

TEACHER QUALITY TOOLKIT

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prepared by

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PREFACE

In 1996, the National Commission on Teaching and America's Future published *What Matters Most: Teaching for America's Future*. Citing research on teaching practices and policies, the authors emphasized the close connection between teachers and student learning: "What teachers know and can do makes the crucial difference in what children learn" (p. 5). The commission's document drew widespread attention to the issue of teacher quality; since its publication, policymakers, educators, and researchers have been searching for ways to improve America's teaching force.

One of the commission's recommendations was to "reinvent teacher preparation and professional development" (p. vii) to address teacher learning from preservice through inservice years. As Feiman-Nemser (2001) asserts, "each phase in a continuum of teacher learning has a unique agenda shaped by the requirements of good teaching and by where teachers are in their professional development" (p. 1014). This suggests the need for a developmental approach to teachers' learning, one that addresses the needs of teacher candidates, emerging teachers, and practicing teachers (Wasley, 1999).

This Teacher Quality Toolkit aims to support the continuum of teacher learning by providing tools that institutions of higher education, districts, and schools can use to improve both preservice and inservice teacher education.

The toolkit incorporates McREL's accumulated knowledge and experience related to teacher quality and standards-based education. The audience for this toolkit includes administrators of colleges of teacher education and teacher preparation programs, pre-kindergarten through grade 12 (PreK–12) school and district administrators, and state and district staff developers.

This toolkit is organized into four chapters. Chapter 1 provides background on teacher quality and describes the importance of teacher quality issues in the current policy climate of the No Child Left Behind (NCLB) Act of 2001. Chapter 2 describes assessments and resources that institutions of higher education can use to improve their teacher preparation programs. Chapter 3 describes assessments and resources that districts and schools can use to improve the professional development opportunities they provide for their teaching staff. Chapter 4 presents suggestions for using the assessment tools provided in Chapters 2 and 3 in university-school collaborations. McREL plans to add to the resources for university-school collaborations in 2005 after completing additional development work.

CHAPTER ONE: BACKGROUND

What is teacher quality? Over the years, the definition of teacher quality in the United States has evolved, reflecting the values of American society (National Research Council, 2001). In the early 1900s, teacher quality was related to virtue, and teachers were expected to communicate moral values in their teaching. In the 1940s and 1950s, teacher quality was defined in terms of personality traits such as compassion and curiosity. Teachers were expected to communicate social values to their students. In the 1960s, teacher quality was based on the technical skills and behaviors of teachers in delivering the prescribed curricula. Today's definition of teacher quality reflects the current era of standards-based reform in education. According to the National Research Council (2001), teacher quality refers to the "knowledge, skills, abilities, and dispositions of teachers" that enable them to "engage students in rigorous, meaningful activities that foster academic learning for all students" (pp. 19 & 22).

How should teacher quality be measured? There is much debate among educators and policymakers about the answer to this question, but most agree that teacher quality is important because of its connection to student learning. Sanders and Rivers (1996; see also Sanders, 1998) pioneered the use of value-added assessments to measure teacher quality. According to this approach, students of effective teachers make greater gains on standardized achievement tests than is expected based on the students' past performances. Sanders and Rivers found, for example, that students in Tennessee who were taught by effective teachers for three consecutive years scored up to 50 percentile points higher on the state test compared to students who had ineffective teachers for three consecutive years. Conversely, students with ineffective teachers did not exhibit the academic growth that would be expected based on their previous performances. In other words, effective teachers add value to student learning by helping their students achieve beyond expectations.

Value-added studies leave little doubt that teachers are critical to student learning, but these studies do not describe the characteristics of effective teachers. A number of research reviews have addressed the importance of various teacher attributes to teacher quality (Wilson, Floden, & Ferrini-Mundy, 2001; Allen, 2003; Rice, 2003). The following have been found to be positively associated with student outcomes:

- Years of teaching experience up to five years (beyond five years, no measurable additional benefit has been found for experience.)
- Advanced degrees in mathematics and science for secondary teachers of those subject areas
- Certification in mathematics for teachers of secondary mathematics
- Coursework in content areas for secondary teachers of those subject areas
- Pedagogical coursework, particularly when tied to a content area (e.g., methods of teaching mathematics)

- Teachers' scores on tests of verbal ability

As this list indicates, although research has identified some of the teacher characteristics that are positively associated with student outcomes, the findings have been limited and, therefore, minimal guidance is available for measuring teacher quality. However, teacher characteristics continue to be of interest to those who make policy recommendations regarding teacher quality.

TEACHER QUALITY AND THE NO CHILD LEFT BEHIND ACT

Currently, the most influential policy regarding the quality of U.S. teachers is the No Child Left Behind (NCLB) Act. This Act requires states to develop a plan to ensure that all teachers are "highly qualified." According to this law, a "highly qualified teacher" is one who holds a bachelor's degree and full state certification or licensure and has demonstrated mastery of the subjects he or she teaches, either by having a major in the subject or by passing a test or other state evaluation. NCLB reflects the federal government's view that teacher quality is a key component of states' efforts to help all students achieve at high levels.

The teacher quality provisions of NCLB are an important first step in improving the quality of the U.S. teaching workforce. However, many educators think that a high-quality teacher has knowledge and skills that go beyond NCLB's definition of "highly qualified." The Southeast Center for Teaching Quality (2004), for example, conducted case studies of 24 high-needs schools from 12 districts in four southeastern states on the effects of the NCLB teacher quality mandates. According to the Center's report, teachers and administrators who were interviewed think that the NCLB definition of teacher quality is insufficient. For example, interviewees thought that the definition should include "additional emphasis on skills such as understanding the developmental stages of student learning, using multiple types of student assessment data, and revising instruction on a daily basis" (p. 5).

As this discussion indicates, teacher quality is a complex issue. There is general agreement that high-quality teachers have knowledge, skills, and characteristics that promote student learning. However, research has documented the influence on student achievement of only a few teacher attributes, such as knowledge of the content area being taught. Many states are beginning to implement the teacher quality requirements of NCLB; some are struggling to do so. The percentages of teachers who meet NCLB requirements vary by district and state (Center on Education Policy, 2004). States need time to meet the challenges of NCLB, but educators need strategies now to improve teacher quality and student achievement.

PURPOSE & DESCRIPTION OF THIS TOOLKIT

This Teacher Quality Toolkit is designed to provide institutions of higher education, districts, and schools with some tools and resources for improving teacher quality and, ultimately, student achievement. The Toolkit was developed in view of the following premises:

- Improving teacher quality is key to improving student achievement.
- Teacher quality is the joint responsibility of higher education institutions, districts, and schools.

- Program self-assessment is necessary to guide teacher quality improvement efforts.
- Exemplary preservice and inservice programs provide models for improving teacher quality.

The first two premises reflect research findings (Sanders & Rivers, 1996) and policy recommendations (NCTAF, 1996) regarding teacher quality. The last two premises reflect McREL's research and knowledge concerning exemplary preservice (Dean & Lauer, 2003) and inservice (McREL, 2000) teacher education programs.

The Teacher Quality Toolkit addresses the continuum of teacher learning by providing tools that can be used to improve both preservice and inservice teacher education (Chapters 2 and 3, respectively). Each chapter provides self-assessment tools that can guide progress toward improved teacher quality and describes resources for designing exemplary programs and practices. Chapters 2 and 3 are independent of each other so that institutions of higher education and districts or schools can use their respective chapters without consulting the other chapter. However, it is recommended that district and school leaders and leaders of higher education institutions use the tools and resources together as suggested in Chapter 4.

CHAPTER TWO: ASSESSMENTS AND RESOURCES FOR INSTITUTIONS OF HIGHER EDUCATION

The purposes of this chapter are to help institutions of higher education (1) design programs that prepare teachers for standards-based education environments and (2) design a system for evaluating program effectiveness. This chapter begins with a discussion of policies and opinions on the responsibilities that higher education institutions have to provide quality teacher preparation programs and to be accountable for program outcomes. Next, model programs that meet these responsibilities are described along with tools and resources to help higher education institutions assess their own programs and make changes. The assessments themselves are included in the appendices to this toolkit.

THE RESPONSIBILITY TO PROVIDE QUALITY TEACHER PREPARATION PROGRAMS

Institutions of higher education are responsible for ensuring that their teacher preparation programs are high quality and that the students who graduate from these programs meet teacher licensure requirements. As cited in a U.S. Department of Education report (2000), one of the barriers to improving the quality of teaching is the lack of accountability for high-quality preparation by both teacher education programs and the higher education institutions that provide them. The report called for developing new measures of the effectiveness of teacher preparation programs and reporting results on these measures to the public. Accordingly, changes in Title II of the Higher Education Act require colleges and universities with teacher preparation programs to provide information to their states about basic features of the programs as well as students' rates of program completion (Huang, Yi, & Haycock, 2002). States are asked to report these data annually to the federal government, along with information on state standards for teachers, certification/licensure requirements, and criteria used to measure the performance of teacher preparation programs. According to Huang et al., changes in the Higher Education Act are putting pressure on states to make teacher preparation programs more accountable for preparing teachers who can meet some level of performance standards.

As described in Chapter 1, The No Child Left Behind (NCLB) Act of 2001 places additional pressures on states to ensure that their teachers are highly qualified. With the enactment of national policies related to teacher quality, it is not surprising that there is heightened national interest in accountability for teacher preparation (Wilson et al., 2001). Cochran-Smith (2001) asserts that the "outcomes question" drives recent teacher preparation policies:

As we enter the twenty-first century, the outcomes, consequences, and results of teacher education have become critical topics in nearly all of the state and national policy debates about teacher preparation and licensure as well as in the development of many of the privately and publicly funded research agendas related to student learning. (p. 6)

By emphasizing both student achievement and high-quality teachers, NCLB sends the message that teacher outcomes are expected to be linked student outcomes. For institutions of higher education, the message translates into accountability for the quality of teacher preparation.

This emphasis on accountability in national policies poses a challenge for higher education institutions that provide teacher preparation programs. As Howey and Zimpher (1999) observed, many lack evidence that their teacher preparation programs are effective. The authors recommend that teacher candidates be assessed throughout their preservice years to measure their development as teachers. They also stress the need to link teacher preparation and performance with K–12 student learning. “The emphasis in assessment,” they assert, “must be squarely on coupling teacher performance and teacher learning with *pupil learning*” (p. 301).

Teacher preparation programs that gather evidence of effectiveness benefit in ways that can help ensure that their graduates have the knowledge and skills they need to be effective teachers. Diez (1998) described several teacher preparation programs that undertook reform by

clarifying the outcomes of their programs, developing performance assessment processes to develop and document the development of student learning outcomes, developing strategies to involve faculty across the institution and in P–12 schools in the reform effort, and designing an evaluation plan to guide continuous improvement efforts. (pp. 2–3)

The National Commission on Teaching and America’s Future (1997; and see Darling-Hammond, 2000) identified seven teacher education programs that prepare teachers for successful instruction of diverse learners. As documented in case studies, an emphasis on the use of assessments was a feature common to the programs. Similarly, in a report for the American Council on Education (ACE), Scannell (1999) described an effective teacher education program as one with comprehensive candidate assessment that is integral to instruction and informs decisions about teacher licensure. McREL’s case studies of nationally recognized teacher preparation programs provide examples of how effective programs use assessments to evaluate teacher preparation outcomes and use the results for both accountability and improvement (Dean & Lauer, 2003; Lauer & Dean, 2003).

Thus, research suggests that assessment and evaluation can help institutions of higher education be accountable and at the same time improve the quality of their teacher preparation programs. To this end, the following sections describe model programs that provide effective preparation for teaching in standards-based classrooms and that have systems for evaluating the effectiveness of these programs.

DESIGNING TEACHER PREPARATION PROGRAMS FOR STANDARDS-BASED EDUCATION

In 1996, the National Commission on Teaching and America’s Future recommended that teacher preparation and professional development programs be organized around standards for students and teachers. The following section describes the characteristics of model programs that prepare teachers for standards-based education systems. The next two sections describe a tool for assessing the adequacy of a program’s teacher preparation and resources for designing programs that address standards-based teaching.

Characteristics of Model Teacher Preparation Programs for Standards-Based Education

Standards-based reforms require teachers to possess new types of knowledge. According to education researchers Ball and Cohen (1999), teachers first need a deep conceptual understanding of the subject matter that they teach. This includes an understanding of the methods of reasoning within a field as well as connections among ideas across fields. Second, teachers need to understand children's developmental phases and the ideas that children have about different subject areas. Third, teachers need to know how differences among learners in areas such as culture, language, class, and gender relate to differences in their frames of reference. Fourth, teachers need to increase their understanding about how children learn and to view children as capable of higher order learning. Finally, teachers need to know pedagogy and a variety of instructional strategies.

Given the need for teacher education programs to ensure that teachers have the knowledge required to implement standards-based reforms, what are the components of effective teacher preparations? To answer this question, McREL researchers examined four teacher education programs that were winners of the U.S. Department of Education's National Awards Program for Effective Teacher Preparation in 2000¹ (Lauer, Martin-Glenn, & Dean, 2002). This recognition was based in part on evidence that program graduates positively impact the learning of students. Lauer et al. studied how the four programs prepare graduates to deliver K–12 standards-based instruction. Data were gathered through interviews of program personnel, review of program documents (e.g., descriptions of program standards), and a survey of program graduates.

Analyses of the interviews and documents identified several components that the four award-winning programs share related to teacher preparation for standards-based education:

- Content courses and subject-area methods courses are aligned with national and, to some degree, state K–12 content standards.
- Candidates use content standards documents as part of their course materials.
- Course assignments require candidates to locate standards documents on the Internet and to identify content standards in their lesson plans.
- In methods classes, candidates learn to develop lesson plans that address standards and to assess students' learning in meeting these standards.

¹ The four winners of the U.S. Department of Education's National Awards Program for Effective Teacher Preparation in 2000 are Alverno College, Milwaukee, Wisconsin; East Carolina University, Greenville, North Carolina; Fordham University Graduate School of Education, New York, New York; and Samford University, Birmingham, Alabama.

- In field experiences, especially student teaching, candidates learn to examine evidence of student learning and to use it to modify their instructional practice.
- To help all students reach high standards, candidates learn to teach exceptional learners and other diverse students.
- Candidates learn to generate student work samples that identify the needs of individual students and to modify instruction based on these needs.
- Candidates are assessed on both their content and pedagogical knowledge. The teacher preparation program uses the results of these assessments to monitor the effectiveness of candidates and the teacher preparation program itself.
- Education faculty collaborate with faculty from arts and sciences at each institution, which helps to ensure that the content that candidates learn is aligned with K–12 content standards.
- Education faculty collaborate with K–12 teachers and administrators, which helps to align teacher preparation curricula with standards and provides feedback to the programs about the performance of their candidates in standard-based classrooms.

The four programs are standards-based models of teacher education. That is, program leaders use standards and data to evaluate and improve their own programs, and, similarly, they prepare candidates to use standards and data to improve the learning of K–12 students.

The Teacher Preparation for Standards-Based Education Survey

As the previous section indicates, programs that prepare teachers for standards-based education provide candidates with courses and experiences that address standards-based teaching. The Teacher Preparation for Standards-Based Education (TPSBE) Survey can help programs determine whether they have provided these courses and experiences for their own candidates. The TPSBE Survey was developed for Lauer et al.'s (2002) study of effective teacher preparation for standards-based education described in the previous section. Survey items were constructed to assess graduates' perceived preparation in the knowledge and skills needed for standards-based teaching (Tell, Bodone, & Addie, 1999; Ball & Cohen, 1999) and graduates' current confidence in implementing standards.

Teacher preparation programs can use the TPSBE Survey to evaluate recent graduates' perceptions of preparedness to teach in standards-based classrooms. The results can help programs identify areas that should be better aligned with K–12 academic standards. Additional information on the development of the survey, its uses, and scoring is provided with the TPSBE Survey tool in Appendix A.

In Lauer et al.'s (2002) study, recent graduates of three award-winning teacher preparation programs responded to the TPSBE Survey. They reported that their primary sources of learning

about standards implementation were subject-area methods classes and student teaching. They reported taking more courses in language arts and in mathematics than in other subject areas. Their responses suggest that they had extensive exposure to classroom assessment and instruction that targets the learning needs of individual students. Correlations indicated positive relationships between graduates' reported learning from teacher preparation and their current confidence to implement standards as well as their perceptions of how well prepared they were to teach in a standards-based setting.

Other Resources on Teacher Preparation for Standards-Based Education

After higher education institutions obtain the perceptions of their graduates about their preparation, institutions must identify ways in which to use this feedback to improve their programs. This section describes two resources — one that can help higher education institutions design teacher preparation programs that are aligned with PreK–12 standards and a resource on strategies for making program changes.

The Standards-based Teacher Education Project (STEP)TM. STEP was established in 1996 by the Council for Basic Education and the American Association of Colleges for Teacher Education. The purpose of STEP is to provide support and guidance to colleges and universities for improving teacher preparation based on three principles:

1. Teachers must know the subjects they are teaching.
2. Teachers must know how to teach students to learn at high levels.
3. Teachers must know how to monitor and assess how well students are learning. (Garvin, 2003, p. 6).

The most recent report on STEP is *Developing Knowledgeable Teachers: A Framework for Standards-Based Teacher Education Supported by Institutional Collaboration* (Garvin, 2003). This report describes the STEP process and the experiences of teacher education programs that have participated in STEP. This report can serve as a handbook on how colleges and universities can change their programs to better prepare teachers for standards-based education. The report provides readers with the following guidance:

- Explanations of the STEP process and how to get started using it
- Models for incorporating STEP processes and structures into teacher preparation programs based on the experiences of four institutions
- Ideas for identifying needed changes and sustaining them in response to state and national teacher quality accountability policies
- Examples of possible STEP variations based on six institutions that have adopted the STEP model
- Perspectives of state and national education officials on STEP

- Tools (e.g., surveys, rubrics, and guidelines) that can be used to align teacher preparation with Pre–12 academic standards

STEP accomplishes its work through collaborations among higher education faculty and local PreK–12 teachers and administrators. The focus of this work is the integration of state and local PreK–12 student learning standards into teacher education programs (Council for Basic Education, 2004). Since 1996, 25 institutions of higher education from five different states have participated in the STEP process. For each participating institution, the STEP process occurs over three years and involves the following sequence of tasks (Garvin, 2003):

- Establishment of a collaborative task force with representation from liberal arts and education faculty, faculty from two-year colleges, and PreK–12 teachers and administrators
- Task force analysis of the higher education institution’s teacher preparation program within the frameworks of PreK–12 content standards and teacher licensure standards
- Proposal outlining the changes needed in the teacher preparation program’s courses, requirements, experiences, and assessments to better address PreK–12 standards
- Development of strategies for assessing the knowledge and effectiveness of candidates
- Assessment of effects of program changes on graduates’ content knowledge and pedagogical skills
- Inventory of teacher educator instructional strategies and identification of instructional models
- Collaborative research projects among faculty and PreK–12 teachers to assess candidate knowledge and skills
- Development of an exit process that ensures candidates have the knowledge and skills to teach a variety of students

Levers for Change. Designing and implementing changes in teacher preparation programs is a significant challenge for higher education institutions. To address this challenge, the U.S. Department of Education sponsored four regional teacher quality institutes during summer 2000. Each participating higher education institution brought a team that included administrators and faculty from education and arts and sciences, PreK–12 administrators and teachers, and community and business representatives. The purpose of the institutes was to help the teams develop collaborative action plans that identify need changes in teacher preparation, strategies for implementing change, and a timeline for completing objectives.

Following the institutes, the U.S. Department of Education, along with McREL and other regional educational laboratories, reviewed the action plans and selected nine that held promise for transforming teacher education. Researchers interviewed members of the nine teams and reviewed their institutional documents. The result of this research is the McREL publication

Levers for Change: Transforming Teacher Preparation (Hassel, Walter, & Hayden, 2002), which outlines the six key strategies, or levers for change, that were common to the nine institutions. Higher education institutions can use these levers to help implement and sustain collaborative changes in teacher preparation. The six levers and key action steps are summarized in Exhibit 2.1.

Exhibit 2.1. Levers and Action Steps to Help Institutions of Higher Education Change Teacher Preparation

Levers for Change	Key Action Steps
Establishing Mission and Goals to Focus the Improvement of Teacher Preparation	Prepare for the challenge of change. Think about ways to be inclusive in crafting mission and goals without becoming overwhelmed by diverse interests. Use information to shape and sell the mission and goals. Be willing to make tough decisions. Celebrate small successes along the way.
Using Standards to Structure Improvement of Teacher Preparation	Take into account the complex world of standards related to teacher preparation. Make sure standards at different levels of the system reinforce one another. Confront the fundamental question of what graduates should know and be able to do. Start small. Involve the right people to get the job done. Create mechanisms to ensure that standards remain the focus of teacher preparation programs over time.
Exerting Leadership to Motivate Improvement of Teacher Preparation	Find top leaders who are willing to put their full support behind change. Appoint a person or a small group of individuals to lead the change effort. Build leadership throughout the institution (and beyond).
Forging Relationships to Facilitate Improvement of Teacher Preparation	Develop relationships that leverage change efforts. Create opportunities for people to work together to accomplish critical tasks. Establish structures that foster relationships. Pay attention to feedback.
Mobilizing Resources to Support Improvement of Teacher Preparation	Know what you need. Look for opportunities to reallocate resources. Be willing to terminate programs that don't support goals. Before starting a new program, see if similar programs exist. Look at the institution's reward structure. Target resources in ways that leverage change.
Using Information to Initiate and Sustain Improvement of Teacher Preparation	Leverage the relationship between information and mission and goals. Make information systems feasible for users. Capitalize on information to spur improvement.

Source: From *Levers for Change: Transforming Teacher Preparation*, by B. C. Hassel, K. Walter, and E. Hayden, 2002. Aurora, CO: Mid-continent Research for Education and Learning.

Levers for Change (Hassel et al., 2002) provides detailed descriptions of how the nine institutions use these levers to implement change. For example, for the Using Standards lever, the report describes Arizona State University's (ASU) process for syllabus development. Faculty members use a common syllabus format that explains how the course addresses both PreK–12 academic standards and the state's teaching standards. The syllabus also describes the opportunities that teacher candidates will have in the course to observe and practice the integration of standards with instruction. An actual ASU syllabus for an education course is reproduced in the report.

An appendix to *Levers for Change* summarizes promising practices that the nine higher education institutions and other institutions attending the teacher quality institutes have used to meet specific improvement goals. For example, one of the practices concerns the effective use of technology in the preparation of teacher candidates. The appendix lists eight potential activities related to this goal, along with the names of the institutions that have implemented the activities. (See Hassel et al., 2002).

DESIGNING AN EVALUATION SYSTEM FOR TEACHER PREPARATION PROGRAMS

The U.S. Department of Education developed the National Awards Program for Effective Teacher Preparation in 2000 as a means of promoting excellence in teaching and teacher preparation. The Department recognized that there are several ways to measure teacher quality, one of which is graduates' test scores on licensing exams. The awards program was designed to identify teacher preparation programs that could provide evidence about their efforts to provide high quality teacher education. This program raised the bar in teacher education accountability by requiring that winners demonstrate the link between teacher preparation practices, learning by teacher candidates, and effective teaching by graduates that results in improved learning for all PreK–12 students.

With the changes in federal administration in 2001, the awards program was not continued. However, the four winning institutions remain models of teacher preparation and models of how to document program effectiveness. Since one of the purposes of the awards program was to deepen discussion of high-quality teacher preparation, five of the regional educational laboratories conducted a study of the structures and processes used by the four recipients of the award to systematically evaluate their teacher preparation programs. The following sections describe the characteristics of the evaluation systems of the award-winning programs, a tool for assessing the adequacy of a program's evaluation system, and a resource for designing teacher preparation evaluation.

Characteristics of Model Evaluation of Teacher Preparation Programs

Systematic evaluation was selected as the focus for the study of the winners of the National Awards Program for Effective Teacher Preparation because the U.S. Department of Education was interested in furthering the discussion about how to determine the overall effectiveness of teacher preparation programs. The findings of this study are documented in two reports — one on the case studies of the four award-winning teacher preparation programs (Lauer & Dean, 2003) and one involving a cross-case analysis (Dean & Lauer, 2003). An overall research question focused the study: What are the structures and processes of systematic evaluation that

supports effective teacher preparation? In addition, six guiding research questions were designed to elicit details about the structures and processes of the evaluation system at each institution studied. (See Exhibit 2.2.)

Exhibit 2.2. Research Questions and Documented Components of the Evaluation Systems of Nationally Recognized Teacher Preparation Programs

Research Question	Components Documented
1. How are individuals, groups, and the components of the teacher preparation program evaluated?	<ul style="list-style-type: none"> • Performance assessments of candidates (e.g., portfolios) • Standardized assessments of candidates • Samples of work from candidates' PreK–12 students • Feedback from candidates on faculty members and university supervisors • Surveys of graduates and principals • Achievement data of graduates' PreK–12 students • Feedback from candidates, graduates, university supervisors, and cooperating teachers about courses and field experiences through surveys, focus groups, and informal discussions
2. How do teacher preparation programs align evaluation with program standards/goals?	<ul style="list-style-type: none"> • Program goals are aligned with national teaching standards (e.g., INTASC), state teaching standards, national content standards (e.g., NCTM). • Program goals provide the framework for evaluation, and data are examined with respect to program goals.
3. How do teacher preparation programs develop systematic evaluation?	<ul style="list-style-type: none"> • Program responses to internal and external catalysts for change (e.g., accreditation review) • Faculty working together within and across departments • Use of system change models that use data to identify areas for improvement • Creation of data collection instruments and procedures • Leadership support • Input from stakeholders
4. How do P–16 stakeholders influence evaluation of teacher preparation programs?	<ul style="list-style-type: none"> • Formal and informal feedback about program components and program graduates through school partnerships and strong relationships with principals and cooperating teachers • Research collaborations • Teacher-in-residence programs • Assessments of candidate portfolios • Contributions to curriculum development
5. How do external influences affect evaluation of teacher preparation programs?	<ul style="list-style-type: none"> • State policies on teacher preparation are sources for program revision and the impetus for evaluation activities. • Programs are proactive in aligning teacher preparation with state regulations. • National influences are Title 2 reporting requirements and the new emphasis on PreK–12 student learning of teacher graduates.

Research Question	Components Documented
6. What are the characteristics of a culture that supports data collection and its use for evaluation of teacher preparation programs?	<ul style="list-style-type: none"> • An attitude that data are essential and it is safe to examine the results of one’s work • Training in using data for evaluation purposes • Time to discuss and analyze data • Incentives that encourage involvement and build commitment to evaluation • Collaboration within and across departments (e.g., liberal arts and sciences)

Note: From *Systematic Evaluation for Continuous Improvement of Teacher Preparation: Volume 1: Cross-case Analysis*, by C. B. Dean and P. A. Lauer, 2003. Aurora, CO: Mid-continent Research for Education and Learning.

Data were gathered through interviews of key participants from each program and through a review of relevant documents. For the cross-case analysis, researchers compared responses to the six guiding research questions across the four sites and identified common themes. They then summarized the structures and processes that the four nationally recognized teacher preparation programs use to evaluate the effectiveness of their programs.²

With regard to evaluation structures, common data collection strategies used by the four winners of the national awards program include graduate and principal surveys, performance assessments, portfolios, focus groups, and informal feedback from PreK–12 teachers and principals (Dean & Lauer, 2003). Each of the recognized programs has offices that carry out various functions that support its evaluation program. Formal committees and advisory groups provide input and feedback on program components and help design and implement program improvements. The programs have formal meeting times for teacher education faculty to provide input about the collection of data, to conduct analyses of data, and to discuss ways to use the results of the analysis to guide program improvement. All four programs have established partnerships that provide access to feedback from PreK–12 school stakeholders. Many sets of standards and principles guide the programs, as well as a clearly articulated set of goals and a framework. An important structural feature of these programs is a strong, coherent curriculum that is aligned with program goals. The curriculum drives data collection and determinations about program success.

With regard to evaluation processes, the four recognized programs reported that they use most of their data in a formative way to make decisions about program changes (Dean & Lauer, 2003). However, they also use data to measure candidates’ knowledge and skills and to determine graduates’ effectiveness in PreK–12 classrooms. Faculty members from all four programs emphasized the important role that communication and collaboration play in their evaluation systems, although the levels of collaboration varied among the programs. Program and institutional leaders are accessible, seek input from a variety of stakeholders, welcome feedback, and value partnerships. Other processes that support program evaluation are faculty hiring and

² *Structure* is used to refer to an element of the evaluation system that helps the program collect, analyze, or use data to improve the program, such as university-school partnerships. *Process* is used to refer to a systematic series of actions directed toward an end, such as hiring, and less well-defined actions such as communication.

evaluation processes, which emphasize norms of collaboration and a focus on improvement. A key process for these programs was continuous improvement. Program leaders reported that they view the work of program improvement as an ongoing process and not something that is the focus of attention only for defined periods of time, such as an NCATE review.

The Teacher Preparation Evaluation System Audit

Results from Dean and Lauer's (2003) study of the four nationally recognized programs were used to design McREL's Teacher Preparation Evaluation System (TPES) Audit. This audit is a tool for assessing whether teacher preparation programs have established the necessary structures and processes to systematically evaluate their programs and to use evaluation results for improvement. Exhibit 2.2 indicates the questions asked about the evaluation systems of the recognized programs and the components that were documented in response to these questions. These components guided the development of the TPES Audit.

Teacher preparation programs can use the TPES Audit to compare the characteristics of their evaluation systems with those of model programs that have developed systematic evaluation approaches for effective teacher preparation (Dean & Lauer, 2003). Some uses of the TPES Audit include the following:

1. Administrators of teacher preparation programs can use the audit to judge whether they have established the necessary structures and processes to systematically evaluate program outcomes.
2. Teacher education faculty and administrators can complete the audit and use the overall results for discussions about changes needed to conduct systematic evaluation.
3. Audit results can be shared with institutional leaders as a way to justify the establishment of new structure and processes (and associated expenses) for systematic evaluation.

Additional information on the audit, its uses, and scoring is provided with the TPES Audit in Appendix B.

Other Resources on Teacher Preparation Program Evaluation Design

The National Awards Program for Effective Teacher Preparation was designed to recognize teacher preparation programs that could present compelling evidence that their programs were effective in preparing teachers who could help all students meet high academic standards (U.S. Department of Education, 2000). The program application is a resource that can help higher education institutions design better practices for evaluating teacher preparation. Program applicants were required to provide three types of evidence to demonstrate their effectiveness:

- Formative: Evidence that the program gathers and uses data to make adjustments to the various stages of the program (e.g., admissions, course development, field experiences, assessment of knowledge and skills)

- Summative: Evidence of the effectiveness of the overall program in helping graduates acquire the knowledge and skills needed to improve all students' learning (e.g., content knowledge, pedagogical knowledge and skills, and skills to examine beliefs about learners and teaching as a profession)
- Confirming: Evidence of the effectiveness of program graduates in K–12 settings

In addition, the evidence had to meet criteria of rigor, sufficiency, and consistency. Rigor was determined by the validity and reliability of the evidence. Sufficiency was determined by the adequacy and the extent of the data used for evidence. Consistency was based on the links between various aspects of the program and the three types of evidence. To help applicants judge the adequacy of their data, the application provided a rubric for evaluating evidence of program effectiveness (see Appendix C). Reviewers of the applications also used this rubric. Teacher preparation programs can use this rubric to help guide the design of data collection activities.

The awards program application also required programs to provide credible evidence from multiple sources. To help applicants judge the credibility of their evidence, the application provided examples that reflect different levels of credibility. In addition, the reviewers of the applications used these examples to better understand how to judge the evidence that applicants provided. The examples are reproduced in Appendix C. Teacher preparation programs can use these examples to identify the type of data that they should collect for evaluation. (Exhibit 2.2 lists the various indicators that the winners of the 2000 awards used to evaluate individuals, groups, and the components of the teacher preparation program.)

The U.S. Department of Education spent considerable time and resources developing a process to identify teacher preparation programs that were effective based on evidence. Although the National Awards Program for Effective Teacher Preparation is no longer in operation, completing the award application and using the review process outlined in the application can be a significant source of learning and improvement for teacher preparation programs.

Interviewees from the four recognized programs commented on the benefits of applying for the award (Lauer, 2003). For example, the application required program leaders to think about data in new ways. Interviewees cited as a challenge the identification of confirming evidence and indicated that in the future they would give more emphasis to collecting this type of data. The overall process of applying for the award was beneficial. The programs viewed the national awards program as a type of external evaluation, similar to the process required for a NCATE review. Some interviewees said the applying for the award and preparing data for the site visit by the awards committee helped the programs prepare for NCATE site visits. One faculty member cited the awards program as a source of outside criteria against which the program could measure the effectiveness of its teacher preparation. A division chair indicated that as a result of applying for the award, the teacher preparation program was revising its evaluation forms for more systematic data collection. Thus, the awards program application criteria help programs think in new ways about the evidence of effectiveness of their teacher preparation and about the quality of the data that they collect for accountability purposes.

CONCLUSIONS

This chapter describes model programs for preparing teachers for standards-based education and tools and resources that can help higher education institutions design similar programs. The goal is to help higher education institutions improve teacher preparation in ways that can improve teacher quality. The focus is on collecting data on the effectiveness of teacher preparation programs and using the data for program improvements. The same data help higher education institutions document how they are meeting their responsibilities to states and to PreK–12 schools to provide quality preparation for teacher candidates.

The model programs described in this chapter are the four winners of the National Awards Program for Effective Teacher Preparation in 2000 (U. S. Department of Education, 2000). These programs were recognized because they provided evidence of their effectiveness, including data that confirmed the ability of their graduates to improve the learning of all students. Increasingly, this emphasis on the performance of graduates' own students is becoming the standard by which teacher preparation programs are judged.

It should be stressed that there is no best approach to transforming teacher preparation and no single model of effective teacher preparation. Effective programs vary in context, student body, and mission, but they share a common goal of improving the learning of all PreK–12 students (Dean & Lauer, 2003). To achieve this goal, higher education institutions need tools for assessing the outcomes of their teacher preparation programs and resources for making improvements. By using the assessments and resources described in this chapter, higher education institutions can begin to improve their teacher preparation programs in ways that improve teacher quality and ultimately student achievement.

CHAPTER THREE: ASSESSMENTS AND RESOURCES FOR SCHOOLS AND DISTRICTS

The No Child Left Behind Act (NCLB) makes it clear that high-quality professional development is key to ensuring that teachers have the knowledge and skills they need to help all students meet high standards. In order to harness the power of professional development, however, school and district staff members must know what is meant by high-quality professional development. This chapter provides that information as well as tools that can assist schools and districts in designing, implementing, and evaluating effective professional development programs.

The chapter begins with a description of the responsibilities of districts and schools in providing high-quality professional development. The next sections include an explanation of the characteristics of effective professional development and descriptions of two assessment tools. The first tool is one that districts and schools can use to assess the extent to which they demonstrate the characteristics of high-quality professional development. The second assessment tool is designed for use by schools and focuses specifically on developing a professional learning community, reflecting the role that school culture plays in professional development. The last section of the chapter presents resources that schools and districts can use to design effective professional development programs. The assessments themselves are included in the appendices to this toolkit.

THE RESPONSIBILITY TO PROVIDE QUALITY PROFESSIONAL DEVELOPMENT PROGRAMS

Professional development serves a variety of functions in the 21st century school system, from expanding teachers' and administrators' knowledge base about the realities of teaching and learning in a context of diversity and accountability, to developing new attitudes about students' capabilities, teacher roles, and use of technology, to contributing to the growth of peers (North Central Regional Educational Laboratory & Public Broadcasting Service, 1990). It's not surprising then, that a number of entities — states, districts, and schools — share responsibility for providing professional development for teachers, administrators, and other school staff.

Federal, state, and local policies recognize the importance of professional development and often require districts or schools to address it in specific ways. For example, under Title I, schools are required to include professional development in their school improvement plans, and states are required to use four percent of their funds to provide technical assistance to schools that do not make adequate yearly progress (AYP) under NCLB. Similarly, districts and schools that do not make AYP must use 10 percent of their Title I funds to support professional development. Some states assign responsibility for professional development to schools and districts through the accreditation or school improvement process. For example, in Kansas, schools must develop a results-based staff development plan and report the percentage of teachers who reached the professional development goals established as part of that plan.

States, districts, and schools often assume responsibility for professional development in order to accomplish broad goals. For example, states might sponsor professional development that helps teachers understand statewide initiatives, such as the state assessment system. Similarly, districts

often provide professional development to enhance teachers' ability to implement new curricula and instructional practices, raise awareness of district initiatives, satisfy state requirements for disseminating information on particular topics, or assist teachers in earning credits for recertification or salary increases (Neville & Robinson, 2003). Increasingly, schools are taking on responsibility for professional development to better meet teachers' learning needs and to address school goals for improved student learning (National Foundation for the Improvement of Education, 1996; Sparks & Hirsh, 1997; Zepeda, 1999; Elmore, 2002).

Districts and schools share many of the same responsibilities for professional development: establishing structures and processes for teacher learning, providing follow-up support, designating resources, and involving everyone in planning, monitoring, and evaluating implementation of what teachers have learned. Schools also have other responsibilities for professional development in addition to those they share with the district. Specifically, according to Youngs (1999), schools must design professional development activities that

- provide teachers with meaningful opportunities to actively engage with new disciplinary ideas and acquire new instructional strategies. . . .
- involve collaboration with colleagues and opportunities to engage in reflective inquiry. . . .
- take individual teachers' backgrounds into consideration as well as the contexts in which they work. . . . [and]
- provide teachers with sufficient time and follow-up support, including regular feedback from accomplished practitioners. (pp. 3–4)

Such activities enable a school to enhance its capacity to enhance student achievement by increasing teachers' knowledge and skills, strengthening the school's professional community, and increasing the degree to which the school's programs are focused, coherent, and sustained over time (Youngs, 1999).

There is increasing agreement that professional development plays a key role in improving student achievement, but only if the professional development is high quality. The next section discusses the characteristics of high-quality professional development and describes tools that districts and schools can use to gauge the quality of their programs and resources they can use to improve their programs.

DESIGNING PROFESSIONAL DEVELOPMENT PROGRAMS

This section begins with an overview of characteristics of model district and school professional development programs that help ensure that teachers and administrators acquire the skills they need to help all students achieve high standards. This overview is followed by descriptions of (1) a tool for assessing the extent to which a professional development program demonstrates the characteristics of effective professional development and (2) a checklist for determining the degree to which a school exhibits the characteristics of a professional community that supports teacher and student learning. These descriptions are followed by a discussion of additional

resources schools and districts might consult to design quality professional development programs that help improve student achievement.

Characteristics of Model Professional Development Programs

What are the characteristics of model professional development programs? A number of organizations have assembled lists over the last decade, but according to Guskey (2003), there still is no consensus about these characteristics. Guskey analyzed 13 well-known lists of characteristics of effective professional development and identified the most common elements among them. These elements include the following:

- Enhancement of teachers' content and pedagogic knowledge
- Provision of sufficient time and other resources
- Promotion of collegiality and collaborative exchange
- Inclusion of specific evaluation procedures
- Alignment of activities with other reform initiatives and with high-quality instruction
- A focus on school-based activities
- Development of leadership capacity of principals and teachers
- Consideration of teacher-identified needs in the planning process

Guskey also notes that, surprisingly, many of the lists do not mention use of student data to drive professional development, nor emphasize that professional development should be based on research evidence. Only a few of the lists include attention to diversity and equity in designing professional development or state that professional development should take a variety of forms, be driven by an image of effective teaching and learning, take into account phases of change, or promote inquiry and reflection. Only one of the lists addresses the involvement of parents and other stakeholders.

The No Child Left Behind (NCLB) Act provides guidance about effective professional development by providing a list of characteristics of high-quality professional development. The Act makes it clear that high-quality professional development activities should be an integral part of district and schoolwide plans for improvement and that they should be developed with extensive participation of the teachers, principals, parents, and administrators of schools. In addition, among other priorities, professional development should include activities that

1. improve and increase teachers' knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;

2. give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;
3. improve classroom management skills;
4. are not 1-day or short-term workshops or conferences;
5. advance teacher understanding of effective instructional strategies; and
6. include instruction in the use of data and assessments to inform and instruct classroom practice. (NCLB, 2001, sec. 9101, p. 1963)

NCLB also emphasizes the importance of regularly evaluating professional development activities as a whole to determine their impact on teacher effectiveness and student academic achievement. It also stresses that the findings of such evaluations should be used to improve the quality of professional development.

The list of characteristics of professional development provided in NCLB is consistent with those described by Guskey (2003). Among the lists that Guskey analyzed were the National Staff Development Council (2001) standards and the principles of professional development developed by the U.S. Department of Education in 1995. These principles were developed in collaboration with hundreds of educators and staff developers who represented a range of education organizations, schools, and districts. They are well aligned with change process literature and other research on the characteristics of effective programs. The principles served as the foundation of the National Awards Program for Model Professional Development, which the U.S. Department of Education established in 1996 to promote discussion and understanding of high-quality professional development. In order to receive the award, schools and districts had to demonstrate that they addressed these principles. The District Professional Development Program Audit and other resources discussed in this chapter are based on these principles. The principles are listed in Exhibit 3.1.

The other tool described in this chapter is designed to focus on one of the key findings of a study of eight of the school-level winners of the National Award for Model Professional Development. In that study, researchers found that a culture of learning was key to the schools' success in improving student achievement. The book *Teachers Who Learn, Kids Who Achieve* (WestEd, 2000), which is based on the study, explains the central importance of a professional learning community and provides a description of how the eight schools included in the study developed their professional learning communities. Six lessons about what these schools do to help teachers learn emerged from the study:

- Use clear, agreed-upon student achievement goals to focus and shape teacher learning
- Provide an expanded array of professional development opportunities
- Embed ongoing, informal learning into the school culture

- Build highly-collaborative school environment where working together to solve problems and to learn from each other become cultural norms
- Find and use the time to allow teacher learning to happen
- Keep checking a broad range of student performance data

Exhibit 3.1. Principles of Professional Development Used in the National Awards Program for Model Professional Development

Principle 1	<ul style="list-style-type: none"> • Focuses on teachers as central to student learning, yet includes all other members of the school community.
Principle 2	<ul style="list-style-type: none"> • Focuses on individual, collegial, and organizational improvement.
Principle 3	<ul style="list-style-type: none"> • Respects and nurtures the intellectual and leadership capacity of teachers, principals, and others in the school community.
Principle 4	<ul style="list-style-type: none"> • Reflects best available research and practice in teaching, learning, and leadership.
Principle 5	<ul style="list-style-type: none"> • Enables teachers to develop further expertise in subject content, teaching strategies, use of technologies and other essential elements in teaching to high standards.
Principle 6	Promotes continuous inquiry and improvement embedded in the daily life of schools.
Principle 7	<ul style="list-style-type: none"> • Is planned collaboratively by those who will participate in and facilitate that development.
Principle 8	<ul style="list-style-type: none"> • Requires substantial time and other resources.
Principle 9	<ul style="list-style-type: none"> • Is driven by a coherent long-term plan.
Principle 10	<ul style="list-style-type: none"> • Is evaluated ultimately on the basis of its impact on teacher effectiveness and student learning, and this assessment guides subsequent professional development efforts.

Note: From *Mission and Principles of Professional Development*, by the U. S. Department of Education Professional Development Team, 1995. Washington, DC: U.S. Department of Education.

Others (Newman & Wehlage, 1995; Lee & Smith, 1996; Louis & Marks, 1998) who have studied professional learning communities also have found positive effects on student achievement and teacher practice. Although these authors use slightly different characteristics to describe a professional learning community, they all agree that a professional learning community provides an environment in which teachers can work collectively and collaboratively to examine instructional practice, improve their effectiveness, and increase student achievement.

As noted previously, a professional learning community provides the structures and processes that make it possible for teachers to improve their practice. But becoming a professional learning community is not easy. It takes commitment and time to break the pattern of teacher isolation that is common in schools and to develop new ways of working together.

The Professional Development Program Audit

The Professional Development Program Audit is a tool for assessing the extent to which a district or school's professional development program addresses the principles of professional development that guided the National Awards Program for Model Professional Development. This tool was derived from materials that were used to judge the extent to which professional development programs reflected the principles for professional development that underlie the National Awards Program for Model Professional Development. Districts and schools that received the award provided evidence that they addressed most, if not all, of the items in the audit.

Districts and schools can use this tool to “take stock” of their current professional development program and to identify areas where the professional development program can be strengthened. Completing the audit also can help district and school staff — and the larger community — understand what effective professional development is and what it might take to design, implement, and evaluate effective professional development. Additional information about the audit, its uses, and scoring is provided with the Professional Development Program Audit tool in Appendix D.

The Professional Learning Community Checklist

A strong professional learning community supports teacher and student learning. That's why the focus in this section is on assessing the extent to which a school exhibits the characteristics of a professional learning community. The Professional Learning Community Checklist was developed from information gathered for a study of high-performing, high-needs schools and from McREL's work with school leadership teams that are working to establish professional learning communities. This tool can be used by schools to develop understanding of the elements of a professional learning community and to gauge the extent to which they exhibit the characteristics of a professional learning community. The checklist itself, along with additional related information about its uses and development, are provided in Appendix E.

Other Resources on Professional Development Programs

Over a period of four years, the National Awards Program for Model Professional Development identified 12 district-level winners and 15 school-level winners. Several resources were developed based on information gathered about these programs. Three of those resources, *Principles in Action* (McREL, 2000), *Learning from the Best* (Hassel, 1999), and *Improving Districts: Systems that Support Learning* (WestEd, 2002), are described in this section. This section also describes several resources developed by McREL to address teaching in a standards-based system and sustaining improvement efforts. Schools and districts can use these resources to design effective professional development programs.

Principles in Action Video. (McREL, 2000) is an engaging documentary-style video that explores the real-life experiences of four winners of the U.S. Department of Education's National Award for Model Professional Development. The *Principles in Action* video is based on interviews with staff developers, teachers, and administrators in two districts (Lawrence, Kansas and Olathe, Kansas) and two schools (Montview Elementary School in Aurora, Colorado and

Woodrow Wilson Elementary School in Manhattan, Kansas). The district stories show how to encourage and support an environment for teacher and administrator learning. The school stories demonstrate the power of a school team working together with a common focus and how effective professional development looks in the day-to-day life of schools.

Each story demonstrates how the winners exemplify the principles of high-quality professional development identified by the U.S. Department of Education as part of the National Awards Program for Model Professional Development. Districts interested in understanding how to address Principles 5, 7, and 9 (see Exhibit 3.1 for a statement of the principles) will find the Olathe story most relevant. The Lawrence Public Schools story emphasizes Principles 6, 8, and 10. Similarly, school leaders interested in understanding how to address Principles 1, 3, and 4 may want to pay particular attention to the Montview story; the Woodrow Wilson story features Principle 2.

This resource can be used in a variety of ways and by a variety of school- and district-level staff — principals, staff developers, and district administrators — as well as policymakers and higher education faculty. Districts and schools can use this resource to

1. enhance understanding of the components of effective professional development for school and district staff;
2. provide the “big picture” view of how districts and schools can design professional development that is comprehensive and coherent;
3. illustrate how districts, teacher unions, community members, and higher education partners can work together to support teacher and administrator professional development;
4. demonstrate how to align professional development with other elements of the system such as district goals, school improvement planning, and state requirements;
5. emphasize the district’s role in providing professional development that has an impact on schools, teachers, and administrators;
6. show how districts and schools can support school-based professional development (study groups, teacher leaders, peer coaching, action research);
7. understand the role principals can play in professional development;
8. explain the role of data and collaborative decision making to design professional development;
9. demonstrate how to structure formal and informal professional development opportunities; and
10. encourage schools and districts to re-think their professional development programs.

Learning from the Best. Effective professional development doesn't happen by chance. It requires careful planning, designated resources, and a commitment to learning on everyone's part. Too often, however, schools and districts find it difficult to develop a comprehensive professional development plan that supports teacher and administrator learning. *Learning from the Best* (Hassel, 1999), a book that is based on the practices of winners of the National Awards Program for Model Professional Development, can help districts and schools develop such plans and improve their professional development. The information in *Learning from the Best* is organized into four sections:

- *Designing Professional Development* – This section addresses how to (1) include professional development participants and organizers in planning, (2) develop an effective plan and (3) share the professional development plan with the school community. The section includes guidance on ensuring that the plan is tied to the school/district long-term plan, based on needs assessment, research based, includes professional development goals, addresses content and process, identifies resources to support the professional development, and includes evaluation steps.
- *Implementing Professional Development* – This section addresses ways to (1) stay abreast of best practices in teaching, learning, and leadership as the plan is implemented, (2) align school and district policies and practices to support implementation of the plan, (3) identify processes for ensuring successful implementation of the plan, and (4) identify opportunities to make professional development a part of everyday school life.
- *Evaluating and Improving Professional Development* – This section addresses ways to (1) ensure the implementation of the evaluation plan and (2) periodically review the evaluation plan.
- *Sharing Professional Development Learning* – This section addresses ways to (1) keep records of decisions made about the professional development program and (2) keep implementation materials organized and available to others.

The book also includes a review of the literature on professional development keyed to each of these sections.

Improving Districts: Systems that Support Learning. Further guidance on how to design effective professional development is available in a publication that was developed by WestEd in collaboration with McREL and NCREL. The document, *Improving Districts: Systems that Support Learning* (WestEd, 2002), is based on a study of nine of the districts that received the National Award for Model Professional Development. This book shows how staff and administrator learning is at the core of improvement in these districts. It also highlights how these districts coordinate professional development and four other elements — vision, roles and structures, communication, and data-driven decision making — to support student learning. Exhibit 3.2 presents some implications for action in the area of professional development suggested by this resource.

Exhibit 3.2. Implications for Action Related to High-Quality Professional Development

- Study research and best practices on professional development and the change process.
- Establish standards for high-quality professional development.
- Require that district and school professional development programs follow these standards.
- Involve the school community in developing the standards; ensure that all stakeholders understand these standards.
- Provide a variety of learning methods and options to meet teachers' and administrators' different levels of knowledge and skills

Note: Adapted from *Improving Districts: Systems that Support Learning* (p. 55), by WestEd, 2002. San Francisco: Author.

Standards-based Practices. As noted on several of the lists of effective professional development analyzed by Guskey (2003), and, in particular, on the list of professional development activities from NCLB discussed previously in this chapter, professional development should help teachers learn how to teach in a standards-based system. Exhibit 3.3 lists a number of the areas that teachers must address to teach effectively in a standards-based system. These areas were included in one section of the Teacher Preparation for Standards-Based Education Survey discussed in Chapter 2. Districts and schools can consult this list and use it as the basis of a needs assessment to identify appropriate professional development opportunities to help their teachers acquire the knowledge and skills they need to teach in a standards-based system.

Exhibit 3.3. Areas that Instruction Should Address in a Standards-based System

Teaching low-achieving students
Teaching limited English proficient students
Teaching students from different cultural/ethnic backgrounds
Engaging students in designing their own learning environment
Encouraging collaboration among students
Challenging students to accept and share responsibility for their own learning
Guiding students in self-assessment
Guiding students in developing conceptual understanding, and thinking and reasoning skills
Engaging all students in learning

Similarly, Exhibit 3.4 presents a list of standards-based practices that teachers need to develop to help all students meet high standards. Again, districts and schools can consult this list when designing professional development experiences or when gathering data about teachers' professional development needs.

Exhibit 3.4. Standards-based Teaching Practices

How to organize instruction around the goals of a lesson
How to plan instruction based on differences in students' prior knowledge
How to plan instruction based on students' individual differences in learning (e.g., due to culture, ability, learning styles)
How to assess a student's level of progress toward the goals of a lesson using a variety of methods
How to adapt my instruction during the lesson based on a student's level of progress toward the goals of a lesson
How to work collaboratively with other teachers in lesson planning
How to work collaboratively with other teachers in analyzing student test scores
How to identify what a student must know and be able to do in order to meet a standard
How to choose curriculum and instructional materials based on their alignment with standards
How to assess students for proficiency on standards
How to organize grading around standards
How to verify my judgments about student proficiency with other teachers

Leadership Folio Series: Sustaining School Improvement. This set of materials produced by McREL (2003) emphasizes what schools need to do to sustain their improvement efforts. The *Leadership Folio Series* includes five folios that address different topics: professional learning community, professional development, data-driven decisions, resource allocation, and communication. Each folio describes key elements of the topic, guidance for addressing the topic, and a continuum that schools can use to gauge their progress in becoming an organization that can sustain effective programs and meet new challenges. The continuum for professional development is included in Exhibit 3.5.

Teachers Who Learn, Kids Who Achieve. This book, published by WestEd (2000), is based on a study of the school-level winners of the National Awards Program for Model Professional Development. The book includes profiles of the winning schools, implications for site and district leaders, an analysis of why a range of professional development activities work, and an explanation of the importance of professional community. Schools will find the book's list of informal learning opportunities especially useful for helping teachers and administrators expand their understanding of what "counts" as professional development. Some examples are serving on committees, sharing from conferences, designing curriculum, creating teacher portfolios, planning with a grade-level team, and supervising a student teacher.

Exhibit 3.5. Continuum of Effectiveness of Professional Development Programs

Least Effective	Somewhat Effective	Most Effective
Relevant		
<p>Professional development is based on informal needs assessments and activities are “one-size-fits-all.” Evaluation of the program is limited and focused on the quality of the activity rather than improved teacher practice. Changes to the professional development program are not related to the needs of the school.</p>	<p>Professional development is tied to the needs of the school. There are some options for professional development that take into account different levels of teacher expertise. Several sources of data are reviewed annually to determine if the program is improving teacher practice in ways that address the needs of the school. Changes to the professional development program are made if necessary.</p>	<p>Professional development is based on the needs and goals of the school. There are many options for professional development that take into account varied levels of teacher expertise. A variety of data are reviewed throughout the year to ensure that the program is improving teacher practice and student learning in ways that address the needs of the school. Changes to the program are made as needed.</p>
Long Term & Integrated Into Daily Practice		
<p>Professional development activities are disjointed and generally of insufficient duration for teachers to develop new skills. Some time is available for teachers to participate in professional development activities and encouragement is provided. Participation is not an explicit expectation. Funding is sought only on an as-needed basis.</p>	<p>Professional development activities are connected and some are integrated into daily practice. The activities are of sufficient duration for teachers to develop knowledge and skills. Supports in place include a professional development committee, designated time for teams of teachers to participate in school-level professional development, and an expectation to participate. Funds have been earmarked for professional development.</p>	<p>Professional development is long-term, ongoing, and integrated into daily practice. The activities are of sufficient duration for teachers to integrate what they have learned into their classrooms. A professional development committee is in place, and funding has been designated for professional development. Participation is a clear expectation for all teachers, and there is a culture of support for risk taking that encourages teachers to extend their learning.</p>
Provides Feedback		
<p>Teachers may receive informal feedback on what is learned in professional development experiences through chance conversations with colleagues, but no formal feedback on improvements in their practice is provided.</p>	<p>Teachers receive some feedback on their use of what is learned in professional development experiences through the teacher evaluation program or a district- or school-level coach.</p>	<p>Teachers receive frequent feedback on their use of what they have learned in professional development experiences through a variety of collaborative activities (e.g., peer coaching, team-level meetings, mentors, instructional support teachers, observations, self-reflection).</p>

Note: From *Leadership Folio Series: Sustaining School Improvement*, by Mid-continent Research for Education and Learning, 2003. Aurora, CO: Author.

CONCLUSION

This chapter describes district- and school-level model professional development programs. It also includes tools and resources that can help districts and schools design similar programs. The model programs described in this chapter are the winners of the National Awards Program for Model Professional Development recognized by the U.S. Department of Education during the period 1996–2000. These programs were recognized because they demonstrated that they effectively address the principles of professional development developed by the U.S. Department of Education. Professional development designed with these principles in mind will be consistent with that advocated in the No Child Left Behind Act.

The winners of the National Award for Model Professional Development differ in many ways, but they are alike in their commitment to learning for their students and their staff. By using the assessments and resources described in this chapter that draw from these programs, districts and schools can improve professional development in ways that meet the calls for increased teacher quality and improved student learning.

CHAPTER FOUR: CONCLUSIONS

This Teacher Quality Toolkit describes model programs for preservice and inservice teacher education. Tools are provided for higher education institutions and for schools and districts to assess the degree to which they have characteristics similar to those of model programs. Resources are cited that can help higher education institutions, schools, and districts design better preservice and inservice teacher learning experiences. Together, Chapters 2 and 3 address the continuum of teacher learning (Feiman-Nemser, 2001) by providing assessment tools and resources that can be used to improve preservice and inservice teacher education respectively. To conclude the toolkit, this chapter provides suggestions for integrating efforts to improve teacher preparation and professional development.

COLLABORATIVE CHANGE

Although Chapters 2 and 3 address the separate roles of higher education institutions and districts in transforming teacher preparation and training, there is evidence that real change requires the joint participation of stakeholders. Randi and Zeichner (2004) described several types of collaborations between higher education and PreK–12 schools that can improve teacher learning opportunities. Professional development schools establish a learning community among teacher educators, preservice students, and inservice teachers (Holmes Group, 1986). Preservice students complete their field experiences under the tutelage of experienced teachers who, in turn, have opportunities to inquire into practice with teacher educators. Research partnerships represent another type of university-school collaboration that results in teacher learning. For example, teachers might work with higher education researchers to analyze the influence of instruction on children’s thinking. Collaboration between universities and schools also can occur around specific subject areas, such as discussion groups to deepen teacher knowledge of social studies. Finally, partnerships between individual teachers and universities provide opportunities for learning. For example, inservice teachers might teach a course for preservice teachers or collaborate with a teacher educator to develop new curricula.

One of the shared characteristics of the four winners of the National Awards Program for Effective Teacher Preparation (U. S. Department of Education, 2000) was collaboration with PreK–12 schools (Dean & Lauer, 2003). Specifically, PreK–12 stakeholders influence program evaluation at the four institutions by providing feedback about program components (e.g., content of courses and field experiences, training for cooperating teachers) and program graduates (e.g., candidates’ content knowledge, ability to manage a classroom, ability to teach diverse students). Feedback is gathered in formal and informal ways through the institutions’ partnerships with PreK–12 schools and districts. Formal ways include regular meetings of the teacher preparation programs with partner schools and focus groups in which principals provide feedback to the programs regarding the performance of teacher candidates and graduates. In addition to formal partnerships, the four programs have strong relationships with principals and cooperating teachers in schools where their candidates are placed for field experiences. PreK–12 practitioners participate on advisory and curriculum committees and some work directly with faculty to develop courses that incorporate PreK–12 standards.

USING ASSESSMENTS FOR COLLABORATIVE CHANGE

A strategy that university-school collaborations can use to improve learning opportunities for both preservice and inservice teachers is the joint use of assessment tools. An example of such a tool is the Teacher Preparation for Standards-Based Education (TPSBE) Survey discussed in Chapter 2 and included in Appendix A. Teacher preparation programs and districts can use the survey to identify the preparation needs of beginning teachers in the local schools in which the programs' recent graduates are teaching. Survey data can provide feedback to teacher education programs about program areas that need improvement. Schools and districts can use the survey to identify areas in which teacher educators and the district should provide professional development to beginning teachers related to standards-based instruction. (See Appendix A for guidelines on survey use.)

IMPROVING TEACHER QUALITY

Educators, policymakers, and researchers agree that teacher quality is critical to student learning. The No Child Left Behind Act of 2001 makes teacher quality a key component in states' efforts to help all students achieve at high levels. Although there is a lack of agreement on how to measure teacher quality, there is general agreement that high-quality teachers have knowledge, skills, and characteristics that promote student learning. This Teacher Quality Toolkit provides higher education institutions, districts, and schools with some tools and resources for improving teacher quality and ultimately student achievement.

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**APPENDIX A
TEACHER PREPARATION
FOR STANDARDS-BASED EDUCATION SURVEY**

BACKGROUND

Lauer, Martin-Glenn, and Dean (2002) researched the components and processes of effective teacher preparation for standards-based education. Their study examined four teacher education programs that received national recognition for effective teacher preparation, based in part on evidence that the programs' graduates have positive impacts on the learning of students. The study identified how the four programs prepare graduates to deliver instruction that is based on K–12 standards. As part of the study, Lauer et al. (2002) surveyed a convenience sample of 34 recent teacher education graduates from three of the four programs. The extent of graduates' learning about standards-based instruction from teacher preparation was positively correlated with graduates' perceptions of their initial preparedness and current confidence to implement standards. The graduate survey developed for the study is reported here as the Teacher Preparation for Standards-based Education (TPSBE) Survey

DEVELOPMENT

For purposes of the TPSBE Survey, *standards-based education* was defined as education based on goals for K–12 student learning that incorporate a) broad descriptions of knowledge and skills that students should acquire for a given content area, and b) specific descriptions of student performance that indicate mastery of a given content area (McLaughlin & Shepard, 1995).

The components of standards-based teaching were based on a report by Tell, Bodone, and Addie (1999). They described the work of co-development teams of teachers and higher education faculty in Oregon in developing standards-based instruction and assessment in six subject areas. The teams concluded that teaching to standards requires the following:

- Identification of what the standard requires
- Planning for instruction based on students' prior knowledge and individual differences
- Assessment and determination of student proficiency
- Verification of judgments about standards and student proficiency with colleagues
- Reflection on student evidence to make improvements in instruction

Survey items were constructed to address teacher education graduates' preparation in the knowledge needed for standards-based teaching (Tell et al., 1999; Ball & Cohen, 1999), their current confidence in implementing standards and to inquire about other variables that might relate to this knowledge, such as years of experience. Thus, the TPSBE Survey asks teacher education graduates about the following:

- Background and experience
- Preparation in content knowledge
- Preparation in pedagogy
- Incorporation of K–12 standards in teacher preparation coursework
- Incorporation of K–12 standards in teacher preparation field or clinical experiences
- Preparation in the knowledge of how to implement the components of standards-based instruction

- Perceptions of preparedness to implement standards in the first year of teaching
- Use of standards in current instruction
- Sources of learning about implementing standards-based instruction
- Feelings of current confidence in implementing standards

The TPSBE Survey was pilot tested with 19 K–12 teachers who completed the survey, provided feedback about the clarity of the questions, and suggested additional survey items. The graduate survey was modified to reflect the pilot test results and then administered to 34 recent teacher education graduates for Lauer et al.’s (2002) study of effective teacher preparation for standards-based education. Following that study, the survey underwent additional review. Survey items were examined for alignment with national standards documents that describe standards-based teaching (e.g., National Council of Teachers of Mathematics, 1991) and with expert opinions related to standards-based instruction (e.g., Wang & Odell, 2002). These opinions included comments from McREL researchers with experience in survey design and from McREL practitioners with experience in standards-based instruction.

USES

The TPSBE Survey was designed to obtain the perceptions of recent graduates (one to three years since graduation) about their preparation for standards-based teaching. Its initial use was for describing the perceptions of graduates from three nationally recognized teacher preparation programs. Lauer et al. (2002) triangulated survey results with findings from interviews of persons involved in preparing teacher candidates in each program and with information from program documents. The overall findings were used to provide guidance for designing effective teacher preparation for standards-based education.

Although originally designed for research purposes, there are three possible uses of the TPSBE Survey to improve teacher education and teaching practices.

1. Teacher preparation programs can use the survey to evaluate their graduates’ perceptions of preparedness to teach in standards-based classrooms. The results can help identify areas for program improvement.
2. Schools and districts can use the survey to identify the professional development needs of beginning teachers related to standards-based instruction. A related use is as a needs assessment for teacher mentoring.
 - Teacher preparation programs and districts can use the survey to identify the preparation needs of beginning teachers in the local schools in which the programs’ recent graduates are teaching.

The TPSBE Survey should not be used to screen applicants or to evaluate teachers or teacher candidates. In addition, survey users are urged to use the following implementation guidelines:

- Protect respondents’ identities. Do not ask respondents to provide their names or other identifying information on the survey.

- Inform the respondents about the purpose of the survey, how the results will be summarized and used, and who will see the results. Then obtain respondents' consents to participate in the survey.
- Protect confidentiality of results. Do not report results in ways that might identify individuals. Do not report separately the results for groups with fewer than 10 individuals. Depending on how the survey is being used, distribution of any survey results might be inappropriate.

SCORING AND INTERPRETATION

Results from the TPSBE Survey provide information on graduates' perceptions related to the components of standards-based education indicated in Exhibit A.1.

Exhibit A.1. Teacher Preparation for Standards-Based Education Survey Questions and Components

TPSBE Survey Question	Components of Standards-Based Education
6	Preservice preparation in content courses
7	Preservice sources of learning about standards
9	Preservice preparation in pedagogical topics
10	Preservice preparation in instructional strategies
11A	Extent of preservice learning about how to implement standards ($\alpha = .89$)*
11B	Extent of preparation to implement standards in the first year of teaching ($\alpha = .88$)*
15	Preservice and inservice sources of learning about standards
17	Extent of current confidence to implement standards ($\alpha = .82$)*

* Chronbach's alpha; indicates the internal consistency of these survey items in Lauer, Martin-Glenn, and Dean, (2002)

To score the survey:

3. Calculate the mean of the responses to each survey item.
4. Calculate the mean of the responses for the survey items under questions 11A, 11B, and 17. These questions are constructs that measure graduates' perceived learning, preparation, and current confidence to implement standards-based instruction. (Do not calculate the means of the responses for the items under other questions because only questions 11A, 11B, and 17 were designed to measure constructs.)
5. Calculate mean responses to the survey items based on different groups (e.g., alternative preparation route), program characteristics (e.g., type of field experience) or characteristics of respondents' current teaching position (e.g., degree to which curriculum is aligned with standards). However, do not *report* separately the results for groups with fewer than 10 individuals.

Questions on the TPSBE Survey address the knowledge and skills needed to teach in standards-based classrooms. The degree of graduates' perceived preparation in this knowledge and skills is an indication of the adequacy of the teacher preparation program from which they graduated. Teacher preparation programs can use these data to identify areas for program improvement.

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TEACHER PREPARATION FOR STANDARDS-BASED EDUCATION SURVEY

Part I: Background and Experience

This information will be used only for aggregated or group analyses.

1. Please indicate which of the following degree(s) you hold.

Please note graduation year, major(s), and institution name and state for each box checked.

Post-Secondary Degree	Check all that apply	Year Graduated	Major (s)	Institution Name & State
a. Bachelor's Degree	#	_____	_____	_____
b. 2 nd Bachelor's Degree	#	_____	_____	_____
c. Master's Degree	#	_____	_____	_____
d. Educational Specialist	#	_____	_____	_____
e. Doctorate (e.g., Ph.D., Ed.D.)	#	_____	_____	_____
f. Other (please explain)	#	_____	_____	_____

2. List all your current teaching certifications, licenses/endorsements, and the dates obtained:

3. Did you receive certification through an alternative teacher preparation program?

YES _____ **NO** _____

If yes, please answer the following questions.

a. What was the highest degree you held at the time of entering the alternative program?

None _____

Bachelors _____

Masters _____

Doctorate _____

b. How many courses in teacher preparation course work did you complete before you began teaching or student teaching? _____

c. Did you student teach prior to becoming the teacher of record?

YES ____ NO ____

4. Counting this year, how many years have you been teaching:

a. In total? _____

b. In your current school? _____

5. What grade level(s) do you currently teach? _____

a. Is this a grade in which there is an annual state assessment? YES ____ NO ____

If yes, which subjects are assessed? _____

b. What subject(s) do you currently teach (if applicable)? _____

c. ____ I am not currently teaching. Please explain: _____

For the following questions, *standards-based education* refers to education based on goals for PK–12 student learning that incorporate a) broad descriptions of knowledge and skills that students should acquire for a given content area, and b) specific descriptions of student performance that indicate mastery of a given content area. *Standards* refer to state or district or national standards.

Part II: Preservice

Preservice refers to the formal training period before becoming a practicing, paid teacher.

6. Please indicate for each subject area the approximate number of courses you completed before obtaining your *initial* teacher certification (include methods courses in your answers):

	None	1–2	3–5	More than 5
a. Language Arts	#	#	#	#
b. Mathematics	#	#	#	#
c. Social Studies	#	#	#	#
d. Science	#	#	#	#
e. Music	#	#	#	#
f. Art	#	#	#	#
g. Physical Education	#	#	#	#
h. Special Education	#	#	#	#

i. Interdisciplinary subject courses
(e.g., language arts/social studies)
List subjects here and indicate number of courses in the boxes to the right.

	<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>More than 5</u>
_____	#	#	#	#
_____	#	#	#	#
_____	#	#	#	#
_____	#	#	#	#

7. In considering your *initial teacher preparation* learning experiences, please indicate the extent to which you learned about PK–12 standards (state/district/national) for students:

In my preservice teacher education, PK–12 standards were taught in:	Not At All	Small Extent	Moderate Extent	Great Extent	Not Applicable
a. Educational foundations courses.	#	#	#	#	#
b. General methods classes.	#	#	#	#	#
c. Subject area methods classes (e.g., Teaching Mathematics).	#	#	#	#	#
d. General subject area content classes (e.g., Concepts in Mathematics).	#	#	#	#	#
e. Practicum or clinical field experience before student teaching.	#	#	#	#	#
f. Student teaching.	#	#	#	#	#

8. To what extent did you complete your preservice education with the same group or cohort of persons? # # # # #

9. In considering your *initial teacher preparation* courses in the following topics, please indicate the extent to which they were addressed in any of your initial teacher preparation coursework? *Note—If you took one or more courses specifically in this topic, mark “Great Extent”.*

My preservice teacher education covered:	Not At All	Small Extent	Moderate Extent	Great Extent
a. Classroom management including discipline or behavior management.	#	#	#	#
b. Educational psychology.	#	#	#	#
c. Learning theories.	#	#	#	#
d. Human development.	#	#	#	#
e. Multi-cultural education.	#	#	#	#

My preservice teacher education covered:	Not At All	Small Extent	Moderate Extent	Great Extent
f. Inclusion strategies for special education students.	#	#	#	#
g. Student work samples.	#	#	#	#
h. Classroom assessment.	#	#	#	#
i. Instructional strategies.	#	#	#	#
j. Bilingual education.	#	#	#	#
k. Rubrics for scoring student work.	#	#	#	#
l. Differentiating instruction according to student learning needs.	#	#	#	#
m.				
n. Test preparation strategies.	#	#	#	#
o. Integrated or thematic units.	#	#	#	#
p. Interpreting standardized tests.	#	#	#	#

10. Please indicate the extent to which your preservice teacher education covered instructional strategies for:

	Not At All	Small Extent	Moderate Extent	Great Extent
Teaching low-achieving students.	#	#	#	#
Teaching limited English proficient students.	#	#	#	#
Teaching students from different cultural/ethnic backgrounds.	#	#	#	#
Engaging students in designing their own learning environment.	#	#	#	#
Encouraging collaboration among students.	#	#	#	#
Challenging students to accept and share responsibility for their own learning.	#	#	#	#
Guiding students in self-assessment.	#	#	#	#
Guiding students in developing conceptual understanding, thinking and reasoning skills.	#	#	#	#
Engaging all students in learning.	#	#	#	#

Part III: Making the Transition from Preservice to Inservice

Preservice refers to the formal training period before becoming a practicing, paid teacher.

Inservice refers to the period of time during which you are a practicing, paid teacher.

11. Each of the following items has two parts. In Part A, please indicate the extent to which you learned about standards-based education during preservice. In Part B, please indicate how prepared you were during your first year of teaching.

	A. In preservice, I learned how to...				B. In my first year of teaching, I was prepared to...			
	Not At All	Small Extent	Moderate Extent	Great Extent	Not At All	Small Extent	Moderate Extent	Great Extent
a. Organize instruction around the goals of a lesson.	#	#	#	#	#	#	#	#
b. Plan instruction based on differences in students' <i>prior</i> knowledge.	#	#	#	#	#	#	#	#
c. Plan instruction based on students' <i>individual differences</i> in learning (e.g., due to culture, ability, learning styles, etc.).	#	#	#	#	#	#	#	#
d. Assess a student's level of progress toward the goals of a lesson using a variety of methods.	#	#	#	#	#	#	#	#
e. <i>Adapt my instruction</i> during the lesson based on a student's level of progress toward the goals of a lesson.	#	#	#	#	#	#	#	#
f. Work collaboratively with other teachers in lesson planning.	#	#	#	#	#	#	#	#
g. Work collaboratively with other teachers in analyzing student test scores.	#	#	#	#	#	#	#	#
h. Identify what a student must know and be able to do in order to meet a standard.	#	#	#	#	#	#	#	#
i. Choose curriculum and instructional materials based on their alignment with standards.	#	#	#	#	#	#	#	#
j. Assess students for proficiency on standards.	#	#	#	#	#	#	#	#
k. Organize grading around standards.	#	#	#	#	#	#	#	#
l. Verify my judgments about student proficiency with other teachers.	#	#	#	#	#	#	#	#

12. During your *first year of teaching*, was there anything you wish you would have known more about that would have helped you teach in a standards-based classroom?

Part IV. Current Teaching Position

13. To what extent is your current teaching context *similar* to the context of your student teaching (or internship)?

	Not At All	Small Extent	Moderate Extent	Great Extent	Not Applicable
My current teaching context is similar to the context of my student teaching (or internship).	#	#	#	#	#

14. To what extent do you believe the curriculum you currently teach reflects each of the following?

The curriculum that I currently teach reflects	Not At All	Small Extent	Moderate Extent	Great Extent	Not Applicable
a. Content standards.	#	#	#	#	#
b. Curriculum frameworks.	#	#	#	#	#
c. Student assessments.	#	#	#	#	#
d. Performance standards.	#	#	#	#	#

15. To what extent did you learn how to implement standards from the following sources?

	Not At All	Small Extent	Moderate Extent	Great Extent
e. Initial teacher preparation coursework.	#	#	#	#
f. Initial teacher preparation clinical experiences.	#	#	#	#
g. Teacher induction program (e.g., mentoring).	#	#	#	#
h. School staff development.	#	#	#	#
i. District staff development.	#	#	#	#
j. Conferences of professional associations.	#	#	#	#
k. Continuing education classes.	#	#	#	#
l. Collaboration with other teachers at my school.	#	#	#	#
m. Trial and error.	#	#	#	#
n. Other (please specify and rate): _____	#	#	#	#

16. From the list of sources in question 14, list which two were the *most* helpful for you to learn how to implement standards. Please explain why they were helpful.

a.

b.

17. To what extent do the following statements accurately describe your confidence level in implementing standards?

	Not At All	Small Extent	Moderate Extent	Great Extent
a. I feel confident that I have the necessary skills to successfully implement standards in the classroom.	#	#	#	#
b. I feel confident that I have the necessary skills to develop instructional activities to help students meet or exceed the standard(s) I am targeting.	#	#	#	#
c. I feel confident that I have the necessary academic knowledge of the subject matter to help students meet or exceed the standard(s) I am targeting.	#	#	#	#
d. I feel confident that I have the necessary skills to develop assessment activities to judge whether students meet or exceed the standard(s) I am targeting.	#	#	#	#

Thank you for your time.

APPENDIX B
TEACHER PREPARATION EVALUATION SYSTEM AUDIT

DEVELOPMENT

In 2000, the U.S. Department of Education developed the National Awards Program for Effective Teacher Preparation as a means of promoting excellence in teaching and teacher preparation. The awards program was designed to identify teacher preparation programs that could provide evidence of their effectiveness. Subsequently, the U.S. Department of Education contracted with five of the regional educational laboratories to conduct a study of the recipients of the award. The findings of this study are documented in two reports — one on the case studies of the four award-winning teacher preparation programs (Lauer & Dean, 2003) and one on the cross-case analysis (Dean & Lauer, 2003).

The following overall research question focused the study: *What are the structures and processes of systematic evaluation that supports effective teacher preparation?* In addition to the overall research question, there were six guiding questions that were designed to elicit details about the structures and processes of the evaluation system at each institution studied. The findings for the six questions were used to design the Teacher Preparation Evaluation System (TPES) Audit.

USES

The TPES Audit is based on the characteristics of the evaluation systems used by the four winners of the 2000 awards program. The impetus for studying the evaluation systems of the four award-winning institutions was their ability to document their effectiveness for the awards program application. However, evaluation of teacher preparation can serve many purposes such as generating data and providing information for accountability reporting, accreditation reviews, program improvement, and marketing to potential pre-service students.

Teacher preparation programs can use the TPES Audit to compare the characteristics of their evaluation systems with those of model programs that have developed systematic evaluation for effective teacher preparation. Some uses of the TPES Audit include the following:

1. Administrators of teacher preparation programs can complete and use the audit to judge whether they have established the necessary structures and processes to systematically evaluate program outcomes.
2. Teacher education faculty and administrators can complete the audit and use the overall results for discussions about changes needed to conduct systematic evaluation.
3. Audit results can be shared with institutional leaders as a way to justify the establishment of new structure and processes (and associated expenses) for systematic evaluation.

The TPES Audit is self-report instrument for higher education and teacher preparation administrators and teacher preparation faculty. The following guidelines should be implemented:

- Protect respondents' identities. Do not ask respondents to provide their names or other identifying information on the survey.

- Inform the respondents about the purpose of the audit, how the results will be summarized and used, and who will see the results. Then obtain respondents' consents to participate in the audit.
- Protect confidentiality of results. Do not report results in ways that might identify individuals. Do not report separately the results for groups with fewer than 10 individuals. Depending on how the audit is being used, distribution of TPES Audit results might be inappropriate.

SCORING AND INTERPRETATION

To score the TPES Audit, count the number of checkmarks for each of the six questions. The number of checkmarks indicates the degree to which respondents perceive that the evaluation system used by the teacher preparation program has characteristics aligned with model programs. The characteristics without checkmarks indicate possible changes needed for better evaluation. The percentage of respondents who check or do not check a particular characteristic indicates the amount of agreement about program evaluation. The latter is a source for identifying gaps in knowledge about what the teacher preparation program does to evaluate its effectiveness.

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McREL TEACHER PREPARATION EVALUATION SYSTEM AUDIT

Rate the teacher preparation program on each of the following criteria related to evaluation. Check the criteria that are presently an aspect of the program.

1. How are individuals, groups, and the components of the teacher preparation program evaluated?

In the following question, candidate refers to the preservice student who is enrolled in the teacher education program. The field supervisor is the person who the university employs to supervise field placements of candidates. The cooperating teacher is the teacher of the classroom where candidates do their student teaching.

- Performance assessments of *candidates* (e.g., portfolios)
- Standardized tests of *candidates*
- Grade point averages of *candidates*
- Samples of work from *candidates' P-12 students*
- Surveys of program *graduates*
- Surveys of *principals* of schools in which graduates are employed
- Achievement data for *graduates' P-12 students*
- Feedback from *candidates* on university supervisors
- Feedback from *candidates* on faculty members
- Feedback from *candidates* about the quality of teacher preparation curriculum and field experiences
- Feedback from program *graduates* about the quality of teacher preparation curriculum and field experiences
- Feedback from *cooperating teachers* the about quality of teacher preparation curriculum and field experiences
- Feedback from *field supervisors* about the quality of teacher preparation curriculum and field experiences
- Focus groups of current and potential school *employers* about the quality of the teacher preparation program

2. How does the teacher preparation program align evaluation with program standards and goals?

- Program goals are aligned with national teaching standards (e.g., Interstate New Teacher Assessment and Support Consortium).
- Program goals are aligned with state teaching standards.
- Program goals are aligned with national content standards (e.g., National Council of Teachers of Mathematics).
- Program goals provide the framework for evaluation activities.
- Evaluation data are examined with respect to program goals.

3. How does the teacher preparation program develop and sustain systematic evaluation?

- Internal and external catalysts (e.g., events, people, policies) lead to program change.
- Faculty work together within and across university departments.
- The program employs a system change model that uses data to identify areas for improvement.
- The program has created data collection instruments and procedures.
- Institution leaders provide support for evaluation of teacher preparation.
- Stakeholders (e.g., principals) provide input to evaluation.

4. How do P–12 stakeholders influence evaluation of the teacher preparation program?

P–12 stakeholders:

- Provide formal and informal feedback about program components and program graduates
- Participate in research collaborations with university faculty
- Participate in teacher-in-residence programs (i.e., P–12 faculty teach in the university)
- Help with assessing teacher candidate portfolios
- Contribute to teacher preparation curriculum development

5. How do external influences affect evaluation of the teacher preparation program?

- State policies on teacher preparation are sources for program revision.
- State policies on teacher preparation are sources for program evaluation activities.
- The program is proactive in aligning teacher preparation with new state regulations.
- National policies on Title 2 reporting requirements are a source for evaluation activities.
- Accreditation organizations (e.g., NCATE) are a source for evaluation activities.
- The U. S. Department of Education's emphasis on the achievement of graduates' P-12 students is an impetus to collect that data.

6. What are the characteristics of the program culture that supports data collection and its use for evaluation of the teacher preparation?

- An attitude that data are essential and it is safe to examine the results of one's work
- Training in using data for evaluation
- Time to discuss and analyze data
- Incentives that encourage involvement and build commitment to evaluation (e.g., consideration for promotion and tenure)
- Collaboration within and across departments (e.g., education and liberal arts and sciences)

APPENDIX C

**RUBRIC AND EXAMPLES
FOR EVALUATING THE EVIDENCE OF EFFECTIVENESS
OF TEACHER PREPARATION PROGRAMS**

DEVELOPMENT

In 2000, the U.S. Department of Education developed the National Awards Program for Effective Teacher Preparation as a means of promoting excellence in teaching and teacher preparation. The awards program was designed to identify teacher preparation programs that could provide evidence of their effectiveness. Program applicants for the award were required to provide three types of evidence to demonstrate their effectiveness:

- Formative: Evidence that the program gathers and uses data to make adjustments to the various stages of the program (e.g., admissions, course development, field experiences, assessment of knowledge and skills)
- Summative: Evidence of the effectiveness of the overall program in helping graduates acquire the knowledge and skills needed to improve all students' learning (e.g., content knowledge, pedagogical knowledge and skills, and skills to examine beliefs about learners and teaching as a profession)
- Confirming: Evidence of the effectiveness of program graduates in K–12 settings

In addition, the evidence had to meet criteria of rigor, sufficiency, and consistency. Rigor was determined by the validity and reliability of the evidence. Sufficiency was determined by the adequacy and the extent of the data used for evidence. Consistency was based on the links between various aspects of the program and the three types of evidence.

USES

To help applicants judge the adequacy of their data, the awards program application provided a rubric for evaluating evidence of program effectiveness, which is reproduced in Exhibit C.1. Teacher preparation programs can use this rubric to help guide the design of data collection activities. To help applicants judge the credibility of their evidence across multiple sources, the application provided examples that reflect different levels of credibility, which are reproduced in Exhibit C.2. Teacher preparation programs can use these examples to identify the type of data that they should collect for evaluation.

REFERENCE

U.S. Department of Education. (2000). *The National Awards Program for Effective Teacher Preparation: Application*. Washington, DC: Author. Retrieved August 17, 2004, from <http://www.ed.gov/inits/teachers/teacherprep/teacherprep.pdf>

Exhibit C.1. Rubric for Evaluating the Evidence of Effectiveness of Teacher Preparation Programs

	RIGOR	SUFFICIENCY	CONSISTENCY
4	The evidence is highly credible. The data are valid and indicators are free of bias. Reliability is supported by multi-year data from several sources.	There are extensive data that support claims of effectiveness. The evidence includes data from multiple sources with multiple indicators.	Components of the program are consistent with the vision of the program. Program components are monitored to determine if they are being instituted as designed. Evidence supports an intended, logical link between program components and program success. The consistencies support the credibility of the evidence.
3	The evidence is credible. Validity has been addressed for most of the data. There may be some questions of bias. Reliability is supported by two or more years of data from at least one data source.	There are adequate data to support the claims of effectiveness. There are multiple sources of evidence and multiple indicators for at least one source.	There are minor inconsistencies between the vision of the program and program components. Some components of the program may not be monitored or there may be some inconsistencies between the evidence provided and the identified successful components of the program. The inconsistencies do not weaken the credibility of the evidence.
2	The evidence has limited credibility. The rigor is compromised by issues of bias or validity/reliability. There are no multi-year data from any source.	There are limited data to support the claims of effectiveness. The data are collected from only one or two sources. There are no multiple indicators for the data source(s).	There are several inconsistencies between the vision of the program and program components. There are significant inconsistencies between the evidence provided and the identified successful components of the program. The inconsistencies raise questions about the credibility of the evidence.
1	The evidence has little or no credibility. The rigor is significantly compromised by issues of bias, or there is not enough information to determine rigor. The data lack validity/reliability. There are no multi-year data.	There are not enough data to support claims of effectiveness. There is only a single source of data.	There are numerous inconsistencies between the vision of the program and its components. The evidence provided is not linked to the components of the program that have been identified as contributing to the program's success. The inconsistencies raise significant questions about the credibility of the evidence.

Source: U.S. Department of Education. (2000). *The National Awards Program for Effective Teacher Preparation: Application*. Washington, DC: Author.

Exhibit C.2. Examples of Credibility of Evidence of Effectiveness across Teacher Preparation Data Sources

	Data Source				
	Teacher Preparation Faculty	Preservice Teachers' Work	Preservice Students & Program Graduates	Supervisory or Mentor Teacher	K–12 Student Results
Most Credible	Faculty systematic sampling and rating of K–12 student work in preservice teachers' classes using a valid and reliable rating tool	Ratings by an external panel, with no knowledge about the identity of the preservice teacher's institution, of a systematic portfolio sample reflecting learning	Data collected on all participants in all stages of the program	Results from valid and reliable observation instrument rated by a trained observer	Performance assessment results or results from a test developed by an "expert" (experienced teacher or commercial test developer), reflecting student gains on a topic that beginning teacher taught, evidence of preparedness for next or related courses, increases in higher-level course enrollment
	Faculty systematic observation of preservice teachers' classroom instruction	Presentation of K–12 student work organized as evidence of preservice teachers' influence on K–12 student learning	Data collected on all graduates. Data include teacher reflections	Systematic ratings on a random sample, including mentor teacher assessment of K–12 student learning	Beginning teacher-created test, given pre and post instruction, reflecting student learning, teacher or student reflection logs or journals indicating increased student engagement in learning
	Faculty review and rating of preservice teachers' practice teaching	Portfolios with section specified to address K–12 student learning	Data collected on selected participants in various stages of the program	Systematic ratings on practicing teachers or beginning teachers, indicating whether K–12 students have learned	Beginning teacher rated samples of K–12 student work demonstrating learning
Least Credible	Narrative report of preservice teachers' learning in a teacher preparation class	Preservice teachers' portfolios - no systematized ratings	Data collected from selected graduates	Informal reports indicating that K–12 students learned from practicing teacher or beginning teacher	Selected K–12 student comments about the beginning teacher from an evaluation page

Source: U.S. Department of Education (2000). *The National Awards Program for Effective Teacher Preparation: Application* (p. 20). Washington, DC: Author.

APPENDIX D
PROFESSIONAL DEVELOPMENT PROGRAM AUDIT

DEVELOPMENT

In 1996, the U.S. Department of Education developed the National Awards Program for Model Professional Development as a means of promoting excellence in professional development. The awards program was designed to identify district- and school-level professional development programs that effectively addressed the U.S. Department of Education's principles of professional development. Subsequently, the U.S. Department of Education contracted with several of the regional educational laboratories to develop the process and rubrics for reviewing applications for the award. These rubrics were used to design the McREL Professional Development Program (PDP) Audit.

USES

The McREL PDP Audit is based on the practices of the winners of the National Awards Program for Model Professional Development during the period 1996-2000. Districts can use the PDP Audit to compare the characteristics of their professional development program with those of model programs that have developed effective professional development programs. Some uses of the PDP Audit include the following:

- District and school administrators, staff developers, or professional development committees can complete and use the audit to judge whether they have established the necessary structures and processes to support effective professional development
- District and school administrators, staff developers, or professional development committees can complete the audit and use the overall results for discussions about changes needed to develop an effective professional development program.
- Audit results can be shared with school board members or the community as a way to justify the establishment of new structure and processes (and associated expenses) for professional development.

The PDP Audit is a self-report instrument for district staff. The following guidelines should be implemented:

- Protect respondents' identities. Do not ask respondents to provide their names or other identifying information on the survey.
- Inform the respondents about the purpose of the audit, how the results will be summarized and used, and who will see the results. Then obtain respondents' consents to participate in the audit.
- Protect confidentiality of results. Do not report results in ways that might identify individuals. Do not report separately the results for groups with fewer than 10 individuals. Depending on how the audit is being used, distribution of PDP Audit results might be inappropriate.

SCORING AND INTERPRETATION

To score the PDP Audit, count the number of checkmarks for each of the five clusters. The number of checkmarks indicates the degree to which respondents perceive that the professional development program has characteristics aligned with model programs. The characteristics without checkmarks indicate possible changes needed for more effective professional development. The percentage of respondents who check or do not check a particular characteristic indicates the amount of agreement about the professional development program. The latter is a source for identifying gaps in knowledge about the components of the professional development program.

McREL PROFESSIONAL DEVELOPMENT PROGRAM AUDIT

Rate the district's or school's professional development program on each of the following criteria related to high-quality professional development. Check the criteria that are presently an aspect of the program.

1. Program Vision and Goals

- a. The district has adopted a set of standards for professional development.
- b. The district's professional development goals are aligned with the district's improvement plan.
- c. There are explicit expectations that teachers participate in frequent professional development each year.
- d. Staff members in all schools have access to professional development appropriate to their responsibilities.
- e. There are multiple ways for teachers at different levels of expertise to acquire and refine their knowledge and skills.
- f. Specific and appropriate support (e.g., mentoring, coaching, training) is provided for teachers who are new to teaching.
- g. Specific and appropriate support (e.g., mentoring, coaching, training) is provided for teachers who are new to their positions.
- h. Specific and appropriate support (e.g., mentoring, coaching, training) is provided for teachers who are experiencing difficulties in their teaching.
- i. There is regular professional development for principals that focuses on ways they can support teacher learning and effective instruction.

2. Program Planning

- a. There are formal committees and procedures for planning professional development, which include representatives of all groups participating in professional development.
- b. School faculties have support to arrange appropriate professional development activities that address their identified needs.
- c. Professional development planning incorporates research and best practices on professional development.
- d. Professional development planning incorporates research and best practices related to the change process.
- e. There is district support or guidance to help school staff develop their professional development plans.
- f. There is district support or guidance to help individual educators pursue individual professional growth goals.
- g. The district uses multiple sources/formats of student performance data from across K-12 to plan professional development.
- h. The district provides schools with the necessary/appropriate data to plan professional development.
- i. Individual educators complete annual professional development or growth plans that are based on district, school, grade/department, and personal growth goals.

3. Program Design

- a. Opportunities are provided for sharing best practices among staff from various schools in the district.
- b. There are multiple ways for teachers at different levels of expertise to acquire and refine new knowledge and skills.
- c. Professional development activities address the research base behind instructional strategies.
- d. Professional development includes elements essential to teaching to high standards (e.g., assessment, standards-based unit design)
- e. Professional development activities are focused on acquisition of new knowledge and skills about subject content that students are expected to learn.
- f. Professional development activities are focused on acquisition of new knowledge and skills about instructional strategies that research and experience have shown are effective.
- g. Professional development activities include an emphasis on how technology can be used as an instructional tool.
- h. Professional development activities help teachers examine their beliefs and attitudes about teaching and learning.
- i. The professional development program provides opportunities that help teachers learn from one another (e.g., study groups, action research groups, grade level teams, mentoring, peer coaching).
- j. There are multiple ways for teachers at different levels of expertise to acquire and refine new knowledge and skills.
- k. Teachers have multiple opportunities over an extended period of time to learn how to apply the content of professional development.

4. Program Resources

- a. Structures such as professional libraries and materials centers exist to support professional development.
- b. The coordination of professional development is a designated job responsibility for one or more individuals at the district level.
- c. The school day/year is structured to allow time for teachers to participate in professional development activities.
- d. There is systematic and frequent communication (e.g., newsletters, emails) designed to help the district community understand how professional development connects to the overall district plan.

5. Program Evaluation

- a. The district and/or school uses multiple sources/formats of student performance data from across K-12 to evaluate professional development.
- b. Professional development is evaluated in relation to changes in teaching and learning that were expected to result from the professional development activities.
- c. The district provides schools with the necessary/appropriate data to evaluate the impact of professional development activities.
- d. There are institutionalized ways to celebrate professional growth at all levels of the system.

APPENDIX E
PROFESSIONAL LEARNING COMMUNITY CHECKLIST

DEVELOPMENT

The Professional Learning Community Checklist draws from work that was conducted as part of McREL's study of high-performing, high-needs schools (HPHN). The study is a multi-year (2001-2005), multi-site comparison study contrasting factors in HPHN schools with those in low-performing, high needs (LPHN) schools. The study, which consists of a main study and five component studies, focuses on three major aspects of school improvement: organizational capacity, professional learning opportunities for teachers, and classroom practices. Items for the checklist are drawn from work by Newman and Wehlage (1995), Lee and Smith (1996), Louis and Marks (1998), and Charlotte Advocates for Education (2004).

USES

Schools can use the Professional Learning Community Checklist to compare the characteristics of their culture to the culture of schools that have a professional learning community. Some uses of the Professional Learning Community Checklist include the following:

- Members of the school leadership team or professional development committee can complete and use the checklist to judge whether they have established the structures and processes necessary to support a professional learning community.
- Members of the school leadership team or professional development committee can complete the checklist and use the overall results for discussions about changes needed to establish or strengthen the school's professional learning community.

Results can be shared with school and district leaders and all school staff as a way to justify the establishment of new structure and processes (and associated expenses) to strengthen the school's professional learning community.

The Professional Learning Community Checklist is self-report instrument for teachers, teacher leaders, school leadership teams, and school-level professional development committees. The following guidelines should be implemented:

- Protect respondents' identities. Do not ask respondents to provide their names or other identifying information on the checklist.
- Inform the respondents about the purpose of the checklist, how the results will be summarized and used, and who will see the results. Then obtain respondents' consents to participate in completing the checklist.
- Protect confidentiality of results. Do not report results in ways that might identify individuals. Do not report separately the results for groups with fewer than 10 individuals. Depending on how the checklist is being used, distribution of Professional Learning Community Checklist results might be inappropriate.

SCORING AND INTERPRETATION

To score the Professional Learning Community Checklist, count the number of checkmarks for each of the four sections of the checklist. The number of checkmarks indicates the degree to which respondents perceive that the school has a professional learning community. The statements without checkmarks indicate possible changes needed to strengthen professional learning community in a school. The percentage of respondents who check or do not check a particular statement indicates the amount of agreement about the school's professional learning community. The latter is a possible source for identifying gaps in knowledge about what a professional learning community is and how to establish and maintain one.

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MCREL PROFESSIONAL LEARNING COMMUNITY CHECKLIST

Rate the school's professional learning community on each of the following characteristics of professional learning communities. Check the characteristics that are present in the school.

1. Shared Sense of Purpose and Focus on Student Learning

- a. There is broad agreement among the school's staff about what the school's mission should be.
- b. Goals and priorities for this school are clear.
- c. The teachers and administrators are in close agreement about school improvement efforts.
- d. A focused school vision for student learning is shared by most of the staff in the school.
- e. Teachers focus on what and how students are learning rather than on how they are teaching.
- f. The acquisition of higher-order thinking skills (reasoning, problem solving, critical thinking) is a learning goal that most teachers in this school have for their students.
- g. Teachers feel responsible for the students they teach but not for other students in the school.
- h. Teachers are expected to maintain discipline in the entire school, not just in their classroom.

2. Collaborative Activity and Deprivatized Practice

- a. Teachers meet with one another to discuss student problems and arrange appropriate help.
- b. Teachers meet with one another to discuss specific teaching practices.
- c. Teachers work with one another or the principal to analyze and address student test results.
- d. Teachers meet with one another to discuss lesson planning, curriculum development, or other collaborative work related to instruction.
- e. Teachers receive useful suggestions from other teachers about teaching techniques, practices, or student activities.
- f. Teachers visit each others' classrooms to observe and discuss each others' teaching.
- g. Teachers observe the academic performance of their colleagues' students or review the grades or test scores of colleagues' students.
- h. Teachers receive meaningful feedback on their performance from supervisors or peers.
- i. Teachers visit one another's classrooms to observe and discuss their teaching.

3. Staff Support and Cooperation

- a. Staff members are recognized for a job well done.
- b. Teachers feel comfortable voicing their concerns in this school.
- c. The principal consults staff before making decisions affecting them.
- d. Administrators know the problems faced by staff.
- e. Teachers at this school are continually learning.
- f. There is a formal support system at this school for beginning teachers.
- g. Administrators facilitate teachers working together.
- h. The principal ensures that teachers have the necessary materials to support high quality instruction.
- i. Teachers are aware of what the principal believes regarding teaching and learning.
- j. There are teacher leadership positions at this school (e.g., team leader, district representative)

4. Shared Decision Making

- _____ a. Teachers participate in making most of the important educational decisions in this school.
- _____ b. Teachers have control over establishing the curriculum.
- _____ c. Teachers have control over teaching techniques.
- _____ d. Teachers have influence over discipline policy.
- _____ e. Teachers have influence over inservice programs.
- _____ f. Teachers have influence over how the school budget will be spent.
- _____ g. Teachers have influence over hiring new full-time teachers.
- _____ h. Teachers have influence over evaluating teachers.