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ABSTRACT

This paper provides a lens through which to view the significant teacher shortage dilemma that affects schools and communities in United States and in the Pacific region. Part 1, "A Critical Perspective," examines challenges facing teacher education, recruitment, and quality in the United States, noting alternative pathways to teacher certification and monetary incentives to become teachers. Part 2, "Standard, Alternative, and Emergency Certification Models," describes the characteristics and benefits of these types of certification. Part 3, "Discussion," describes the types of people drawn to teaching by the various types of certification, examines implications for Hawaii and the Pacific entities, and makes recommendations for the Pacific region in dealing with this complex issue, including: raise the status of and standards for teaching; initiate new recruitment programs; focus on the areas of highest need; and eliminate all emergency certification programs. Nine appendixes include: Web links; licensing and certification organizations; Title II teacher quality legislation; Interstate New Teacher Assessment and Support Consortium model standards for beginning teachers; beginning teacher certificates issued; special programs for teacher certification; state standards for teacher licensure; states requiring teacher assessment for new licensure; and state teacher scholarship programs. (Contains 36 references.) (SM)

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By David Roth and Watson Scott Swail*



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

November 2000

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CERTIFICATION AND TEACHER PREPARATION IN THE UNITED STATES

By David Roth and Watson Scott Swail

INTRODUCTION

Teaching is more than picking up a bag of instructional tricks at the schoolroom door or learning to mimic the actions of another educator—even a very good one. Good teachers are thinkers and problem solvers. They know when children aren't learning and can adjust instruction appropriately; they know how to design and use a variety of assessment techniques—not just paper-and-pencil tests; they know how to work with parents to bring out the best in a child; they know that teams of professional educators can transform schools and expect to go about doing it. (Imig, 1996, p. 14A)

Good teaching is perhaps the most critical part of a solid education. In fact, the deleterious effects of just one ineffective teacher may jeopardize the entire educational success of a young person, regardless of how many effective teachers she might subsequently have (Wright, Horn, & Sanders, 1997). The critical importance of teaching is not just acknowledged by educators and practitioners, but by the public at large. A 1998 survey conducted by Louis Harris and Associates found that 55 percent of Americans chose the quality of teachers as “the greatest influence on student learning” (NEA, 1999). And good teaching isn't an accident. Surely some teachers have a gift to help students learn, but knowledge of the learning process, child development, and academic content are all important components of good teaching.

Teacher quality has long been an important issue for parents, educators, and policymakers, to the extent that new legislation was recently enacted by Congress to watchdog teacher preparation across the nation. Section 207, as it is known in policy circles, was enacted as part of the reauthorization of the Higher Education Act in 1998. This legislation requires colleges and state governments to report information on teacher quality, including pass rates on licensure examinations as well as the number of teachers holding emergency or alternative certificates (see Appendix C for the legislation). The first such institutional report must be filed with the U.S. Department of Education by April 7, 2001, and states must comply by October 7, 2001. Section 207 has the immediate impact of burdening colleges and state agencies with the responsibility of collecting appropriate data, and if the data-collection systems aren't available, those must be developed as well. Complicating the law is that each state has its own set of licensure and certification guidelines (see Appendices C & D).¹ While the intent is in good faith, no one is really sure what the congressionally mandated data will mean in the end due to the breadth of field practice across

¹In order to smooth out the process, the Teacher Preparation Accountability and Evaluation Commission (TPAEC) was created to provide technical assistance to the U.S. Department of Education. In its recent report on the requirements, TPAEC acknowledges the variance in institutions, and recommends that the states “respect the individuality of higher education institutions and don't use the reports to try to homogenize teacher-preparation programs” in each state (AASCU, 2000, p. 7).

the 50 states, the District of Columbia, Puerto Rico, and the Pacific Islands. What the law accomplishes is to set a tone for what is expected in teacher certification over the next several years. Quality counts, teacher test scores, and other indicators will be considered.

The need to recruit qualified teachers to serve the neediest communities and schools of the United States and the entities of the Pacific has never been more pronounced. Regardless of geographic location—whether it be Koror, Palau or Newark, New Jersey—the most needy children and their schools are historically those who have suffered most from the tyranny of low expectations and paltry resources. While schools in our most affluent communities have historically had little trouble attracting and retaining quality teachers, economically challenged rural and urban schools have not kept pace with their moneyed counterparts when it comes to staffing classrooms with well-prepared, licensed instructors. Many Pacific schools are staffed with faculty members barely out of high school themselves, individuals who have been granted licenses to teach having proven only minimum competence. Decades of debate on education reform have done little to address the teacher crisis that exists for our neediest students, as is evidenced by the sheer numbers of new teachers required to meet the basic needs of our rural and inner-city schools.

Over the past twenty years, alternative methods of teacher certification have developed in response to the dire need for teachers in communities and schools across the United States and the Pacific. School districts and colleges have, in unprecedented numbers, begun to offer programs of certification that circumvent many of the traditional requirements that were the hallmark of pedagogical training. These alternative teacher-training programs, first conceived as short-run responses to crisis, have become integral parts of the educational landscape (Stoddart & Floden, 1995).

To be sure, alternative models of teacher certification are not novel, but in fact mark a return to the roots of teacher education in the United States. Interestingly, until the advent of teachers' colleges in the late nineteenth and early twentieth centuries, local school districts were most often the entities empowered with the authority to certify teachers. Alternative certification programs represent a return to that paradigm and further proof that there is in fact "nothing new under the sun."

This paper is being written primarily to help provide a wider lens through which one might view the significant teacher-shortage dilemmas that affect schools and communities in the Pacific. We have divided this paper into three sections. Part I provides a perspective of the challenges facing teacher education, recruitment, and quality in the United States. Part II focuses on issues of certification and licensure, with a specific look at the alternative and emergency certification issues across the nation. Finally, Part III will provide discussion based on our findings, with recommendations and considerations with respect to the conditions and critical teacher-quality issues of the Pacific Island entities.

PART I: A CRITICAL PERSPECTIVE

The Pacific Island schools and school systems to which this study will be relevant differ greatly in population, culture, economy, and resources from the communities and schools on the mainland United States. However, the effect of teacher shortages upon students, whether in Los Angeles, Pohnpei, Guam, or Milwaukee, is disturbingly similar. When there are not enough well-trained, well-supported teachers, students suffer regardless of geography. But the geography of the islands makes the task of maintaining quality of instruction even more difficult. The 1.6 million people living in the Pacific region are spread out over an area of 4.9 million square miles, an area roughly equivalent to 1.6 times that of the continental United States.

Teacher shortages affect underserved communities and schools across the Mainland and the Pacific, all with strikingly similar results. Those communities that are the wealthiest and the most homogeneous have historically had very little trouble recruiting well-qualified teachers. By contrast, high-poverty urban and rural schools are the ones most likely to suffer from debilitating teacher shortages. Surprisingly, however, discourse about the shortage of well-qualified teachers on the Mainland most often revolves around the dilemmas facing urban, inner-city schools, while the opposite discussion is taking place in Pacific communities. The plight of the Mainland's rural schools is not as well documented as the plight of the rural schools in the Pacific, a condition that has forestalled significant national efforts to meet the unique needs of the rural student. According to Collins (1999), "Few states have developed specific programs to address the problems of rural teacher recruitment and retention. Recent research on rural teacher recruitment and retention appears thin, and much of it has been conducted outside the United States."

To be sure, severe teacher shortages affect almost every high-poverty urban and rural community throughout the mainland U.S. and the Pacific. We hope that as the light thrown upon the schools of the Pacific illuminates the needs of the rural Mainland student, further study will be made of the needs of the young people and their families living outside of our suburbs and inner-cities.

The Teacher Pool

According to the National Center for Education Statistics (NCES), an estimated 2.4 million new teachers will be needed by 2008-09 due to teacher attrition and retirement. This number jumps to 2.7 million when student/teacher ratios fall due to class-size reduction efforts. In high-poverty urban and rural districts alone, more than 700,000 new teachers will be needed in the next 10 years (NCES, 1999). This means that on average, approximately 240,000 new teachers will be needed each year for the next decade.

The aging teaching force creates much of this need. Of the 3.22 million teachers in 1998 (NCES, 1999), approximately 750,000 will retire by 2008-09 (NCES, 2000). In total, approximately six percent of the teaching force leaves the profession each year, while an additional seven percent of teachers change schools each year (National Education Association, 1999). The attrition problem is more dramatic for new teachers. One out of every five new teachers leaves teaching within three years. More disturbing is the fact that a full 50 percent of new teachers in urban areas leave within the first five years (NEA, 1999).

To be fair, not all of the 2.4 million teachers needed by 2008-09 must be “newly minted,” or first-time, traditionally developed teachers. According to NCES, only 42 percent of the newly hired teachers in 1993-94 were newly minted (Feistritzer & Chester, 2000, p. 9). Still, we will need more than 45,000 of the newly minted type each year for the next 10 years. These figures are based on projections that public- and private-school enrollments will exceed 53 million, an increase of one percent since 1998 (NCES, 2000, Table 2, p. 13).²

But this is not just about getting warm bodies in our nation’s classrooms. We want and expect to have well-qualified teachers in every school across the Mainland and in the Pacific. However, this is simply not our current reality. Teachers in high-poverty urban districts are most likely to be under-qualified when compared to their peers in more affluent school districts. Between one-third and one-half of all secondary math teachers in these districts have neither a college major nor minor in math (NCES, 1998). The situation is even more pronounced for Pacific Island schools and communities, where it is not anomalous for schools to be staffed by a vast majority of teachers who do not even hold a bachelor’s degree. For our students in high-poverty urban and rural schools, under-qualified teachers and high levels of poverty create a situation almost designed for student failure.

Teacher Quality

Seemingly regardless of how many teachers are trained nationally, or what sort of incentives have been offered, there have been teacher shortages in our high-poverty inner-cities and rural communities throughout the past century (Stoddart & Floden, 1995). While suburban schools have often had a glut of well-qualified teachers applying for positions, high-poverty urban and rural schools have resorted to employing teachers who enter the classroom via the most expedient route possible and are often teaching outside their area of expertise. They are employed by virtue of the fact that an “emergency” credential program exists in their region (Haberman, 1988). Teachers in urban areas carry a particularly heavy burden given the fact that they educate 50 percent of our minority students, 40 percent of our lowest income students, and between 40 and 50 percent of the nation’s students who are not proficient in English (Recruiting New Teachers, 2000). AFT President Sandra Feldman (1998a) puts it this way:

In districts where the conditions are rough and the pay is low . . . schools often end up getting the least qualified new teachers. (We call them “Labor Day Specials.”) They are hired with “emergency credentials” or misassigned to classes they weren’t trained to teach.

For those of us in the teacher business, we are all too familiar with Labor Day and what it means for America’s schools. According to NCES, we do manage to fill 99 percent of all teaching positions. But that doesn’t ensure that every position is being filled with a caring, competent professional. In fact, data

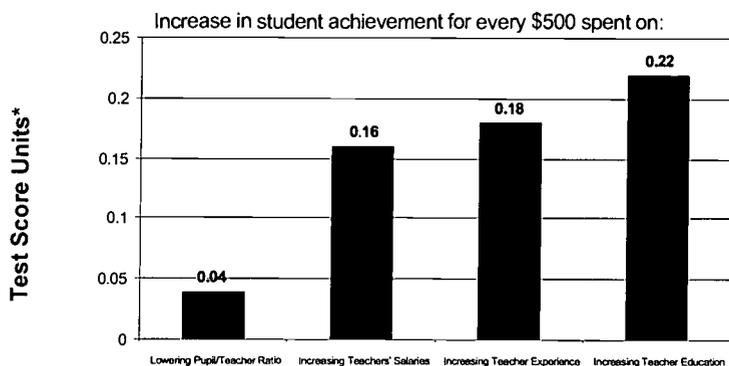
² Alternatively, enrollment in Hawai’i’s public schools will increase 11.7 percent during that time, from 188,000 students to 210,000 (NCES, 2000, Table 4, p. 15). Of the 10,111 teachers in the state of Hawai’i in 1993-94, 759 were first-time teachers. In 1995-96, 354 bachelor’s degrees in education and 187 master’s degrees in education were awarded (Feistritzer, 1999, Table 6, p. 12). This production of new teachers accounts for only 5.4 percent of the teaching population in Hawai’i, or a fraction of the loss of teachers in a given year due to retirement and attrition. The current base of 12,075 teachers must be increased significantly to meet future need.

corroborate the opposite. Many of our K-12 teachers are either uncertified or unprepared for effective classroom practice:

- Twenty-eight percent of teachers are certified in an area not associated with their teaching or do not have an undergraduate major or minor in their primary assignment field (NEA, 1999).
- Eighty percent of Great City School districts allow non-credentialed teachers to teach, 60 percent allow individuals to teach under emergency permits, and the same percentage allows long-term substitutes to teach (Recruiting New Teachers, 2000).
- Only 64 percent of teachers with three or fewer years of experience have full state certification; the corresponding figure for teachers with 10 or more years experience is 99 percent (NEA, 1999).

Why does this matter? Research supports the thesis that professionalization and standards of teaching are directly correlated with student achievement. Greenwald, Hedges, and Laine (1996) found that the money spent increasing teacher education has the greatest impact on student achievement as compared with lowering student/teacher ratios, increasing teacher salaries, or increasing teacher experience (see Exhibit 1). Certification is known to impact student achievement as well. A 1985 study by Hawk, Coble, and Swanson found that certification in mathematics had a direct impact on student learning as measured by an achievement test (Darling-Hammond, 1999).

Exhibit 1. Effects of Educational Investments on Student Achievement



*Achievement gains were calculated as standard-deviation units on a range of achievement tests in the 60 studies reviewed.

SOURCE: Greenwald, Rob, Larry Hedges, & Richard Laine (1996). "The Effects of School Resources on Student Achievement." *Review of Educational Research*, 66 (3), pp. 361-396.

It isn't that we don't know what teachers should know. We do. For instance, the Interstate New Teacher Assessment and Support Consortium (INTASC) has developed a series of principles that define what a teacher should know and be able to do in the classroom (see Exhibit 2 & Appendix D). Through the work conducted by INTASC, the National Board for Professional Teaching Standards (NBPTS), and the National Council for Accreditation of Teacher Education (NCATE), we are quite knowledgeable about what makes good classroom practice and what makes a good teacher. Where there is great concern is in the area of alternate and emergency certification and the ability of those teachers to meet the levels defined by these national groups.

Exhibit 2. INTASC Model Standards for Beginning Teachers

The Interstate New Teacher Assessment and Support Consortium (INTASC) *Model Standards for Beginning Teachers*

- Principle 1 The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
- Principle 2 The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.
- Principle 3 The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.
- Principle 4 The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.
- Principle 5 The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
- Principle 6 The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
- Principle 7 The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
- Principle 8 The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.
- Principle 9 The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
- Principle 10 The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

SOURCE: Council of Chief State School Officers (www.ccsso.org/intasc.html)

Meeting the Need

Why we are saddled with teacher shortages and quality issues is not in the purview of this paper. However, it appears that two major reasons people either don't enter the teaching force or leave it within a few years are teacher pay and teacher professionalism. Feldman (1998a) suggests that poor pay is an "embarrassing but accurate reflection of our society's priorities and our shameful neglect of children, especially our poor children." This relates to teacher professionalism, an issue noted by the public. The National Board of Professional Teaching Standards (NBPTS) (see Appendix B) was created in the wake of *A Nation At Risk*, which strongly suggested that "the key to success [in education] lies in creating a profession equal to the task" (NBPTS, 2000). The NBPTS was created in part to raise both the level of teacher practice and the perception of teaching as a profession on a level par to lawyers, doctors, and other certified professionals.

Regardless of the causes, school districts, states, and the U.S. Department of Education are getting quite creative about attracting teachers into the classroom. Their methods fall into three categories: recruitment, monetary incentives, and alternative pathways to teacher certification.

A. Recruitment Efforts

Clearly, the discussion of alternative or traditional methods of teacher certification is a purely academic one if there are no new teachers to certify. The great need for teachers in classrooms around the nation and across the Pacific has led to myriad approaches to teacher recruitment, two of which (*Teach for America* and *CalTeach*) are briefly profiled on the following page.

The need to recruit individuals into the teaching profession is recognized by those at all levels of government. Both states and individual school districts routinely hold recruiting fairs at colleges and universities around the country and are increasingly targeting those who might wish to leave the corporate world for the greener pastures and rewards of academia. Interestingly, over half (55 percent) of the individuals admitted into teacher-preparation programs at the post-baccalaureate level are transitioning into teaching from an occupation outside of education, and nearly 3 in 10 individuals studying to be teachers began doing so after they had already received at least a B.A. (Feistritzer, 1999, p. 1).

Exhibit 3. Teach for America Program

Teach for America

Teach for America is a national corps of recent college graduates who commit two years to teach in high-poverty urban and rural public schools. There are fifteen geographic locations participating in the Teach for America program, and over 1,500 corps members serving more than 100,000 students each year.

Newly recruited Teach for America corps members participate in an intensive five-week training program facilitated by master teachers. The corps member then moves to one of the fifteen participating urban or rural sites and is placed in a classroom as a regular teacher. Teach for America operates local offices in each of its geographic areas to help corps members acclimate to their new surroundings and provide ongoing support.

In order to submit an application, a Teach for America candidate must have a cumulative undergraduate GPA of 2.50, a condition placed upon the corps members by the school districts involved in the program.

Exhibit 4. CalTeach Recruitment Program

CalTeach

CalTeach is an outgrowth of the recommendations of the California Statewide Task Force on Teacher Recruitment, a broad-based group that studied the policies and issues surrounding teacher credentialing. The Task Force's recommendations became the basis for **CalTeach's** priorities:

- Develop and distribute statewide public-service announcements;
- Develop and distribute effective teacher-recruitment publications;
- Create a referral database for qualified teachers seeking employment in the public schools;
- Provide information to prospective teachers regarding requirements for obtaining a teaching credential and/or admission to and enrollment in conventional and alternative teacher-preparation programs;
- Develop and conduct outreach activities for high school and college students.

CalTeach is administered by the CSU Institute for Education Reform as an intersegmental program. Representatives from the California Department of Education, California Commission on Teacher Credentialing, University of California, California State University, California Community Colleges, and the Association of Independent California Colleges and Universities collaborate to guide the work and mission of **CalTeach**.

For the past three years, **CalTeach** has worked on these goals using a variety of methods, including an aggressive public-outreach program, sophisticated technology tools, and strong collaborative connections with other teacher-preparation advocates. Co-located on California State University campuses in Sacramento and Long Beach and funded primarily by the state, **CalTeach** produces a quarterly newsletter, hosts an interactive website, sponsors a telephone hotline, and distributes a steady stream of advertisements, brochures, and videos. All are designed to make people aware of teaching as a valued, rewarding career vitally important to California's future.

Recent evidence points to the success of these programs in attracting individuals to a career in teaching. There has been a sharp rise in the number of individuals studying to be teachers in the United States: an increase of 49 percent (from 134,870 to 200,545) from 1983 to 1998 (Feistritzer, 1999, p. 1). This is quite

important given the concomitant increase in the number of teachers needed in our schools over the next decade.

One of the major hurdles in recruiting teachers is assigning them to the sites of greatest need, which include rural and urban areas. Incentive programs designed to entice prospective teachers to these needy areas are in place, but it is a difficult task at best. According to Collins (1999), to recruit rural teachers:

Administrators must target candidates with rural backgrounds or with personal characteristics or educational experiences that predispose them to live in rural areas. The emphasis on background and experience is crucial for racially or culturally distinct communities . . . the degree to which a rural teacher becomes involved in community educational and cultural programs influences his or her decision to remain; therefore, retention requires a coordinated school-community effort.

B. Monetary Incentives

Incentive programs have received much press in the past few years, especially signing bonuses. Massachusetts made the biggest noise by offering \$20,000 over four years for the 100 top candidates. Detroit and Washington, D.C., have played the incentive game to a lesser degree. Baltimore showed a little more creativity by offering \$5,000 in real-estate closing costs for teachers willing to live in the city, plus \$1,200 moving expenses.

Critics of these programs suggest that these are only short-term fixes. All of these incentive programs require teachers to stay for a period of time before moving on or repay the incentive. However, critics argue that without permanent increases in teacher salaries, teachers will leave after the waiting period is over. Thus, the overall end effect will be negligible.

A number of state programs that provide either scholarships or forgivable loans are in operation around the country, as well as a major program housed at the U.S. Department of Education. The Delaware Higher Education Commission, which has been conducting a national study of teacher-based incentive programs, found that 23 states currently have teacher scholarship programs (see Appendix I). Most of these programs were created to deal with teacher shortages in rural or other areas, or in specific subject/content areas, such as special education, ESL, mathematics/science, and bilingual education. It is important to note that while the term “scholarship” is used widely, many of the programs are more accurately coined “forgivable” loan programs. That is, the state will convert the scholarship to a loan if the person leaves teaching within a pre-determined time period.

C. Alternative Pathways to Teacher Certification

Finally, states have developed a number of alternative pathways into teaching that allow individuals, usually those who have degrees already, to enter the teaching force without having to duplicate much of their study. In essence, these programs provide a short ladder to the classroom and are the primary focus of this paper. We will discuss them in much greater detail in Part II.

PART II: STANDARD, ALTERNATIVE, AND EMERGENCY CERTIFICATION MODELS

For the purposes of our discussion, the terms “teacher licensing” and “teacher certification” must be fully defined. The literature can often be confusing in relation to the terminology used to discuss teacher preparedness, with one author using one set of terms and another an entirely different lexicon. We will try to reduce the complexity of our explanation in an attempt to create a document that can be of use to the professional educator and the layperson alike. Simply put, “Certification is the process of deciding that an individual meets the minimum standards of competence in a profession. Licensing is the legal process of permitting a person to practice a trade or profession once he or she has met certification standards” (Cronin, 1983, p. 175). Licensing is conducted by each state, and states license teacher-education institutions that meet their guidelines. When a student completes the course work at an institution authorized by the state (including student teaching and other expectations of the institution), the teacher becomes certified and subsequently licensed to teach in that state.

Because each state is responsible for its own licensing and certification rules, it is true that teachers certified and licensed in one state may not necessarily teach in another state. However, many states have developed reciprocity agreements to allow teachers to teach across states. The National Association of State Directors of Teacher Education and Certification (NASDTEC) administers a contract for forty-one states (in addition to the District of Columbia, Guam, and Puerto Rico). In addition, there are regional compacts that practice reciprocity among their members,³ while many states accept teachers who have completed their education at member institutions of NCATE.

The professional licensing of teachers in the United States dates back to the late 1600s, and the purpose of the licensure system was to ensure a minimum level of quality on behalf of the teacher. Like physicians or attorneys, teachers are required to procure a license so that the “consumer” may somehow be assured of the quality of the “product” being provided. In the case of the teacher, licensure provides yet another criterion by which the quality of a child’s education may be judged and the perceived efficacy of an educational system assured.

Licensure requirements and certification vary from state to state. Despite the differences, most authorities agree that teacher candidates should:

- Have at least a bachelor’s degree; some states require a fifth year or master’s degree;
- Complete an approved, accredited education program;
- Have a major or minor in education (for elementary education);
- Have a major in the subject area in which they plan to teach (for middle- or high-school teaching);

³ Northeast Regional Credential (NERC) is a northeastern U.S. compact of New York, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. MOINKSA is a Midwestern compact of Missouri, Oklahoma, Iowa, Nebraska, Kansas, South Dakota, and Arkansas (hence the name).

- Have a strong liberal-arts foundation;
- Pass either a state test, the widely used PRAXIS exam, or another exam.

Thus, traveling the traditional route to teacher certification requires, at a minimum, a bachelor's degree and a proficiency exam of some type.

However, the efficacy of traditional systems of teacher preparation and licensure has received considerable criticism. This is evidenced by the proliferation of programs designed to provide alternative methods of teacher certification to those traditionally employed by institutions of higher education. From emergency-credential programs to internship programs to university-partnership programs, there are myriad different pathways to a state teacher license. Each and every one of the alternative programs that exist across the United States is designed to provide an easier or more accessible route to the classroom for prospective teachers. And while the success of these programs is a matter of intense ongoing debate, there is no doubt that alternative methods of teacher preparation are integral elements of the educational universe.

The United States is one of the few industrialized countries that does not require teachers to pass a uniform test for licensure (NEA, 1999). This inconsistency is a consequence of our decentralized system of education, where states are the legislating authority across the country. For almost one hundred years, institutions of higher education were uniquely endowed with the authority to both educate prospective teachers and certify to state authorities that "newly minted" teachers were qualified to teach. However, in response to an overwhelming need, over the past twenty years there has been a significant increase in the number of states allowing alternative methods of certification. In 1983, only eight states allowed for alternative certification, whereas today, 40 states and the District of Columbia have embraced alternative certification programs (Stoddart & Floden, 1995; Feistritzer & Chester, 2000). Clearly, the "emergencies" have become routine, and the obvious need suggests that alternative methods of certification will become the means of ensuring that enough well-qualified teachers are available for all our students (Hart, 1996). "Both inner-cities and rural areas rely on alternative certification programs to provide instructors for communities where it's hard to keep a well-paid physician, let alone \$25,000-a-year teachers" (Kierstan, 1988, p. 2).

The trend toward de-standardization of teacher credentialing ironically is coupled with a steady increase in the number of states that are adopting or developing standards for teacher licensure. According to the Council of Chief State School Officers, 31 states have state standards for teacher licensure. Of these, 17 are based on the standards developed by the Interstate New Teacher Assessment and Standards Consortium, or INTASC (CCSSO, 1998).⁴ The opposition between a movement away from standardized pathways to certification and a greater standardization of state licensure processes is intriguing, potential proof that the quality of the teaching is far more important than the method by which the individual became credentialed.

⁴ As of December 1998, Hawai'i was in the process of developing licensure standards based on INTASC recommendations.

To implement alternative methods of teacher certification is to bring a new breed of teacher into the classroom. Alternatively certified teachers are by-in-large more diverse, older, and have significant professional experience that may have had nothing to do with education (Stoddart & Floden, 1995). They are individuals who most probably would not become teachers but for the availability of alternate certification—a pathway with far fewer opportunity costs than the traditional university-based approach.

Institutions of Higher Education and Teacher Preparation

The number of individuals studying to become teachers in the U.S. has increased 49 percent, from 134,870 to 200,545 between 1983 and 1998. Similarly, the number of teacher preparation institutions has increased. In 1999, 1,354 institutions of higher education (IHE) were involved in the preparation of teachers. Of these, 60 percent are independent nonprofit institutions, 37 percent are public, and 3 percent are proprietary. Almost two-thirds of the institutions are accredited by a professional accrediting body. Of these, 44 percent were accredited by NCATE and 14 percent by a regional accreditation body (Feistritzer, 1999).

While most undergraduate programs require students to complete 120 credit hours, undergraduate teacher-preparation programs require about 134 credit hours. Students typically spend 14.5 weeks in their student teaching practicum. By 1998, virtually all IHEs preparing teachers required passage of a content-area test for completion of their programs, compared to only 5 percent in 1983 (Feistritzer, 1999).

While the majority of teachers are prepared as undergraduates through these programs, a growing number of teachers are beginning their teaching careers later in life. They enter the traditional teacher-preparation funnel as post-baccalaureate students. In fact, 28 percent of all individuals studying to be teachers had at least one degree. Of this group, 79 percent held degrees in non-education fields, and 55 percent were transitioning into education from another field. Thirty-six percent of the post-baccalaureate students had some teaching experience, either as a substitute, a teacher's aide, or a school paraprofessional. About two-thirds of IHEs surveyed by the National Center for Education Information (NCEI) have programs specially designed for post-baccalaureate students who want to enter the teaching force (Feistritzer, 1999).

The ability of these institutions to provide a good education for prospective teachers depends partly on how one defines "good education." However, like K-12 education, teacher-education facilities are also adhering more closely to nationally recognized standards. The 1,354 teacher-training IHEs identified by NCEI will be required to meet new and rigorous performance-based standards in order to receive accreditation by NCATE in the year 2001, and these NCATE-accredited institutions will be publicly acknowledged by the U.S. Department of Education (NCATE, 2000). Arthur Wise, president of NCATE, states that "encouraging schools of education to attain national professional accreditation will increase the supply of well-qualified teacher candidates who can improve student achievement" (NCATE, 2000).

Of course, what happens after teacher certification in terms of professional development is equally important to the quality of the education students receive in the classroom. When teachers first start teaching, school districts often provide special programs to help them acclimate to the classroom and to the burden of ramping-up their curriculum. These "induction" programs are considered an important part

of helping teachers out, considering that the first year is often the most difficult year that a teacher will ever experience. Yet fewer than half the teachers hired during the last nine years participated in formal induction programs during their first year (NCES, 1999).

However, almost all states (47) have policies defining requirements for continuing professional development for licensing teachers (NASDTEC, 1998). These guidelines usually come in the form of a number of hours or credits earned over a five-year period. (Hawai'i was not one of the 47 states listed in the NASDTEC report.)

Exhibit 5. Standard Certification Models

Standard Certification Models

Traditionally, teachers are licensed after completing a teacher-education program at a state-sanctioned college or university. These programs usually expect a significant degree of commitment from prospective teachers, requiring physical attendance at the college or university for classes. For example, according to the California Commission on Teacher Credentialing, an individual interested in becoming a traditionally certified teacher must satisfy the following criteria to receive a Five Year Preliminary Credential:

- Bachelor's or higher degree
- Approved professional-preparation program including student teaching
- CBEST (California Basic Educational Skills Test)
- Completion of course work in the teaching of reading
- Course work in the teaching of the U.S. Constitution
- Subject-matter competence (via program or exam)

A teacher must then satisfy the following additional criteria in order to be granted a Professional Clear Credential that can be renewed time and again:

- 5th year of education course work and recommendation of California IHE with Commission-approved program. Included in the course work must be: course work on the teaching of health education, on special education (mainstreaming), and on computer education.

Alternative and Emergency Certification

In 1998-99, approximately 24,000 teachers were certified in 28 states through alternative routes (Feistritzer & Chester, 2000). The National Center for Education Information (NCEI), the organization that conducts the annual survey of alternative certification programs, estimates that over the past two decades, more than 125,000 teachers have been certified through alternative processes. The teacher-certification process is designed to ensure that individuals seeking to enter teaching meet minimum standards for competence. Schools, colleges, and departments of education "certify" that their graduates have met such minimum standards, thus recommending them for licensure by the state.

The purpose of alternative certification is to provide a pathway for people to enter teaching that does not require the traditional undergraduate, four-year path. Although these pathways differ, "alternative" or "emergency" certification still involves the issuance of teaching licenses to individuals who have not

completed a traditional college or university teacher-education program (Ashburn, 1984). “Alternative teacher education programs may differ in time, format, and locale, but they must assure that those who complete them meet demanding standards for admission into the profession” (American Association of Colleges for Teacher Education, 1999). Alternative methods of certification tend to produce teachers who are able to teach in areas with context-specific needs, while traditional certification places more emphasis on expanding a prospective teacher’s grasp of effective pedagogy (Stoddart & Floden, 1995).

Recurring interest in alternative certification programs seems to be rooted in three major issues: a need to address declining numbers of available teachers; a concern with the quality of individuals who do choose teaching as a career; and a desire on the part of the general public to allow entry into teaching by individuals perceived to have skills needed by the schools. (Bradshaw, 1998, p. 5)

Kwiatkowski (1999) identifies four distinct models of alternative certification programs in the field. These include programs designed to:

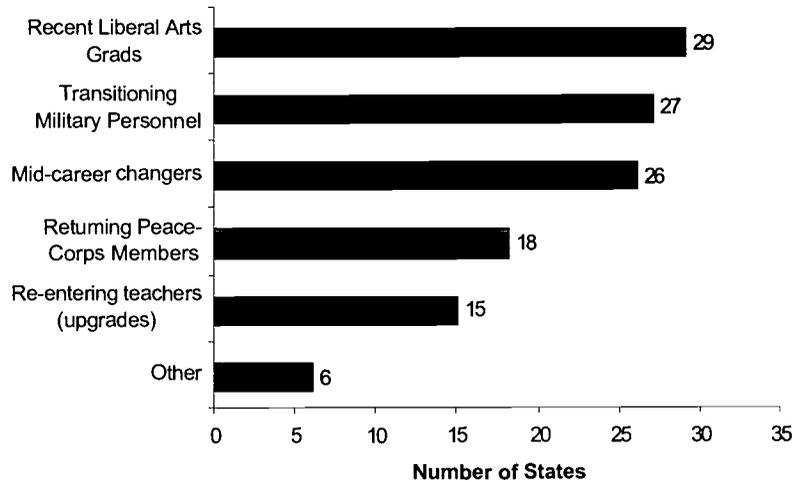
- a) increase the number of teachers available in specific subject areas,
- b) increase the numbers of teachers from underrepresented backgrounds,
- c) bring more teachers to rural or inner-city areas,
- d) decrease the need for emergency certification (Kwiatkowski, 1999).

According to the NCEI, New Jersey was the first state to enact legislation authorizing alternative routes to teacher certification (Feistritzer & Chester, 2000). Fifteen years later, the state has used the program to train and hire over 7,000 teachers. Interestingly enough, New Jersey enacted the legislation to reduce the use of emergency certification. Since 1985, New Jersey has not issued a single emergency certificate in any of the teaching areas falling under the program, nor has it moved people outside their teaching fields without the appropriate certification (Klagholz, 2000). Part of the success of the program is credited to the parallel reform agenda in the state for public education and the enhancement of teacher quality. That effort resulted in reducing the pedagogical courses in undergraduate programs, replacing them with more liberal arts and subject-area course work. According to Klagholz, “reform of the ‘traditional route’ paved the way for the ‘alternate route’ program because it fundamentally redefined the ‘well-prepared teacher’ as someone with a liberal-arts degree who acquires teaching skill mainly through actual classroom practice.” The New Jersey program puts prospective teachers in the classroom immediately (following an emergency pathway) but has strict certification practice that teachers must complete concurrently with their teaching. Approximately one-fifth of all New Jersey teachers are certified in this manner.

In their annual survey of alternative methods of teacher certification in the U.S., NCEI found that most of the alternative programs in operation focused on middle-career transition, recent liberal-arts graduates, re-entering teachers needing upgraded credentials, or transitioning military personnel (see Exhibit 6). For instance, 29 states offer programs for recent liberal-arts graduates. Many of these consist of a fifth-year program to provide a teaching certificate. Twenty-seven states offer programs for retiring military

personnel. Because many military personnel retire after 20 years, they can essentially begin their second career as a teacher by the time they are 40 years old. Other programs provided by states focus on mid-career changers (26 states), returning peace-corps members (18 states), and upgrade programs for re-entering teachers (15 states).

Exhibit 6. States with Special Teacher Certification Programs



Feistritzer, C. Emily & David T. Chester (2000). *Alternative Teacher Certification. A State-by-State Analysis*. Washington, DC: National Center for Education Information.

What Makes an Effective Alternative Certification Program?

Due to the scope of the issue and the sheer number of programs in existence, it is difficult to provide a complete model of what these programs look like. However, the National Center for Education Information has developed a hierarchy of criteria that define an “exemplary program.” These include the following six conditions:

1. The program has been specifically designed to recruit, prepare, and license for teaching those talented individuals who already have at least a bachelor’s degree.
2. Candidates for these programs pass a rigorous screening process, such as passing entry tests, interviews, and demonstrating mastery of content.
3. The programs are field-based.
4. The programs include coursework or equivalent experiences in professional education studies before and while teaching.
5. Candidates for teaching work closely with trained mentor teachers.
6. Candidates must meet high performance standards for completion of the programs (Feistritzer & Chester, 2000).

Exhibit 7. States That Have Exemplary Alternative Teacher Certification Programs: 2000

State	Name of Exemplary Alternative Teacher Certification Route Program(s)	Year first started implementing alternative routes for certifying teachers	Number of individuals certified to teach through alternative route programs		State has passed or introduced legislation or made changes in alternative certification since 1997
		Year	Total number certified	Number certified in 1998-99	
Arkansas	Alternative Certification	1988	1,000	400	
California	University Intern: District Intern	1967, 1983	-35,000	4,573	
Colorado	Alternative Teacher Program	1991	618	194	
Connecticut	Alternate Route to Teacher Certification	1988	1,489	159	
Delaware	Delaware Alternative Route to Certification/Secondary Education	1986; 1997	278	45	X
Illinois	Teachers for Chicago; GATE: Golden Apple Teacher Education	New programs			X
Kentucky	Local District Certification Option: Exceptional Work Experience Certification Option	New programs			X
Maryland	Resident Teacher Certificate	1991	365	55	
New Jersey	Provisional Teacher Program	1985	6,925	1,223	
New Mexico	Alternative Certification Program	New program			X
Pennsylvania	Alternative Candidate Certification	New program			X
Texas	Alternative Teacher Certification	1985	29,730	2,728	
TOTALS			75,405	9,377	

SOURCE: Feistritzer, C. Emily & David T. Chester (2000). *Alternative Teacher Certification. A State-by-State Analysis*. Washington, DC: National Center for Education Information.

In essence, the six criteria developed by NCEI mirror traditional programs in many ways. In exemplary traditional and alternative programming, prospective teachers require an earned B.A., some type of screening or testing, field-based practice, association with a mentor/teacher, and standards of high performance. Thus, the exemplary programs identified by NCEI are in fact following a high standard not unlike the traditional process. It is not a short cut, per se.

As can be seen from Exhibit 7, programs from 12 states make the list of exemplary programs as prescribed by the criteria above. Interestingly enough, almost half of these programs originated in the past few years. California, New Jersey, and Texas are represented on this list and are the pathfinders in alternative certification.

Klagholz (2000), building from his experience in designing and implementing the New Jersey program in the 1980s, suggests that the key in developing an effective alternative certification program is the coexistence of large-scale reform, the elimination of emergency certification, educating the public, and forceful recruitment strategies (see Exhibit 8). An interesting note is that Klagholz suggests that it is important not to make alternative routes legally contingent on college participation. While this may appear to end the monopoly of the four-year institution in licensing and certification, in reality, all teachers in New Jersey still must have a B.A. in order to teach.

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Exhibit 8. Characteristics of Effective Alternative Certification Programs

Characteristics of an Effective Alternate Route Program

1. **Reform traditional teacher preparation by eliminating artificial and unnecessary requirements:** thereby laying the groundwork for an alternative program that is equivalent and parallel. If an "alternate route" program is simply appended to an unchanged traditional system, then opponents can portray the excessive course requirements of the traditional program as "state standards" and the streamlined requirements of the alternative program as a "lowering of standards." While the argument is false, the state will be trapped by its own inattention to basic reform and the "lesser" alternative program will be consigned to use only as a "fallback measure" for hiring "substandard" candidates in "emergencies."

2. **Balance workability with a firm commitment to meaningful support and training.** If the program is cumbersome and bureaucratic, districts will not use it and capable candidates will not tolerate it. If merely a "shortcut," it will not have public or professional credibility, and districts' free use of it to attract quality people into teaching will not have support or acceptance.

3. **Eliminate emergency certification and disallow the employment and reassignment of teachers** to teach subjects in which they have little formal education. The state's commitment to quality is underscored and the justification for the "alternate route" strengthened if the program is a replacement for "emergency" employment and out-of-field teaching.

4. **Educate the public and the profession.** Any attempt to reform will generate opposition and rhetoric about "lowering standards." If state officials lack the courage to make the necessary counterarguments, they will be backed into creating a bobtailed "alternate route" program that is limited or unworkable. Such a program will fail to produce the desired results and is not worth the effort required to put it on the regulatory books.

5. **Do not make operation of the "alternate route" program legally contingent on college participation.** New Jersey's non-collegiate regional centers are not only crucial to the program's workability, they also were—ironically—the main stimulus for college involvement. Had college participation been guaranteed in regulation, most colleges would have resisted making the needed changes in practice or refused outright to participate. The threat of being left out, created by the state-run regional centers, accounted in no small measure for colleges' willingness to participate in the "alternate route" program.

6. **Recruit, recruit, recruit.** Under New Jersey's dual system, a school district with a job opening can hire any graduate of any college, of recent or past years, who has a degree in the subject field, an appropriate mix of personal qualities and experience, and the ability to pass the relevant subject test. If not unlimited, this national—even international—pool is substantially larger and more diverse than any pool of teacher education graduates. Yet the best candidates are not going to arrive automatically on school doorsteps. Districts need sophisticated recruitment programs, yet few have them. The worst-case scenario is the district that passively selects its new staff from among the student teachers placed in its schools each year by the local college. After properly defining eligibility requirements, the development of effective means of searching out talent from diverse sources is the second most important thing a state can do to move away from worrying about shortages and toward achieving high levels of quality.

Klagholz, Leo (2000). Growing Better Teachers in the Garden State: New Jersey's "Alternate Route" to Teacher Certification. Washington, DC: Thomas B. Fordham Foundation.

Emergency Certification

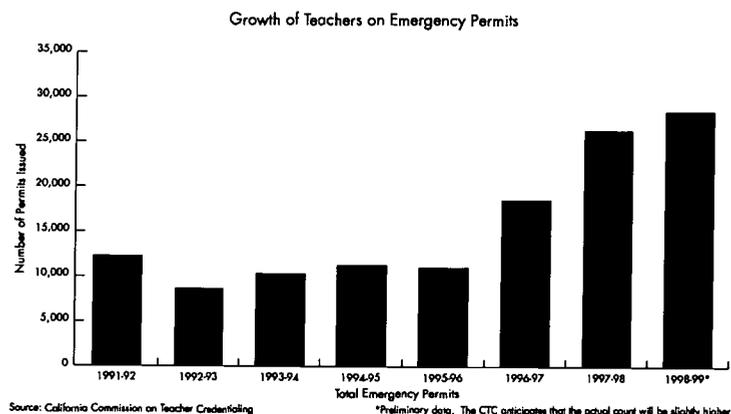
Emergency certification is a type of alternative certification that is used in specific and “emergency” situations such as teacher shortages. Emergency certification is typically granted on a temporary basis, and the expectation is that the teacher will obtain the necessary credentials to become fully certified or will eventually be replaced by a regularly certified instructor. When the teacher completes the necessary requirements, the “emergency” notation is removed from the teacher’s certificate.

There are those in education who would like to see emergency certification done away with due to the negative impact it could have on the profession as a whole. Williamson et al. (1984) have identified three of the major implications of emergency certification for the profession:

1. A reduction of the profession’s ability to maintain teacher standards and improve standards for professional training. Emergency certification may cause a dual system—those who are traditionally certified, and those who are not.
2. A decrease in the number of qualified teachers. Qualified candidates may be discouraged from seeking employment because the positions are filled with unqualified teachers, or may not seek professional training because they see it as unnecessary.
3. A detrimental effect on the process of turning research into effective practice. Use of emergency certification procedures could potentially undercut what we know about sound instructional practice.

California is perhaps the most definitive case study of emergency certification. According to the Center for the Future of Teaching and Learning (2000), a California-based think tank, “there are more than one million California students attending schools with so many underqualified teachers as to make these schools dysfunctional.” Over the past decade, the number of teachers with emergency permits has tripled. In 1998-99, 28,500 teachers, or more than 10 percent of the California teaching force, were employed on the basis of emergency permits.

Exhibit 9. Growth of Teachers on Emergency Permits in California



SOURCE: The Center for the Future of Teaching and Learning (2000).

The size and scope of the emergency-certification issue is difficult to quantify on a national basis. What we do know is that it is pervasive throughout the nation, and each fall we read in the newspapers about the number of unqualified teachers in our systems. The prevailing opinion is that emergency certification is a cop-out and it belies what we know about teaching and learning. The standards movement in teaching and learning is the result of rigorous research over the years. Emergency certification is not a silver-bullet approach to remedying teacher shortages if those teachers do not become fully certified. In that case, it may only exacerbate the problem.

Arthur Wise, president of NCATE, staunchly opposes emergency credentialing. He claims that emergency credentialing keeps teaching a quasi-profession, a low-level job one can "fall back on" if no better employment is available. As the world grows smaller and technology plays an increasingly important role in our lives, our children need more and better education. They need to be taught by professionals who are knowledgeable in their fields, who are dedicated to teaching, and who care about their students. They need fully licensed teachers who have demonstrated that they are entitled to their licenses.

Exhibit 10. California Emergency Permits

California Emergency Permits

In order to attain an Emergency Permit to teach in a California school, an individual must possess a baccalaureate degree or higher from a regionally accredited college or university and must pass the California Basic Educational Skills Test (CBEST). These are, in total, the requirements for a basic emergency credential.

The school district that decides to employ an emergency credentialed teacher must provide "orientation, guidance, and assistance" to the emergency-certified teacher and ensure that the teacher has at least a working grasp of the curriculum that an emergency permit teacher is expected to teach, along with an understanding of "effective techniques of classroom instruction and effective techniques of classroom management." (California Teacher Credentialing Commission, 2000).

PART III: DISCUSSION

Good teachers are critical. The research is clear—the single most important thing that a school can provide to ensure the success of students is a skilled and knowledgeable teacher. Good teachers—those who know what to teach and how to teach it—produce successful students. But teachers who are underqualified or ill-equipped do not produce successful students. (Center for the Future of Teaching and Learning, 2000)

Few educational issues have sparked such an emotional and bifurcated debate as has the one surrounding the preparation of our children's teachers. In an era of increasing demand *for—but limited supply of*—teachers in underserved, high-poverty urban and rural areas, the methods by which our teachers are certified for licensure is of paramount significance. While some posit that traditional methods of teacher preparation are the only viable ways to ensure that students will successfully progress through the educational pipeline, others argue that the implementation of alternative methods is the only reasonable strategy to fill the desperate need for teachers that exists in our most troubled schools. Still others opine that an artful combination of the two will provide the desired results.

Those that argue the merits of traditional, college- or university-based teacher-education programs believe strongly in the checks and balances associated with a rigorous, time-tested and standards-based approach to teacher education. Advocates for traditional methods of preparation decry the benefits associated with more expedient methods of teacher preparation as myopic and dangerous to the educational success of our young people. "Teaching appears to be the only profession in which the solution to the problems of short personnel supply is to open the doors to the unprepared and the underqualified" (Williamson et al., 1984, p. 2).

In a paper presented at the 1998 American Educational Research Association (AERA) conference, Bradshaw identifies the following contradictions that emerge when alternative pathways to certification are implemented:

- Across the nation, standards are being raised for traditional, university-based teacher-preparation programs at the same time standards for alternative routes to teaching are being relaxed. (It is also important to note that national attention is being given to creating and implementing rigorous curricular and testing standards for students.)
- Nationally, colleges and universities are held accountable for the quality of teacher-education programs through increased accreditation requirements, while monitoring to hold school districts accountable for the preparation of alternative-certification candidates is less stringent if it exists at all.
- Teaching is becoming more complex and requires more extensive training than ever before, but alternatively certified teachers enter the classroom with little or no training.

- The strength of teachers who enter through alternative routes is their strong content knowledge, but research suggests that strong content knowledge does not ensure teaching effectiveness.

The movement away from uniform rigorous requirements for all teachers in public schools that alternative-certification models represent is of great significance to those who argue against it. According to Sandra Feldman, president of the American Federation of Teachers, “Advocates of ‘alternative certification’ say the solution is easy. We should get rid of teacher standards altogether because the ‘bureaucratic red tape’ involved in certification turns off many qualified people.” Feldman continues, “In districts where attracting new teachers is already a chronic problem, ‘alternative’ means ‘emergency.’ It means lowering standards, allowing any warm body to teach” (1998, August).

Further proof for those advocating traditional methods of teacher preparation can be found in the performance of alternatively certified teachers versus traditionally certified teachers on state-licensing exams. According to Leibbrand (2000, p. 7), a recent study of 270,000 PRAXIS II test takers by the Educational Testing Service (ETS) indicated that graduates of NCATE-accredited institutions pass ETS content examinations for teacher licensing at a higher rate (91 percent) than graduates of unaccredited colleges (84 percent) or those who never entered a teacher-preparation program at all (73 percent). Leibbrand insists:

Those who take state licensing exams with no prior teacher preparation have a significantly higher failure rate on the content-oriented licensing exams than those who are fully prepared. This explodes the misconception that “the best and the brightest” would only teach if those bothersome standards were not applied. (p. 6)

Of course, the most important measure of the success of teacher preparation programs is the academic success of the students. Leibbrand (2000) offers several examples of the positive impact of fully licensed teachers on student outcomes: A 1996-97 study conducted by UT-Austin showed that Texas students performed better on state exams when their instructors were fully licensed in the subjects they teach. Seventy-five percent of third graders passed all parts of the 1997 state assessment when taught by fully licensed teachers in their field, but only 63 percent of students passed the exam when fewer than 85 percent of their third-grade teachers were licensed. A study conducted by Hawk, Coble, and Swanson (Darling-Hammond, 1999) found that student test scores in mathematics and algebra increased significantly when taught by a certified teacher compared to a non-certified teacher (see Exhibit 11).

Additionally, a 1996 report by the National Commission on Teaching and America’s Future indicated that “fully prepared teachers are more highly rated and more effective with students than those whose background lacks one or more of the elements of formal teacher education—subject matter preparation, knowledge about teaching and learning, and guided clinical experience” (NEA, 1999).

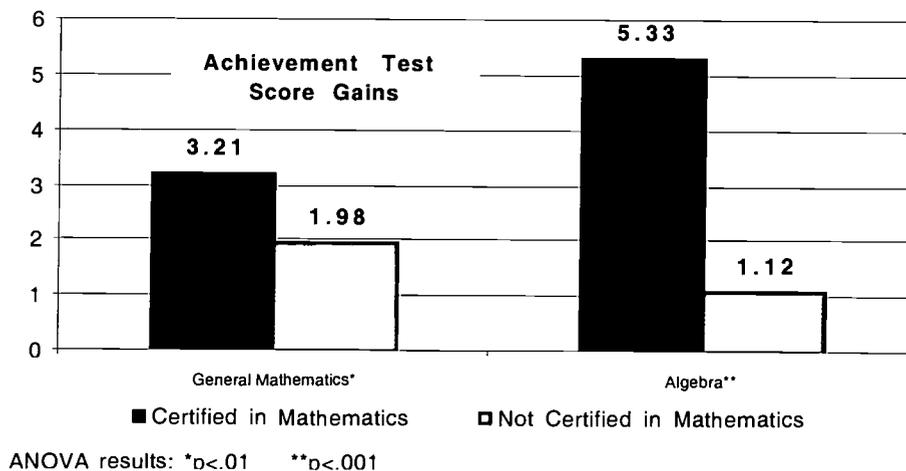
The proponents of alternative methods of teacher certification are no less vociferous than are the detractors and cite both the enormous need for teachers along with the large numbers of individuals who would pursue teaching if provided with an alternative to traditional college or university programs. “The

choice between a traditional program and an alternate route is not a choice between some professional preparation and no such preparation. It is, instead, a decision about the timing and institutional context for teacher preparation and about the mix of professional knowledge and skills to be acquired” (Stoddart & Floden, 1995, p. 7).

Many of those who cite the tremendous need and benefits of alternative methods of certification look directly to school-district personnel to offer proof of alternatively credentialed teachers’ success. Dale Ballou (1999) writes:

Any of the staunchest supporters of alternative certification are found in urban school systems. Administrators and educators familiar with the needs of these students are adamant in insisting that the great majority of the graduates of teacher education programs are ill prepared to work in these systems and that alternate routes are a vital source of supply. Most studies show no difference between alternate route and conventionally trained instructors; where there is a difference, it tends to favor teachers who entered through the alternate programs. (pp. 15-16)

Exhibit 11. Effects of Teacher Certification on Student Achievement in Mathematics



SOURCE: Darling-Hammond, Linda (1999). Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure A Competent, Caring, and Qualified Teacher for Every Child. New York, NY: National Commission on Teaching & America's Future. NOTES: This data come from a study by Parmalee P. Hawk, Charles I. Coble, and Melvin Swanson (1985, May-June). "Certification: It Does Matter" *Journal of Teacher Education*, 26 (3), pp. 13-15.

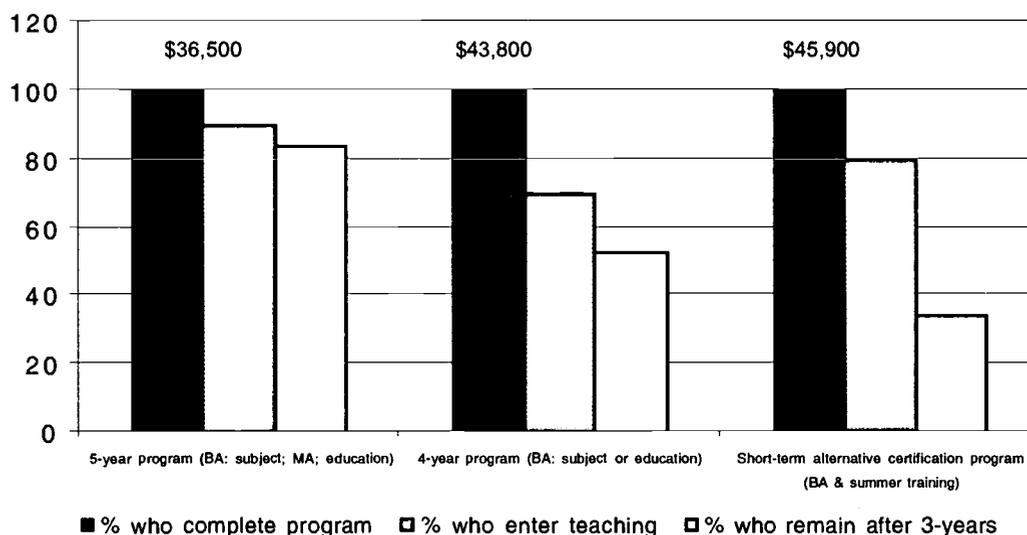
One final point worth addressing is the cost of alternative programs and the retention of teachers who go through various teacher certification/preparation programs. First, the retention of teachers from five-year master-in-education programs, four-year traditional-education programs, and short-term alternative-certification programs differs significantly (see Exhibit 12). According to Darling-Hammond (1999), over 80 percent of teachers who go through a rigorous five-year education program enter the teaching profession and are still employed as teachers after three years. Those who go through four-year programs enter and remain at a rate of slightly over 50 percent. But only one-third of the teachers prepared through a short-term alternative program are still teaching three years later. The costs associated with these programs also differ significantly. Once costs associated with recruitment, induction, and replacement due

to attrition are taken into consideration, the relative cost to states, universities, and school districts is less for the more rigorous, well-designed programs. As Exhibit 12 shows, costs for short-term certification programs average \$9,400 more than costs for five-year master's-level programs.

Thus, alternative certification has implications for both cost and quality. Research shows that alternatively trained teachers are less likely to stay in the classroom, have less academic impact on their students, and are trained at a greater cost to society.

Exhibit 12. Average Retention Rates for Different Pathways Into Teaching

(*estimated cost per teacher)



SOURCE: Darling-Hammond, Linda(1999) *Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure A Competent, Caring and Qualified Teacher for Every Child*. New York, NY: National Commission on Teaching & America's Future.

Observations and Conclusions

Although there are intense differences of opinion among proponents on both sides of the teacher-preparation continuum, they agree that the different modes of teacher preparation attract definable types of individuals. Generally, college- and university-based traditional teacher-education programs attract those who have planned to teach since early in their educational careers and those who have the necessary time to become certified teachers. Conversely, alternative programs generally attract older individuals with career experience in other fields as well as individuals who do not have time for or interest in completing a college- or university-based teacher-training program.

For the latter individuals, the opportunity cost of pursuing an alternative method of teacher certification is relatively low and therefore more attractive than traditional teacher-education programs. Those individuals who are already engaged in careers or who have vocational responsibilities that prevent them from returning to school full-time often can afford neither the necessary time nor the reduction in income that would result from enrolling in an IHE teacher-education program. However, many of the alternative-

certification models we have examined allow for a flexible time commitment that presents the already employed individual an opportunity to seamlessly transition into a career as a teacher.

Institutions of higher education stand at the crossroads of the divergent pathways toward teacher certification. While IHEs have historically been responsible for training teachers, their monopoly has been disrupted and their market share decreased by the emergence of local- and district-based alternative teacher-preparation programs that often divert current and prospective students from more traditional programs.

In response to the great demand by potential teachers for certification programs that allow greater flexibility than traditional certification models, many IHEs now offer alternative programs for teacher certification in addition to their more traditional classroom-based programs. This responsiveness to the demands of potential teachers and to the needs of understaffed schools represents an interesting and remarkable reaction on the part of the very institutions that have epitomized the paradigm of traditional teacher education.

Implications for Hawai'i and the Pacific Entities

The development of teacher-training programs is driven by policy considerations, and the specific social, economic, and cultural contexts of Hawai'i and the Pacific must be carefully considered. The islands of the Pacific cover a territory of almost 5 million square miles made up of unique, complex, and widely divergent communities and cultures. Clearly, young people and their families will encounter dramatically dissimilar educational and social experiences dependent upon where they reside in the Pacific. While the experience of students living and attending school in Hawai'i may be similar to that of students living on the U.S. Mainland, the experience of a family in Palau or in the Republic of the Marshall Islands is likely to be very different.

One of the most distressing dissimilarities between residents of Hawai'i and residents of the other Pacific Islands relates to relative prosperity. The following exhibit illustrates the great disparity between the economic conditions for a sampling of different Pacific entities:

Exhibit 13. Persons Below the Poverty Level in Selected Pacific Entities

Entity	Percent Below Poverty Level
US	13%
Hawai'i	8%
American Samoa	57%
CNMI	32%
Palau	70%

Source: PREL, 2000

The economic condition in which many Pacific Island entities find themselves only exacerbates the already existing crisis in resource distribution. For an entity struggling to ensure subsistence, the thorough and comprehensive training of teachers and other educational professionals presents formidable challenges. For example, only 58 percent of teachers in Yap State and only 9 percent of those in the Republic of the Marshall Islands hold at least a bachelor's degree. This is a situation that almost ensures that students attending public school in these entities will not achieve educational success, at least not according to the standards applied to students in the U.S. (PREL, 2000).

The specific social and economic conditions of each Pacific entity require action that takes into account the prevalent need for well-qualified teachers, along with the entity-specific need for teachers who are sensitive and responsive to the respective social and cultural attributes of the Region's students.

Recommendations

It appears to us that alternative-certification procedures present an opportunity to meet the unique needs of the Pacific entities. The melange of great geographic distances and rural contexts, the complexity of the Pacific's cultural map, the tremendous shortage of well-qualified teachers, and the relative scarcity of higher-education opportunities provide a compelling argument for the implementation of strategies designed to recruit and train teachers outside traditional higher-education settings.

However, we believe that it is of paramount importance that any and all alternative teacher-preparation models implemented in the Pacific be designed with meticulous attention to two factors: the effectiveness of the teaching-pedagogy program and rigorous standards for teaching excellence.

The research unambiguously posits that alternative programs of certification are effective only if they do not attempt to short-circuit the lessons that Feistritzer & Chester (2000), Darling-Hammond (1999), Leibbrand (2000), INTASC, and so many others have imparted. Simply stated, the route to certification may be alternative, but the procedure must take a traditional approach to pedagogical efficacy and to experiential, field-based training.

In the context of the Pacific, however, an important difference emerges when one deconstructs the definition of "traditional approach to pedagogy." In our analysis of teacher certification and licensing requirements across the United States, we found absolutely no evidence that states permit the licensing (emergency, alternative, or traditional) of an individual who does not possess at least a bachelor's degree from an accredited or state-approved institution. The consensus is that any individual who becomes a teacher must be endowed with the practical and philosophical content imparted by the higher-education process. It would be hard to find many arguments against this contention, and we wholeheartedly agree that the most effective teacher-education programs build upon the solid base of knowledge imparted by higher education. It is also important to consider the philosophical and symbolic implications of requiring a bachelor's degree for our teachers, since it is the teachers who, as role models for our young people, provide them with living, breathing examples of what it takes to become a success.

The benefits of a teaching force minimally endowed with a bachelor's degree notwithstanding, we do believe that it is possible to design an alternative-certification program that does not require a bachelor's

degree as a prerequisite. It may very well be that a four- or five-year degree is the path of least resistance, but it is arguable—at least in theory—that it is possible to establish an appropriate and suitable teacher-preparation and certification program using an alternative-education model. The adoption of the standards developed by INTASC (Model Standards for Beginning Teachers), Feistritzer & Chester (exemplary alternative-certification programs), and other accreditation and certification organizations is central to the design, implementation, and success of such a program. As the research shows, only high standards for teachers result in high standards for children. Simply put, less is less. If a substandard education is assumed, a substandard education will almost certainly result.

Regardless of the method by which a teacher is prepared and certified, we believe that in order to ensure the academic success of those young people with whom a teacher will come in contact, any and all teachers must be rigorously trained in content mastery, effective pedagogy, classroom management, and cultural understanding. Therefore, we believe that prospective teachers must invariably be endowed with the following:

1. a firm grasp of situation-specific and level-specific content;
2. a research-based understanding of child development and effective classroom management;
3. a firm understanding of pedagogy that has historically proved effective;
4. training in cultural context and sensitivity;
5. knowledge of the world of higher education and career experience beyond secondary school.

It is also our opinion that “on the job training,” per se, is not a sufficient substitute for field-based training under the tutelage of an expert or master teacher. This is to say that while there may be a great desire to quickly move prospective teachers from the lecture hall into their own classrooms, simply ensuring that there is a “warm, live body” in the role of instructor may be the most pernicious of all the alternatives. As with the whole of the human educational experience, prospective teachers need to learn from those who have successfully gone before them, and providing all teachers with sufficient mentoring is of paramount importance. Emergency-certification processes that allow teachers to move rapidly into classrooms should be avoided and replaced by programs that exhibit the educationally sound attributes we have previously detailed.

Given our review of literature and programming, we close with a list of recommendations for the Pacific region in dealing with the complex issues of teacher preparation and certification.

- **Raise the status of and standards for teaching.** Teachers are only accorded esteem when it is deserved. The Pacific region is no different in this respect than any other entity in the world. If teaching is perceived as a substandard occupation, often poorly paid, people will not flock to it. If the best potential teachers are to enter the profession, steps must be taken to raise both standards and expectations.
- **Work with all sectors of the postsecondary continuum to develop original model programs for preparation and certification.** The Pacific region is vastly different from the mainland U.S.

in almost every respect. This difference supports the notion of developing an alternative model of teacher preparation, primarily because the situation itself is unique. On the U.S. Mainland, an estimated 50 percent of all teachers have a community-college background. Perhaps the community-college system could be more fully tapped as a major resource with respect to teacher preparation in the Pacific. For example, a two-plus-two type program (most common in vocational disciplines) could be developed. Areas with severe teacher shortages could move teachers into the classroom after a two-year stint at a community college with the remaining two years to be articulated and carried out through four-year institutions or through distance learning.

- **Establish an online network for teacher preparation and ongoing professional development.** While online access is still an expensive proposition for many of the islands in the Pacific region, costs might still be less than for other options, which require travel, lodging, and displacement. In any event, costs for online access and distance education will drop dramatically over the next few years, even in the most remote areas. A recent study by Hirtle, McGrew-Zoubi, and Lowery-Moore (1999) looked at the use of online education for teacher certification. The online alternative-certification process was actually more attractive to teachers because of the flexibility possible through the asynchronous format. Although the study focused on post-baccalaureate students, there is no reason to think that the same process couldn't be employed to serve the needs of sub-baccalaureate students. Moreover, there is no reason to think that use of online networks will stop once a teacher is licensed and certified. The continued use of the professional network after certification would also help establish teaching as a true profession.
- **Initiate new recruitment programs.** Whether based on incentive programs (such as the teacher-scholarship programs identified in Appendix I) or public-service campaigns, areas or regions with teacher shortages must be creative in attracting talented individuals into the disciplines and geographic areas where they are needed. This connects with the previous point about teaching professionalism and the need to raise the teachers' status in general. All of this is important in attracting talent. However, specific targeted-recruitment programs have worked very effectively on the U.S. Mainland.
- **Focus on the areas of highest need.** No system can be revamped in an afternoon. If steps are to be taken to improve conditions and train better teachers, it is best to start with the biggest problem areas and work from there. Because children are on the receiving end in the education system, the areas of greatest need should be identified and acted upon quickly. Of course, no steps should be taken until a complete plan of action is in place. In New Jersey, the main reason the alternative program worked was because it was on a parallel and synchronized track with full-scale education reform in that state.
- **Eliminate all emergency-certification programs.** Even the staunchest proponents of alternative certification oppose the use of emergency certificates. These don't solve the problem; instead, they prolong it. The New Jersey example is again an appropriate model to cite here: The state's alternative program was carefully developed with the intent of eliminating emergency-certification programs. New Jersey succeeded in doing this in less than two years.

- **Future research.** In this paper, we have used available research and data to develop a discussion on the current state of teacher credentialing in the United States and its potential ramifications for student learning. In short, we know that effective training is integrally connected to effective teaching, and that effective teacher training involves, among other things, structured programming, field-based study, mentoring, and appropriate knowledge about student learning and pedagogical practice.

While the research points us in the right direction, we still need to know more. Collection of current data on teacher preparation and certification in the Pacific region, with specific emphasis on the use of emergency-credentialing and teacher-education programs, is a prerequisite to further investigation and development of suitable pathways to excellence.

Standards and Alternative Certification Programs in Hawai'i

Hawai'i and Teacher Standards

In 1998-99, 12,075 teachers were employed in the state of Hawai'i. A total of 1,008 were newly-hired teachers, of whom 54% had completed an approved college teacher-preparation plan (standard certification route), 26% held temporary licenses, and 20% were on an alternative or special-certification route (Feistritzer & Chester, 2000, p. 146).

Hawai'i is one of 38 states that require a teacher assessment at some point in the certification and licensure of new teachers. According to a survey by the Council of Chief State School Officers (CCSSO), Hawai'i uses the Praxis series to assess basic skills, professional knowledge of teaching, and subject-matter knowledge (CCSSO, 1998). The CCSSO report also shows that Hawai'i meets many of the national standards for teaching and learning, but falls short in other ways. For instance, CCSSO reports that (as of December 1998) Hawai'i does not have content standards in core subject areas (considered "under revision"), nor do they have a state-mandated textbook or curriculum selection/recommendation process. Hawai'i does have standard assessment programs in reading, writing, and mathematics, but not in science or social studies.

Alternative Certification in Hawai'i

Hawai'i first started implementing alternative routes for certification in 1990, and started a new program in 1996, the Alternative Program for Shortage Areas. Alternatively certified teachers in Hawai'i are employed by a school district (both full-time and part-time status) while participating in the program. According to the National Center for Education Information (NCEI), Hawai'i does not offer any tuition-assistance programs for prospective teachers except those certifying in special education. The programs identified by NCEI operating in Hawai'i include the following:

Alternative Program for Shortage Areas (1996). Operated by the Brigham Young University-Hawai'i (BYUH), the APSA is designed to reduce the shortage of teachers in selected teaching fields or in geographic areas that are difficult to staff.

Respecialization in Special Education (RISE) Program—Alternative Certification Program for Special Education (1990). Operated by the Hawai'i State Department of Education, the RISE program is a one-year, on-the-job training program designed to provide teachers with the knowledge and skills necessary to provide appropriate services to students.

Alternative Licensing Program in Special Education (ABC-SE) Program (1991). Operated by the Hawai'i State Department of Education with Chaminade University of Honolulu, the ABC-SE program is a two-year, integrated, on-the-job program consisting of formal course work and field experiences.

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APPENDIX A – WEB LINKS

National Partnership for Excellence and Accountability in Teaching (NPEAT)

www.npeat.org

NPEAT is a voluntary association of 29 national organizations and several major research universities dedicated to research-based action that results in teaching excellence to raise student performance.

National Education Association (NEA)

www.nea.org

The National Education Association is the largest teacher union in the United States. Their website provides discussion and statistics on a variety of elementary, secondary, and postsecondary education issues.

Education Commission of the States (ECS)

<http://www.ecs.org/ecs/ecsweb.nsf>

The mission of the Education Commission of the States is to help state leaders identify, develop and implement public policy for education that addresses current and future needs of a learning society. The website provides information on K-12 and postsecondary issues through their information clearinghouse, including policy notes and briefs about activities in the 50 states, key issue packets in high interest areas, and promising practices that show evidence of success in improving student achievement.

American Federation of Teachers (AFT)

www.aft.org

The site for the nation's second-largest teachers union, AFT, contains discussion and statistics on a variety of elementary, secondary, and postsecondary education issues.

National Council for Accreditation of Teacher Education (NCATE)

www.ncate.org

NCATE is a coalition of 33 specialty professional associations of teachers, teacher educators, content specialists, and local and state policy makers. NCATE provides accreditation to schools, colleges, and departments of education.

National Commission on Teaching and America's Future

www.tc.columbia.edu/~teachcomm/nav.htm

The National Commission on Teaching and America's Future, funded by the Rockefeller Foundation and Carnegie Corporation of New York and housed at Teachers College, Columbia University, is a blue-ribbon group of 26 public officials, business and community leaders, and educators who are broadly knowledgeable about education, school reform, and teaching. In 1996, the Commission released *What Matters Most*, a comprehensive document about teacher quality in America. That document may be found on the Commission's website.

Recruiting New Teachers, Inc.

www.rnt.org

Recruiting New Teachers, Inc., is a national nonprofit organization founded in 1986 that focuses on expanding the pool of prospective teachers and improving the nation's teacher recruitment, development, and diversity policies and practices.

The Council of Great City Schools

www.cgcs.org

The Council of Great City Schools represents 57 large-city school districts, with a mission to promote the cause of urban schools and to advocate for inner-city students through legislation, research, and media relations. In January 2000, CGCS and Recruiting New Teachers, Inc., released *The Urban Teacher Challenge*, a report on teacher supply and demand in the great city schools.

Interstate New Teacher Assessment and Support Consortium (INTASC)

<http://www.ccsso.org/intasc.html>

INTASC is a consortium of state education agencies, higher education institutions, and national educational organizations dedicated to the reform of the education, licensing, and ongoing professional development in teachers. The INTASC model core standards for licensing teachers represent those principles which should be present in all teaching regardless of the subject or grade level taught and serve as a framework for the systemic reform of teacher preparation and professional development.

The Council of Chief State School Officers (CCSSO)

www.ccsso.org

The Council of Chief State School Officers (CCSSO) is a nationwide, nonprofit organization composed of the public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five extra-state jurisdictions. CCSSO seeks its members' consensus on major educational issues and expresses their view to civic and professional organizations, federal agencies, Congress, and the public. Through its structure of standing and special committees, the Council responds to a broad range of concerns about education and provides leadership on major education issues.

RAND

www.rand.org

RAND is a research think-tank that provides high-quality, objective research on issues that include national defense, education and training, health care, criminal and civil justice, labor and population, science and technology, community development, international relations, and regional studies. RAND Education's staff includes over 40 experts who focus research on assessment and accountability, evaluation of school reform, and teachers and teaching.

The Milwaukee Teacher Education Center

<http://www.mteconline.org>

The Milwaukee Teacher Education Center is a nonprofit, innovative, alternative teacher-certification program whose goal is to provide the finest teachers for the children of Milwaukee's public schools. Participants from all walks of life and previous professional experience are carefully selected for a year-long program designed specifically to help them become a teacher in the Milwaukee Public School system. Individuals must possess a minimum of a baccalaureate degree to be selected for this program.

University of Kentucky – College of Education

<http://www.uky.edu/Education/TEP/usacert.html>

The UK College of Education is attempting to collect the teacher certification requirements for the 50 states. This page provides links to all states and is intended to help individuals gather planning information on states of your choice.

National Center for Education Information

www.ncei.com

The National Center for Education Information (NCEI) is a private, non-partisan research organization in Washington, D.C. specializing in survey research and data analysis. NCEI is the authoritative source of information about alternative teacher preparation and certification. The Center publishes annual data reports on teacher preparation and alternative certification.

National Center for Research on Teacher Learning (NCRTL)

<http://ncrtl.msu.edu>

Originally called the National Center for Research on Teacher Education, **NCRTL** was founded at Michigan State University's College of Education in 1985 with a grant from the Office of Education Research and Improvement, U.S. Department of Education. The center was renamed in 1991 to reflect its new emphasis on teacher learning and the center's desire to provide leadership in defining this new area of research. The center examines various approaches to teacher education including preservice, inservice, alternative route, and induction programs to further knowledge and understanding of the purpose of teacher education, the character and quality of teacher education, and the role of teacher education in teacher learning.

APPENDIX B – LICENSING AND CERTIFICATION ORGANIZATIONS

National Council for Accreditation of Teacher Education (NCATE)

2010 Massachusetts, Ave., NW, Suite 500, Washington, DC 20036-1023

Phone: (202) 466-7496; Fax: (202) 296-6620 www.ncate.org

Founded in 1954, the National Council for Accreditation of Teacher Education (NCATE) is a voluntary accrediting body, recognized by the U.S. Department of Education, that evaluates and accredits institutions for the preparation of elementary and secondary school teachers, school service personnel, and administrators. NCATE standards focus on the overall quality of the professional education unit. The unit may be the institution or college, school, department, or other administrative body within the institution that is primarily responsible for the initial and continuing preparation of teachers and other professional personnel (NCATE Standards Book, 1997). Standards are currently organized within four categories: (1) design of professional education—curriculum, delivery, and community; (2) candidates in professional education; (3) professional-education faculty; and (4) the unit for professional education. Themes throughout the standards include the conceptual framework, diversity, intellectual vitality, technology, professional community, evaluation, and performance assessment. Performance-based standards are key for NCATE 2000, which will emphasize candidate performance (Wise, 1998).

NCATE membership includes public and student representatives and representatives from teacher-education institutions, teachers, policy makers, administrators, and specialists as well as subject-specific, child-centered, and technology organizations. Over 30 organizations, including the National Board for Professional Teaching Standards, comprise NCATE, and 46 states plus the District of Columbia participate in partnerships with NCATE.

NCATE sponsors several projects, including the Historically Black Colleges and Universities Technical Support Network, Professional Development School Standards Project, NCATE/NBPTS Partnership for Graduate Programs, and Technology Initiatives.

Teacher Education Accreditation Council (TEAC)

One Dupont Circle, Suite 320, Washington, DC 20036-0110

Phone: (202) 466-7230; Fax: (202) 466-7238 www.teac.org

The Teacher Education Accreditation Council (TEAC) was developed in 1998 in response to a concern of the Council of Independent Colleges (CIC) that NCATE is the only national teacher education accreditation association, and it accredits less than half of the 1,260 institutions of higher education that offer teacher education programs (Basinger, 1998). TEAC was formally incorporated in 1997 and has petitioned the U.S. Department of Education for recognition.

The TEAC mission is to promote professional education programs in colleges and universities by recognizing those of the highest quality. It plans to develop an alternative accreditation process that relies on a continuing institutional self-examination reinforced by external audits. Four principles of quality are identified by TEAC: (1) student learning; (2) assessment of student learning; (3) institutional learning;

and (4) institutional commitment. TEAC will audit the institutions' internal processes for assessing student learning and assist institutions in the continuous improvement of their teacher education programs. The institution will choose which standards it will use, and the academic audit will serve as an evaluation tool.

The governance of TEAC differs from that of NCATE. Rather than having professional associations appoint individuals to the governing board, individuals are elected by the member institutions. There are 51 candidate member institutions and 18 affiliate members (www.teac.org/members.html, 1999). About half of the members of the Board of Directors are either college presidents or deans or directors of teacher education programs. The other half are teachers, public officials who oversee education, representatives of national associations, and members of the general public.

National Board for Professional Teaching Standards (NBPTS)

26555 Evergreen Road, Suite 400, Southfield, MI 48076

Phone: (248) 351-4444; Fax: (248) 351-4170 www.nbpts.org

The National Board for Professional Teaching Standards (NBPTS) was created in 1987. Its membership includes teachers and state and local officials in the field of elementary and secondary education, and leaders from the business community and higher education. It seeks to strengthen the profession of teaching and thereby raise the quality of education. Its mission is to establish high and rigorous standards for what accomplished teachers should know and be able to do; to develop and operate a national, voluntary system to assess and certify teachers who meet these standards; and to advance related education reforms for the purpose of improving student learning in American schools.

NBPTS hopes that advanced certification will act as a catalyst to transform teaching as a career by enabling states and schools to recognize outstanding teaching professionals, offer them better compensation, provide them with increased responsibilities, and place important decisions about teaching policy and practices in their hands. NBPTS is also concerned with education policy and reform issues such as teacher preparation recruitment (particularly among minorities) and the role NBPTS-certified teachers will play in schools. The standards grow out of a central policy statement: What Teachers Should Know and Be Able to Do. The five core propositions of NBPTS are: (1) teachers are committed to students and their learning; (2) teachers know the subjects they teach and how to teach those subjects to students; (3) teachers are responsible for managing and monitoring student learning; (4) teachers think systematically about their practice and learn from experience; and (5) teachers are members of learning communities (NBPTS, 1994). Key components of this certification process are that candidates complete portfolios and participate in on-demand tasks at assessment centers.

Interstate New Teacher Assessment and Support Consortium (INTASC)

One Massachusetts Ave., NW, #700, Washington, DC 20001-1431

Phone: (202) 336-7048; Fax: (202) 408-8072 <http://www.ccsso.org/intasc.html>

The Interstate New Teacher Assessment and Support Consortium (INTASC) was established in 1987 by the Council of Chief State School Officers to enhance collaboration among states interested in rethinking

teacher licensing and assessment for education professionals. In 1993, the consortium proposed model standards that described what beginning teachers should know and be able to do. These standards were drafted by representatives of the teaching profession and personnel from 17 education agencies. (www.ccsso.org, 1999). Currently 33 states are members of INTASC. The standards, applicable for beginning teachers of all disciplines and all levels, are compatible with the national teacher certification standards proposed by the National Board for Professional Teaching Standards and are organized around 10 principles. An important attribute of the standards is that they are performance-based; according to the consortium, more emphasis is placed upon the abilities teachers develop rather than the hours they spend completing course work. These performance-based standards should enable states to have greater innovation and diversity in how teacher education programs operate by assessing outcomes rather than inputs or procedures.

Besides these model standards, which address the knowledge, dispositions, and performance of all teachers, INTASC is also developing subject-area standards for new teachers. These standards currently include English/language arts, mathematics, and science, with elementary art, social studies, and special education in the development stage. The assessments that can be used to evaluate a new teacher's performance against these standards are being developed through the Performance Assessment Development Project, a program designed for the licensing of beginning teachers, and include the use of portfolios to determine licensing of candidates. INTASC is also developing a cadre of teachers, teacher educators, and state education staff who can implement the assessments in their states.

In addition, INTASC has contracted with Educational Testing Services (ETS) to develop the Test for Teaching Knowledge (TTK), which is based on the model standards. The TTK is a constructed-response test based on authentic situations facing beginning teachers. Pilot sessions were conducted in the spring of 1999. A field test will be conducted in 2000 (www.ccsso.org, 1999).

Interstate School Leaders Licensure Consortium (ISLLC)

Council of Chief State School Officers

One Massachusetts Ave., NW, Suite 700, Washington, DC 20001-1431

Phone: (202) 408-5505; Fax: (202) 408-8072

www.ccsso.org/isllc.html

Established in 1995, the Interstate School Leaders Licensure Consortium (ISLLC) was organized by the Council of Chief State School Officers and operates in partnership with the National Board for Educational Administration. Similar to INTASC, it is a consortium of states and associations formed to develop model standards and assessments for school leaders. Membership includes representatives of state agencies/departments of education, professional standards boards, and major educational leadership associations.

APPENDIX C – TITLE II TEACHER QUALITY LEGISLATION (SEC. 207)

1998 Amendments to Higher Education Act of 1965

P.L. 105-244

TITLE II—TEACHER QUALITY SEC. 207. ACCOUNTABILITY FOR PROGRAMS THAT PREPARE TEACHERS.

(a) DEVELOPMENT OF DEFINITIONS AND REPORTING METHODS- Within 9 months of the date of enactment of the Higher Education Amendments of 1998, the Commissioner of the National Center for Education Statistics, in consultation with States and institutions of higher education, shall develop key definitions for terms, and uniform reporting methods (including the key definitions for the consistent reporting of pass rates), related to the performance of elementary school and secondary school teacher preparation programs.

(b) STATE REPORT CARD ON THE QUALITY OF TEACHER PREPARATION- Each State that receives funds under this Act shall provide to the Secretary, within 2 years of the date of enactment of the Higher Education Amendments of 1998, and annually thereafter, in a uniform and comprehensible manner that conforms with the definitions and methods established in subsection (a), a State report card on the quality of teacher preparation in the State, which shall include at least the following:

- (1) A description of the teacher certification and licensure assessments, and any other certification and licensure requirements, used by the State.
- (2) The standards and criteria that prospective teachers must meet in order to attain initial teacher certification or licensure and to be certified or licensed to teach particular subjects or in particular grades within the State.
- (3) A description of the extent to which the assessments and requirements described in paragraph (1) are aligned with the State's standards and assessments for students.
- (4) The percentage of teaching candidates who passed each of the assessments used by the State for teacher certification and licensure, and the passing score on each assessment that determines whether a candidate has passed that assessment.
- (5) The percentage of teaching candidates who passed each of the assessments used by the State for teacher certification and licensure, disaggregated and ranked, by the teacher preparation program in that State from which the teacher candidate received the candidate's most recent degree, which shall be made available widely and publicly.
- (6) Information on the extent to which teachers in the State are given waivers of State certification or licensure requirements, including the proportion of such teachers distributed across high- and low-poverty school districts and across subject areas.
- (7) A description of each State's alternative routes to teacher certification, if any, and the percentage of teachers certified through alternative certification routes who pass State teacher certification or licensure assessments.
- (8) For each State, a description of proposed criteria for assessing the performance of teacher preparation programs within institutions of higher education in the State, including indicators of teacher candidate knowledge and skills.
- (9) Information on the extent to which teachers or prospective teachers in each State are required to take examinations or other assessments of their subject matter knowledge in the area or areas in which the teachers provide instruction, the standards established for passing any such assessments, and the extent to which teachers or prospective teachers are required to receive a passing score on such assessments in order to teach in specific subject areas or grade levels.

(c) INITIAL REPORT-

(1) IN GENERAL- Each State that receives funds under this Act, not later than 6 months of the date of enactment of the Higher Education Amendments of 1998 and in a uniform and comprehensible manner, shall submit to the Secretary the information described in paragraphs (1), (5), and (6) of subsection (b). Such information shall be compiled by the Secretary and submitted to the Committee on Labor and Human Resources of the Senate and the Committee on Education and the Workforce of the House of Representatives not later than 9 months after the date of enactment of the Higher Education Amendments of 1998.

(2) CONSTRUCTION- Nothing in this subsection shall be construed to require a State to gather information that is not in the possession of the State or the teacher preparation programs in the State, or readily available to the State or teacher preparation programs.

(d) REPORT OF THE SECRETARY ON THE QUALITY OF TEACHER PREPARATION-

(1) REPORT CARD- The Secretary shall provide to Congress, and publish and make widely available, a report card on teacher qualifications and preparation in the United States, including all the information reported in paragraphs (1) through (9) of subsection (b). Such report shall identify States for which eligible States and eligible partnerships received a grant under this title. Such report shall be so provided, published and made available not later than 2 years 6 months after the date of enactment of the Higher Education Amendments of 1998 and annually thereafter.

(2) REPORT TO CONGRESS- The Secretary shall report to Congress—

(A) a comparison of States' efforts to improve teaching quality; and

(B) regarding the national mean and median scores on any standardized test that is used in more than 1 State for teacher certification or licensure.

(3) SPECIAL RULE- In the case of teacher preparation programs with fewer than 10 graduates taking any single initial teacher certification or licensure assessment during an academic year, the Secretary shall collect and publish information with respect to an average pass rate on State certification or licensure assessments taken over a 3-year period.

(e) COORDINATION- The Secretary, to the extent practicable, shall coordinate the information collected and published under this title among States for individuals who took State teacher certification or licensure assessments in a State other than the State in which the individual received the individual's most recent degree.

(f) INSTITUTIONAL REPORT CARDS ON THE QUALITY OF TEACHER PREPARATION-

(1) REPORT CARD- Each institution of higher education that conducts a teacher preparation program that enrolls students receiving Federal assistance under this Act, not later than 18 months after the date of enactment of the Higher Education Amendments of 1998 and annually thereafter, shall report to the State and the general public, in a uniform and comprehensible manner that conforms with the definitions and methods established under subsection (a), the following information:

(A) PASS RATE-

(i) For the most recent year for which the information is available, the pass rate of the institution's graduates on the teacher certification or licensure assessments of the State in which the institution is located, but only for those students who took those assessments within 3 years of completing the program.

(ii) A comparison of the program's pass rate with the average pass rate for programs in the State.

(iii) In the case of teacher preparation programs with fewer than 10 graduates taking any single initial teacher certification or licensure assessment during an academic year, the institution shall collect and publish information with respect to an average pass rate on State certification or licensure assessments taken over a 3-year period.

(B) PROGRAM INFORMATION- The number of students in the program, the average number of hours of supervised practice teaching required for those in the program, and the faculty-student ratio in supervised practice teaching.

(C) STATEMENT- In States that approve or accredit teacher education programs, a statement of whether the institution's program is so approved or accredited.

(D) DESIGNATION AS LOW-PERFORMING- Whether the program has been designated as low-performing by the State under section 208(a).

(2) REQUIREMENT- The information described in paragraph (1) shall be reported through publications such as school catalogs and promotional materials sent to potential applicants, secondary school guidance counselors, and prospective employers of the institution's program graduates.

(3) FINES- In addition to the actions authorized in section 487(c), the Secretary may impose a fine not to exceed \$25,000 on an institution of higher education for failure to provide the information described in this subsection in a timely or accurate manner.

SEC. 209. GENERAL PROVISIONS.

(a) METHODS- In complying with sections 207 and 208, the Secretary shall ensure that States and institutions of higher education use fair and equitable methods in reporting and that the reporting methods protect the privacy of individuals.

(b) SPECIAL RULE- For each State in which there are no State certification or licensure assessments, or for States that do not set minimum performance levels on those assessments—

(1) the Secretary shall, to the extent practicable, collect data comparable to the data required under this title from States, local educational agencies, institutions of higher education, or other entities that administer such assessments to teachers or prospective teachers; and

(2) notwithstanding any other provision of this title, the Secretary shall use such data to carry out requirements of this title related to assessments or pass rates.

(c) LIMITATIONS-

(1) FEDERAL CONTROL PROHIBITED- Nothing in this title shall be construed to permit, allow, encourage, or authorize any Federal control over any aspect of any private, religious, or home school, whether or not a home school is treated as a private school or home school under State law. This section shall not be construed to prohibit private, religious, or home schools from participation in programs or services under this title.

(2) NO CHANGE IN STATE CONTROL ENCOURAGED OR REQUIRED- Nothing in this title shall be construed to encourage or require any change in a State's treatment of any private, religious, or home school, whether or not a home school is treated as a private school or home school under State law.

(3) NATIONAL SYSTEM OF TEACHER CERTIFICATION PROHIBITED- Nothing in this title shall be construed to permit, allow, encourage, or authorize the Secretary to establish or support any national system of teacher certification.

APPENDIX D – INTASC MODEL STANDARDS FOR BEGINNING TEACHERS

The Interstate New Teacher Assessment and Support Consortium (INTASC)

Model Standards for Beginning Teachers

<http://www.ccsso.org/intasc.html>

Council of Chief State School Officers
One Massachusetts Avenue, NW · Suite 700 · Washington, DC 20001-1431
voice: 202.408.5505 · fax: 202.408.8072

The **INTASC model core standards** for licensing teachers represent those principles which should be present in all teaching regardless of the subject or grade level taught and serve as a framework for the systemic reform of teacher preparation and professional development. The core standards are currently being translated into standards for discipline-specific teaching. Standards for teaching mathematics were released in Spring 1995, and a draft of standards in English language arts will soon be released. INTASC recently began developing standards for teaching science. In the next five years INTASC will continue crafting model standards for teaching in history/social studies, the arts, elementary education, and special education.

Principle #1: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Knowledge

The teacher understands major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the discipline(s) s/he teaches.

The teacher understands how students' conceptual frameworks and their misconceptions for an area of knowledge can influence their learning.

The teacher can relate his/her disciplinary knowledge to other subject areas.

Dispositions

The teacher realizes that subject matter knowledge is not a fixed body of facts but is complex and ever-evolving. S/he seeks to keep abreast of new ideas and understandings in the field.

The teacher appreciates multiple perspectives and conveys to learners how knowledge is developed from the vantage point of the knower.

The teacher has enthusiasm for the discipline(s) s/he teaches and sees connections to everyday life.

The teacher is committed to continuous learning and engages in professional discourse about subject matter knowledge and children's learning of the discipline.

Performances

The teacher effectively uses multiple representations and explanations of disciplinary concepts that capture key ideas and link them to students' prior understandings.

The teacher can represent and use differing viewpoints, theories, "ways of knowing," and methods of inquiry in his/her teaching of subject matter concepts.

The teacher can evaluate teaching resources and curriculum materials for their comprehensiveness, accuracy, and usefulness for representing particular ideas and concepts.

The teacher engages students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline.

The teacher develops and uses curricula that encourage students to see, question, and interpret ideas from diverse perspectives.

The teacher can create interdisciplinary learning experiences that allow students to integrate knowledge, skills, and methods of inquiry from several subject areas.

Principle #2: The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development.

Knowledge

The teacher understands how learning occurs—how students construct knowledge, acquire skills, and develop habits of mind—and knows how to use instructional strategies that promote student learning.

The teacher understands that students' physical, social, emotional, moral and cognitive development influence learning and knows how to address these factors when making instructional decisions.

The teacher is aware of expected developmental progressions and ranges of individual variation within each domain (physical, social, emotional, moral, and cognitive), can identify levels of readiness in learning, and understands how development in any one domain may affect performance in others.

Dispositions

The teacher appreciates individual variation within each area of development, shows respect for the diverse talents of all learners, and is committed to help them develop self-confidence and competence.

The teacher is disposed to use students' strengths as a basis for growth, and their errors as an opportunity for learning.

Performances

The teacher assesses individual and group performance in order to design instruction that meets learners' current needs in each domain (cognitive, social, emotional, moral, and physical) and that leads to the next level of development.

The teacher stimulates student reflection on prior knowledge and links new ideas to already familiar ideas, making connections to students' experiences, providing opportunities for active engagement, manipulation, and testing of ideas and materials, and encouraging students to assume responsibility for shaping their learning tasks.

The teacher accesses students' thinking and experiences as a basis for instructional activities by, for example, encouraging discussion, listening and responding to group interaction, and eliciting samples of student thinking orally and in writing.

Principle #3: The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Knowledge

The teacher understands and can identify differences in approaches to learning and performance, including different learning styles, multiple intelligences, and performance modes, and can design instruction that helps use students' strengths as the basis for growth.

The teacher knows about areas of exceptionality in learning—including learning disabilities, visual and perceptual difficulties, and special physical or mental challenges.

The teacher knows about the process of second language acquisition and about strategies to support the learning of students whose first language is not English.

The teacher understands how students' learning is influenced by individual experiences, talents, and prior learning, as well as language, culture, family and community values.

The teacher has a well-grounded framework for understanding cultural and community diversity and knows how to learn about and incorporate students' experiences, cultures, and community resources into instruction.

Dispositions

The teacher believes that all children can learn at high levels and persists in helping all children achieve success.

The teacher appreciates and values human diversity, shows respect for students' varied talents and perspectives, and is committed to the pursuit of "individually configured excellence."

The teacher respects students as individuals with differing personal and family backgrounds and various skills, talents, and interests.

The teacher is sensitive to community and cultural norms.

The teacher makes students feel valued for their potential as people, and helps them learn to value each other.

Performances

The teacher identifies and designs instruction appropriate to students' stages of development, learning styles, strengths, and needs.

The teacher uses teaching approaches that are sensitive to the multiple experiences of learners and that address different learning and performance modes.

The teacher makes appropriate provisions (in terms of time and circumstances for work, tasks assigned, communication and response modes) for individual students who have particular learning differences or needs.

The teacher can identify when and how to access appropriate services or resources to meet exceptional learning needs.

The teacher seeks to understand students' families, cultures, and communities, and uses this information as a basis for connecting instruction to students' experiences (e.g., drawing explicit connections between subject matter and community matters, making assignments that can be related to students' experiences and cultures).

The teacher brings multiple perspectives to the discussion of subject matter, including attention to students' personal, family, and community experiences and cultural norms.

The teacher creates a learning community in which individual differences are respected.

Principle #4: The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.

Knowledge

The teacher understands the cognitive processes associated with various kinds of learning (e.g., critical and creative thinking, problem structuring and problem solving, invention, memorization and recall) and how these processes can be stimulated.

The teacher understands principles and techniques, along with advantages and limitations, associated with various instructional strategies (e.g., cooperative learning, direct instruction, discovery learning, whole group discussion, independent study, interdisciplinary instruction).

The teacher knows how to enhance learning through the use of a wide variety of materials as well as human and technological resources (e.g., computers, audio-visual technologies, videotapes and discs, local experts, primary documents and artifacts, texts, reference books, literature, and other print resources).

Dispositions

The teacher values the development of students' critical thinking, independent problem solving, and performance capabilities.

The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to student responses, ideas, and needs.

Performances

The teacher carefully evaluates how to achieve learning goals, choosing alternative teaching strategies and materials to achieve different instructional purposes and to meet student needs (e.g., developmental stages, prior knowledge, learning styles, and interests).

The teacher uses multiple teaching and learning strategies to engage students in active learning opportunities that promote the development of critical thinking, problem solving, and performance capabilities and that help student assume responsibility for identifying and using learning resources.

The teacher constantly monitors and adjusts strategies in response to learner feedback.

The teacher varies his or her role in the instructional process (e.g., instructor, facilitator, coach, audience) in relation to the content and purposes of instruction and the needs of students.

The teacher develops a variety of clear, accurate presentations and representations of concepts, using alternative explanations to assist students' understanding and presenting diverse perspectives to encourage critical thinking.

Principle #5: The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Knowledge

The teacher can use knowledge about human motivation and behavior drawn from the foundational sciences of psychology, anthropology, and sociology to develop strategies for organizing and supporting individual and group work.

The teacher understands how social groups function and influence people, and how people influence groups.

The teacher knows how to help people work productively and cooperatively with each other in complex social settings.

The teacher understands the principles of effective classroom management and can use a range of strategies to promote positive relationships, cooperation, and purposeful learning in the classroom.

The teacher recognizes factors and situations that are likely to promote or diminish intrinsic motivation, and knows how to help students become self-motivated.

Dispositions

The teacher takes responsibility for establishing a positive climate in the classroom and participates in maintaining such a climate in the school as whole.

The teacher understands how participation supports commitment, and is committed to the expression and use of democratic values in the classroom.

The teacher values the role of students in promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning.

The teacher recognizes the value of intrinsic motivation to students' life-long growth and learning.

The teacher is committed to the continuous development of individual students' abilities and considers how different motivational strategies are likely to encourage this development for each student.

Performances

The teacher creates a smoothly functioning learning community in which students assume responsibility for themselves and one another, participate in decision making, work collaboratively and independently, and engage in purposeful learning activities.

The teacher engages students in individual and cooperative learning activities that help them develop the motivation to achieve, by, for example, relating lessons to students' personal interests, allowing students to have choices in their learning, and leading students to ask questions and pursue problems that are meaningful to them.

The teacher organizes, allocates, and manages the resources of time, space, activities, and attention to provide active and equitable engagement of students in productive tasks.

The teacher maximizes the amount of class time spent in learning by creating expectations and processes for communication and behavior along with a physical setting conducive to classroom goals.

The teacher helps the group to develop shared values and expectations for student interactions, academic discussions, and individual and group responsibility that create a positive classroom climate of openness, mutual respect, support, and inquiry.

The teacher analyzes the classroom environment and makes decisions and adjustments to enhance social relationships, student motivation and engagement, and productive work.

The teacher organizes, prepares students for, and monitors independent and group work that allows for full and varied participation of all individuals.

Principle #6: The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Knowledge

The teacher understands communication theory, language development, and the role of language in learning.

The teacher understands how cultural and gender differences can affect communication in the classroom.

The teacher recognizes the importance of nonverbal as well as verbal communication.

The teacher knows about and can use effective verbal, nonverbal, and media communication techniques.

Dispositions

The teacher recognizes the power of language for fostering self-expression, identity development, and learning.

The teacher values many ways in which people seek to communicate and encourages many modes of communication in the classroom.

The teacher is a thoughtful and responsive listener.

The teacher appreciates the cultural dimensions of communication, responds appropriately, and seeks to foster culturally sensitive communication by and among all students in the class.

Performances

The teacher models effective communication strategies in conveying ideas and information and in asking questions (e.g., monitoring the effects of messages, restating ideas and drawing connections, using visual, aural, and kinesthetic cues, being sensitive to nonverbal cues given and received).

The teacher supports and expands learner expression in speaking, writing, and other media.

The teacher knows how to ask questions and stimulate discussion in different ways for particular purposes, for example, probing for learner understanding, helping students articulate their ideas and thinking processes, promoting risk-taking and problem-solving, facilitating factual recall, encouraging convergent and divergent thinking, stimulating curiosity, helping students to question.

The teacher communicates in ways that demonstrate a sensitivity to cultural and gender differences (e.g., appropriate use of eye contact, interpretation of body language and verbal statements, acknowledgment of and responsiveness to different modes of communication and participation).

The teacher knows how to use a variety of media communication tools, including audio-visual aids and computers, to enrich learning opportunities.

Principle #7: The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Knowledge

The teacher understands learning theory, subject matter, curriculum development, and student development and knows how to use this knowledge in planning instruction to meet curriculum goals.

The teacher knows how to take contextual considerations (instructional materials, individual student interests, needs, and aptitudes, and community resources) into account in planning instruction that creates an effective bridge between curriculum goals and students' experiences.

The teacher knows when and how to adjust plans based on student responses and other contingencies.

Dispositions

The teacher values both long term and short term planning.

The teacher believes that plans must always be open to adjustment and revision based on student needs and changing circumstances.

The teacher values planning as a collegial activity.

Performances

As an individual and a member of a team, the teacher selects and creates learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction (e.g., that activate students' prior knowledge, anticipate preconceptions, encourage exploration and problem-solving, and build new skills on those previously acquired).

The teacher plans for learning opportunities that recognize and address variation in learning styles and performance modes.

The teacher creates lessons and activities that operate at multiple levels to meet the developmental and individual needs of diverse learners and help each progress.

The teacher creates short-range and long-term plans that are linked to student needs and performance, and adapts the plans to ensure and capitalize on student progress and motivation.

The teacher responds to unanticipated sources of input, evaluates plans in relation to short- and long-range goals, and systematically adjusts plans to meet student needs and enhance learning.

Principle #8: The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.

Knowledge

The teacher understands the characteristics, uses, advantages, and limitations of different types of assessments (e.g. criterion-referenced and norm-referenced instruments, traditional standardized and performance-based tests, observation systems, and assessments of student work) for evaluating how students learn, what they know and are able to do, and what kinds of experiences will support their further growth and development.

The teacher knows how to select, construct, and use assessment strategies and instruments appropriate to the learning outcomes being evaluated and to other diagnostic purposes.

The teacher understands measurement theory and assessment-related issues, such as validity, reliability, bias, and scoring concerns.

Dispositions

The teacher values ongoing assessment as essential to the instructional process and recognizes that many different assessment strategies, accurately and systematically used, are necessary for monitoring and promoting student learning.

The teacher is committed to using assessment to identify student strengths and promote student growth rather than to deny students access to learning opportunities.

Performances

The teacher appropriately uses a variety of formal and informal assessment techniques (e.g., observation, portfolios of student work, teacher-made tests, performance tasks, projects, student self-assessments, peer assessment, and standardized tests) to enhance her or his knowledge of learners, evaluate students' progress and performances, and modify teaching and learning strategies.

The teacher solicits and uses information about students' experiences, learning behavior, needs, and progress from parents, other colleagues, and the students themselves.

The teacher uses assessment strategies to involve learners in self-assessment activities, to help them become aware of their strengths and needs, and to encourage them to set personal goals for learning.

The teacher evaluates the effect of class activities on both individuals and the class as a whole, collecting information through observation of classroom interactions, questioning, and analysis of student work.

The teacher monitors his or her own teaching strategies and behavior in relation to student success, modifying plans and instructional approaches accordingly.

The teacher maintains useful records of student work and performance and can communicate student progress knowledgeably and responsibly, based on appropriate indicators, to students, parents, and other colleagues.

Principle #9: The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Knowledge

The teacher understands methods of inquiry that provide him/her with a variety of self- assessment and problem-solving strategies for reflecting on his/her practice, its influences on students' growth and learning, and the complex interactions between them.

The teacher is aware of major areas of research on teaching and of resources available for professional learning (e.g., professional literature, colleagues, professional associations, professional development activities).

Dispositions

The teacher values critical thinking and self-directed learning as habits of mind.

The teacher is committed to reflection, assessment, and learning as an ongoing process.

The teacher is willing to give and receive help.

The teacher is committed to seeking out, developing, and continually refining practices that address the individual needs of students.

The teacher recognizes his/her professional responsibility for engaging in and supporting appropriate professional practices for self and colleagues.

Performances

The teacher uses classroom observation, information about students, and research as sources for evaluating the outcomes of teaching and learning and as a basis for experimenting with, reflecting on, and revising practice.

The teacher seeks out professional literature, colleagues, and other resources to support his/her own development as a learner and a teacher.

The teacher draws upon professional colleagues within the school and other professional arenas as supports for reflection, problem-solving and new ideas, actively sharing experiences and seeking and giving feedback.

Principle #10: The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Knowledge

The teacher understands schools as organizations within the larger community context and understands the operations of the relevant aspects of the system(s) within which s/he works.

The teacher understands how factors in the students' environment outside of school (e.g., family circumstances, community environments, health and economic conditions) may influence students' life and learning.

The teacher understands and implements laws related to students' rights and teacher responsibilities (e.g., for equal education, appropriate education for handicapped students, confidentiality, privacy, appropriate treatment of students, reporting in situations related to possible child abuse).

Dispositions

The teacher values and appreciates the importance of all aspects of a child's experience.

The teacher is concerned about all aspects of a child's well-being (cognitive, emotional, social, and physical), and is alert to signs of difficulties.

The teacher is willing to consult with other adults regarding the education and well-being of his/her students.

The teacher respects the privacy of students and confidentiality of information.

The teacher is willing to work with other professionals to improve the overall learning environment for students.

Performances

The teacher participates in collegial activities designed to make the entire school a productive learning environment.

The teacher makes links with the learners' other environments on behalf of students, by consulting with parents, counselors, teachers of other classes and activities within the schools, and professionals in other community agencies.

The teacher can identify and use community resources to foster student learning.

The teacher establishes respectful and productive relationships with parents and guardians from diverse home and community situations, and seeks to develop cooperative partnerships in support of student learning and well being.

The teacher talks with and listens to the student, is sensitive and responsive to clues of distress, investigates situations, and seeks outside help as needed and appropriate to remedy problems.

The teacher acts as an advocate for students.

APPENDIX E – BEGINNING TEACHER CERTIFICATES ISSUED

Numbers of Beginning Teaching Certificates Issued and Numbers of Newly Hired Teachers

STATE	Graduates in your state	Graduates from another state	Participating in an alternative route	Completed an alternative route	Teachers from out-of-state	No. of newly hired teachers	Year of data for newly hired teachers	Total No. IHEs that have teacher-preparation programs
ALABAMA	-8,000		n/a	1159		2,250	1992-93	31
ALASKA			0	0		n/a	1998-99	5
ARIZONA	No data					n/a	1998-99	9
ARKANSAS	2,500		250	400		n/a	1997-98	18
CALIFORNIA	16,855	-5,000	4,573	2,042		24,849	1998-99	75
COLORADO	2,991	2,500	197	194		2,315	1997-98	16
CONNECTICUT	6,459 initial certificates			159		3,344	1998-99	14
D.C.	No data					302	1991-92	7
DELAWARE	0	1	36	45		405	1996-97	4
FLORIDA	9647		5609		590	11,169	1998-99	28
GEORGIA	No data					8,082	1995-96	35
HAWAII	558	446	209	158		1,008	1998-99	5
IDAHO	1,535	257	52	5	227	541	1998-99	6
ILLINOIS	11,712	n/a	n/a	24	n/a	5,028	1993-94	55
INDIANA	5,772 tot. initial licenses		0	0	n/a	1,049	1992-93	38
IOWA	n/a	n/a	0	0	n/a	1,529	1994-95	31
KANSAS	2,058	849	n/a	n/a		1,284	1997-98	22
KENTUCKY	2,380	816	40	148	193	2,274	1998-99	26
LOUISIANA	2,854	432		478		n/a	1998-99	20
MAINE	600+	495 cond. Certs., 422 transitional endorsements				661	1990-91	13
MARYLAND	6,033	1,871	125	70	1,420	6,033	1998-99	22
MASSACHUSETTS	Total in 1998-99: 27,617					n/a	1998-99	59
MICHIGAN	unknown	1,463				4,108	1997-98	32
MINNESOTA	4,370	2,000				2,000	1998-99	26
MISSISSIPPI	1,386	n/a				1,956	1998-99	15
MISSOURI	2,200	2,000	25	12		2,350	1997-98	35
MONTANA	not disag.					n/a	1998-99	8
NEBRASKA	-2,000					800	1997-98	17
NEVADA	No data					2,643	1991-92	3
NEW HAMPSHIRE	1,749			210	993	n/a	1998-99	13
NEW JERSEY	3,624	993	1,190	1,223	n/a	5,371	1998-99	25
NEW MEXICO	unknown	2,500	73	n/a		571	1992-93	8
NEW YORK	11,549	n/a	n/a	8,175	n/a	6,177	1997-98	108
N CAROLINA	No data					5,775	1992-93	48
N DAKOTA	803	181	0			250	1998-99	10
OHIO	7,700	2,500	1	0		9,500	1998-99	51
OKLAHOMA	3,306	201	795	363		n/a	1998-99	20
OREGON	No data					2,420	1997-98	16
PENNSYLVANIA	11,423	1,740	n/a	308		3,152	1998-99	88
RHODE ISLAND	875	525	0	0	n/a	n/a	1998-99	8
S CAROLINA	2400	n/a	191	191	n/a	n/a	1998-99	30
S DAKOTA	558	494	80	21	15	536		
TENNESSEE	12,000 total licenses issued					4,600	1998-99	35
TEXAS	12,181	n/a	n/a	2,728	7,039	16,487	1996-97	70
UTAH	3,907 (inc. in/out state)		16	75		2,035	1992-93	8
VERMONT	No data							
VIRGINIA	11,859 total licenses issued							
WASHINGTON	3,598	n/a			1,984	1,667	1996-97	22
W VIRGINIA	1,167	n/a	0	0	n/a	415	1998-99	22
WISCONSIN	4,352					2,747	1998-99	33
WYOMING	230	470	15	11	400	200	1997-98	1

* Feistritzer, C. Emily & David T. Chester (2000). *Alternative Teacher Certification: A State-by-State Analysis*. Washington, DC: National Center for Education Information.

APPENDIX F – SPECIAL PROGRAMS FOR TEACHER CERTIFICATION

	Transitioning military personnel	Recent liberal arts graduates	Re-entering teachers who need to upgrade credentials	Mid-career changers	Returning Peace Corps members	Other
Alabama	yes	yes	yes	yes	yes	
Alaska	no	no	no	no	no	
Arizona						
Arkansas	yes	yes		yes	yes	
California	yes	yes		yes	yes	yes
Colorado	yes	yes		yes	yes	
Connecticut	no	yes	no	yes	no	
Delaware	yes	yes		yes		
D.C.		yes		yes	yes	
Florida	no	no	no	no	no	no
Georgia	yes	yes	yes	yes	yes	
Hawaii	no	no	no	no	no	no
Idaho	yes	no	yes	yes	yes	
Illinois	no	yes	yes	yes	yes	
Indiana	no	no	no	no	no	
Iowa	no	no	no	no	no	
Kansas	no	no	no	no	no	
Kentucky	yes	no	yes	yes	yes	yes
Louisiana	no	no	no	no	no	no
Maine	no	no	no	no	no	no
Maryland	yes (TTT)	yes	no	yes	no	no
Massachusetts		yes		yes		
Michigan	yes	yes		yes	yes	
Minnesota	no	yes	yes	yes	no	
Mississippi	yes	yes			yes	
Missouri	no	no	no	no	no	
Montana	no	no	no	no	no	
Nebraska	yes	yes	yes	yes	yes	
Nevada	no	no	no	no	no	yes
New Hampshire	yes	yes	yes	yes	yes	
New Jersey	yes	yes		yes		
New Mexico	no	no	no	no	no	
New York	yes	yes	yes	yes	yes	yes
North Carolina						
North Dakota						
Ohio	yes	yes		yes		yes
Oklahoma	yes	yes	yes		yes	
Oregon	yes					
Pennsylvania			all, except re-entering teachers, go through Intern or Alternative Certification Program			
Rhode Island	no	no	yes	no	no	
South Carolina	yes	yes		yes	yes	
South Dakota	yes	yes	no	yes	yes	
Tennessee	yes	yes	yes	yes	yes	
Texas	yes	no	no	yes	yes	
Utah	yes					
Vermont	no	no	no	no	no	
Virginia	yes	yes		yes		
Washington	yes	MIT	yes	no	no	no
West Virginia	no	MAT at Marshall				
Wisconsin	yes	yes				
Wyoming	no	yes	yes	no	no	

Feistritzer, C. Emily & David T. Chester (2000). *Alternative Teacher Certification. A State-by-State Analysis*. Washington, DC: National Center for Education Information.

APPENDIX G – STATE STANDARDS FOR TEACHER LICENSURE

State Standards for Teacher Licensure, 1998

STATE	Teacher Standards/Date Approved	Standards apply to ALL fields	Standards specific to fields	Based on INTASC standards
Alabama	January 1997	X	E/LA, M, SSt, S, AR, FL, EI Ed	yes
Alaska	1994	X		yes
Arizona	--			
Arkansas	Developing			
California	Various dates by field	X	E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	no
Colorado	1994	X		no
Connecticut	Effective July 1, 2003		E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	yes
Delaware	January 1998	X		
DoDEA	December 2, 1985 Amended 1986, 1988	X	E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	no
D.C.	--			
Florida	Revised 1981, 1988, 1997	X		
Georgia	--	--		
Guam	--	X	MEd, O	--
Hawaii	Developing	X		yes
Idaho	Pending 1998	X		no
Illinois	Developing	X	Core standards and teaching fields	yes
Indiana	--			
Iowa	Fall 1998, effective 2001		Early Childhood	yes
Kansas	Developing	X		yes
Kentucky	January 1, 1998	X		Interrelated
Louisiana	X	X	Apply to all fields	Comparable
Maine	X			no
Maryland	November 1995	X		
Massachusetts	October 1994		E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	no
Michigan	August 1993; Rev. July 1998		Entry-level approved; many endorsement areas	
Minnesota	Pending 1998		E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	yes
Mississippi	July 1997	X		no
Missouri	February 1997	X		yes
Montana	None			
Nebraska			Rule 24: specific fields	no
Nevada	None			
New Hampshire	Every 8 years		E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	no
New Jersey	--			
New Mexico	1986-1989; revising	X	E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	
New York	--			
North Carolina	May 1998		All teaching fields	
North Dakota	Tch. Ed.		Apply to teacher education	yes--
Ohio	November 1996	X		yes
Oklahoma	1997	X	E/LA, M, SSt, S, AR, FL, EI Ed, M O	yes
Oregon	1996	X	EI Ed, M Ed, O	no
Pennsylvania	1984	X	E/LA, M, SSt, S, AR, FL, EI Ed, O	no
Rhode Island	June 1998	X		yes
South Carolina	--			
South Dakota	Summer 1998; effective 2000		E/LA, M, SSt, S, AR, FL, EI Ed, M Ed	yes
Tennessee	None			
Texas	Spring 1994	X		yes
Utah	January 1998-continually updated	X		no
Vermont	--			
Virgin Islands	Developing	X		no
Virginia	Program standards-1994; New Competencies for Licensure, 1998	X		no
Washington	1997-98 (revision)	X		yes
West Virginia	June 1997	X	E/LA, M, SSt, S, AR, FL, EI Ed, M Ed, O	no
Wisconsin	Developing			yes
Wyoming	1998	X		no

SOURCE: Council of Chief State School Officers (1998). *Key State Education Policies on K-12 Education*. A 50-State Report. Washington, DC: Author.

NOTES:
 Developing = Yes, standards in draft or developing
 Approved = Yes, teacher standards approved; date approved by state board
 INTASC = Interstate New Teacher Assessment and Support Consortium
 M = Mathematics
 S = Science
 FL = Foreign Language
 MEd = Middle Grades Education
 -- = State did not respond

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APPENDIX H – STATES REQUIRING TEACHER ASSESSMENT FOR NEW LICENSE

States Requiring Teacher Assessment for New License, 1998

STATE	WRITTEN TEST-AREAS INCLUDED-NAME OF TEST				PERFORMANCE ASSESSMENT		
	Basic Skills	Professional Knowledge of teaching	Subject Matter Knowledge	Portfolio	At what point in licensure process?	Classroom Observation	At what point in licensure process?
Alabama	X	X	(by institution)				
Alaska	Praxis I	Proposed	UK				
Arizona (1994)							
Arkansas	PPST	Professional Knowledge/NTE	NTE Subj. Area		Developing		
California	CBEST	RICA	MSAT, SSAT, PRAXIS				
Colorado	PLACE	PLACE	PLACE	X	Exit preservice		
Connecticut	Praxis I-CBT	Praxis II	Praxis II		Initial 2 years	X	Initial 2 years
Delaware	Praxis I				Initial 2 years		
DODEA DC (1996)	CSIPPST	X					
Florida	College-Level Academic Skills Test	Yes	Yes	X		X	
Georgia (1996)							
Guam	Guam Educator's Test for English Proficiency					X	Required in the Teacher Eval. Program
Hawai'i	Praxis I	Praxis II	PRAXIS Subject Assessments				
Idaho	No						
Illinois	X						
Indiana							
Iowa	No						
Kansas	PPST	Professional Knowledge/NTE					
Kentucky (1996)	Core battery	Core battery	Praxis II	X	In-prep program	X	In-prep program
Louisiana	NTE General	NTE-Professional Knowledge	NTE - Subject Tests				
Maine	National Teacher Exam						
Maryland	Praxis I	Praxis II	Praxis II Subject Assess.				
Massachusetts	Mass. Teacher Test	Mass. Teacher Test				X	Teacher Prep
Michigan	MTTC		MTTC		-none-		
Minnesota	Praxis I						
Mississippi		Praxis II PLT	Praxis II Subject Area	X	During 1st year		
Missouri	College Basic Academic Subj. Exam	Praxis II Content Knowledge					
Montana	PPST/CBT						
Nebraska	PPST or CBT or CMEE				-none-		
Nevada	Praxis I	Praxis II	35 subject matter tests				
New Hampshire	Praxis I (9/1/98)	Praxis II (7/1/99)					
New Jersey (1996)							
New Mexico	Core Battery of the NTE	Core Battery of the NTE				X	Renewal license
New York (1996)							
North Carolina	PPST	PLT	NTE/Praxis	X	Initial 2 years	X	Initial 2 years
North Dakota	(by institution)						
Ohio		Praxis II	Praxis II		— Planning performance assessment—		

Oklahoma	Oklahoma General Education Test	Oklahoma Professional Teaching Exam	Oklahoma Subject Area Tests	X	Initial licensure	X	Teacher prep
Oregon	CBEJT or Praxis I	Praxis II	Praxis II			X	Minimum visits by supervisors specified
Pennsylvania	Communication Skills	Principles of Learning & Teaching	Praxis Series				
Rhode Island	National Teacher Exam	National Teacher Exam					
South Carolina							
South Dakota	No						
Tennessee	NTE/Praxis(for admittance)	NTE/Praxis Prof. knowledge	NTE/Praxis Specialty Test			X	Teacher prep
Texas	Texas Academic Skills Program (TASP) Test	Examination for Certification of Educators in Texas (ExCET)	Examination for Certification of Educators in Texas (ExCET)				
Utah	No					X	Initial 2 years
Vermont (1996)							
Virgin Islands	Praxis I						
Virginia	Praxis I	Principles of Learning & Teaching	Praxis II			X	Student teaching
Washington	No					X	Classroom experiences
West Virginia	Praxis I	Praxis II	Praxis II			X	Student teaching
Wisconsin	Praxis I, PPST			X		X	
Wyoming	No						

SOURCE: Council of Chief State School Officers (1998). Key State Education Policies on K-12 Key State Education Policies on K-12 Education. A 50-State Report. Washington, DC: Author.

NOTES:

Praxis I/PPST = Pre-Professional Skills Test

Praxis II/PLT = Principles of Learning and Teaching

— National Teacher Exam

Alabama: Test is designed by the preparing institution to cover the content of the program

California: Professional knowledge of teaching reading

Colorado: PLACE, Liberal Arts and Sciences

DoDEA: Test of Communication Skills (CS) or Pre-Professional Skills Test (PPST) One year successful teacher experience at time of application

Illinois: Beginning January 1, 1999 the State Board of Education will design a new testing system for teachers. Assessments will be administered prior to issuing the initial certificate and prior to issuing the Standard certificate. The assessments may be performance-based.

Louisiana: Currently transitioning to PRAXIS I and PRAXIS II

North Dakota: Some ND institutions require NTE, many require the PPST. Many state institutions already require performance assessments including portfolios.

APPENDIX I – STATE TEACHER SCHOLARSHIP PROGRAMS
State Teacher Scholarship Programs (as of August 30, 2000) (SOURCE: Delaware Higher Education Commission)

State Tuit. & Fees**	Name of Program	Annual Award	Eligibility	Major	Teaching Areas	Success	Comments
Alaska	Teacher Scholarship Loan Program	\$7,500	Fresh/Soph/Jr/Sr	elementary, secondary, or special ed	designated rural areas	19%	Funded through general fund and bond sales
\$2,769 Arkansas	Emergency Secondary Education Loan Program	\$2,500	Soph/Jr/Sr	designated shortage area	shortage area*	70%-80%	Must be admitted into teacher education program in shortage area
\$2,590 Arkansas	Freshman/Sophomore Minority Grant Program	\$1,000	African-American, Asian-American, Hispanic	education	not specified		Recipients sign a statement of interest in teaching as a career, must perform pre-service internships in public school settings or other appropriate activities. (information from web)
\$2,590 Arkansas	Minority Teacher Scholarship	\$5,000	Jr/Sr	designated shortage area	shortage area*	90%	Must have passed the PPST or be admitted into the teacher education program
\$2,590 California	Assumption Program of Loans for Education	\$2,000 1 st yr \$3,000 2 nd - 4 th years	Jr/Sr Grad institutions select applicants	education	shortage area* or school serving largely low-income families	60.5%	Success rate based on those who have completed their degree program (does not include those who did not complete their degree).
\$2,609 Connecticut	Minority Teacher Incentive Grant	\$5,000	Jr/Sr	education	CT public school	new program	While teaching, receive \$2,500/yr to pay back student loans (4 year maximum)
\$4,345 Delaware	Christa McAuliffe Scholarship-Loan	\$5,000 (varies)	Fresh/Soph/Jr/Sr	education	DE public school	59% (72%)	1 year service for each year received (72% - teaching & cash)
\$4,462 Florida	Florida Teacher Scholarship and Forgivable Loan Program	\$1,500	Fresh/Soph	education	shortage area*		Limited to fresh/soph only, 1 graduate from each public high school, proportional number to graduates of private high schools (information from web)
\$2,022 Florida	Critical Teacher Shortage Forgivable Loan Program	\$4,000 \$8,000	Jr/Sr Grad	designated shortage area	shortage area*	50%	
\$2,022 Florida	Critical Teacher Shortage Student Loan Forgiveness Program	\$2,500 \$5,000	Undergrad Grad	designated shortage area	shortage area*		Funding to teachers for repayment of undergraduate and graduate loans which led to certification in critical shortage subject area (information from web)
\$2,022							

State	Program	\$78/semester hour	Florida public school employees	designated shortage area	shortage area*	?	Reimbursement up to nine (9) semester hours, or equivalent, per academic year, maximum of 36 semester hours (Information from web)
Florida	Critical Teacher Shortage Tuition Reimbursement Program						
Georgia	HOPE Promise Scholarship	\$3,000	Jr/Sr	education	GA public school	?	must have a 3.2 minimum gpa service 2 yr/each year received
Georgia	The Promise II Teacher Scholarship	\$3,000	teacher, paraprofessional, or instructional aid in GA public school	teacher certification program	GA public school	?	1 year service for each 30 semester hours received. Limited to no more than 30 semester hours of study.
Georgia	HOPE Teacher Scholarship	\$2,500	Grad	designated shortage area	shortage area*	?	must teach in the shortage area for which the funding was received
Illinois	David A. DeBolt Teacher Shortage Scholarship	Lessor of: TFRB or \$5,000	Soph/Jr/Sr	designated shortage area	shortage area*	18% (95-96) 44% (92-93)	5 yrs. to repay in service
Illinois	Minority Teachers of Illinois	Lessor of: TFRB or \$5,000	African American/ Black, Hispanic American, Asian American, or Native American	preschool, elementary, or secondary	school with > 30% minority enrollment	18% (95-96) 44% (92-93)	5 yrs. to repay in service
Illinois	Illinois Special Education Teacher Tuition Waiver Program	TF at a public institution	Fresh/Soph/Jr/Sr, or a non-Special Ed. teacher	special ed	special ed		(information from web)
Kansas	Kansas Teacher Scholarship	\$5,000	Fresh/Soph/Jr/Sr	designated shortage area	shortage area*		1 st priority – Jr/Sr Special consideration – minority applicants 2 nd priority – students who have completed the Regents Curriculum & are academically competitive (information from web)
Kentucky	Teacher Scholarship	\$1,250 \$5,000	Fresh/Soph Jr/Sr/Grad	education	shortage area**	85%	teaching in a critical shortage area forgives double service repayment
Louisiana	Tuition Opportunity Program Teacher Award (TOPS)	\$6,000	Fresh/Soph/Jr/Sr Grad	education degree or teacher certification program	approved elementary or secondary school		\$4,000 minimum award \$6,000 majoring in mathematics or chemistry (information from web)

Maine	Educators for Maine Program	\$3,000 \$1,500	Fresh/Soph/Jr/Sr Grad	education	ME public, private or state administered elementary or secondary school	teaching in an educator shortage area or underserved subject area forgives double service repayment (information from web)
\$4,058 Maryland	Sharon Christa McAuliffe Memorial Teacher Education Award	T/FR/B up to \$10,000	attend MD college, current student with at least 60 credit hrs. or current teacher in non-critical area, or college graduate	designated shortage area	shortage area*	may be renewed for one year (information from web)
\$4,359 Maryland	Distinguished Scholar Teacher Education Program	\$3,000	Distinguished Scholar recipient	education	MD public school	Awards are in addition to the Distinguished Scholar award of \$3,000/yr.
\$4,359 Maryland	Maryland HOPE Teacher Scholarship	\$1,000 2 yr c/g \$3,000 4 yr c/g	Fresh/Soph/Jr/Sr Grad	education	MD school	(Information from web)
\$4,359 Maryland	Maryland Teacher Scholarship	\$2,000 2 yr c/g \$4,000 4 yr c/g	Fresh/Soph/Jr/Sr Grad	education	MD public school	Grad students can apply only if they have not completed a teacher ed program or do not hold professional teacher certification (information from web)
\$4,359 Mississippi		\$1,000 \$3,000 \$125/credit	Fresh/Soph Jr/Sr Grad	education or librarian current teacher	public school	\$8,000 aggregate
\$2,859 Mississippi		TFRB +\$500			geographic	Entrance interview with recipients
\$2,859 New Mexico	Southeastern New Mexico Teachers' Loan for Service Program	\$4,000	accepted by or enrolled in an accredited teacher credentialing/ licensure program at a NM public college	education	designated county public preschool, elementary or secondary school	Available only to students in five specified counties (information from web)
\$2,180						

North Carolina	Teaching Fellows Program	\$6,500	Fresh	education	NC public school or US Government school in NC	400 new awards each year
\$1,958	Prospective Teacher Scholarship/Loan	\$2,500	Fresh	education	NC public school	1 year service for each year received. May repay 4 years of loan by teaching 3 years in a "low performing" school or a school on "warning status" (information from web)
\$1,958	South Carolina Teachers Loan Program	\$2,500 \$5,000	Fresh/Soph Jr/Sr		shortage area* geographic	Interest rate lowered from 12% to 2% above Stafford
\$3,520	South Carolina Teaching Fellows Program	\$6,000	Fresh	education	SC school	\$5,700 for tuition/board, \$300 for summer enrichment programs (information from web)
\$3,520	Christa McAuliffe Scholarship Program	\$1,000	Sr	education		(information from web)
Tennessee \$2,495	Minority Teaching Fellows Program	\$5,000	Fresh/Soph/Jr/Sr Minority resident	education	TN public school	1 year service for each year received (information from web)
Tennessee \$2,495	Tennessee Teaching Scholars Program	\$3,000-\$5,000	Jr/Sr/Grad	education	TN public school	Eligibility criteria changed: allow only students accepted into teacher education (junior yr), and post-baccalaureate students.
\$2,495	T. H. Bell Teaching Incentive Loan	T/F UT public college or set amount at BYU & Westminster College	Fresh/Soph/Jr/Sr	education		Student must attend a Utah college. Qualified students may also receive premier stipends up to \$3,000/yr. 2 yr grace period (information from web)
\$2,174		\$3,000	Minority students = teacher ed. Male = elem. or middle school ed.		*	
Virginia \$4,160	Future Teachers Conditional Scholarship Program	\$4,000			math/science (pre-1987) not specified	Accelerated forgiveness for teaching in a high-need area (subject area or geographic area).
Washington \$3,151	Minority Teacher Loan	\$2,500	minority student** who is a Jr/Sr	education	school district with >29% minority enrollment, or district in the Chap. 220 program	\$5,000 maximum total one year teaching = 25% loan forgiveness (information from web)
Wisconsin \$3,113						

Tuition & Fees: Average tuition and fees at a public 4-year institution in the state (Source: The Chronicle of Higher Education, 2000-01 Almanac Issue)

State Specific Information

Arkansas: Secondary education level: Math, Science, Foreign Language, Special Education.

California: (99-00) Math, Science, Special Education, Bilingual Education, and Reading

Florida: (00-01) Emotionally Handicapped, Physically Handicapped, Mentally Handicapped, Speech and Language Impaired, Visually Impaired, Hearing Impaired, Specific Learning Disabled, Varying Exceptionalities, Mathematics, Science, English for Speakers of Other Languages, Industrial Arts/Technology Education. 13 month grace period, deferment for up to 24 months. Receive double credit for teaching at a high-density, low-economic urban school or at a low-density, low-economic rural school.

Illinois: (99-00) Bilingual Special Education, Vocational/Practical Arts, and Secondary Level Foreign Language

Kansas: (00-01) Special Education, Vocational/Practical Arts, and Secondary Level Foreign Language

Kentucky: Teaching in critical subject shortage area will cancel two prom notes instead of one for each semester of teaching. Can teach at any board-certified school in KY (public/private/K-12). Deferment for up to 3 years for (1) in-school, (2) hardship, (3) unemployment, and (4) disability.

Maryland: (98-99) Art (elementary or secondary), Computer Science, English for Speakers of Other Languages (ESOL), General Science, Mathematics, Music (elementary or secondary), Physical Science (secondary), Special Education (generic), grades 6 through adult; and Special Education (severely/profoundly handicapped).

South Carolina: (00-01) Art, Business Education, Early Childhood Education, Elementary Education, French, Home Economics, Industrial Technology, Latin, Library Science (Media Specialist), Secondary English/Language Art, Secondary Mathematics, Secondary Science Areas, Spanish, Special Education (Including Speech Pathology, Occupational Therapy and Physical Therapy).

Virginia: Special Education, Chemistry, Physics, Earth & Space Science, Foreign Languages, Technology Education.

Washington: High-need areas not yet specified. Teaching service is credited for teaching in private schools, head-start programs, early childhood programs, alternative schools, tribally controlled schools, ESL programs, Adult Basic Education programs that lead to a GED, and substitute teaching (prorated). Criteria for selection of recipients include academic ability, commitment to service, leadership, and references.

Wisconsin: Minority student is defined as a student who is either an African American; American Indian; Hispanic; or Southeast Asian from Laos, Cambodia, or Vietnam admitted to the U. S. after December 31, 1975.



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