for mathematics or NCTE for English. These assessments are related to a particular program and may not have broad application to all candidates. Program teams work with the various offices (OPP and Technology Services) to design instruments and processes. Reports are generated annually for review in the summer/fall or on request.

Post-graduation Assessments

Post-graduation assessments consist of two items, an alumni survey and an employer survey. Both survey instruments are completed on-line based upon an email request. Graduates are surveyed for the first time one year after graduation and then each subsequent year up to five years (the 2009 survey will be the first with a potential 5-year graduate). Employers are identified through the State's certification system, which can identify all Baylor graduates employed by public schools in Texas. Employer email addresses are compiled and used to contact and direct them toward the online survey instrument. Employers are surveyed

regardless of the graduation date of the Baylor candidate employed in the district. Reports are generated annually for review in the summer/fall.

Unit Assessments

Unit assessments examine all programs' candidate performance related to the 18 program benchmarks. Primary data sources for these unit assessments are candidate electronic portfolios (efolios) and the Professional Practice Evaluation Forms (PPEF).

Efolios. Efolios are reviewed online according to a schedule approved annually by the teacher education faculty. Summative data are compiled and reported as aggregate data for (all Intern or TA) candidates and compared to individual program candidates (e.g. elementary candidates, middle school candidates, secondary candidates, and all-level candidates; two additional subgroups are disaggregated—ESL and GT candidates). Every-other year, efolio inter-rater reliability training is conducted to ensure a consistent basis of evaluation. In the intervening years, programs are responsible for training any additional reviewers. Reports are generated annually for review in the summer/fall.

PPEF forms. PPEF forms, used in connection with field placements, are completed on each candidate at mid-term and end-of-term conferences. These forms are currently multi-copy forms so that participants (candidate, clinical instructor/mentor teacher, and university supervisor) may all provide signatures on and retain copies of the documents. These forms are then entered into an electronic form by the university supervisor who submits them to OPP/Technology Services for download into the assessment system. Again, summative data are compiled and reported as aggregate data for (all Intern or TA) candidates and compared to individual program candidates (e.g. elementary candidates, middle school candidates, secondary candidates, and all-level candidates; two additional sub-groups are disaggregated—ESL and GT candidates). Reports are generated annually for review in the summer/fall.

The goal for unit assessments (efolio and PPEF) is to collect all data through electronic web-enabled forms. Other goals include the migration of the Candidate Biographical Data Update; an updated Alumni Survey; an online Academic Program Feedback form; a University Faculty form for providing feedback on public school placements; and various other instruments within OPP into web-enabled formats to facilitate the merging of these data into a larger system.

IX. References

- Bell, B., & Gilbert, J. (1994). Teacher development as professional, personal and social development. *Teaching and Teacher Education*, *10*, 483-497.
- Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, *35*, 463-483.
- Borko, H., & Putnam, R. (1996). Learning to teach. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 673-708). New York: Macmillan.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *How people learn: Brain, mind, experience and school*. National Academy Press. Washington, DC.
- Bransford, J., Derry, S., Berliner, D., Hammerness, K., & Beckett, K. L. (2005). Theories of learning and their roles in teaching. In L. Darling-Hammond, & J. Bransford (Eds.) *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 40-87). Hoboken, NJ: Jossey Bass/John Wiley.
- Burnstein, N., Kretschmer, D., Smith, C., & Gudoski, P. (1999). Redesigning teacher education as a shared responsibility of schools and universities. *Journal of Teacher Education*, *55*, 106-119.
- Cochran-Smith, M., Feiman-Nemser, S., McIntyre, D. J., (Eds.) & Demers, K. E. (Ass. Ed.)(2008). *Handbook of research on teacher education: enduring questions in changing contexts* (3rd ed.). New York: Routledge/Taylor and Francis Group.
- Collier, S. T. (1999). Characteristics of reflective thought during the student teaching experience. *Journal of Teacher Education*, *50*, 173-182.
- Darling-Hammond, L. (1998). Teacher learning that supports student learning. *Educational Leadership*, *55*, 6-11.
- Darling-Hammond, L. (2000)(Ed.). *Studies of excellence in teacher education*. Washington, DC: American Association of Colleges for Teacher Education.
- Darling-Hammond, L., Banks, J., Zumwalt, K., Gomez, L, Sherin, M. G., Griesdorn, J., Finn, L. (2005). Educational goals and purposes:

 Developing a curricular vision for teaching. In L. Darling-Hammond & J. Bransford (Eds.). *Preparing teachers for a changing worlds: What teachers should learn and be able to do* (pp. 169-200). Hoboken, NJ: Jossey Bass/John Wiley.
- Darling-Hammond, L., & Bransford, J. (Eds.)(2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. Hoboken, NJ: Jossey Bass/John Wiley.
- Donavan, M. S., Bransford, J. D., & Pellegrino, J. W. (1999)(Eds.). *How people learn: Bridging research and practice*. Washington, DC: National Academy Press.
- Ertmer, P. (2003). Transforming teacher education: Visions and strategies. *Educational Technology research and Development, 41*(1), 124-128.

- Feiman-Nemser, S. (2008). teacher learning: How do teachers learn to teach? In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, (Eds.) & K. E. Demers (Ass. Ed.) *Handbook of research on teacher education: enduring questions in changing contexts* (3rd ed.)(pp.697-705). New York: Routledge/Taylor and Francis Group.
- Feiman-Nemser, S., & Remaillard, J. (1996). Perspectives on learning to teach. In F. B. Murray (Ed.), *The teacher educators' handbook: Building a knowledge base for the preparation of teachers* (pp. 6-91). San Francisco: Jossey-Bass.
- Freese, A. R. (1999). The role of reflection on preservice teachers' development in the context of a professional development school. *Teaching and Teacher Education*, *15*, 895-909.
- Fuchs, L. S., Fuchs, D., Hamlett, C. L., & Stecker, P. M. (1991). Effects of curriculum-based measurement on teacher planning and student achievement in mathematics operations. *American Educational Research Journal*, 28, 617-641.
- Goor, M. B., & Santos, K. E. (2002). To think like a teacher: Cases for special education interns and novice teachers. Boston, MA: Allyn & Bacon.
- Han, E. P. (1995). Issues in education: Reflection is essential in teacher education. *Childhood Education*, 7, 228-230.
- Hill, H., Rowan, B., & Ball, D. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42, 371-406.
- Houston, W. R. (2008). Settings are more than sites. In M. Cochran-Smith, S. Feiman-Menser, & D. J. McIntyre (Eds.) & K. E. Demers (Ass. Ed), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.)(pp. 388-393). New York: Routledge/Taylor and Francis Group.
- Hmelo-Silver, C. E. (2004). Problem-based learning: what and how do students learn? *Educational Psychology Review*, *16*, 235-266.
- Kruse, S. D. (1997). Reflective activity in practice: Vignettes of teachers' deliberative work. *Journal of Research and Development in Education*, *31*, 46-60.
- Lampert, M. (2001). *Teaching problems and the problems of teaching*. New Haven: Yale University Press.
- McTighe, J., & Ferrara, S. (1998). *Assessing learning in the classroom*. Washington, DC: National Education Association.
- Mercer, C. D., & Mercer, A. R. (2001). *Teaching students with learning problems*. Columbus, OH: Prentice Hall.
- Miller, S. P. (2002). *Validated practices for teaching students with diverse needs and abilities*. Boston, MA: Allyn and Bacon.
- Mitchell, L. S. (2008). Growth of teachers in professional maturity. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.). *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.)(pp. 800-807). New York: Routledge.

- Oakes, J., Franke, M. L., Quartz, K. H., & Rogers, J. (2002). Research for high-quality urban teaching: Defining it, developing it, assessing it. *Journal of Teacher Education*, 53, 228-234.
- Olson, J. L., & Platt, J. M. (2000). *Teaching children and adolescents with special needs*. Columbus, OH: Prentice Hall.
- O'Shea, L. J., O'Shea, D. J., & Algozzine, B. (1998). *Learning disabilities: From theory toward practice*. Columbus, OH: Prentice Hall.
- Palinscar, A. S., & Brown, A. L. (1982). Reciprocal teaching of comprehension monitoring activities. *Cognition and Instruction*, *1*, 117-175.
- Phillips, M. B., & Hatch, J. A. (2000). Practicing what we preach in teacher education. *Dimensions of Early Childhood*, 28(3), 24-30.
- Polloway, E. A., Patton, J. R., & Serna, L. (2001). *Strategies for teaching learners with special needs*. Columbus, OH: Prentice Hall.
- Proctor, T. J., Wagstaff, M. E., & Ochoa, B. (1998). An urban professional development school. *Teaching and Change*, *6*, 39-52.
- Pugach, M. C., & Johnson, L. J. (1990). Fostering the continued democratization of consultation through action research. *Teacher Education and Special Education*, 13, 240-245.
- Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.). *Handbook of research on teaching* (4th ed.)(pp. 905-947). Washington, DC: American Educational Research Association.
- Ruhl, K. L., & Hall, T. E. (2002). Continuum of special education and general education field experiences in the preservice special education program at Penn State. *Teacher Education and Special Education*, 25, 87-91.
- Scardamalia, M., Bereiter, C., & Steinbach, R. (1984). Teachability of reflective processes in written composition. *Cognitive Science*, 8, 173-190.
- Schoenfeld, A. H. (1984). *Mathematical problem solving*. Orlando, FL: Academic Press.
- Schoenfeld, A. H. (1991). On mathematics as sense making: An informal attack on the unfortunate divorce of formal and informal mathematics. In J. F. Voss, D.N. Perkins, & J. W. Segal (Eds.). *Informal reasoning and education*. (pp. 331-343). Hillsdale, NJ: Erlbaum.
- Shepard, L., Hammerness, K., Darling-Hammond, L., Rust, F. et. al., (2005). Assessment. In L. Darling-Hammond & J. Bransford. (Eds.)(2005). *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 275-326). Hoboken, NJ: Jossey Bass/John Wiley.
- Shulman, L. S. (1990). Reconnecting foundations to the substance of teacher education. *Teachers College Record*, *91*, 300-311.
- Sternberg, R., & Grigorenko, E. (2003). *The psychology of abilities, competencies, and expertise*. New York: Cambridge University Press.
- Tatto, M. T. (1998). The influence of teacher education on teacher's beliefs about purposes of education, roles, and practice. *Journal of Teacher Education*, 49, 66-78.
- Taylor, C., & Nolen, S. (2004). *Classroom assessment*. Upper Saddle River, NJ: Prentice.