

# Building a Profession:

*Strengthening  
Teacher  
Preparation  
and Induction*

**REPORT OF THE  
K-16 TEACHER  
EDUCATION  
TASK FORCE  
AMERICAN  
FEDERATION  
OF TEACHERS**

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APRIL 2000**

## **AFT K-16 TEACHER EDUCATION TASK FORCE**

In 1998 in response to a recommendation in the AFT policy resolution "The Union Role in Assuring Teacher Quality," AFT President Sandra Feldman appointed a task force to study a variety of issues related to teacher preparation.

The task force focused its work on three interrelated issues: entry/exit standards (including licensure) for teacher candidates; the clinical experience (including induction of new teachers); and the curriculum, in regard both to subject matter and pedagogy.

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# Executive Summary

**A** confluence of forces—the calls for high student achievement for all children, demands for accountability on the part of educational institutions and stakeholders, new federal legislation, recommendations of a prestigious commission and new research findings—have all served to focus the public’s attention on teachers and the quality of instruction. Couple this with the current and even larger looming teacher shortage and it becomes clear why renewed attention is being paid to teacher preparation.

As the issue of teacher quality has attracted more attention, so too has it attracted varied proposals for achieving that end. One policy thrust calls for weakening the professional schools that educate teachers through the deregulation or elimination of teacher training and licensure. This view holds that there is little beyond subject matter that any teacher need know, and that that “little” can be learned on the job. The AFT holds a different view. We believe that the best way to bring an adequate supply of well-trained teachers into the classroom is not by avoiding collegiate teacher education, but rather by strengthening it—by bringing higher quality, greater resources and much more coherence to the way teacher education screens and prepares teacher candidates.

In 1998, the AFT created a task force composed of K-12 and higher education leaders to examine issues related to improving teacher education. This report presents their findings and recommendations.

In general, the task force found that while some education programs at colleges across the nation have taken significant and creative steps to reshape curricula and raise standards, many programs are still beset by serious problems that must be addressed. These include:

- difficulty in recruiting the ablest students—prompted in large part by low pay, poor working conditions, and lack of respect for the profession as well as the low esteem in which teacher education courses are held at many universities;
- inadequate standards for entering and exiting teacher education programs;
- underinvestment by the university in teacher education;
- poor coordination between teacher education and liberal arts faculty;
- little consensus about what should comprise the pedagogy curriculum;
- difficulty, within a four-year program, in finding enough time and the proper balance of coursework in liberal arts, pedagogy and a major in an academic discipline;
- lack of standards for clinical programs resulting in haphazard recruitment and training of supervising personnel, along with inadequate collaboration among the professionals concerning program goals, student oversight and assessment; and
- clinical experiences that often are too brief and do not require students to take sufficient responsibility for instruction.

In light of these findings, **the task force calls for an urgent national commitment to bring higher quality, greater resources and more coherence to the way higher education screens and prepares teacher education candidates.** To that end, we make the following 10 recommendations for reshaping teacher preparation.

### **1. REQUIRE CORE LIBERAL ARTS COURSES**

The task force calls on education and arts and sciences faculty to establish core courses in the liberal arts and sciences that college freshmen and sophomores are required to take in order to be admitted into a teacher education program, and on college presidents to support the faculty in this endeavor. These courses must provide broad exposure and a sound foundation in the range of subjects and information relevant to K-12 student standards.

### **2. INSTITUTE HIGHER ENTRY CRITERIA**

The task force calls for raising entrance standards for teacher education programs by requiring a 2.75 grade point average at the end of the sophomore year as an initial requirement, to be phased up to a 3.0 grade point average.

### **3. INSTITUTE A NATIONAL ENTRY TEST**

The task force calls upon leaders in the profession to develop a national voluntary test—not imposed by the federal government—to be used by states or higher education institutions to select candidates who want to enter teacher education. This test, which would generally be administered by the end of the sophomore year, would require students to demonstrate college-level proficiency in the core subject areas of mathematics, science, English language arts, and history/geography-social studies.

### **4. REQUIRE AN ACADEMIC MAJOR**

The task force calls upon all institutions of higher education to require an academic major in addition to pedagogical studies

and general liberal arts coursework for all teacher candidates—elementary, middle and high school. The major must be sufficiently rigorous to enable teachers to deeply understand their content. It must also be comprehensive enough to prepare prospective teachers to help their students meet the new, more demanding K-12 education standards.

### **5. DEVELOP CORE CURRICULA IN PEDAGOGY**

The task force calls for congressional funding to enable the teaching profession to reach agreement on, and recommend that colleges adopt, rigorous core curricula in pedagogy based on the best research into how students learn and on the content-specific teaching methods shown to be effective with students. This could be done under the auspices of a respected body of scholars and educators—such as the National Academy of Sciences, the learned societies or a specially assembled body.

### **6. STRENGTHEN THE CLINICAL EXPERIENCE**

The task force calls for strengthening the clinical experience of traditional teacher preparation programs by building on successful models. These models should include the following characteristics:

- The cooperating classroom teachers with whom prospective teachers are placed are chosen on the basis of excellence determined by a peer review process; these classroom teachers should be adequately trained to assume this responsibility, and well rewarded for undertaking it.
- Education faculty are freed to spend more time with their students at their school placement sites and to receive professional advancement and other rewards for doing so.
- Clinical supervisors—the college staff who serve as the prospective teachers' link between the college campus and the K-12 classroom—are chosen on the basis of excellence

in teaching and adult learning, are trained by the education faculty regarding best practices, and are adequately compensated for their work.

- These three sets of professionals—cooperating teacher, clinical supervisors and education faculty—work together from the beginning to the end of the clinical experience to develop explicit goals for the process and develop criteria to assess the performance of prospective teachers.

### **7. INSTITUTE A RIGOROUS EXIT/LICENSURE TEST**

The task force calls on the teaching profession under the auspices of a respected body of scholars and educators (such as the National Academy of Sciences, the learned societies or a specially assembled body) to develop examinations in subject matter and pedagogy—to be taken by all prospective teachers prior to licensure in their teaching field. Current state teacher-testing requirements vary greatly and often are characterized by low-level content and low passing scores. These new examinations should aim for a level of rigor that is consistent with what entry-level teachers in other high-performing countries are expected to know.

### **8. TAKE A FIVE-YEAR VIEW**

The task force recommends that teacher preparation be organized, at a minimum, as a five-year process. This may take the form of a five-year university program, during which the students have opportunities early in pre-service training to observe and work in schools; in the fifth year, prior to graduation, the students receive an intensive clinical training internship, conducted in close collaboration with the public schools, for which they are compensated. If the university program is only four years, it is essential that the school district institute, at a minimum, a yearlong internship and mentoring program for new teachers.

## **9. STRENGTHEN INDUCTION**

The task force calls for an induction program for all beginning teachers regardless of whether they have completed a four- or a five-year program. This must include a quality selection process for identifying and training mentor teachers; adequate training and compensation for these mentors; and time for them to genuinely teach, support and evaluate beginning teachers.

## **10. REQUIRE HIGH STANDARDS FOR ALTERNATIVE PROGRAMS**

The task force calls upon those state departments of education that recognize alternative routes to teaching to require, at a minimum, that to be admitted to an alternative-route program students must pass state teacher-testing exams in the appropriate content areas. In addition, such programs must provide pedagogical coursework to alternative route candidates, monitor their performance in the classroom, and provide necessary services to support their development of effective teaching skills and strategies.

In order to implement these recommendations, the task force calls upon responsible parties to do the following:

- **University presidents** must make the preparation of high-quality teachers an institutional priority. This should be reflected in funding for teacher education commensurate with other professional training, in greater support for clinical experience programs, in strengthening relationships between the arts and science and education faculty, and in realigning the faculty reward structure to encourage greater involvement of faculty with their schools and community.
- **The National Council for the Accreditation of Teacher Education (NCATE)** must articulate higher standards of subject-matter knowledge and academic performance re-

quired of students entering and graduating from teacher education, particularly as they relate to state standards for K-12 students. In addition, NCATE needs to spell out quality standards for student teaching and other clinical experiences that include criteria for who may be a cooperating teacher or supervisor, and what role the university plays in training and coordinating such personnel.

- **K-12 union locals** must assume greater responsibility for the quality of the clinical experience by working with the district and the higher education institutions to identify and train excellent teachers to serve as cooperating teachers.
- **Higher education unions** must use their good offices to strengthen teacher education, to promote greater communication and coordination between teacher education and other faculty, to ensure contractually that the institutional reward system favors clinical work in the schools, and to encourage the hiring of excellent clinical faculty and cooperating teachers.
- **State legislatures, Congress and foundations** must make funding available to put into place the reforms mentioned above so as to enable excellent teacher education to become the norm, not the exception.

Strengthening teacher education will take political will, money, culture and attitude change at the universities and the public schools, and greater seriousness of purpose among all involved in the policies and practices related to the preparation of teachers. The best answer to high-quality teaching is professionalism: High-quality professional training, high standards for entry into teaching, a strong induction program for beginning teachers, competitive pay, administrative support and continuous opportunities for professional growth.

# Introduction

**A**s we enter the 21st century, various forces have combined to focus public attention on teachers and the quality of instruction. These include calls for higher academic achievement for all children; demands for accountability of educational institutions and stakeholders; the recommendations of the National Commission on Teaching and America's Future; and new research findings, which demonstrate that teacher quality is the single most important school variable affecting student achievement.

The urgency of recruiting and training quality teachers is underscored by demographics. Student enrollments are at an all-time high at the same time that the teacher work force is aging, and large numbers of teachers are likely to retire in the next few years. Indeed, more than 220,000 new teachers must be hired nationwide each year in the foreseeable future, if the country is to meet the educational needs of an ever-burgeoning student population. These students, the most diverse ever in our nation's history, will be required to meet higher standards for student achievement than ever before. Schools in rural and urban settings struggle to hire qualified teachers to

meet the needs of these students, and even wealthier suburban schools have difficulty finding the science, mathematics and special education teachers they need. This burgeoning demand for new teachers and an increasing demand for high quality in the teacher work force have put a spotlight on the preparation of teachers.

For more than half a century, researchers, policymakers and the education community have grappled with the wide range of problems that beset teacher recruitment and preparation: difficulty recruiting the ablest students; underinvestment in teacher education; lack of coordination between colleges of teacher education and the arts and sciences faculty; and inadequate pre-service time for teacher candidates to acquire the content knowledge, pedagogical knowledge and clinical experience they need to be successful in the classroom. Despite such impediments, as well as state requirements that are constantly changing, education faculty at colleges and universities around the country have produced many thousands of capable teachers.

As the issue of teacher quality has garnered increasing attention, so too has it attracted diverse “solutions” for achieving it. One thread of “reform,” paradoxically, calls for weakening the professional schools that educate teachers through the deregulation of teacher training. For example, Ballou and Soler (1998) suggest: “The federal government should break the education school monopoly on teacher preparation. Any federal funds set aside for training should be available to any program that trains teachers, not just schools of education. Independent, non-profit groups such as Teach for America and individual schools should be eligible to use the funds for ‘on-the-job’ training, or in other ways they see fit.” Since then, the Fordham Foundation has issued its manifesto (1999) calling for the deregulation of teacher education and, in a separate earlier report, questioned the need for teacher licensure (Ballou and Podgursky, 1998). The Sylvan Learning Centers,

online universities and a number of other vendors have established businesses providing alternate teacher training.

A second approach to reform aims at improving, not eliminating, teacher education. A number of collegiate teacher education programs have been working to deepen the content knowledge of teacher candidates, strengthen their instructional and assessment skills, and provide them with rich clinical experiences. Too often, however, the costs of these reforms result in relatively small programs funded by special grants and available to only a limited number of those enrolled in teacher education.

The American Federation of Teachers believes that the way to improve teacher preparation is to develop policies that strengthen teaching as a true profession with all the classical attributes of a profession—and to admit up front that many of those attributes are not characteristic of teaching today. As the late Albert Shanker, former AFT president, said in 1996:

To be considered a true profession, an occupation must: have a distinct body of knowledge—acknowledged by practitioner and consumer alike—that undergirds the profession and forms the basis of delivering high-quality services to clients; define for itself the nature of training required of those who wish to enter the field; require rigorous training to acquire the knowledge and skills necessary to practice the profession; control the standards for entry into the profession; have its practitioners be a major voice in determining working conditions; have its practitioners exercise independent judgment about client needs to ensure those needs are met; evaluate the performance of practitioners and remove from the profession those whose performance fall below standards; require that practitioners continue to learn about advances in the field; induct its members into the profession in a systematic and rigorous fashion; and have the respect of the larger society.

This focus on strengthening professionalism marks the findings and recommendations of this AFT K-16 Teacher Education Task Force. In our view, the best way to bring an adequate supply of well-trained teachers into the classroom is not by avoiding collegiate teacher education, but rather by

strengthening it—by bringing more professional control, higher quality, greater resources, and much more coherence to the way higher education screens and prepares teacher candidates today—whether those candidates come through traditional four-year programs or alternative routes.

The charge to the K-16 Teacher Education Task Force, composed of AFT leaders from K-12 and higher education, was to examine issues related to improving teacher preparation. We focused our work on three interrelated issues: entry/exit standards (including licensure) for teacher candidates; the clinical experience (including induction of new teachers); and the curriculum, in regard both to subject matter and pedagogy. To learn about these issues, we conducted extensive literature reviews, analyzed state policies and surveyed teacher training institutions. This report presents the findings from that research and formulates a set of recommendations to strengthen pre-service teacher licensure and entry into the profession. Addressing these issues with a sense of seriousness and urgency is necessary if we are to improve the quality of teacher preparation and produce teachers who are well prepared to deal with the challenges of the 21st century classroom—i.e., preparing a diverse student body to meet the high academic standards necessary to function in a highly technical, ever changing, democratic society. Even as we begin, however, we must emphasize an important truth. No package of teacher education reforms can be expected to ensure a continuing supply of qualified teachers unless it is coupled with high-caliber induction programs, better salaries and improved working conditions.

# Teacher Education

**T**he preparation of teachers is routinely an undergraduate, four-year program of university courses that includes (1) course-taking in the liberal arts and sciences, (2) a major or minor in one of the liberal arts and sciences disciplines and/or (3) teacher education, including a field experience in the schools. For candidates preparing to teach in elementary schools, knowledge of the subject matter is usually acquired through the initial liberal arts requirements. Candidates planning to teach in the high schools now typically major in the discipline they intend to teach. Programs vary regarding their expectations for candidates intending to teach in the middle grades. Some programs expect candidates to minor in two to four “core” subject areas (mathematics, science, history, English, the arts); others require a major in one discipline. In response to recommendations made by the Carnegie Forum (1986) and the Holmes Group (1986), some teacher education programs have instituted a “fifth year” model, expecting all candidates to complete a baccalaureate degree before progressing into an intensive year of education courses and school-based clinical experiences.

From the time they enter college until the time they become

full-fledged professionals, prospective teachers must go through seven steps.<sup>1</sup> These are:

- The **liberal arts and sciences requirements** typically taken by all college freshmen and sophomores.
- The **entry standards** students must meet in order to be accepted into the college's teacher education program at the end of the sophomore year.
- The **courses in pedagogy** students take during their junior and senior years as teacher education students.
- The **academic subject major** required of many teacher candidates today.
- The classroom-based **clinical experience** required by virtually all teacher education programs prior to graduation.
- The **exit/licensure requirements** at the end of the teacher education program.
- The **induction period**, during which classroom novices become full-fledged professionals.

The task force investigated each of these processes and found promising practices but also many ways in which the existing system falls short of meeting the needs of the profes-

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<sup>1</sup> About 5 percent of the current teaching force entered the profession through an alternate route. These teachers tend to be older than traditional candidates, have experience in other careers, and have a greater percentage of minority members and individuals with science and math backgrounds than do candidates who enter through traditional routes. Nonetheless, these alternative-route candidates need clinical experience and pedagogical knowledge to be successful in the classroom. While this report does not discuss alternative routes, the AFT believes that such candidates must pass the same licensure tests as other entrants and must have serious supervised clinical training during their initial teaching years. Appendix A presents a brief overview of current alternative-route policies and practices.

sion. In particular, the task force looked at the factors impeding good practice and ways to overcome these impediments. The following sections describe what the task force discovered, step by step.

## Liberal Arts and Sciences Requirements

All students must take a core of required liberal arts and sciences courses when they are admitted to college. The breadth and quality of this coursework is of crucial importance to prospective teachers, particularly for most elementary and many middle school teachers who receive a great deal of their content preparation in these required courses. In too many cases today, however, the task force found that colleges lack a fully coherent or rigorous general liberal arts and sciences curriculum in the first two years for prospective teacher candidates. Typically, students sample widely among the varied disciplines based on any variety of personal considerations. This may or may not be appropriate for most college students, but it is certainly a problem for teacher candidates.

## Teacher Education Entry Requirements

Students are generally admitted into the college's teacher education program at the end of their sophomore year. Today, entry into teacher education is driven primarily by diverse institutional standards based on state accreditation standards and teacher licensure requirements. The National Council for the Accreditation of Teacher Education (NCATE) standard defines the minimum requirement for entry into the teacher education program for many states and institutions of higher education: basic literacy as demonstrated by a proficiency test and a 2.5 GPA or "C" average in coursework.<sup>2</sup> Indeed, every state, except Louisiana, requires students entering teacher preparation to have at least a 2.5 GPA. (In Louisiana, the requirement is 2.2.)<sup>3</sup>

As we have seen, these grade point averages largely reflect the student’s success in the general liberal arts and sciences courses. Some campuses also expect those applying to the teacher preparation program to take an introductory course or two in teacher education and usually require students to pass these courses with at least a “C.” However, as we have also learned, the breadth and quality of the liberal arts coursework may not be sufficient to meet the challenge of preparing good teachers. Also, in the absence of a consistent grading policy, it is impossible to tell what level of achievement a particular grade point average reflects.

Indeed, completion of two years of general education in many two- and four-year institutions—even with a 2.5 GPA—does not necessarily ensure that a teacher candidate has mastered basic literacy skills. For this reason, more than two-thirds of the states require demonstration of such basic skills on a pre-entry test into the teacher education program.<sup>4</sup> Sadly, there is nothing very rigorous about these tests. For example, an analysis of the widely used Praxis I test concluded:

- None of the literacy assessments—reading, mathematics and writing—exceeded high school level, and “at least two-

<sup>2</sup> A 2.5 GPA is a standard criterion for entry into other undergraduate professional programs such as business, nursing and pharmacy on most university campuses.

<sup>3</sup> We learned from our interviews that some campuses have recently raised the minimum GPA expectation of all teacher candidates to 2.7 or 2.75—a higher standard than in other professional schools on campus. Several colleges of education differentiate GPA expectations by program area—raising the score for candidates eager to enter programs (such as elementary education) that have more applicants than can be accepted into the program.

<sup>4</sup> Twenty-five states require that students pass some form of national or state basic literacy test, and an additional 14 states require that individual campuses test for such skills.

thirds of the mathematics items were judged to be middle school” level.

- “The basic literacy exams showed little complexity; rather the test items tended to require only simple recall or the application of a set procedure. . . . [W]e found the tests to be far less difficult than either the SAT or ACT” (Education Trust, 1999).

Furthermore, individual states and institutions generally set very low cutoff scores for demonstration of mastery.

## The Education Curriculum

A central component of virtually every teacher education program is coursework in pedagogy, in effective methods of teaching. Debate about the relevance and rigor of pedagogy coursework has raged for decades. Critics have asserted, among other things, that there is no special content beyond subject matter that teachers must know, or that pedagogy instruction is too isolated from subject-matter instruction. Classroom teachers, on the other hand, often criticize their training as leaving them unprepared to deal with the demands of the modern classroom.

The most pervasive criticism is that, unlike preparation programs in medicine and law, which focus on the content of their fields and applying that content to the benefit of clients, teacher preparation too often focuses on the learning process, denigrating the content of what is to be learned (Urban, 1990). Indeed, Christopher Lucas (1997) chronicles the concerns of critics who for the last half-century have continued to conclude that teacher education is generally not an intellectual pursuit.

Teacher education coursework has also been widely criticized for its redundancy. In her analysis of teacher preparation coursework, Harriet Tyson (1994) found that “there is plenty

of scholarly and anecdotal evidence for a lot of redundancy within and among the courses that future teachers are required to take. The same topic, worthy though it may be, appears in the introductory education course, the educational psychology course and the general course on teaching methods.”

To put it plainly, there is no consensus among academics as to what a core curriculum of education coursework should include—no body of knowledge the profession has determined that *all* teacher candidates need to know. In the absence of an agreed-upon core, the course content that teacher candidates receive at different colleges, and even from different instructors at the same college, can vary tremendously—not just in nuance, but in basic essentials. It is little wonder that many teachers say their teacher preparation program did not prepare them for teaching. Nor is it surprising that research continues to document the limited impact of teacher education on the perspectives, beliefs and practices of teacher candidates (Feiman-Nemser and Remillard, 1996).

In 1990, John Goodlad recommended that education research “must bear the stamp of scholarly effort and approval and not be hunches and conjectures.” He advocated that the knowledge base be “codified and transmitted” and made readily accessible and bona fide. This has not yet happened. Indeed, Henry Holmes, dean of the Education School at Harvard University in the 1920s, failed in his attempt to identify “a set of fundamental principles around which to organize the professional curriculum” (Feiman-Nemser, 1990), and no one has yet been successful in accomplishing this task (Grossman and Richert, 1988; Barnes, 1990; Carter, 1990; Scardamalia and Bereiter, 1990; Kramer, 1991; Feiman-Nemser and Remillard, 1996). But, even if there is no current consensus on the core content of teacher education, advances in research on the process of learning and in effective teaching practices suggest that the raw material now exists to develop such a core, certainly in fields such as reading.

Three factors loom large in explaining the difficulty in creating a core curriculum in teacher education: the belief that teaching is a highly complex, context-specific enterprise; competing definitions of teaching; and state regulations and policies.

**Complex nature of teaching.** Education researchers often focus on the nature of teaching as ambiguous, complicated work that requires judgment, action, and the continuous ability to reflect and revise decisions on the basis of one's observations and insights. Teaching is interactive, and teachers "do not draw on knowledge one domain at a time; rather, they weave together different kinds of knowledge as they reason about what to do and take action in particular situations" (Feiman-Nemser and Remillard, 1996).

This focus on complexity, however, has seldom been matched by research aimed at establishing continuities that can be drawn upon to improve teaching. When teacher knowledge is viewed as "experiential, procedural, situational, and particularistic" (Carter, 1990), creating a coherent professional education program becomes very difficult. With no widely acknowledged principles to guide the process of how one learns to teach, any method that has worked in a classroom for any teacher becomes equal to any other method.

**Competing definitions of teaching.** Faculty in professional education programs define requirements and select courses based on philosophies of teaching and what the purpose of schooling is. These can be very different from faculty member to faculty member. National accrediting agencies expect teacher preparation programs to describe their mission and to demonstrate how courses and requirements align with this vision. But because each institution does this for itself, the "core curriculum of educational coursework" will vary significantly among programs.

**State regulations and policies.** New regulations and policies that address teacher preparation have recently been the focus

of a number of state legislatures, professional standards boards, boards of regents, state boards of education and state departments of education. Because there is no consensus within the profession, two somewhat conflicting views of teacher education drive these state mandates. In many cases, the new policies reflect a widely shared attitude among the public that intelligent, college-educated people can learn all they need to know about teaching either on the job or during a single summer of well-planned instruction. When this view of teacher education dominates the decision-making process, the regulations not only reduce the number of courses and hours a teacher candidate spends in a professional education program, they also limit the influence of the teacher education program both on the campus and in the preparation of future teachers.

A second, somewhat contrary, view of teacher education held by many policymakers is that educational experts will not create a suitable program for future teachers without guidance from the state. Teacher education does not need to be deregulated; rather, the requirements—curriculum, clinical experience and testing—need to be specified by the state. As a consequence, states mandate specific courses for teacher education programs and stipulate the number of hours future teachers must enroll in certain courses. These mandates are rarely considered in terms of their impact on a coherent course of study, and teacher education programs are required to change or add courses in an almost ad hoc fashion.

## The Arts and Sciences Major

A battle has raged for years over how much time in teacher education should be devoted to pedagogy and how much to subject-matter knowledge. This question has taken on even greater saliency in light of the K-12 standards movement, which makes it even more important that teachers have a deep knowledge of the subjects they teach.

In response, the number of institutions requiring an academic subject-matter major has greatly increased in recent years for teacher education students outside the elementary school level. On the basis of 1994 data, the National Center for Education Statistics (NCES) has noted that fewer of the newest teachers are majoring in education. According to *Education Week* (Jan. 13, 2000), 38 states now require an academic major or its equivalent for prospective secondary teachers.<sup>5</sup> This is a step forward, although about 20 percent of high school teacher candidates continue to major in education rather than an academic subject. Recently, there has been a push both in statehouses and on college campuses to require elementary teachers as well as high school teachers to have an academic major. Some universities have instituted an interdisciplinary major for elementary teachers to ground them in a number of the core subject areas they are expected to teach.

The education major, however, is still the norm among elementary school teacher candidates: 83 percent continue to major in education, and only 11 states require an academic subject major for elementary school teachers.<sup>6</sup>

## Clinical Experience: Pre-service Student Teaching

The school-based clinical experience is a central component of the initial preparation of teachers; it offers them experiences with students and teachers in classrooms and other school set-

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<sup>5</sup> The 12 states that do not require a subject-area major for high school teachers are Arkansas, Delaware, Idaho, Illinois, Indiana, Kansas, Louisiana, Maryland, Oregon, Pennsylvania, Washington, and West Virginia.

<sup>6</sup> It should be noted that much of the concern about teachers not knowing their subject matter comes from hiring practices and school assignment policies, not from teacher education candidates who graduate without a major in the field they intend to teach.

tings, regardless of the grade level the candidate expects to teach or whether the preparation program is four or five years. Almost without exception, every teacher preparation program—whether housed in a small rural liberal arts college or in a large multidepartment college of education at a major state university—requires at a minimum a 10-week student-teaching experience for all elementary, middle and high school teacher candidates. And surveys of students and teachers indicate that the clinical experience is often considered the most important aspect of teacher education.

The typical student teaching experience involves three loosely linked staff supervising the novice—the academic faculty, the clinical supervisor (sometimes referred to as “clinical faculty”) and the cooperating teacher. The academic faculty have as their main responsibility providing theory and methods courses to teacher candidates. Given their responsibilities on campus and the university reward structure, academic faculty rarely observe student teachers, or, for that matter, the cooperating teacher. The job of on-site observation, supervision and counseling of the student teacher is largely left to the supervisory faculty, who often are retired teachers and other school personnel working on an adjunct, part-time basis. The cooperating teacher is the teacher in whose class the student is placed. This is the individual whose teaching practices are most influential for the student teacher, and the person who has the most direct and continual opportunity for observing the student teacher as that student performs various teacher functions—from tutoring a child, to preparing lesson plans, to teaching the entire class.

In addition to the student-teaching experience, many programs offer teacher candidates school-based experiences prior to student teaching, such as visiting schools and observing teachers and students. Some programs offer one-year internships or apprenticeships in lieu of traditional student teaching. These internships combine school-based instruction in teach-

ing methods and assessment with classroom observations, experiences and practice teaching.

The ways in which the clinical portion of teacher preparation is designed vary as widely as the size of the programs and the nature of the institutions. In this report, the term “clinical experience” encompasses field-based observations and school-based experiences, such as assisting teachers in the classroom and tutoring students, student teaching and internships. These experiences can occur in schools with which the campus has informal connections based on convenience, strong partnerships or contractual relationships such as the Professional Development School (PDS) model.

Review of research and interviews with deans reveal a nearly universal agreement on what a good clinical-experience program should look like. In excellent clinical programs, candidates should be able to:

- link theory and practice;
- observe and learn from the diverse teaching styles demonstrated by excellent teachers in a variety of settings;
- learn daily classroom and school routines and the details of how to manage a classroom, from the simplest routines such as arranging furniture, leaving notes on the chalkboard and calling the roll, to handling interruptions and maintaining discipline;
- learn how to design instruction and curriculum to achieve student learning in core subject areas;
- learn how to assess student learning and how to use the results of those assessments to plan instruction;
- observe and learn from school faculty engaged in content-based professional conversations about teaching and learning;

- learn to engage all students in learning by guiding and challenging them through instruction, assignments and assessment;
- learn to observe students and their work to judge how well they are learning and to give appropriate feedback to ensure that all students learn; and
- learn to work with colleagues to establish a school climate that supports and encourages student learning.

In recent years, colleges and the education faculty have developed many excellent clinical training programs that achieve high results. They are characterized by a careful choice of school sites, clinical supervisors and cooperating teachers, as well as continual interchange among the professionals around the goals of the experience and the standards that students must meet. The problem, unfortunately, is that programs offering such a high level of personal attention are not widely available, serving only about 20 percent of teacher candidates nationwide. Facing large numbers of teacher candidates and insufficient resources, most programs still fall far short of what is needed. Indeed, it is not surprising to learn that:

- The student-teaching experience is too short to adequately prepare teacher candidates to assume full responsibility for a classroom.
- Student teachers are often placed in schools because they are close to campus or to the students' homes, or because of a school's willingness to participate, rather than its academic excellence.
- The cooperating teachers who are responsible for mentoring the student teachers placed in their classrooms are frequently selected haphazardly by principals with little input from the university or the teachers in the schools.

- Cooperating teachers receive few or no incentives for working with student teachers, and they are not trained adequately, nor supported by the school or university.
- Cooperating teachers' evaluations of teacher candidates are often ignored, or not requested at all.
- The supervisory faculty, frequently retired teachers and principals who are responsible for overseeing the student teacher placements, have low standing at the university and are often selected as a result of their availability and willingness to accept such low-paid assignments rather than for their excellence as teachers and mentors.
- Supervisory faculty, like cooperating teachers, are often untrained and unsupported in their work with teacher candidates.
- There frequently is far too little coordination among university faculty, clinical supervisors and cooperating teachers regarding standards of good teaching and the requirements of a rigorous clinical experience.

There is, in short, a pervasive disconnect among the professionals responsible for the clinical training of prospective teachers.

## Exiting Teacher Education and Entering the Profession

Institutional exit criteria revolve around state licensure requirements. In most states, these requirements include completing an approved program with at least a 2.5 GPA, practice teaching in a school setting and passing some kind of standardized licensure test.<sup>7</sup>

## **COURSEWORK MASTERY**

As we have seen, the balance of academic and pedagogy courses taken by teacher education students—indeed, the very content of those courses—has been a professional battleground over competing concepts of teaching. In most states and on most campuses, candidates who take the courses required for a teaching license, and maintain a “C” or better (2.5 on a 1-to-4 scale) in those courses, are deemed to have given sufficient “evidence of mastery.” As further evidence of coursework mastery, some campuses require candidates to pass state licensure tests, including subject-matter tests, prior to graduation.

As with the GPA entry requirement, there has been some challenge to the 2.5 GPA exit standard—questions have been raised about grade inflation and the rigor of the courses. In response, some educators point to recent research demonstrating that newly graduated teachers often have higher GPAs than those of other bachelor’s degree recipients. That evidence can be interpreted to indicate deeper knowledge and better skills on the part of new teachers (Darling-Hammond and Cobb, 1996). On the other hand, Robin Henke and others (1996) say that the higher GPA of teacher education candidates may be the result, at least in part, of the courses they took. Teacher education candidates were more likely than other graduates to have taken education courses, less likely to have taken advanced mathematics and calculus courses, and tended to take fewer courses in science and engineering.

## **SUCCESSFUL COMPLETION OF THE CLINICAL EXPERIENCE**

Among the required courses are field experiences, including student teaching. The recommendations of both school-based

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<sup>7</sup> Assessment requirements for initial licensure vary considerably among states, both in terms of what is tested and where the cut-score is set. ETS produces the Praxis series (formerly the NTE). These tests—basic skills, pedagogy, general knowledge, and subject-specific knowledge—are used in various combinations by more than 40 states.

and university supervisors are generally required to provide evidence that the candidate is able to teach students. Some programs also are beginning to institute performance-based assessments of a teacher candidate's knowledge and skills and to use videos, portfolios and special projects as the means to determine the candidate's mastery. In most cases, the performance-based assessments are exclusively designed to demonstrate pedagogical knowledge and skills rather than knowledge of subject-matter content.

### **EXIT AND LICENSURE EXAMS**

Just as every state expects graduating teachers to have a 2.5 GPA, virtually all also expect teachers to pass some sort of standardized examination(s) for initial licensure. Information from the *Manual on the Preparation and Certification of Educational Personnel 1998-99*, prepared by the National Association of State Directors of Teacher Education and Certification (NASDTEC, 1998) reveals that:

- *Basic Skills Exams* are required by 40 states;<sup>8</sup>
- *Subject-Matter Exams* are required by 30 states;
- *General Knowledge Exams* are required by 19 states;
- *Knowledge of Teaching Exams* are required by 25 states;
- *Assessment of Teaching Performance* is required by 13 states; and
- Six states (Alaska, Iowa, South Dakota, Utah, Vermont and Wisconsin) do not require an examination for initial teacher certification.

The current licensure exams pose two serious problems for anyone concerned about the quality of teachers entering the classroom:

- First, the tests being offered assess low-level knowledge and skills, not the candidate's command of college-level work.<sup>9</sup>

- Second, cut-scores for these tests are often very low and, on occasion, are not enforced even at that low level. Data are hard to extract from testing companies or state agencies (a situation that will change with the newly required U.S. Department of Education State Report Cards, which will provide information on both cut-scores and pass rates). Nevertheless, it appears that in many teaching fields in many states, candidates who score at or above single-digit percentiles qualify for a license, and very few states have cut-scores above the 25th percentile for any field. Further, when states have teaching shortages, they often waive the testing requirement or lower the passing score. For example, one state experiencing a shortage of secondary mathematics teachers issued licenses to every candidate who took the mathematics exam regardless of the score.

In sum, the common criteria for exit from teacher education are not yet sufficient to ensure that teachers are “models of educated persons” or to convince the public that teaching is a profession in which wide and deep knowledge of a complex field is required of all practitioners.

## Induction Programs for Beginning Teachers

Graduation from a teacher education program—whether four or five years—cannot be considered the end of training for

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<sup>8</sup> NASDTEC includes the District of Columbia as a state.

<sup>9</sup> The quality of the licensure exams is the subject of at least two studies, one from the Education Trust (1999) and one proposed by the National Research Council of the National Academy of Sciences. The task force also recognizes that there are some promising efforts to reform teacher testing. The Interstate New Teacher Assessment and Support Consortium (INTASC) has developed a set of standards for beginning teachers that could form the basis for curriculum reform and for new and better standardized tests. Indeed, INTASC is developing performance assessments in the core disciplines and a test for teaching knowledge. The consortium has yet to address the need to develop better tests of teacher candidates’ subject-matter knowledge.

teachers. The demands of the pre-college degree—acquiring subject-matter knowledge, pedagogical content knowledge and clinical training—do not allow sufficient time for teacher candidates to develop the skills and experiences necessary for completely independent practice in their initial teaching assignments, including the skills necessary to work effectively with paraprofessionals and other education support staff. Nonetheless, after graduation most new teachers are assigned a class, often with the most hard-to-teach students, and then left to sink or swim on their own. By contrast, other countries with high-achieving school systems induct new teachers into the profession through clinical, real-world training processes—following rigorous undergraduate academic preparation—by which inductees develop and perfect their teaching skills under the mentorship of more experienced and skilled colleagues.

Some school districts, working in collaboration with university teacher-education programs in some cases, are instituting internship programs for novice teachers. These programs ensure that new teachers have both a reduced teaching load and a mentor who will assist them as they confront the hard realities of the classroom. The reduced load allows time for professional development activities that include observing master teachers, talking with colleagues about teaching and learning, and responding to the guidance offered by mentors who review the novice teachers' practice and recommend strategies to improve the quality of their classroom performance. Such programs have been instituted in Toledo, Berea, Cincinnati, and Cleveland, Ohio; New York City and Rochester, N.Y.; Minneapolis, Minn.; Pittsburgh and Philadelphia, Pa.; and Poway, Calif. Research indicates that teachers who are mentored when they enter teaching are more likely to remain in the profession.

# Recommendations

**A**s we have seen, excellent teaching requires a firm grounding in academic subject matter and in the art and science of how to convey information—in short, it requires professionalism, just like law, medicine and any other complex service to the public. Only individuals who receive top-quality training—at college and at the work site—and who demonstrate that they meet high standards—on paper and on their feet—should be permitted to enter the teaching profession. **Thus, the task force calls for an urgent national commitment to bring high quality, greater resources and more coherence to the way teacher education candidates are screened and prepared.** To this end, we make the following 10 recommendations.

## **1. REQUIRE CORE LIBERAL ARTS COURSES**

The task force calls on education and arts and sciences faculty to establish core courses in the liberal arts and sciences that college freshmen and sophomores are required to take in order to be admitted into a teacher education program, and on college presidents to support the faculty in this endeavor. These courses must provide broad exposure and a sound foundation in the range of subjects and information relevant to K-12 stu-

dent standards.

## **2. INSTITUTE HIGHER ENTRY CRITERIA**

The task force calls for raising entrance standards for teacher education programs by requiring a 2.75 grade point average at the end of the sophomore year as an initial requirement, to be phased up to a 3.0 grade point average. This should include the liberal arts and science requirements described above, as well as one or more introductory education course(s) which include opportunities to observe real classrooms.

## **3. INSTITUTE A NATIONAL ENTRY TEST**

The task force calls upon leaders in the profession to develop a national voluntary test—not imposed by the federal government—to be used by states or higher education institutions to select candidates who want to enter teacher education. This test, which would generally be administered by the end of the sophomore year, would require students to demonstrate college-level proficiency in the core subject areas of mathematics, science, English language arts, and history/geography-social studies.

## **4. REQUIRE AN ACADEMIC MAJOR**

The task force calls upon all institutions of higher education to require an academic major in addition to pedagogical studies and general liberal arts coursework for all teacher candidates—elementary, middle and high school. The major must be sufficiently rigorous to enable teachers to deeply understand their content. It must also be comprehensive enough to prepare prospective teachers to help their students meet the new, more demanding K-12 education standards.

## **5. DEVELOP CORE CURRICULA IN PEDAGOGY**

The task force calls for congressional funding to enable the teaching profession to reach agreement on, and recommend that colleges adopt, rigorous core curricula in pedagogy based on the best research into how students learn and on the con-

tent-specific teaching methods shown to be effective with students. This could be done under the auspices of a respected body of scholars and educators—such as the National Academy of Sciences, the learned societies, or a specially assembled body.

We can no longer tolerate a “do your own thing” pedagogy curriculum. Every successful profession has developed a set of broadly agreed upon understandings about the training needed to enter the profession. This must become a reality for the teaching profession as well. The task force is not advocating the establishment of a mechanistic curriculum that stifles creative college teaching and research. But we know enough now about learning and effective teaching in areas such as reading and mathematics to develop professional consensus about what should be taught to all teacher candidates in these fields.

## **6. STRENGTHEN THE CLINICAL EXPERIENCE**

The task force calls for strengthening the clinical experience of traditional teacher preparation programs by building on successful models. These models should include the following characteristics:

- The cooperating classroom teachers with whom prospective teachers are placed are chosen on the basis of excellence determined by a peer review process; these classroom teachers should be adequately trained to assume this responsibility, and well rewarded for undertaking it.
- Education faculty are freed to spend more time with their students at their school placement sites and to receive professional advancement and other rewards for doing so.
- Clinical supervisors—the college staff who serve as the prospective teachers’ link between the college campus and the K-12 classroom—are chosen on the basis of excellence in teaching and adult learning, are trained by the education faculty regarding best practices, and are adequately compen-

sated for their work.

- These three sets of professionals—cooperating teacher, clinical supervisors and education faculty—work together from the beginning to the end of the clinical experience to develop explicit goals for the process and develop criteria to assess the performance of prospective teachers.

The task force believes the clinical experience can best be provided in public schools where the faculty embraces the mission of preparing new teachers, has allocated resources to that mission, and has developed a professional culture that supports it.

### **7. INSTITUTE A RIGOROUS EXIT/LICENSURE TEST**

The task force calls on the teaching profession under the auspices of a respected body of scholars and educators (such as the National Academy of Sciences, the learned societies or a specially assembled body) to develop examinations in subject matter and pedagogy—to be taken by all prospective teachers prior to licensure in their teaching field. Current state teacher-testing requirements vary greatly and often are characterized by low-level content and low passing scores. These examinations should aim for a level of rigor that is consistent with what entry-level teachers in other high-performing countries are expected to know.

### **8. TAKE A FIVE-YEAR VIEW**

The task force recommends that teacher preparation be organized, at a minimum, as a five-year process. This may take the form of a five-year university program, during which the students have opportunities early in pre-service training to observe and work in schools; in the fifth year, prior to graduation, the students receive an intensive clinical training internship, conducted in close collaboration with the public schools, for which they are compensated. If the university program is only four years, it is essential that the school district institute,

at a minimum, a yearlong internship and mentoring program for new teachers.

### **9. STRENGTHEN INDUCTION PROGRAMS**

The task force calls for an induction program for all beginning teachers regardless of whether they have completed a four- or a five-year program. The AFT will work with school administrators and, through collective bargaining agreements, implement induction programs for novice teachers that include: a quality selection process for identifying and training mentor teachers; adequate training and compensation for these mentors; and time for them to genuinely teach, support and evaluate beginning teachers.

### **10. REQUIRE HIGH STANDARDS FOR ALTERNATIVE PROGRAMS**

The task force calls upon those state departments of education that recognize alternative routes to teaching to require, at a minimum, that to be admitted to an alternative-route program students must pass state teacher-testing exams in the appropriate content areas. In addition, such programs must provide pedagogical coursework to alternative route candidates, monitor their performance in the classroom, and provide necessary services to support their development of effective teaching skills and strategies.

# Roles and Responsibilities

**T**o improve current conditions, the AFT believes that university officials, school district officials, college and school district faculty, public and private grantmakers, and policymaking bodies (such as NCATE, disciplinary associations and state agencies) must use all their influence to carry out the agenda outlined in this report. The national AFT, as well as each K-12 and higher education union, must take up the fight in their schools and on their campuses. For example:

- **The president of the university must make the preparation of high-quality teachers an institutional priority.** Presidents and boards of trustees must demonstrate that teacher education is at the heart of serious discussions and decisions. Recently a foundation president reviewed randomly selected annual reports from our nation's colleges and universities, only to discover that the education divisions were not mentioned in a single one. This is confirmed in the shameful amount of money spent on teacher education compared to other disciplines. For example, the task force looked at two

colleges in different regions of the country; one spent less than half on each teacher education graduate compared to its engineering graduates, and the other spent less than one-third on teacher education classes compared to industrial technology. At research institutions, it was found that only social work and accounting departments receive less financial support than the college of education (Howard, Hitz, and Baker, 1998). Dollars do not tell us everything, but what they do tell us is extremely disturbing.

The task force is greatly heartened by the publication in 1999 of an American Council on Education report, *To Touch the Future*, which strongly urges college and university presidents to devote greater attention to teacher education and to restructure resources toward it. Presidents should help strengthen relationships between the arts and sciences and education faculty, realign the faculty reward structure to encourage greater involvement of faculty with their school and community, greatly increase spending for the clinical experience program, and form alliances with neighboring communities to ensure that the university's resources are directed toward the development of teachers who can help their students meet high academic standards.

■ **NCATE must strengthen its standards regarding entry into the profession as well as its standards for clinical practice**

Current entry standards require only a 2.5 grade point average and basic literacy. NCATE should articulate a higher standard of subject-matter knowledge and academic performance, particularly as it relates to state standards for K-12 students. In addition, it needs to spell out standards for student teaching and other clinical experiences that include criteria delineating who may be a cooperating teacher or a supervisor, and what role the university plays in training and coordinating such personnel.

- **State legislators, Congress and foundation leaders must designate the funds needed to enable colleges and universities to deliver excellent teacher education.** Public funds from national, state and local sources must be increased to deliver high-quality pre-service training. They must also provide support for additional post-graduation, on-the-job clinical training through the development of induction programs for novice teachers. Corporate and foundation leaders can help improve the quality of instruction and thus ensure student achievement by providing grants and special projects targeted at teacher education programs.
- **College faculty, clinical supervisors and cooperating school-teachers must define clear, explicit and shared expectations for their roles and responsibilities during the clinical experience.** These standards should be reflected in new NCATE standards and incorporated into collective bargaining contracts.
- **School district unions must assume greater responsibility for the quality of the clinical experience.** K-12 locals need to make the process of identifying cooperating teachers for teacher education candidates and mentors for novice teachers a central part of their responsibility. Collective bargaining should address the procedures that would ensure a quality mentor program, rigorous selection criteria, training for cooperating and mentor teachers, and adequate compensation. School districts and K-12 unions both have a professional responsibility to cooperate in ensuring teacher quality by jointly arranging meetings, seminars and other activities.
- **Higher education unions must use their good offices to strengthen teacher education. The campus union can take the lead in promoting greater communication between teacher-education faculty and their colleagues in other departments.** The union, through its contract, can work to ensure that the

institutional reward system favors clinical work in the schools, and that the hiring and training process for clinical faculty meets high standards. The union must work, through academic channels, to ensure that the basic liberal arts and sciences requirements offer students the grounding they need to be effective in the classroom. The union should insist that the university not place students in clinical settings where the cooperating teacher has not been vetted by a process that ensures excellence.

Strengthening teacher education requires political will, money, culture and attitude change both in the universities and in the public schools, and greater seriousness of purpose among all involved in the policies and practices related to teacher preparation. Good education for our nation's schoolchildren cannot be delivered by declaring pedagogy meaningless nor by requiring that teachers need only the most superficial knowledge of content to interact with their students. The best answer to high-quality teaching is professionalism: high-quality professional training, high standards for entry into the profession, a strong induction program for beginning teachers, competitive pay, administrative support and continuous opportunities for professional growth.

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# Appendix A: Alternative Certification

## Background

Teacher preparation programs in the United States traditionally have been designed to meet the needs of high school graduates who enter college and want to become teachers. These state-approved programs typically fulfill the college's general education requirements for earning a baccalaureate degree and include a major or minor in education, as well as requirements such as passing specific tests and student teaching. Upon successfully completing the program, a candidate receives a license to teach.

Since the mid-1980s, when three states (California, New Jersey and Texas) began implementing programs that prepare teachers through alternative means, the number of states that have some kind of alternative route to teacher certification has grown dramatically. In 1999, some 40 states reported that they provide alternatives to the traditional avenue into teaching (Feistritzer and Chester, 2000).

## About the Data

The National Center for Education Information (NCEI) report, *Alternative Teacher Certification: A State-by-State Analysis 2000*, by C. Emily Feistritzer and David T. Chester contains the most current data on alternative certification. But, as the authors note, the data available from the states are quite limited and have many holes. For instance, only 12 states track the age of candidates in their alternative certification programs.

## Evolution of Alternative Routes

### **Meeting the needs of older candidates and responding to shortages**

Alternative teacher-certification programs have evolved in order to attract and prepare individuals who already have undergraduate degrees in fields other than education. Traditional undergraduate programs don't make sense for these individuals.

Alternative teacher-preparation routes also have developed in response to threats of shortages. Existing and anticipated shortages (the well-publicized projected need for 220,000 new teachers per year over the next decade) are largely geographic and subject-matter specific. And, as Feistritzer and Chester point out, when the estimated annual demand for new teachers is examined, it becomes clear that it refers to "newly hired" teachers, which can mean new to the country, state, district or school as well as those individuals new to teaching. From the available data, however, it is difficult to tell what percent of new hires in any given year are individuals returning to teaching or changing teaching positions, what percent are new teachers prepared in teacher education programs and what percent are new teachers prepared through alternative routes or granted emergency licenses. In any case, the Feistritzer and

Chester data do show that the number of alternative certified teachers is growing.

### **Growing interest in alternative routes to teacher certification**

Thus far, alternative teacher-certification programs have prepared under 5 percent of today's 2.7 million teachers. But, according to 1999 NCEI interviews there is increasing interest in these routes—especially from individuals wanting to become certified to teach. Officials in 33 states say that interest in alternative certification programs among local school district personnel has grown, 27 states report rising interest among state legislators, and 22 states say interest among university/college schools of education has increased.

### **Changing profile of prospective teachers**

What type of candidates do alternative certification programs attract? Existing data (fewer than half the states with such programs record these data) show that this growing segment of prospective teachers tends to be older and that these programs attract more men and minorities than traditional programs. It appears, too, that participants are likely to teach in the inner city or in rural areas.

- Candidates tend to be older—the age ranges from 25 to 50—than participants in traditional programs (Feistritz and Chester, 2000). Indeed, the profile of individuals entering teaching has changed markedly. People are beginning their preparation later in their academic and professional careers. Nearly three out of 10 candidates who completed a college-based teacher preparation program in 1998 entered the program after receiving at least a bachelor's degree (Feistritz and Chester, 2000).
- Alternative programs attract more men than traditional programs. Of the 16 states recording such data, most report that the percentage of male alternative-certification candidates

exceeds the percentage distribution of male teachers (27.2 percent) in public schools nationwide. For example, South Carolina reports that 58 percent of program participants are male, and Idaho reports that 67 percent of participants are men (Feistritzer and Chester, 2000; Henke et al., 1997).

- Alternative programs attract more minority candidates than traditional programs. Only 12 of the 40 states with alternative routes to certification report usable data on race and ethnicity. However, the available data indicate that most (seven out of 12) states had a proportion of black program participants that was greater than the proportion of blacks in the national teacher work force, which is 8.6 percent. Some states reported even larger proportions of black participants in alternative programs—ranging from 13.5 percent in Texas to 99 percent in Kentucky. For the states that showed ethnic breakouts for alternative teacher-certification programs, most (eight out of 12) had a proportion of blacks equal to or greater than the proportion of blacks in the state as a whole. For example, Michigan's black population is roughly 14 percent, but 80 percent of candidates in alternative programs were black (Feistritzer and Chester, 2000; Henke et al., 1997; Wright, 1996).
- The data also show that most (seven out of 12) states had a proportion of Hispanic candidates in alternative programs that was greater than the proportion of Hispanics among teachers nationally, which is 3.7 percent. States reported larger proportions, which range from 5 percent in Arkansas and Delaware to 27 percent in Texas and up to 55 percent in New Mexico. For the states that showed ethnic breakouts for alternative teacher-certification programs, most had a proportion of Hispanics equal to or greater than the proportion of Hispanics in the state as a whole. For example, New Mexico's Hispanic population is roughly 38 percent, but 55

percent of candidates in alternative programs were Hispanic (Feistritzter and Chester, 2000; Henke et al., 1997; Wright, 1996).

- Participants in alternative programs seem to be more likely to teach in inner-city and rural communities than in small towns or suburbs. More than half of the states that keep such data (13) report that 50 percent or more of the participants in their alternative route programs teach in inner-city or rural communities. In California, for instance, 80 percent of alternative certification participants teach in inner-city schools, and Idaho reports that 90 percent of alternative program participants teach in rural schools (Feistritzter and Chester, 2000).

Based on these data, it appears that alternative certification programs may hold promise as a means of increasing minority representation in the teaching force and supplying qualified teachers to schools in hard-to-staff urban and rural areas.

## Quality Issues

Just as working to improve and ensure the quality of traditional teacher-preparation programs is a crucial component in any efforts to enhance instruction and student learning, it is equally important to ensure that alternative routes into teaching are of high caliber.

The quality of existing alternative certification programs varies widely. Few states have programs with well-defined criteria for recruiting, selecting, training and licensing prospective teachers. The range of qualifying criteria, for instance, varies from requiring a bachelor's degree, passage of a test(s), screening interviews, and demonstration of content mastery to requiring just a bachelor's degree to not requiring a college degree at all. A few examples from Feistritzter and Chester's program descriptions:

- Arkansas’s “Alternative Certification Program” requires applicants to have at least a bachelor’s degree (non-education major in the subject he or she intends to teach, or coursework requirements for secondary certification), a cumulative GPA of 2.75 *or* 3.0 in the last 60 hours of degree work, three letters of reference, and an interview with a selection committee. The applicant must also take the Praxis I and Praxis II (Specialty Area Examination) to enter the program.
- In Vermont, if a certified teacher is not found to fill a vacant position by autumn, the district is allowed to select “the best available candidate” and can obtain a waiver.
- In Michigan, one route requires that candidates possess at least a bachelor’s degree or be currently enrolled in a teacher preparation program—which will result in a Michigan teaching certificate when finished—and have completed 90 semester hours in a teacher preparation program.

On one extreme are quality alternative certification programs that (1) aim to attract talented career changers and others with at least a bachelor’s degree in a non-education major, and (2) impose rigorous entry criteria that may include tests, interviews and demonstrated mastery of content among other requirements. Candidates in these programs take education and pedagogy courses the summer before entering the classroom and throughout the school year. They teach during the regular school year, but under the close supervision of expert mentor teachers and become fully licensed once they have successfully met the standards for completing the program. According to Feistritz and Chester, there are only 12 states that implement one or more programs that meet the National Center for Education Information’s criteria (similar to the above) for exemplary alternative teacher preparation. In 1998-99 less than 40 percent of the approximately 24,000 individu-

als certified through alternative route programs had the benefit of programs that Feistritzer and Chester have identified as being exemplary.

On the opposite end of the spectrum are programs that require little more than a college degree, if that, and fail to require education coursework or to provide support in the classroom. Individuals who enter teaching through such routes—often referred to as “emergency certification”—are left to sink or swim. In between these extremes are programs that may have some, but not all, of the characteristics essential to quality alternative certification programs.

## Selectivity

Data collected in the 11 states that track application and acceptance to alternative certification programs indicate some amount of selectivity in determining who enters such programs. All but three states report accepting fewer candidates than applied to their alternative route program(s). In Connecticut, for instance, 460 people applied to the state’s alternative teacher-certification programs, but only 180 were accepted. It is not clear from the data, however, why the candidates were rejected by the programs. For example, all or nearly all of the candidates might meet a program’s entry requirements, but the program might turn many away because of restrictions related to the program’s size. That situation would be drastically different from a program that rejects applicants because they do not meet stringent entry criteria.

Nearly one-third of all states with alternative certification programs (13 out of 40) also have a program that can be considered an emergency route. For example, California, a state that Feistritzer and Chester identify as having exemplary programs, implements an emergency certification program. In some states, emergency certification accounts for filling more teaching positions than any other alternative route. In 1998-

99, California issued 28,617 emergency teaching permits—vastly more than for all other alternative routes combined. Louisiana issued 4,698 emergency certificates (called “temporary teaching assignment”)—more than five times the number of its other alternative certification avenues combined. The emergency route is not selective.

## Recommendations

Emergency routes where individuals are thrown into the classroom to “sink or swim” are unacceptable and must be eliminated as an “alternative route” to the classroom. But, recruiting individuals who did not originally prepare to be teachers can provide a rich source of candidates for the teacher work force. It is reasonable to develop for these individuals alternative training programs that accommodate their past educational and work experiences. Such programs must insist on rigorous standards for entry (including passing all subject-matter tests required of traditional candidates) and pre-employment pedagogical training. In addition, individuals who enter these routes into teaching must have intensive support and supervision by expert teachers during their initial teaching experiences—“buddy systems” won’t suffice.

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