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**AUTHOR** Lertz, Margaret E.; And Others  
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**ABSTRACT**

Points at which state policies can control entry of individuals into the teaching profession were studied. A 50-state survey identified points of policy intervention and types of policies in effect in each state during 1983-84. Four in-depth case studies provided details about the political environment and rationale behind each policy, the extent of coordination among policies in each state, and the impact of state policies on teacher supply and equity. Findings indicated: (1) states vary considerably in the types of screening policies and testing requirements for teacher education candidates; (2) many areas covered in the assessment of individual teachers are not focused on in teacher education programs; (3) remediation is encouraged by many state policies but funding is often lacking; (4) states that have introduced new policies perceive them as strengthening teacher education programs; (5) passing rates for different ethnic groups show similar patterns in most states; (6) many states perceive their policies as affecting teacher supply; (7) data on individuals screened out of the profession by state policies suggest that shortages of certain types of teachers will continue to occur or be aggravated; and (8) current efforts are being directed toward enacting more or stricter standards. (JD)

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The Impact of State Policy on  
Entrance into the Teaching Profession

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Submitted to:

National Institute of Education  
Education Policy and Organization

by

Margaret F. Goertz

Ruth B. Ekstrom

Richard J. Coley

Division of Education Policy Research and Services  
Educational Testing Service  
Princeton, New Jersey 08541

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# The Impact of State Policy on Entrance into the Teaching Profession

## Executive Summary

In the last several years, concern over the quality of America's school teachers has led policymakers to search for ways to make the nation's teaching force better. As a result, states have initiated a number of policies affecting entrance into the teaching profession: (1) those that control access into teacher education by the use of basic skills tests, college entrance tests, and/or minimum grade point average; (2) those that prescribe the nature of training and instruction for individuals who wish to become teachers; and (3) those that control access into the teaching profession by requiring prospective teachers to pass tests in general knowledge, pedagogy, subject matter specialties, or basic skills, and/or by requiring an evaluation of the beginning teacher's classroom performance. By 1988, 29 states will require aspiring teachers to pass a state-prescribed, standardized test before entering a teacher education program and/or before being certified to teach. Nine states will require successful performance in internship programs ranging from one to three years by 1985.

While state policymakers have become more active in addressing the problem of teacher quality, little is known about the substance or impact of these activities. The purpose of this study was to describe policies used by states to regulate entrance into the teaching profession and to collect information on the impact of these policies. The first step involved developing a "pipeline" model that identifies the various points at which state policies can control the entry of individuals into the teaching profession and shows the relationships among these points. Next, information was collected through a 50-state survey to identify the points of policy intervention and the types of policies in effect in each state during 1983-84. Third, in-depth case studies were conducted in California, Colorado, Georgia, and Oklahoma to provide important details about the political environment and rationale behind each policy, about the extent of coordination among the policies in each state, and about the impact of the state initiatives on teacher supply and on equity. Finally, information from both the survey and the case studies was evaluated to develop recommendations for future state policies.

### Major Findings

The major findings of the study, based on analyses of the 50-state survey and four case studies, are summarized below.

- o States vary considerably in the types of policies they use to screen individuals entering the teaching profession. All states approve teacher education programs and most have enacted

additional policies designed to assess the capabilities of individual teachers. Yet, states differ in the number of assessments made, the areas covered by the assessments, and the criteria used to set minimum standards.

- o Seventeen states require some or all teacher education candidates to pass a state-prescribed basic skills test before entering a teacher education program, 13 states have a statewide minimum grade point average, while 10 states require both. Applicants for certification are, or will be, tested in basic skills (14 states), general knowledge (9 states), professional knowledge (12 states), and/or knowledge of the teacher's specialty area (14 states).
- o Many of the areas covered in the assessment of individual teachers are not those areas focused on in teacher education programs (e.g., basic skills and subject matter). Consequently, accountability for student failure is often misplaced.
- o While some state policies encourage the provision of remediation, funding is often lacking and there is limited information on which to design effective remedial programs. There appears to be little effort to coordinate remedial programs available for all higher education students and those for students in teacher education.
- o The states which have introduced new policies perceive them as strengthening teacher education programs, making students more serious, focusing attention on weaknesses in teacher education, and screening out students who lack sufficient knowledge of basic skills and subject matter. In the case study states which impose testing requirements, first time passing rates range from a low of 57 percent (mathematics basic skills in Colorado) to a high of 80 percent (across all subject matter areas in Oklahoma).
- o These passing rates, however, obscure considerable variation across racial/ethnic groups. For example, in California, 76 percent of whites, 39 percent of Hispanics, and 26 percent of Blacks passed the state's test of basic skills. In Georgia, 87 percent of White students passed the Teacher Competency Test, a subject matter test, on the first try, but only 34 percent of the Black students did so. Results from other states show similar patterns.
- o Many states perceive that their policies have also affected teacher supply. However, it is difficult to isolate the impact of state policies from other factors which appear to limit the supply of beginning teachers (e.g., demographics, low salaries, and expanding employment opportunities for women and minorities).

In addition, we found that few states or IHEs collect the type of data needed to assess the impact of changing state policies on teacher supply and on teacher quality.

- o Available data on the individuals screened out of the teaching profession by those state policies suggest that shortages of certain types of teachers will occur or be aggravated: minority teachers, teachers for bilingual education programs, teachers for inner city and rural schools, and substitute teachers.
- o Although states appear aware of the impact of these policies, current efforts are directed toward enacting more and/or stricter standards rather than addressing existing problems of coordination, equity, and supply.

### Policy Implications

It is necessary to have screens in the teacher supply pipeline to ensure the quality of individuals entering the teaching profession. It is clear that, as a method, individual assessment provides a better way of evaluating the capabilities of potential teachers than does program approval. However, the approaches used by most states are inadequate to meet the goals of enhancing teacher quality for five reasons.

- o Current state policies focus on screening out people rather than developing the talents of people who wish to become teachers. This emphasis impacts adversely on: (1) students entering college with a weak secondary school preparation, (2) adults returning to college or making a career change, and (3) open-admissions institutions and their students.
- o By restricting access into the teaching profession, state policies will reduce the socio-economic and racial/ethnic diversity of the nation's teaching force at a time when the schools are educating larger numbers of minority students.
- o State policies focus on assessing a limited number of skills which have varying degrees of relevance to the teacher education curriculum and, ultimately, to classroom performance.
- o Current policies result in misplaced accountability with teacher education departments held responsible for students' knowledge of the basic skills and of subject matter areas. Consequently, non-education departments have little or no incentive to improve their teaching in ways that will improve teacher quality. This situation is aggravated by state policies that use test score results in basic skills and subject matter areas to place teacher education programs on probation.

- o State policies are short-sighted because no attention is given to the impact of policies on teacher supply at a time when growing teacher shortages are projected.

### Recommendations

State policies should address the multiple points in the teacher supply pipeline in a coordinated and equitable manner. A comprehensive and equitable system of teacher preparation and certification should include the following elements:

- o All students entering college should be assessed to identify basic skill deficiencies and, if necessary, opportunities for remediation should be provided.
- o A student should show proficiency in basic skills before admission to a teacher education program. This policy should apply to all college majors, not just teacher education. The mechanism used to screen teacher candidates for basic skills proficiency should be the same as that used to assess entering freshmen.
- o Students' knowledge of subject matter specialty and pedagogy should be evaluated before a teacher education degree is awarded, using a common metric across IHEs within a state.
- o Candidates for certification should show evidence of proficiency in basic skills, subject matter area and professional knowledge and complete a successful entry-year teaching assignment.
- o Screening devices should be designed to provide diagnostic information for student remediation and for program improvement.
- o Adequate resources should be made available for remediation and program improvement.

Coordination and accountability can be achieved by:

- o Informing non-education departments of deficiencies in student performance on subject matter examinations and teacher education departments of deficiencies in professional knowledge and first year teaching performance.
- o Applying probationary policies specifically to those departments that provide the relevant subject matter and teacher education courses.
- o Having state agencies collect data necessary to determine the impact of state policies on teacher supply, paying particular attention to shortages of minority teachers, and teachers in specific subject matter areas and geographic regions.



## CHAPTER 1

### STUDY OVERVIEW AND FINDINGS

#### Introduction

Over the last decade, public confidence in the quality of education has steadily declined. In the late 1970s, dissatisfaction with the performance of the public schools, fueled by evidence of declining test scores and functionally illiterate high school graduates, led 40 states to develop accountability measures and to enact laws requiring students to demonstrate proficiency in the basic skills. More recently, public attention has turned to teachers. Information on the background and preparation of new teachers and "horror stories" about bad teachers in the classroom have led the public to question the quality of America's school teachers and policymakers to search for ways to make the teaching force better.

Evidence of a teacher quality problem abounds. Students entering teacher education programs are less able than those entering other fields; many are drawn from the bottom quarter of graduating high school and college students (National Commission on Excellence in Education, 1983). Mean scores on the Scholastic Aptitude Test (SAT) for future education majors dropped from 867 in 1973 to 813 in 1982. In that latter year, the average score for all students entering college was 893. In fact, students intending to major in education had lower SAT scores than any group of students, with the exception of those intending to concentrate in ethnic studies or in trade and vocational education (NCES, 1982).

While some argue that teaching has never attracted "the best and the brightest," others suggest that the decline in the quality of teachers is indicative of a problem in teacher education. The approximately 50 percent decline in the number of individuals seeking entrance to teacher education between 1972 and 1980 left teacher educators with only two choices: (1) to phase out some of the programs, or (2) to lower standards so as to maintain enrollments (Sykes, 1983). Because of this, many highly selective private colleges and universities have cut back on or are considering terminating their teacher education programs (Travers, 1980). Nonetheless, 100 new teacher education programs were initiated in the last 10 years, primarily in small private colleges with few standards (Feistritzer, 1984).

Teacher preparation programs are criticized for their lack of rigorous standards and their low status on many college and university campuses. Schools of education lack rigorous admission standards and few students fail once they are admitted into teacher training programs. Stoddart, Losk and Benson (1984) state that schools of education admit

about 90 percent of their applicants, while Feistritzer (1984) found that more than half of all teacher education programs do not require their students to pass a test upon completion of their training. In addition, the typical teacher preparation curriculum is criticized for including a large number of education methods courses. A survey of 1350 teacher training institutions cited by the National Commission on Excellence in Education found that 41 percent of an elementary school teacher's coursework is in the field of education, limiting the amount of time available for subject matter courses.

Funding patterns supply one index of the low status of teacher education as well as a possible cause for its low quality. Peaseau and Orr (1980) provide data which show that allocations for teacher education, at the bachelor's, master's, and post-master's levels, are substantially lower than for most other curriculum areas. The reputation of schools of education has fallen so low that some critics are recommending that teacher education be provided through alternative routes (Stoddart, Lusk and Benson, 1984).

In response to these teacher quality issues, states have initiated a number of policies affecting entrance into the teaching profession. The most common policies are: (1) those that control access into teacher education by the use of basic skills tests, college entrance tests, high school grade point average, or college lower-division grade point average; (2) those that prescribe the nature of training and instruction for individuals who wish to become teachers by specifying curriculum content, number and type of courses, and practicum experiences; and (3) those that control access into the teaching profession by requiring prospective teachers to pass tests in general knowledge, pedagogy, subject matter specialities, or basic skills, and/or by requiring an evaluation of the beginning teacher's classroom performance. In 1983-84, 15 states required teacher candidates to pass a test to be certified and similar requirements will become effective in 8 more states by 1987. By 1985, 9 states will require successful performance in internship programs ranging from one to three years. Admission standards for teacher training institutions are being raised and more liberal arts courses and more fieldwork are being required.

It has been argued that these policies alone are insufficient to increase teacher quality. "They are likely to weed out the obviously unqualified and perhaps marginally improve the quality of first-year instruction" (Sykes, 1983). In addition, there is little or no research supporting the extent to which these screening processes relate to teacher behavior and pupil learning (Shallock, 1979). Indeed, opponents of teacher competency testing argue that it measures only a small part of the requisite skills for teaching and has adverse consequences for minority students.

At the same time that states are moving to control access into the teaching profession, the nation appears to be facing a teacher shortage. Low salaries, low prestige and classroom management and discipline problems are discouraging those who might have been inclined to teach in the past. Industry is attracting math and science-oriented college students, and women and minorities have greater access to other employment because of progress toward equal opportunity goals. The size and composition of the teacher shortage is the subject of much debate. Some studies project a severe, national shortage by the late 1980s (NCES, 1982; Darling-Hammond, 1984). Critics of these studies note that the projections involve several assumptions about turnover rates that may not be valid and that need more careful analysis (Sweet & Jacobsen, 1983). And, they argue, these projections do not include any assumptions about the size and composition of the teacher reserve pool and its potential for meeting increased demand, the actual need and availability of teachers in different academic areas, and the professional and educational backgrounds of teachers holding "emergency" certificates or teaching "out-of-field" (National Academy of Sciences, 1984). Yet, while the quality of the data varies somewhat depending on the source and on the definition of need (primarily whether or not the teacher is certified to teach in the subject area of specialty), there is considerable evidence that a teacher shortage exists and is severe for special education teachers, and for mathematics and science teachers (NEA, 1981; NCES, 1981).

Taken together, these facts raise a critical question. Can this country maintain an adequate supply of teachers while, at the same time, increasing teacher quality?

### Focus of the Study

While state policymakers have become active in addressing the problem of teacher quality, little is known about the substance or impact of these activities. The purpose of this study was to describe policies used by states to regulate entrance into the teaching profession and to collect information on the impact of these policies. The first step involved developing a "pipeline" model that identifies the various points at which state policies can control the entry of individuals into the teaching profession and shows the relationships among these points. Next, information was collected through a 50 state survey to identify the points of policy intervention and the types of policies in effect in each state during 1983-84. Third, in-depth case studies were conducted in California, Colorado, Georgia, and Oklahoma to provide important details about the political environment and rationale behind each policy, about the extent of coordination among the policies in each state, and about the impact of the state initiatives on teacher supply and on equity. The case study state selection criteria included the number and type of policies in effect, the date of policy implementation, region of the country, and availability of data on policy impact. Finally, information

from both the survey and the case studies was evaluated to develop recommendations for future state policies.

The remainder of this chapter describes how states regulate the training and certification of teachers and summarizes the study's major findings. The second chapter of the report provides profiles describing the specific approaches used in each of the 50 states and reports the results of a survey of policy changes and impact across the states. The third chapter contains the four case studies and describes the case study methodology in greater detail. The final chapter identifies the study's strengths and weaknesses and makes recommendations for additional research.

### Teacher Supply Pipeline

The primary policies adopted by states to deal with teacher quality and supply problems have been tests, grade requirements, curriculum prescription, internships and other extensions of preservice training, and on-going teacher education. A pipeline model, that identifies various points where "filters" or "screens" may be installed to control the supply of teachers and describes the types of filters states use, was developed. Figure 1 shows the pipeline model, with five points where state policy can serve as a filter affecting the number and type of individuals who become teachers. The first three filters relate to teacher education and the last two concern teacher certification.

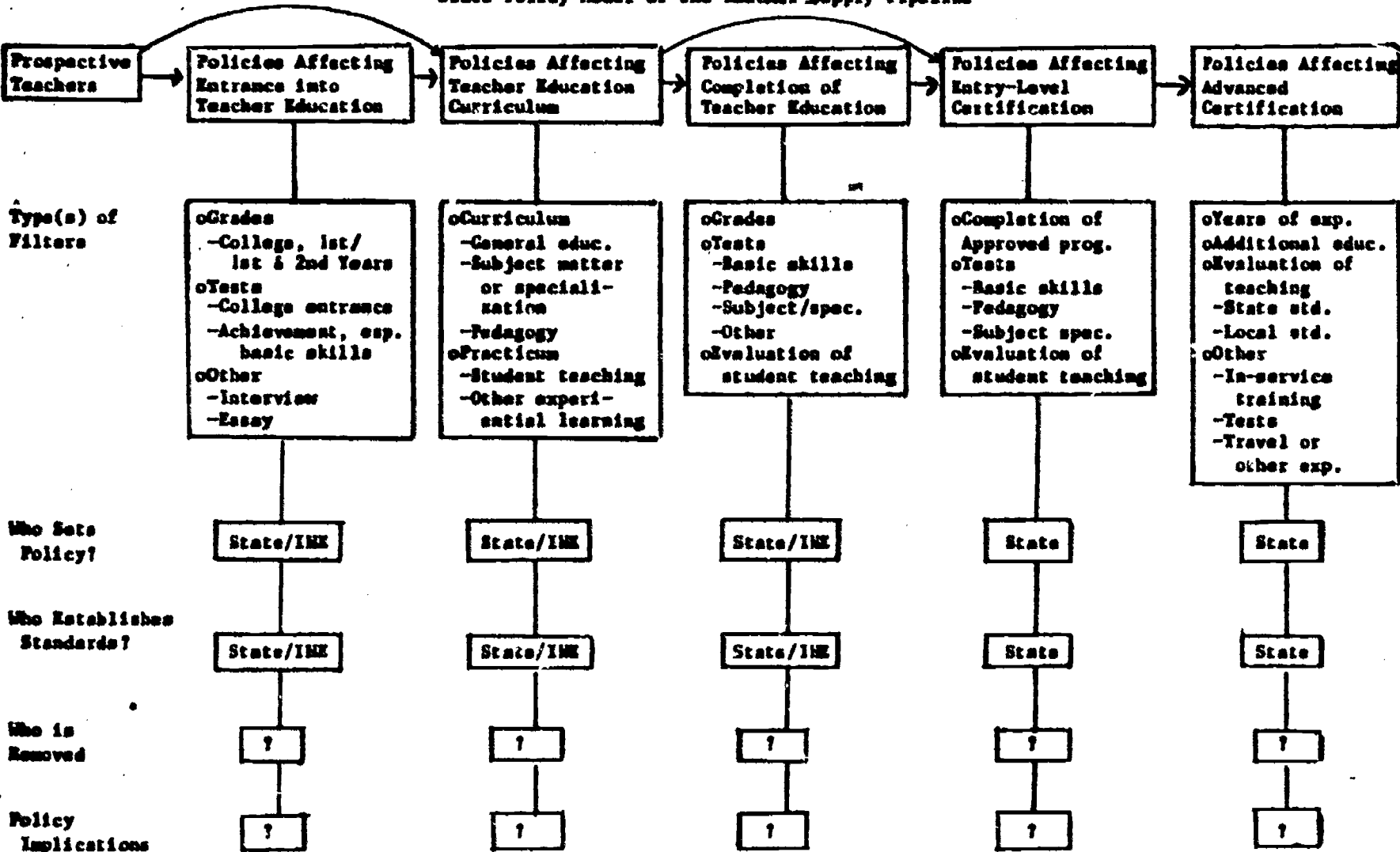
#### Entrance into Teacher Education

The first filter is entrance into teacher education. The major screening mechanisms here are aimed at individuals, requiring either a minimum grade point average (usually in the first and/or second years of college) or testing (usually a college entrance test or an achievement test, most often focusing on basic skills). Other individual assessment filtering mechanisms, such as personal evaluation and interviews, are less frequently employed. Minimum grade point average (GPA) or test score standards for entrance into teacher education may be established by the state or may be set by the institutions of higher education (IHEs). Implementation is usually carried out by the IHEs. Most states employing a filter at this stage provide individuals who initially do not meet the required test standard a second opportunity for testing after remediation.

This filter presents a confusing picture for three reasons. First, individuals may enter teacher education programs at different points in their college careers (e.g., when they enter college, or at the end of the second or third year of college). Second, it is often difficult

Figure 1

State Policy Model of the Teacher Supply Pipeline



to differentiate between those policies set by the state and implemented by the IHEs and those policies set and implemented by the IHEs (particularly with regard to minimum grade point average). Finally, states not only use different screening mechanisms for entrance into teacher education but they also set different standards for similar mechanisms.

### Prescribed Teacher Education Curriculum

The second filter is completion of a state-prescribed teacher education curriculum. These curriculum requirements affect institutions directly and individuals only indirectly. The state policies usually specify the emphasis and balance within the components of teacher education (general education, pedagogy, and subject matter or specialization) as well as the extent of student teaching and other supervised experiential learning. States must rely on IHEs to monitor the status of individuals completing an approved teacher education program. Unless the individual's course transcript becomes part of a permanent record, it is impossible to differentiate later between the individual who barely meets the requirements of the program and the individual who substantially exceeds the minimum requirements.

There is considerable confusion at this filter point both because no two states have identical curriculum requirements and because requirements vary within states according to teaching level and/or specialty. A few states have recently introduced processes that allow individuals to bypass the prescribed teacher education curriculum.

### Completion of Teacher Education

Concerns about the adequacy of the teacher education curriculum filter have led a number of states to institute a third filter that evaluates the individuals who have been exposed to the state-specified curriculum. The major mechanisms here are tests and minimum GPA requirements, although a few states are using competency ratings based on observation of student teaching. The tests used vary considerably. Some states develop their own examinations while others use available standardized tests. Some tests are designed specifically to assess knowledge of teaching methods, some are focused on a subject matter area or specialization, and still others are focused on the basic skills. Even when the same test is used, there is no common standard among states; criteria vary widely and the proportion of individuals passing any test may be highly dependent on the nature and extent of earlier filters. Remediation and retesting are usually available for individuals who initially do not pass test filters.

Confusion at this filter point exists because the same test may be used by an IHE to assess satisfactory completion of teacher education and by a state to evaluate individuals for certification; however, this is not always the case. One must draw a parallel with other professions and

be aware that, just as satisfactory completion of medical or law school does not automatically admit individuals to the practice of these professions, neither does satisfactory completion of a teacher education program always automatically provide certification.

### Entry-level Certification

Before discussing the policies that affect the teacher certification portion of the pipeline, it is important to differentiate between the types of certification now required. Most states have multi-level certification which consists of entry-level certification for individuals entering the teaching profession for the first time and various mechanisms (such as certification renewal or advanced certification levels) for further screening of teachers. The types of certification can be classified as: (1) one level permanent, (2) one level renewable, (3) multi-level, transition optional, and (4) multi-level, transition required.

The major filters for initial, entry-level certification include education (usually satisfactory completion of an approved teacher education program), tests (sometimes the same tests used at the end of teacher education), and/or observation of student teaching. The teacher certification standards are set and implemented by the state although the extent of state control may be minimal when completion of an approved teacher education program is the only requirement for initial certification. Shortages of teachers in some specialty areas (most often science) have led a small number of states to develop alternative mechanisms for the certification of college graduates who did not complete teacher education programs. This latter certification process usually requires only a few courses in pedagogy and a period of supervised teaching.

### Advanced Certification

As indicated above, very few states now issue a permanent (or life-time) certificate. Instead, additional certification steps are required of the experienced teacher. This further certification or re-certification is the fifth and final filter in the teacher supply pipeline. The mechanisms used for the further screening of teachers range from renewal of a single level certificate with only the requirement that the individual has taught for some period in the renewal cycle; to renewals and transitions to higher level certificates based on additional education, in-service training, or other professional development; to renewals and transitions requiring evidence of satisfactory teaching, based on local or state standards evaluated by local or state officials.

The assumption underlying multi-level certificates appears to be that the advanced level of certification indicates greater competency than the entry-level. The picture is complicated by the fact that advancement to

a higher level certificate is required in some states and is optional in others. There is no obvious relationship between the type of advanced certification requirements and the required versus optional nature of these requirements.

### Study Findings

The findings of this study are grouped into three areas of interest to policymakers: (1) variations in state policies, (2) coordination among state policies, and (3) impact of state policies on teacher supply and equity.

#### Variations in State Policies

states require teachers to complete a state-approved training program. The approved program concept is similar to other forms of educational assessment (such as the Carnegie unit) which focus on the types of learning situations to which an individual is exposed and on the time spent in these situations, rather than on what the individual actually learned. The major advantage of using an approved program approach to certify teachers is the speed and ease with which evaluation can be done. The most serious drawback is that, because the course rather than the individual is evaluated, no differentiation is made between individuals whose learning has been outstanding and those who just "squeaked through." In addition, the approved program approach must depend on the course providers to set and maintain standards. Furthermore, no common metric is available to determine if and how much these standards vary across institutions.

These problems of relying on the approved program approach as the sole policy for teacher certification has led an increasing number of states to enact various policies that set standards for evaluating individuals entering the teaching profession. Policies vary along four major dimensions:

- o The number of filters in effect,
- o The point(s) in the teacher supply pipeline where the filters are placed,
- o The content or skills covered by the filter (e.g., basic skills, knowledge of teaching specialty, professional knowledge and/or teaching performance), and
- o The minimum standards established.



A survey of all fifty states was undertaken to determine the variations in state policies. This is summarized briefly in this chapter and reported on in more detail in Chapter 2.

A 50-state overview. Table 1 summarizes the types of state policies in effect in 1983-84 (or legislated by 1983-84 but due to become effective after that date). Seventeen states require some or all teacher education candidates to pass a state-prescribed basic skills test before entering a teacher education program, 13 states have established a statewide minimum grade point average, while 10 states require both. All 50 states approve the content of teacher education programs and 38 of them establish minimum course hours in general education, professional studies and subject specialty. To complete a teacher education program, students must maintain a state-established minimum grade point average (20 states) and/or pass a test of basic skills (5 states), a test of professional knowledge (3 states) or a test of knowledge of subject matter (1 state). Six states require a competency-based assessment of the prospective teacher's skills.

The only universal requirement for entry-level certification is completion of an approved program. In 28 states, this is the only requirement for certification. Twenty-two states have established a testing requirement. The type of test used and subject matter tested vary considerably among the states, however. Applicants for certification are tested in basic skills (14 states), general knowledge (9 states), professional knowledge (12 states), and/or knowledge of the teacher's specialty area (14 states). Nine states evaluate a beginning teacher's performance before initial certification is granted.

Only three states--Massachusetts, Missouri and New Jersey--grant a permanent license to first-year teachers but 16 other states provide lifetime certificates to teachers who hold an advanced certificate. The remaining 31 states require teachers to renew their certificates on a regular basis and, with the exception of Illinois, base recertification on years of teaching experience, and/or completion of additional formal education and/or in-service training. Sixteen states require teachers to participate in staff development programs. In most cases, these activities fulfill some recertification requirements.

Policies in four states. In-depth case studies were conducted in California, Colorado, Georgia and Oklahoma to obtain more detailed information on the origins, structure and operation of state policies. The four states selected for these case studies each use some type of individual assessment as well as an approved program approach to screen teachers. The policies they enacted, however, illustrate the wide range of policies used by states across the country. The case study findings are summarized briefly in this chapter and are reported in more detail in Chapter 3.

Colorado requires that students pass basic skills tests in oral and written English communication skills and in mathematics before formal admission into an approved teacher education program or assignment to student teaching. A norm-referenced test, the California Achievement

Table 1

Summary of State Policies Affecting the Entrance  
of Individuals into the Teaching Profession

State	Entrance into Teacher Education			Teacher Education Curriculum	
	Test	Minimum Grade Point Average	Other	Approved Program	Distribution Requirements
Alabama	X	X		X	X
Alaska				X	
Arizona	X	X		X	X
Arkansas				X	X
California				X	X
Colorado	X <sub>b</sub>			X	
Connecticut	X <sup>b</sup>	X <sup>b</sup>		X	X
Delaware				X	X
Florida	X	X	X	X	X
Georgia	X <sup>e, b</sup>	X		X	X
Hawaii				X	X
Idaho				X	X
Illinois				X	X
Indiana				X	X
Iowa				X	
Kansas	X <sup>e</sup>	X <sup>e</sup>	X <sup>b</sup>	X	
Kentucky	X	X <sup>i</sup>		X	X
Louisiana		X	X	X	X
Maine				X	X
Maryland				X	X
Massachusetts				X	X
Michigan		X <sup>i</sup>		X	X
Minnesota				X	
Mississippi	X <sup>e</sup>			X	X
Missouri	X	X		X	X
Montana				X	X
Nebraska				X	
Nevada				X	X
New Hampshire				X	
New Jersey	X	X	X	X	X
New Mexico				X	X
New York				X	X
North Carolina	X <sup>b</sup>			X	
North Dakota				X	
Ohio				X	X

Table 1 (cont.)

Summary of State Policies Affecting the Entrance  
of Individuals into the Teaching Profession

<u>State</u>	<u>Entrance into Teacher Education</u>			<u>Teacher Education Curriculum</u>	
	<u>Test</u>	<u>Minimum Grade Point Average</u>	<u>Other</u>	<u>Approved Program</u>	<u>Distribution Requirements</u>
Oklahoma		X		X	X
Oregon	X	X		X	
Pennsylvania				X	
Rhode Island				X	X
South Carolina	X			X	X
South Dakota				X	X
Tennessee	X			X	X
Texas	X <sup>j</sup>			X	X
Utah				X	X
Vermont				X	
Virginia				X	X
Washington				X	
West Virginia				X	X
Wisconsin				X	X
Wyoming	X			X	X

Completion of Teacher Education Program

<u>State</u>	<u>Minimum Grade Point Average</u>	<u>Test</u>			<u>Other</u>
		<u>Basic Skills</u>	<u>Prof. Knowl.</u>	<u>Subject Special.</u>	
Alabama	X				
Alaska					
Arizona	X	X	X		
Arkansas	X				
California					
Colorado	X				
Connecticut	X				
Delaware					
Florida	X				
Georgia	X	X <sup>e</sup>			
Hawaii	X				
Idaho	X				
Illinois					
Indiana					
Iowa					
Kansas	X				
Kentucky	X				
Louisiana	X				
Maine					
Maryland					
Massachusetts					X <sup>h</sup>
Michigan					
Minnesota					
Mississippi	X				X <sup>h</sup>
Missouri	X				
Montana	X				
Nebraska					
Nevada					
New Hampshire					
New Jersey	X				
New Mexico					
New York					
North Carolina		X			
North Dakota	X				
Ohio					

Completion of Teacher Education Program

<u>State</u>	<u>Minimum Grade Point Average</u>	<u>Test</u>			<u>Other</u>
		<u>Basic Skills</u>	<u>Prof. Knowl.</u>	<u>Subject Special.</u>	
Oklahoma	X				
Oregon					
Pennsylvania					x <sup>h</sup>
Rhode Island					
South Carolina					x <sup>h</sup>
South Dakota	X				
Tennessee	X	X			
Texas					
Utah					
Vermont					
Virginia					
Washington					x <sup>h</sup>
West Virginia		x <sup>b</sup>	x <sup>b</sup>		x <sup>b,h</sup>
Wisconsin					
Wyoming					

Entry-Level Certification

State	Approved Program	Test				Evaluation of Beginning Teaching
		Basic Skills	General Knowl.	Prof. Knowl.	Subject Special.	
Alabama	X			X <sup>e</sup>	X	
Alaska	X					
Arizona	X					X <sup>b</sup>
Arkansas	X	X	X	X	X	
California	X	X				
Colorado	X					
Connecticut	X					
Delaware	X	X				
Florida	X	X		X		X
Georgia	X				X	X
Hawaii	X					
Idaho	X					
Illinois	X					
Indiana	X					
Iowa	X					
Kansas	X		some type of test <sup>k</sup>			
Kentucky	X	X <sup>j</sup>	X <sup>j</sup>	X <sup>j</sup>	X <sup>j</sup>	
Louisiana	X	X	X	X	X	
Maine	X					
Maryland	X					
Massachusetts	X					X <sup>b</sup>
Michigan	X					
Minnesota	X					
Mississippi	X	X	X	X	X <sup>b</sup>	X
Missouri	X				X <sup>b</sup>	
Montana	X					
Nebraska	X	X <sup>j</sup>			X <sup>j</sup>	
Nevada	X					
New Hampshire	X	X <sup>m</sup>				
New Jersey	X					
New Mexico	X	X	X <sup>j</sup>	X	X	
New York	X	X	X <sup>j</sup>	X <sup>j</sup>		
North Carolina	X			X	X	X <sup>j</sup>
North Dakota	X					
Ohio	X					

Entry-Level Certification (cont.)

<u>State</u>	<u>Approved Program</u>	<u>Test</u>				<u>Evaluation of Beginning Teaching</u>
		<u>Basic Skills</u>	<u>General Knowl.</u>	<u>Prof. Knowl.</u>	<u>Subject Special.</u>	
Oklahoma	X				X	X
Oregon	X					
Pennsylvania	X	Some type of test <sup>1</sup>				
Rhode Island	X					
South Carolina	X				X	X
South Dakota	X					
Tennessee	X	X	X	X <sup>k</sup>	X	
Texas	X	Some type of test <sup>k</sup>				
Utah	X					
Vermont	X					
Virginia	X	X <sup>j</sup>	X <sup>j</sup>	X <sup>j</sup>	X <sup>j</sup>	X <sup>j</sup>
Washington	X					
West Virginia	X					
Wisconsin	X					
Wyoming	X					

State	Recertification					State Requires Staff Development
	Years of Experience	Add'l. Formal Education	In-Service	Other	Lifetime, Not Appl.	
Alabama	X <sup>a</sup>	X <sup>a</sup>				
Alaska	X	X <sub>b</sub>				
Arizona	X	X <sup>b</sup>				
Arkansas	X <sup>a</sup>	X <sup>a</sup>			X <sup>c</sup>	
California	X	X	X <sup>b</sup>			X <sup>b</sup>
Colorado	X	X <sup>a</sup>	X <sup>d</sup>	X <sup>a</sup>		
Connecticut	X	X <sup>a</sup>	X <sup>a</sup>		X <sup>c</sup>	X <sup>b</sup>
Delaware	X				X <sup>c</sup>	
Florida	X	X <sup>a</sup>	X <sup>a</sup>			X
Georgia	X	X <sup>a</sup>	X <sup>a</sup>			
Hawaii	X				X <sup>c</sup>	
Idaho	X	X	X <sup>d</sup>			X
Illinois				X <sup>f</sup>		
Indiana	X	X			X <sup>c</sup>	
Iowa	X	X	X <sup>d</sup>		X <sup>c</sup>	
Kansas	X	X	X <sup>d</sup>			
Kentucky	X	X	X <sup>d</sup>		X <sup>c</sup>	
Louisiana	X	X <sup>a</sup>		X <sup>a, g</sup>	X <sup>c</sup>	
Maine	X	X <sup>a</sup>	X <sup>a</sup>			
Maryland	X	X <sup>a</sup>	X <sup>a</sup>		X <sup>c</sup>	
Massachusetts					X	
Michigan	X	X <sup>a</sup>	X <sup>a</sup>		X <sup>c</sup>	
Minnesota	X	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>		
Mississippi	X	X	X <sup>a</sup>			
Missouri					X	
Montana	X	X <sup>a</sup>	X <sup>a</sup>			X
Nebraska	X	X				
Nevada	X	X <sup>a</sup>	X <sup>a</sup>			
New Hampshire	X		X			X
New Jersey					X	
New Mexico	X	X	X <sup>d</sup>			X
New York	X	X			X <sup>c</sup>	
North Carolina	X		X <sup>d</sup>			
North Dakota	X	X				
Ohio	X	X			X <sup>c</sup>	



<u>State</u>	<u>Recertification (cont.)</u>					<u>State Requires Staff Development</u>
	<u>Years of Experience</u>	<u>Add'l. Formal Education</u>	<u>In-Service</u>	<u>Other</u>	<u>Lifetime, Not Appl.</u>	
Oklahoma	X <sup>a</sup>	X <sup>a</sup>				X
Oregon	X	X				
Pennsylvania	X	X <sup>a</sup>	X <sup>a</sup>		X <sup>c</sup>	X
Rhode Island	X	X			X <sup>c</sup>	
South Carolina	X	X <sup>a</sup>	X <sup>a</sup>			
South Dakota	X	X <sup>a</sup>	X <sup>a</sup>			X <sup>b</sup>
Tennessee	X	X				X
Texas	X <sup>k</sup>	X <sup>k</sup>			X <sup>c, k</sup>	X
Utah	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>			
Vermont	X	X <sup>a</sup>	X <sup>a</sup>			
Virginia	X	X <sup>a</sup>		X <sup>a</sup>		X
Washington	X	X				
West Virginia	X	X			X <sup>c</sup>	X
Wisconsin	X	X <sup>a</sup>	X <sup>a</sup>			X
Wyoming	X	X <sup>a</sup>	X <sup>a</sup>			

<sup>a</sup>May be substituted for another requirement.

<sup>b</sup>Effective 1985.

<sup>c</sup>Applies to holders of Advanced Certification.

<sup>d</sup>May substitute for some formal education credits.

<sup>e</sup>Required in state-supported schools only.

<sup>f</sup>Payment of fees and registration.

<sup>g</sup>Request of employing superintendent.

<sup>h</sup>Competency-based assessment.

<sup>i</sup>Required for entrance into student teaching.

<sup>j</sup>Effective 1984.

<sup>k</sup>Effective 1986.

<sup>l</sup>Effective 1987.

<sup>m</sup>No date set for implementation.

Test (CAT), is used to assess written English and mathematics skills. The passing score is the 75th percentile score for high school seniors nationally. Students who fail any section of the test may be retested three additional times.

California also uses a single assessment with a basic skills test. The California Basic Educational Skills Test (CBEST) is designed to measure college-level skills in reading comprehension, English composition and mathematics. The original legislation required all applicants for teaching credentials (except those in adult education or in a children's center) to pass this test. A 1983 amendment requires that the test be taken, but not passed, before admission to teacher education. To pass, an examinee must have a total score of 123, with a minimum score of 37 on each of the three test sections. The cutoff scores set by the Superintendent of Public Instruction at a level slightly higher than those recommended by an advisory board, were based on a predetermined proportion of items to be passed in each test section, ranging from 65 percent to 70 percent. Individuals may repeat any sections of the test they fail with no limit on the number of retestings.

Georgia conducts two assessments of individuals entering the teaching profession. All applicants for initial certification must pass the Georgia Teacher Certification Test (TCT) in the area of their teaching specialty. The TCT is composed of 23 criterion-referenced area tests. Individuals who fail this test may teach for one year on a probationary license. The test may be retaken any number of times. During the initial three years of teaching, candidates for renewable certification must demonstrate acceptable teaching performance as measured by the Teaching Performance Assessment Instruments (TPAI). This instrument, which assesses 14 generic competencies evaluated by 45 indicators, is composed of five sections: (1) teaching plans and materials, (2) classroom procedures, (3) interpersonal skills, (4) professional standards, and (5) student perceptions. Candidates are assessed up to six times over a three year period. The assessors are a supervisor, a peer teacher, and an external data collector. Candidates must attain 85 percent of the competencies on the first assessment or 75 percent on two or more assessments to pass.

Oklahoma also conducts two assessments. Individuals applying for an entry-year license take a criterion-referenced test of knowledge in the teaching specialty area, called the Oklahoma Teacher Certification Testing Program (TCT). This consists of 76 tests covering 34 content areas. Cutoff scores were set as part of the test development process, based on estimates by current teachers and teacher educators of the proportion of successful beginning teachers who could pass each item. Individuals who fail the test may retake it as often as they wish. Individuals with an entry-year license must take part in the Entry-Year Assistance (EYA) program. The beginning teacher is observed and evaluated at three times during the first year of teaching using an instrument that covers human relations, teaching and assessment, classroom management and

professionalism. The evaluators are a teacher consultant, an administrator, and a teacher educator. At the end of the first year the evaluators may recommend certification or may recommend that the teacher take part in the EYA program for a second year. If teachers are not recommended for certification after the second year, they cannot continue teaching.

A number of factors influenced the design of assessment policies in these four states. One can look first at the impetus behind the policy. Georgia policymakers were swept up in the competency education movement of the early 1970s. In response to legislative interest in competency-based certification, a statewide task force produced a plan to implement competency-based preparation and certification in Georgia by 1978. Oklahoma policymakers apparently looked to Georgia for a model program. Basic skills testing was enacted in Colorado and California because, in each state, a determined legislator responded to anecdotal evidence of a crisis in teaching.

A second factor is contextual. In 1977, the Colorado State Board of education required IHEs to screen prospective teacher education candidates for basic skills competencies, but left the choice of an assessment instrument to the IHEs. The legislation requiring use of the CAT went one step further by imposing a uniform measure across all institutions. The sponsor of the CBEST legislation in California had authored legislation in 1977 that mandated statewide pupil proficiency testing. Basic skills testing of teachers seemed to him to be a logical extension of this earlier legislation.

A third factor is the availability of funds to develop and implement assessment instruments. For example, both Colorado and California legislated the use of basic skills tests as screens. When the Colorado legislature did not appropriate money for test development, policymakers were limited to existing instruments and looked primarily at those already used by IHEs to screen applicants. In California, funds were available to support the development of a new test when it was determined that commercial tests did not satisfy the objectives set by the advisory committee. Georgia and Oklahoma also had sufficient resources to undertake a lengthy test development process.

A final factor is politics. Responsibility for formulating and administering teacher education and certification policies is shared by state legislatures, state boards of education, state departments of education and other state agencies, and institutions of higher education. In most cases, the legislatures specify the area(s) to be assessed (e.g., basic skills competencies in mathematics, communications, etc.; teaching specialty; and/or teaching performance) and the point(s) in the pipeline where the assessments will be made (e.g., admission into teacher education, admission into student teaching, completion of the program, etc.). The State Board of Education is then given the authority to select an assessment instrument, set minimum standards (such as test cut-off scores) and develop assessment procedures.

The Georgia legislature gave the State Board of Education total responsibility for designing a competency-based teacher assessment program. All negotiations and compromises were made outside the legislative chambers. Oklahoma's legislation, which is somewhat prescriptive, was subject to 100 amendments; 35 were accepted. California's Senator Hart first proposed that CBEST be used to screen applicants to teacher education programs. This proposal was opposed successfully by IHEs that felt such a policy would encroach on their right to set admissions policies. As a result, the test became a requirement for certification. Politics also affected standard-setting. Although, California used sophisticated methods to establish cutoff scores, the Superintendent of Public Instruction raised the cutoff score a few points above that recommended by the advisory committee because he was personally committed to raising educational standards.

One generalization can be made across the four states. Although they differ in approach, the new state policies are here to stay. Regardless of low passage rates by minorities or by graduates of some IHEs, legislators are in no mood to lower standards. They feel that public response has been favorable and that there is more support for raising standards at other points in the pipeline than for modifying existing policies.

Trends in state policies. The mix of policies now in effect across the nation results from changes made by the states in an attempt to enhance the quality of the teaching profession. As part of the 50-state survey, states were asked to specify which policies had been changed in the last five years. The results are summarized in Table 2.

Thirty-seven states indicated that they had made some type of policy change in the preceding five years. Although only one state made changes in all five areas, the majority of states instituted changes in several areas. Only eight states reported policy changes in a single area. Thirty-two states reported changes in the areas of teacher certification and 28 reported changes in the teacher education curriculum. Twenty states changed policies affecting entrance into teacher education, 15 changed requirements affecting completion of teacher education, and nine reported changes affecting staff development.

State respondents were also asked whether policy changes had affected the quality and/or supply of teachers. The results, which are reported in detail in Tables 3-6 in Chapter 2, suggest that changes in certification policies impact primarily on teacher quality, while changes made to policies at earlier points in the teacher preparation process are likely to affect teacher supply as well as quality. However, much of this impact assessment is based on impressions, rather than on analysis of data. Few states indicated that they had collected data to help them identify the impact of policies affecting entrance into the teaching profession.

Table 2  
Types of Recent State Policy Changes  
Affecting Teacher Education and Certification

State*	Policy Areas				
	Entrance Into Teacher Education	Teacher Education Curriculum	Completion of Teacher Education	Teacher Certification	Staff Development
AL				X	
CA	X	X		X	
CO	X	X		X	
CT	X	X	X		X
DE				X	
FL	X	X	X	X	
GA		X		X	
HI	X	X		X	X
IA		X		X	X
IL		X		X	
IN		X		X	
KS	X	X	X	X	
LA	X	X	X	X	X
MA	X	X	X	X	
MI		X			
MN	X	X		X	
MO	X	X	X	X	
MS	X	X	X	X	
MT		X		X	X
NE		X		X	
NH		X			
NJ	X	X	X		
NM	X		X	X	
NV		X	X	X	X
NY				X	
NC	X	X	X	X	
OH		X			
OK	X		X	X	X
OR	X	X		X	
SC	X	X	X	X	
TN	X	X		X	
TX	X		X	X	X
UT	X			X	X
VT				X	
VA		X	X	X	
WI		X		X	
WY				X	

\*Only states which responded to the questionnaire and which indicated they had made policy changes within the preceding five years are included.

### Coordination Among State Policies

There are a number of junctures in the teacher preparation and licensing process at which states currently impose requirements. There is little evidence, however, that in most states these requirements are developed as a part of a comprehensive set of state policies affecting entrance into teaching (Peterson, 1984). Legislators often enact policies in a piecemeal fashion, making isolated responses to isolated problems rather than taking a broader view and providing a set of coordinated procedures. Georgia and Oklahoma provide examples of states which have tried to produce a coordinated set of processes which link teacher performance to teacher education. Yet, they share two types of coordination problems with the other case study states.

First, accountability for student failure is often misplaced. Although instruction in basic skills and subject matter areas is usually not provided in the schools of education, basic skills and subject matter specialty tests are used to evaluate the teacher education programs. Teacher education departments are held responsible for education students' knowledge of these areas while non-education departments actually providing the instruction have little or no incentive to improve their teaching in ways that will improve teacher quality. This problem is aggravated in states like Georgia where schools of education may be placed on probation, and ultimately closed, if their graduates perform poorly on subject matter tests.

The second coordination problem centers on the provision of remediation to individuals who do not initially pass the tests. Although most of the case study states recommended such remediation, it is required only in Colorado. None of the four states provide funds for remediation. In addition, the nature of tests used often makes remediation difficult. CBEST and CAT are norm-referenced tests. Thus, institutions cannot identify specific deficiencies within each basic skill subtest area. Moreover, in California, students can decide whether or not to have the CBEST score reported to their institutions. Without this information, institutions may have no indication that individuals need remedial assistance. In both Georgia and Oklahoma, although the subject matter tests are criterion-referenced, limited individual information is available to IHEs. The primary data provided to IHEs to assist in remediation are objective mastery reports which provide a list of objectives with low pass rates across the state.

There also appears to be no coordination between the tests used by the states in other parts of higher education (e.g., for admission, or for promotion to junior standing) and those used in teacher education. For example, the California State University system cannot compare the performance of entering freshmen on its communications skills and mathematics entrance tests and their performance on CBEST one to two years later. And there is considerable institutional variation in the extent to which teacher education programs can and do make use of the remedial services available on their campuses for students who fail these other tests.

### Impact of State Policies on Teacher Supply and Equity

The states which have introduced new policies in the last five years perceive them as strengthening teacher education programs, making students more serious about teacher education, focusing attention on weaknesses in the teacher education curriculum, and screening out students who lack sufficient knowledge of basic skills, subject matter and/or pedagogy. A major activity of this study was to identify, collect and analyze data on the characteristics of individuals screened out of the teaching profession and on the impact of state policies on teacher supply.

Who is screened out of teaching? Although the impact of individual assessment policies differed somewhat across the four case study states, several patterns were evident.

First, it appears that more people are screened out by basic skill testing and by testing early in the teacher preparation process than by later subject matter testing or evaluation of beginning teachers. In Colorado, the pass rate for the CAT, which is required for entrance into teacher education, hovers around 65 percent. The initial pass rate on CBEST, which is required for certification in California, is 68 percent. In Georgia, 78 percent of first time test-takers pass the TCT, which is required for initial certification, while fewer than one percent of beginning teachers who complete three years of teaching are screened out by the TPAI. However, about 25 percent of beginning teachers leave the classroom before the end of three years either because of sub-standard performance on the TPAI or because they decide they do not wish to pursue a career in teaching. In Oklahoma, about 80 percent of first time examinees pass the TCT, and 98 percent of beginning teachers are recommended for certification after first year evaluation in the EYA program.

Second, the passage rates differ considerably by racial/ethnic group. In California, 76 percent of white test-takers, 39 percent of Hispanic test-takers, and 26 percent of Black test-takers pass CBEST. In Georgia, 87 percent of White students pass TCT on the first attempt but only 34 percent of Black students do so. In Oklahoma, the TCT pass rate for Whites is 79 percent, for Hispanics 58 percent, and 48 percent for Blacks. Colorado does not collect data by race/ethnicity.

Finally, the individual assessments have a differential impact on students from different types of IHEs. The CBEST pass rates at California IHEs ranged from a low of 33 percent to a high of 90 percent. Up to 85 percent of the students at more selective institutions but only 30 to 40 percent of students at open admissions institutions in Colorado pass the CAT. Similar institutional differences exist in Georgia and in Oklahoma. It seems clear that the more selective the general admission policies of the IHEs are, the higher the pass rates will be on later assessments.

Many institutions with high failure rates have responded by raising the admission standards for their teacher education programs. Several California State University campuses now require students to pass CBEST before admission to teacher education, while other campuses have also raised the minimum GPA requirements. In Colorado, students at some open admissions institutions must now pass the CAT before acceptance into a teacher education program. These types of action, of course, reduce the amount of time which inadequately prepared students have to overcome their deficiencies. The case study data suggest that this group includes older students returning to education with "rusty" skills, especially in mathematics, and students from disadvantaged backgrounds and/or with inadequate secondary school education.

Teacher shortages. There is a general perception among the respondents in our case study states that the use of individual assessment will aggravate teacher shortages. However, it is difficult to isolate the impact of state policies from other factors which have also affected the supply of beginning teachers: changing demographics, low salaries and expanding employment opportunities for women and minorities. We found that few states or IHEs collect the type of data needed to accurately assess the impact of changing state policies on teacher supply and demand. None of the states we visited had information on the number of unfilled teaching positions by program areas or by type of community. This situation is not uncommon; in 1982, only 11 states had automated teacher supply/demand models (National Academy of Sciences, 1984).

Available data on individuals screened out of the teaching profession suggest, however, that state policies will aggravate shortages of certain types of teachers. A shortage of minority teachers is evident from the data cited above. Statistics collected by other states using teacher testing programs show that their tests have also had a differential impact on majority and minority populations. In Florida, 83 percent of those who took the state's teacher certification examination in 1982 passed each of its four parts. Among Blacks the figure was 35 percent. When prospective teachers took a competency test required for admission to colleges of education in Texas, 62 percent of the Whites passed all three sections of the test compared to 10 percent of the Black and 19 percent of the Hispanic test-takers. These figures have led one educator to predict that "within the decade, the minority teaching forces will be less than 5 percent, compared to 12 percent in 1980." A related consequence will be a growing shortage of teachers for bilingual education programs.

Teacher shortages in certain types of school districts may also be increased by some of these assessment policies. In California, severe teacher shortages in inner city schools were reported and cited as one reason for the introduction of a program to provide alternative routes for entering the teaching profession. In all four case study states, increasing certification requirements were viewed as creating teacher supply problems in rural school districts, where the pool of available



individuals is small. In Oklahoma, especially, where there are pressures to certify individuals in their major subject area only, considerable opposition has been expressed by rural superintendents who often need individuals who are certified to teach a variety of subjects.

Finally, policymakers in Georgia and Oklahoma, which use teaching specialty knowledge tests, expressed concern about the different pass rates in various subject matter areas. In Oklahoma, for example, pass rates have been somewhat lower in teacher shortages areas, such as mathematics and science (trigonometry, 78 percent; earth sciences, 22 percent; physics, 44 percent) and foreign languages (French, 21 percent; German, 57 percent) than in areas where the teacher supply is greater.

### Policy Implications and Recommendations

It is necessary to have screens in the teacher supply pipeline to ensure the quality of individuals entering the teaching profession. It appears that, as a method, assessment of individual teachers provides a better way of evaluating the capabilities of potential teachers than does program approval. However, the findings from this study lead us to conclude that the approaches used by most states today are inadequate to address the problems of equity, coordination and accountability.

#### Equity

Current state policies focus on screening out people, rather than on developing the talents of individuals who wish to become teachers. This emphasis impacts adversely on: (1) students entering college with weak secondary school preparation, (2) adults returning to college or making a career change, and (3) open-admissions institutions and their students. Current policies which restrict access into the teaching profession will reduce the socio-economic and racial/ethnic diversity of the nation's teaching force at a time when the schools are educating larger numbers of minority students.

When students are screened prior to entrance into teacher education, IHEs have little opportunity to provide instruction to compensate for students' past educational inadequacies. With the help of a well-designed remediation program, many of the students now excluded could become satisfactory teachers, in terms of both subject matter knowledge and teaching performance.

There is also a conflict between states' policies for open admission to higher education and policies restricting admission to teacher education. Open-admissions colleges tend to attract more students from disadvantaged backgrounds or with inadequate high school preparation. High failure

rates on certification tests, however, have led several states to consider closing or placing on probation, teacher education programs at these types of institutions. This can result in teacher education programs being available only in institutions which have selective admissions policies and in the abolishment of teacher education in institutions with open admissions policies.

In addition, state policies are acting as a damper on students' interest in a teaching career. The testing requirements are often seen as a hurdle and one that is not required for entrance into other occupations. The mandated publication of test results and the extensive publicity about racial/ethnic differences in the pass rates on tests for prospective teachers appears to have led many minority students to assume, whether correctly or not, that they too will be unable to pass these tests. This has, consequently, led these students to choose other careers.

The end result of current state policies will be to reduce the social and economic heterogeneity of the nation's teaching force. In 1980, 87 percent of public elementary and secondary school teachers were White, 10 percent were Black and 2 percent were Hispanic. At the same time, 16 percent of the school children were Black, 8 percent were Hispanic and 3 percent were from other minority groups. The racial/ethnic mismatch of teachers and children varies across the states. Student bodies in the southern states are 30 to 50 percent minority; the teaching force is 20 to 40 percent minority. Forty-three percent of California students are non-White, while only 16 percent of their teachers are non-White. In New York and Arizona, the percentage of minority students is 3 to 4 times greater than the percentage of minority staff (Dilworth, 1984). Yet, it is those states with large minority student enrollments--in the South, California, New York, New Mexico, Texas and Arizona--that have implemented programs to screen teachers. The poor performance of minorities on these tests, the closing of teacher education programs in open-admissions and predominantly minority institutions, and the declining number of minorities entering college and aspiring to be teachers will worsen the socio-economic and racial/ethnic mismatch between student and teacher in the next twenty years.

Recommendations. To ensure that all students who aspire to be teachers have an opportunity to prepare for a teaching career, state policies on teacher preparation should include the following elements:

- o All students entering college should be assessed to identify basic skill deficiencies and opportunities for remediation should be provided, if necessary.
- o A student should show proficiency in basic skills before admission to a teacher education program. This policy should also apply to other college majors, not just teacher education. The mechanism used to screen teacher candidates for basic skills proficiency should be the same as that used to assess entering freshmen.

- o Students' knowledge of both subject matter specialty and pedagogy should be evaluated before a teacher education degree is awarded, using a common metric across IHEs within a state.
- o Screening devices should be designed in a way that provides diagnostic information for student remediation and for program improvement.
- o States should provide adequate resources for remediation and program improvement.

### Coordination

Many states focus on assessing a limited number of skills which have varying degrees of relevance to the teacher education curriculum and, ultimately, to classroom performance. For example, 14 states require basic skills tests for certification and nine require tests of general knowledge but only nine evaluate a beginning teacher's classroom performance before certification is granted.

State policies also result in misplaced accountability with teacher education departments held responsible for students' knowledge of the basic skills and of subject matter area. Consequently, non-education departments have little or no incentive to improve their teaching in ways that will improve teacher quality. This situation is aggravated by state policies that use test score results in basic skills and subject matter areas to place teacher education programs on probation.

Recommendations. Coordination between teacher education curriculum and certification standards can be achieved by:

- o Requiring candidates for certification to show evidence of proficiency in basic skills, subject matter area and professional knowledge and to complete a successful entry-year teaching assignment.
- o Informing non-education departments of deficiencies in student performance on subject matter examinations and teacher education departments of deficiencies in professional knowledge and first year teaching performance.
- o Applying probationary policies specifically to those departments that provide the relevant subject matter and teacher education courses.

### Accountability

State policies are short-sighted because no attention is given to the impact of policies on teacher supply at a time when growing teacher shortages are projected. Few states collect data on either the impact of their teacher screens or the supply and demand for teachers by teaching specialty and geographic region. This means that policymakers cannot determine who is being closed out of the teaching profession by state policies, at what point in their education students are being screened out, and what kind of alternative programs should be developed when the impact of policies is undesirable.

### Recommendations

- o State agencies should collect data necessary to determine the impact of state policies on teacher supply, paying particular attention to shortages of minority teachers, in specific subject matter areas and in geographic regions.
- o Whenever major policy changes are made, states should examine who is being screened out and why.
- o States should develop facilitating opportunities to overcome undesirable impacts of their policies. These opportunities could include remedial programs, recruitment of minority students into teacher preparation programs, early career exploration, forgivable loans, and incentive policies directed toward better pay and working conditions.

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## CHAPTER 2

### STATE PROFILES AND QUESTIONNAIRE RESULTS

Once the issues affecting entrance into the teaching profession were identified and a conceptual model for categorizing the types of state policies were developed, a 50-state survey was conducted to identify state policies affecting teacher education and certification in each state during 1983-84.

#### State Profiles: An Overview

The primary objective of this activity was to develop accurate and comprehensive profiles of each state's teacher education and certification system which will be useful to state policymakers and others concerned with teacher quality issues. The profiles are intended to provide a comprehensive source of information on each of the 50 states that is richer and more integrated than existing sources of information which usually take the form of cross-state charts and tables.

The conceptual framework for a teacher education and certification "pipeline" and a review of other surveys of state policies defined the common components of the profiles. These common components are:

- o Standards and Certification Body
- o Standards Used for the Approval of Teacher Education Programs
- o Admission to Teacher Education
- o Curriculum Requirements
- o Completion of Teacher Education
- o Certification Process
- o Staff Development
- o Other Considerations (pending legislation, study commissions, information on teacher shortages, innovative programs, etc.)
- o State Contact

It should be noted that in a few cases there is an overlap of information in the "Completion of Teacher Education" and the "Certification Process" sections. This overlap arises, for example, when it appears that the same test is required for completion of teacher education as well as for certification. When it was impossible to determine where the requirement actually applies (it may apply to both areas), we included the requirement in both categories.

Drafts of each state profile were written based on information contained in several publications and from education periodicals. Most of the information came from the following sources:

Council of Chief State School Officers. Report of the Council of Chief State School Officers' Ad Hoc Committee on Teacher Certification, Preparation, and Accreditation, July 1982.

Flakus-Mosqueda, Patricia. Survey of States' Teacher Policies, Working Paper No. 2. Denver, Colo.: Education Commission of the States, October, 1983.

National Education Association. Standards and Certification Bodies in the Teaching Profession, Washington, D.C.: National Education Association, 1983.

Sandefur, J. T. "Competency Assessment in Teacher Education". Paper presented to the NCATE/ACTE Summer Workshop on Leadership and Governance, Muncie, Indiana, July 28, 1982.

Southern Regional Education Board. "Present Status--Teacher Testing," (Draft, mimeo) July 1983.

Vlaanderen, Russ. Testing for Teacher Certification, Denver, Colo.: Education Commission of the States, June 21, 1982.

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In addition, an attempt was made to identify policies that have been legislated but not yet implemented, and policies that were being deliberated by state study commissions, legislatures, and other state agencies. For the most part, this information was gathered from issues of Education Week, State Education Review (Education Commission of the States), and other education and general media, and is included in the "Other" section of the profiles. Thus, while an attempt was made to "keep up" with state activities through the Summer of 1984, providing a complete picture of that activity proved to be a never ending task.

The draft profiles were sent to each state education agency (SEA) for verification and completion of a related questionnaire (described in the next section) in early 1984. The NASDTEC Directory was used to identify SEA respondents. Verified profiles were returned by 45 states. The returned profiles were revised to reflect relevant comments or revisions made by the SEAs. The person who responded from each SEA is listed on the profile as the contact for further information. The profiles appear at the end of this chapter. An asterisk after the name of the state indicates that it has been reviewed by the SEA and revised to reflect that review. The profile information is summarized in Table 1, pages 10-17.



### The Questionnaire

The main purpose of the questionnaire sent to each state was to provide a mechanism for the verification and correction of the information in each profile. A secondary purpose was to obtain additional information about the rationale for the state policies described in the profiles and about availability of data that would show the effects of the policies. This information was intended to aid in the selection of sites for the case studies. The questionnaire also included questions about the types of policy changes that had been introduced within the last five years and the perceived effects (in terms of teacher supply and quality) of these changes as they affected (1) admission to teacher education, (2) the teacher education curriculum, (3) requirements to complete teacher education, (4) the certification process, and (5) staff development. These questions were designed to provide a means for relating the findings from this study to the findings of the National Center for Education Statistics' 1983 Survey of Teacher Education. A copy of the questionnaire is included as Appendix A.

In the 20 states in which policy changes affecting entrance into teacher education were made, the most frequent addition was a testing requirement, mentioned by 14 states. (See Table 3.) Ten of these states added only the test requirement, while three added requirements that included both a test and a GPA minimum, and one added a requirement that included a test, a GPA minimum, and other prerequisites. No state added a GPA requirement without also adding a testing requirement. However, three states added other prerequisites for entrance into teacher education that involved neither testing or grades. Six of the states which had made policy changes affecting entrance into teacher education indicated that it was too early to assess the impact of the change. Four indicated that supply had decreased while quality had increased. Three states each indicated that supply had decreased, that quality had increased, or that there were no changes resulting from the new policy.

In the 28 states which made policy changes affecting the nature of the teacher education curriculum, 12 states indicated that they now require more professional studies, 12 indicated that they now require more student teaching, 11 indicated that they had made their programs more rigorous, 10 indicated that they now require more general studies, and one now requires a program lasting more than four years. (See Table 4.) In addition, 13 states indicated that they had made other types of curriculum changes. While 13 states made only one type of curriculum change, six made two types of changes, three made three types of changes, five made four types of changes, and one made five types of changes. Nine states indicated that the curriculum changes had not affected teacher education student supply or quality. However, eight states indicated that quality had increased, three indicated that quality had increased but supply decreased, two indicated that supply had decreased, and one indicated that both supply and quality had increased. Four states felt that it was too early to determine the impact of the curriculum changes.

Table 3

Nature of Recent Changes Affecting  
Entrance into Teacher Education and Their Impact

	<u>Type(s) of Change(s)</u>				<u>Impact*</u>
	<u>Test</u>	<u>GPA</u>	<u>Other</u>	<u>Not Specified</u>	
CA	X				SD
CO	X				QI
CT	X	X			E
FL	X				SD, QI
HI			X		SD, QI
KS			X		E
LA	X	X			SD, QI
MA				X	QI
MN				X	QI
MS	X				SD
MO	X				NC
NJ	X	X			E
NM	X				SD
NC				X	E
OK	X	X	X		E
OR	X				SD, QI
SC	X				NC
TN	X				NR
TX	X				E
UT			X		NC

\*Impact: SD = supply decreased, SI = supply increased, QD = quality decreased, QI = quality increased, NC = no change, E = too early to tell, NR = no response.

Table 4  
 Nature of Recent Teacher Education  
 Program Changes and Their Impact

	Type(s) of Change(s)						Impact*
	<u>More rigorous</u>	<u>More general studies</u>	<u>More prof. studies</u>	<u>More student teachings</u>	<u>More than 4 yrs. req.</u>	<u>Other</u>	
CA						X	NC
CO						X	QI
CT	X						E
FL	X	X	X	X		X	SD, QI
GA		X					NC
HI	X			X		X	SD, QI
ID			X				QI
IL						X	QI
IN						X	NC
KS	X		X				E
LA				X		X	NR
MA	X		X	X		X	QI
MI			X				QI
MN		X	X	X			QI
MS		X	X				SD, QI
MO		X	X	X		X	NC
MT						X	QI
NE						X	NC
NH		X	X				NC
NJ	X	X	X	X			E
NV	X	X	X	X			NC
NC	X	X		X	X		SD, QI
OH	X						NC
OR						X	SD
SC	X			X			QI
TN			X	X			E
VA	X	X		X			SD
WI						X	NC

\* Impact: SD = supply decreased, SI = supply increased, QD = quality decreased, QI = quality increased, NC = no change, E = too early to tell, NR = no response.

In the 15 states which introduced new policies affecting completion of teacher education, five added a requirement for the evaluation of teaching performance or specific competencies, four added a testing requirement, four added a GPA minimum requirement, and one added a requirement involving both a test and a GPA minimum. (See Table 5.) Five of the states indicated that it was too early to determine the impact of these changes. However, five indicated that quality had increased, one indicated that quality had increased but supply had decreased, one indicated that supply had decreased, and one found no changes related to the new policy.

Among the 32 states which had made changes in teacher certification, the most common change, mentioned by 15 states, was increased educational requirements. (See Table 6.) Thirteen states added or increased requirements for competency demonstration, ten added a testing requirement, nine added or increased the requirements for observation of teaching, seven added an initial certification step for new teachers, seven put more stress on certificate renewal and less on life certification, three added or increased an in-service training requirement, two developed certification programs for holders of bachelor's degrees lacking teacher education, and one added a certification step for highly experienced teachers. Eleven states indicated that they had made other type of changes in their teacher certification policies. Eleven states made only one type of change in their certification policies. However, ten states made two types of changes, six states made three types of changes, and two states made four types of changes. The three remaining states reported certification policy changes in five, six, and nine of the areas described above. Eleven states indicated that the impact of the changes they had made was to increase quality, two indicated that quality had increased but supply had declined, and one indicated that supply had declined. Ten states indicated that their policy changes had no impact and six states felt that it was too early to determine the impact.

Taken together these results suggest that policy changes made at the certification level impact primarily on teacher quality but policies made at earlier points in the pipeline are more likely to affect teacher supply as well as teacher quality.

The questionnaire also included questions about the availability of data that would provide evidence of the impact of the different types of policies. The results are shown in Table 7. As can be seen, few states collect data that can be used to determine the impact of their policies. Only three states indicated they have data about the number and type of individuals who apply to enter teacher education programs but who fail to meet the admission standards, four reported having data about the number and type of individuals who fail to meet teacher education completion standards, and eight indicated that they had data about the number and type of individuals who are screened out by teacher certification requirements. By not mandating the collection of data to evaluate policy impact, policymakers can respond to immediate public pressures without noting or taking responsibility for the consequences of their actions.

**Table 5**  
**Nature of Recent Changes Affecting Completion of**  
**Teacher Education and Their Impact**

<u>State</u>	<u>Type(s) of Change(s)</u>				<u>Impact</u> *
	<u>GPA Requirement</u>	<u>Test</u>	<u>Other Evaluation of Competencies/Perf.</u>	<u>Not Specified</u>	
CT	X				E
FL			X		SD,QI
KS	X				E
LA	X				QI
MA			X		QI
MO	X				NC
MS			X		QI
NJ	X	X			E
NM		X			SD
NV				X	NR
NC		X			SI,QI
OK		X			QI
SC			X		QI
TX		X			E
VA			X		E

\*Impact: SD = supply decreased, SI = supply increased, QD = quality decreased, QI = quality increased, NC = no change, E = too early to tell, NR = no response.

Table 6

Nature of Recent Changes in Teacher

Certification and Their Impact

State*	Type(s) of Change(s)*										Impact**	
	1	2	3	4	5	6	7	8	9	10		
AL											X	QI
CA											X	SD
CO			X		X							QI
DE	X		X						X			E
FL	X	X	X	X	X	X	X	X	X		X	SD,QI
GA											X	NC
HI	X				X							QI
ID				X		X						QI
IL						X		X			X	QI
IN											X	NC
KS											X	E
LA						X						QI
MA	X				X	X		X				QI
MN					X	X		X				QI
MS					X	X						SD,QI
MO					X	X		X				NC
MT					X	X						NC
NE						X						NC
NM			X									NC
NV						X			X			NC
NY			X								X	NR
NC	X				X			X	X			QI
OK	X		X	X		X						QI
OR			X									E
SC								X	X			QI
TN			X		X							NR
TX			X		X						X	E
UT											X	NC
VT					X	X	X	X	X			NC
VA	X		X		X	X		X			X	E
WI						X			X			E
WY											X	NC

- \*Type: 1 = Added initial certification step for new teachers  
 2 = Added advanced certification stop for highly experienced (master) teacher  
 3 = Added a testing requirement  
 4 = Added/increased in-service training requirement  
 5 = Added/increased competency demonstration requirement  
 6 = Increased educational requirements  
 7 = Developed certificate for BA's without teacher education  
 8 = Added/increased observation of teaching requirement  
 9 = Put more stress on certificate renewal, less on life certificate  
 10 = Other

\*\*Impact: SD = supply decreased, SI = supply increased, QD = quality decreased, QI = quality increased, NC = no change, E = too early to tell, NR = no response.

Table 7

Availability of Evidence of Policy Impact

A. Data about number and/or type of individuals who apply to enter teacher education programs but who fail to meet admission standards.

Yes	No	Collected by IHE's	NA/NR
3	22	6	14

B. Evidence that curriculum requirements serve as a barrier to any type of student.

Yes	No	NR
3	33	8

C. Data about number and/or type of students who fail to meet teacher education completion standards.

Yes	No	Collected by IHE's	For appeals only	NA/NR
4	22	6	2	10

D. Data about number and/or type of individuals who are screened out by certification requirements.

Yes	No	Collected by IHE's	NR
8	27	1	8

E. Evidence that certification requirements serve as barrier to any type of student.

Yes	No	NR
6	32	6

THE 50 STATE PROFILES

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Acronyms Used in the Profiles

ACT - American College Test

CAT - California Achievement Test

GPA - Grade Point Average

IHE - Institution of Higher Education

LEA - Local Education Agency

NASDTEC - National Association of State Directors of Teacher Education and Certification

NCATE - National Council for the Accreditation of Teacher Education

NTE - National Teachers Examination

SAT - Scholastic Aptitude Test

SBE - State Board of Education

SEA - State Education Agency

1. State: Alabama\*

2. Standards and Certification Body: Teacher education standards and policies are established by the SBE. Certificates are issued by the SEA.

3. Standards Used for the Approval of Teacher Education Programs: Standards from NCATE, Southern Association of Colleges and Schools, and NASDTEC are incorporated into state standards. IHEs must be accredited by the Southern Association of Colleges and Schools and meet state standards.

4. Admission to Teacher Education: Admission is made at the end of the sophomore year based on the following: .745 on SAT or 16 on ACT, a GPA of 1.2 on a 3.0 scale, and a passing score on the Alabama English Language Proficiency Test.

5. Curriculum Requirements: The basic program of teacher education includes two components--general education and professional studies--each requiring two years of study. The general component is the same for all levels and includes 60 hours--15 in humanities, 12 in social studies, 12 in the natural and physical sciences, and physical education and electives. The professional studies component for elementary school preparation includes 12 hours in the humanities and behavioral studies, 27 hours in elementary school curriculum areas, 12 hours in curriculum and teaching, 3 hours in evaluation of teaching and learning, 6 hours in reading, and 9 hours of student teaching. The requirements for middle school and secondary teaching are basically the same as for elementary except that in place of the 27 hours in elementary school curriculum areas, course work must include at least two teaching areas of not less than 27 hours (of which one-third must be in upper division work) or a comprehensive teaching field.

6. Evaluation to Complete Teacher Education: Minimum GPA of 1.2 on a scale of 3.0.

7. Certification Process: Candidates for certification must pass the appropriate test(s) of the Alabama Initial Teacher Certification Testing Program. The basic certificate (Class B) requires a bachelor's degree and completion of an approved teacher education program and is valid for 8 years. Continuation of the Class B certificate requires 9 hrs. of additional credit earned during the valid period of the certificate or 4 years of successful, full-time teaching experience during the valid period of the certificate and satisfactory participation in the approved professional development program for the year(s) employed in an Alabama school system. The Class A certificate requires a master's degree, completion of an approved graduate teacher education program and a prescribed amount of teaching experience. The Class A certificate is valid for 10 years. Continuation of the Class A certificate requires 6 hrs. of additional graduate credit earned during the valid period of the certificate or 5 yrs. of successful full-time experience and satisfactory participation in the approved professional development program. Completion of a planned sixth year program of study in an approved teacher education program leads to the Class AA certificate. Continuation of the Class AA certificate requires 6 hrs. of additional graduate credit earned during the valid period of the certificate or 6 years of successful experience and satisfactory completion of an approved professional development program. If the requirements to continue to Class B, A, and AA certificates are not met, the certificates may be reinstated by earning 12 hrs. of additional graduate credit within 3 years of the beginning date the new certificate is to bear. All credits earned for continuation or reinstatement must be earned in the certification area.

8. Staff Development: LEAs must submit inservice plans to the SEA; needs are locally defined.

9. Other: Teacher shortages in math and science coincide with a scholarship program aimed at training more teachers in those areas. Temporary certification is available for certificated non-math teachers who meet certain minimum criteria to teach basic math courses while completing full certification requirements in math.

Following the June 1984 administration of the Alabama Initial Teacher Certification Tests, test data will be used to identify programs which need to be improved. Failure to improve those programs may lead to their termination.

10. Contact: Dr. C.C. Baker  
Assistant Superintendent for Regulatory Services  
Alabama State Department of Education  
Montgomery, Alabama 36130  
205-261-5290

1. State: Alaska
2. Standards and Certification Body: Professional Teaching Practices Commission (legislation).
3. Standards Used for the Approval of Teacher Education Programs: NASDTEC.
4. Admission to Teacher Education: Varies by IHE.
5. Curriculum Requirements: Varies—bachelor's degree, completion of approved program, and IHE recommendation.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: Completion of approved program. Initial certificate is good for 5 years. Certificate renewable based on 6 credits during the 5 year life of the certificate.
8. Staff Development: Most LEAs require staff development programs. All LEAs are allocated 10 inservice days a year and assistance from the SEA is available. The SEA approves all inservice courses.
9. Other: There are teacher shortages in speech pathology and some categories of special education. The state has a forgivable loan program for training teachers and other professionals. The SBE recently approved a one year study of teacher certification, and is also looking at curriculum requirements.

1. State: Arizona
2. Standards and Certification Body: Professional Standards and Certification Advisory Committee (constitution and legislation).
3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association; state guidelines.
4. Admission to Teacher Education: Admission is made at the end of the sophomore year--selection is the responsibility of the IHE based on GPA and the basic skills component of the Arizona Teacher Proficiency Exam.
5. Curriculum Requirements: Elementary education: 45 hrs. general education including courses on the constitution, social and behavioral sciences, psychology, science, math, English, and the arts and humanities; 30 hrs. in the academic major or 18 hrs. in the subject matter field and 12 hrs. in an additional subject field; and 24 hrs. in professional preparation including psychological and philosophical foundations, curriculum, methods, and reading courses, student teaching or two years of successful teaching experience. Secondary education: same general education requirements as for elementary; 30 hrs. in an academic major; 22 hrs. in professional preparation courses and student teaching (as required for elementary education).
6. Evaluation to Complete Teacher Education: A minimum GPA and a passing score on the basic skills and professional knowledge components of the Arizona Teacher Proficiency Exam are required. This test is taken in the senior year and may be retaken as often as desired.
7. Certification Process: The Basic Certificate is valid for 6 years and can be renewed with an additional 5 credits or some quantity of successful and continuous teaching. The Standard Certificate (advanced) is valid for 6 years and requires a Master's degree or 30 credits. See Other.
8. Staff Development: SEA staff are available to assist LEAs with district-organized inservice activities.
9. Other: The certification requirements above are new and a program of first year on-the-job evaluations of teachers is being pilot tested in 14 LEAs. By 1985 all new teachers will be supervised and observed by master teachers, and they must demonstrate proficiency in 14 skill areas to obtain a certificate.  
In 1985 initial certification will be valid for 8 years; then teachers must obtain a master's degree or 40 additional credits. Scholarships have been established to support students seeking an undergraduate education degree in math or science. State aid is available to improve the competencies of math and science teachers and to train teachers from other disciplines.  
There is a Joint Interim Education Committee on Career Ladders; legislation was passed in the 1984 session that appropriated \$528,000 to provide LEAs with funds to develop career ladder programs for teachers. A bill to repeal tenure died in the House of Representatives in 1983.

1. State: Arkansas\*
2. Standards and Certification Body: The SBE and the legislature set certification requirements.
3. Standards Used for the Approval of Teacher Education Programs: NCATE, state standards.
4. Admission to Teacher Education: Established and varies by IHE.
5. Curriculum Requirements: General education requirements for all levels include 12 hrs. English, one course each in biological science, math, physical science; 12 hrs. social studies; 6 hrs. physical education; and 9 hrs. electives. Professional requirements for all levels include 18 hrs. (study of school, of learning processes, and of teaching) and 6 hrs. of student teaching. Secondary teachers must complete between 17 and 24 hrs. in their teaching field.
6. Evaluation to Complete Teacher Education: There are GPA and testing (NTE) requirements.
7. Certification Process: As a result of a 1979 state law all candidates for certification must pass the NTE common and area tests, effective February 1983 (cut-off scores are established by the SBE). The Standard Certificate is awarded on the recommendation of the IHE and is valid for 6 years (10 years with a Master's degree). It can be renewed with 6 credits or 2 years teaching experience (or 1 year if during the last year of the certificate's life). The advanced certificate (Continuing) is valid for as long as a person teaches and 6 years thereafter.
8. Staff Development: There are two statewide staff development programs, one for teachers and one for administrators. The voluntary "Program for Effective Teaching" (PET) was begun by the SEA in 1979 and concentrates on improving the skills of teachers and college of education professors.
9. Other: The General Assembly recently passed a bill to provide a loan program to train math and science teachers because of a shortage.  
The Arkansas Education Association has called for legislation requiring education schools to provide free remedial help to graduates who fail the certification test. Cut-off scores are low by national standards--basic math teachers have to score at or above the 11th percentile. The SEA administered the NTE to all certification candidates during the last two years to prepare for the new standards.  
All Arkansas teachers must pass a basic skills test by 1987 or lose certification according to a new law signed by Governor Bill Clinton. All teachers must take the test in reading, math, and writing during the 84-85 school year and pass it no later than June 1, 1987. Those who fail may retake it after remedial courses and those whose certification expires before June 1987 can obtain temporary certification.
10. Contact: Austin Z. Hanner, Coordinator  
Teacher Education and Certification  
Arkansas Department of Education, Room 107-B  
Little Rock, Arkansas 72201  
501-371-1474

1. State: California\*

2. Standards and Certification Body: The Commission on Teacher Credentialing has the responsibility to set standards and to establish regulations to implement all statutes related to teacher education and certification.

3. Standards Used for the Approval of Teacher Education Programs: The Commission on Teacher Credentialing has established guidelines for the approval of teacher education programs. Programs are approved when staff monitor and verify that the guidelines have been met. Programs are evaluated approximately every six years.

4. Admission to Teacher Education: Admission standards are established and vary by IHEs. Completion of the California Basic Education Skills Test (CBEST) prior to admission to teacher education is a legal requirement. Although the legal requirement is that the test be used for diagnostic purposes, some IHEs may require that a passing score be made prior to admission, based on a score set by the Superintendent of Public Instruction. Other IHEs may require that the test be passed prior to starting student teaching, using the same cut scores. The CBEST requirement became effective September 1983.

5. Curriculum Requirements: Bachelor's degree, except in professional education from an accredited IHE. For a preliminary credential the following requirements apply: for a single subject credential, the program must be in one of a number of statutory subjects (English, history, math...). For the multiple subjects credential, the program must be a diversified or liberal studies major consisting of a minimum of 84 units distributed over four areas: English; Math and the Physical or Life Sciences; Social Sciences; and Humanities and the Fine Arts. In lieu of completing an approved waiver program, students may satisfactorily complete a subject matter examination. Professional preparation programs must consist of at least nine units of professional education coursework and one semester of student teaching, including cross-cultural field experience. Also required are four units of study, or passage of an exam, in the teaching of reading, and two units of study, or passage of an exam, on the provisions and principles of the Constitution. Legislation severely limits both the quantity of prerequisites to student teaching and overall length of the professional preparation program.

6. Evaluation to Complete Teacher Education: Each IHE with an approved program is required to assess each candidate prior to recommending the candidate for the initial teaching credential.

7. Certification Process: Applicants for a teacher trainee certificate must pass the California Basic Educational Skills Test (CBEST) measuring the basic skills and knowledge of subject matter. The Commission on Teacher Credentialing now has the responsibility for setting standards for the test. The standards were initially set by the Superintendent of Public Instruction.

Preliminary certification is granted for five years. After completion of a fifth year of study at an approved IHE, the completion of one unit of study in health education, and an approved course of study and practice in the education of exceptional students, the Clear Credential is given. Life credentials are issued to individuals who have completed two years of service on the Clear Credential. SB 813 (the new reform law) requires that individuals earning a Clear Credential after September 1, 1985 will be required to complete 150 hours of staff development during each five year cycle, as a condition for renewing the credential. Life credentials will not be issued after that date. There are currently no renewal or continuing education requirements.

SB 813 allows high schools to hire teacher trainees who have a bachelor's degree but no professional teacher training. These trainees must pass the basic skills and subject matter tests, have an individualized training program, and be assisted by a mentor teacher. The new legislation also creates a voluntary program to provide beginning teachers with assistance, guidance, and training through mentor teachers (see below).

Teachers who completed their professional training outside of California must meet various requirements, including testing, depending on the certificate they seek.

8. Staff Development: Some 55 different state initiatives include some aspect of staff development. Inservice is offered through teacher, resource, and professional development centers; county and district offices; and IHEs. 15 Regional Teacher Education and Computer Centers devote 60 percent of their budgets to math, science, and computer skills development and work cooperatively with IHEs to develop programs and establish relationships with business and industry.

9. Other: Shortages exist in math, science, bilingual, and special education. SB 813 established a loan program for students training to teach in shortage areas, particularly math and science. That legislation also established a mentor teacher program. Mentors can serve for three years and earn additional salary of \$4,000. They work on curriculum and staff development and assist beginning teachers, while remaining in the classroom 60 percent of the time.

The Commission on Teacher Credentialing has a major reform bill that was considered in 1982 and 1983. Part of this bill (deletion of a life credential and requiring a Bachelor's degree for an emergency credential) has been passed (SB 813 of 1983 and SB 1740 of 1982). However, other components of the reform bill will be a part of a legislative proposal in 1984.

10. Contact: Richard K. Mastain  
Coordinator, Office of Licensing and Professional  
Development  
1020 "O" Street, Room 222  
Sacramento, California 95814  
916-445-0233



1. State: Colorado\*

2. Standards and Certification Body: The certification body is the SEA. Standards are established by the SBE. The Commission on Teacher Education and Certification is appointed by the SBE to review IHEs to assure that SBE standards are being met.

3. Standards Used for the Approval of Teacher Education Programs: SBE.

4. Admission to Teacher Education: Admission is based on GPA (determined by IHE), and passing score on the California Achievement Test (CAT). The CAT score must be at least the 75th percentile score for high school seniors. Students can take the test four times in the four year period. On-going evaluation, counseling, and remediation are required. This testing policy is effective January 1983 and replaces a policy dating to 1975 under which IHEs selected their own tests and determined their own passing scores.

5. Curriculum Requirements: An approved program of teacher education including student teaching. Components include pre-student teaching field experiences, growth and development, teaching-learning process, communications/human relations, and foundations. Special requirements include early field experiences, legal issues, teaching reading, and exceptional child education.

6. Evaluation to Complete Teacher Education: Minimum GPA, passing score on the CAT, and institutional recommendation.

7. Certification Process: With the completion of an approved program, initial certification is valid for 5 years and requires 6 graduate credits or inservice training in lieu of 4 credits for renewal. The Professional Teacher Certificate is valid for 5 years and requires a master's degree and 3 years teaching experience. Certificate renewal can also be obtained by supervising student teachers, approved leaves-of-absences for job experience, travel experiences, and individually designed development experiences. All certificates must be renewed every five years.

Teachers with 5 or more years of experience may apply for certification and have the approved program requirement waived if the person scores at or above the 75th percentile on the professional education section of the NTE.

8. Staff Development: SEA staff are available for technical assistance for inservice programs. A maximum of 4 hrs. of LEA inservice credits can be used to meet certificate renewal requirements.

9. Other: The number of graduating teachers has dropped by one-half over the last 10 years. Shortages exist in math, physics, special education, and chemistry. In November 1983, the SBE voted to abolish teacher tenure and replace it with a performance-based evaluation and pay system. The recommendation is not binding. Many bills will be introduced in the state legislature in January 1984 that address tenure and certification issues.

The University of Northern Colorado (the nation's fifth largest college of education) has announced a quality assurance partnership between the college of education and other education-related agencies hiring its graduates. Any such employer hiring a graduate can get help from the college to correct any professional employment deficiencies in the first and second years of employment.

10. Contact: M. D. Spurlin  
Colorado Department of Education  
303 W. Colfax Ave.  
Denver, Colorado 80204  
303-534-8871 (ext. 376)

1. State: Connecticut\*

2. Standards and Certification Body: The SBE adopts standards and procedures for teacher preparation program approval which are implemented by the SEA. The Board of Governors for Higher Education adopts standards and procedures for accrediting IHEs which are implemented by the Department of Higher Education.

3. Standards Used for the Approval of Teacher Education Programs: SBE.

4. Admission to Teacher Education: Varies by IHE (see Other for new policy effective December 1984).

5. Curriculum Requirements: Elementary education: 75 hrs. of general education including English, science, math, social studies, and fine arts; 30 hrs. of professional education including foundations of education, educational psychology; curriculum and methods of teaching (must include developmental reading and children's literature); 6 to 12 hrs. student teaching or completion of one year of successful teaching. Secondary education: 45 hrs. of general education courses similar to the elementary requirements; 30 hrs. of academic requirements in one or two fields of concentration appropriate for a subject endorsement. Subject endorsements require between 18 and 30 hrs. in that subject. Professional education requirements include 18 hrs. in areas similar to the elementary requirements; and the same student teaching requirements.

6. Evaluation to Complete Teacher Education: Students must meet GPA requirements as well as successfully complete laboratory experience and student teaching.

7. Certification Process: Provisional certification is valid for 10 years. The advanced certificate (Standard Certificate) requires 30 credits or a master's degree and 3 years experience, 2 of which must be consecutive. Teachers must attain the Standard Certificate, which is permanent. Inservice can satisfy the credit requirement. LEAs may hire non-certified personnel to teach in shortage areas, but they must enroll in a program leading to certification.

8. Staff Development: The legislature is presently considering a bill which would require 5-year plans for ongoing, systematic, professional development programs in all LEAs, based on guidelines adopted by the SBE. The SE has a professional development unit which provides materials, resources, and consultants to assist LEAs.

If proposed certification regulations are adopted, all new teachers and administrators will be required to earn 9 continuing education credits every 5 years. These units will be offered in LEAs, teacher centers, regional service centers, and colleges.

9. Other: New Standards and Procedures for the Approval of Connecticut Teacher Preparation Programs were adopted by the SBE on January 5, 1984. The new standards relate to administration, faculty, students, curriculum, facilities and resources, and evaluation. Effective December 1984, new academic standards for admission to teacher education shall include passing a state-mandated skills exam in math, reading, and writing or presentation of a combined SAT score of 1000 with at least a score of 400 on both the verbal and math sections; a B minus undergraduate GPA; and the presentation of a written essay.

The Distinguished Citizen's Task Force on Quality Teaching, composed of representatives of business, industry, government, education, and public and private sector agencies, was convened in September 1982 and released their recommendations a

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year later. These recommendations include increasing teacher and administrator salaries, establishing career ladders, enacting specific policies at the local level that encourage the retention of quality teachers, creating or improving professional development programs, establishing a statewide system of business and education cooperation, attracting academically superior students to teacher education, and allocating resources for a public information campaign to improve the image of the teaching profession.

There is a severe shortage of physics teachers--one person graduated as a physics teacher last year. There is also a shortage of industrial arts and speech pathology teachers. In July 1983, the state instituted a program of forgivable loans to train teachers in shortage areas.

State law requires LEAs to establish performance evaluation programs by mutual agreement with teacher representatives and submit an annual report to the state.

10. Contact: Brenda H. White  
Connecticut State Department of Education  
P.O. Box 2219, Room 375  
Hartford, Connecticut 06145  
203-566-4572

1. State: Delaware\*
2. Standards and Certification Body: The SBE sets policies which are administered by the SEA.
3. Standards Used for the Approval of Teacher Education Programs: NASDTEC, Middle States Association.
4. Admission to Teacher Education: Qualifying GPA is set by the IHE.
5. Curriculum Requirements: Elementary Education--approved program in elementary education or 45 hrs. to include teaching of reading (6); child development (3); educational psychology (3); sociology (3); curriculum and methods (24); clinical and/or field experience (6) including student teaching. Secondary Education--approved program in the area of endorsement or 15 to 18 hrs. in professional education to include human behavior, methods and materials, and clinical and/or field experience including student teaching. 30 to 45 hrs. in the specific teaching field, depending on area.
6. Evaluation to Complete Teacher Education: see # 7.
7. Certification Process: Effective July 1983, candidates must pass the Pre-Professional Skills Test covering reading, writing, and math to receive the Initial Standard Certificate which is valid for 5 years. The Professional Status Certificate is issued after 3 years of teaching experience and is valid for as long as the teacher teaches in the same area. If teaching is not continuous, 6 credits additional are required to regain certification.
8. Staff Development: The SEA coordinates a large offering of inservice programs conducted by state and LEA staff, and by the Teacher Center. The SEA publishes a list of approved inservice programs which can be used as part of the credit requirements to advance on the statewide salary schedule. Funding is borne at the local level.
9. Other: There are shortages of industrial arts teachers, occupational and physical therapists, and school psychologists. Due to a proposal to increase high school graduation standards, there is a predicted shortage of math teachers. Shortages are related to geography and salary schedules.
10. Contact: Dr. E. Marsh, Director  
Certification and Personnel Division  
State Department of Public Instruction  
Dover, Delaware 19901  
302-736-4688

1. State: Florida\*

2. Standards and Certification Body: The Education Standards Commission is advisory to the SBE which approves rules to implement legislation drafted by the SEA. The State Board of Regents formulates policies and procedures for the State University System. The SEA screens and certifies applicants and issues teacher certificates.

3. Standards Used for the Approval of Teacher Education Programs: SBE; Specialty Organizations.

4. Admission to Teacher Education: Admission is made at the end of the freshman year. Teacher education students must score at or above the 40th percentile on the SAT or ACT. IHEs may waive this requirement for 10 percent of their applicants who may be admitted with probational status and may be provided with remedial services. IHEs set minimum GPA requirements (within SBE and Board of Regents guidelines) and screen with examinations and other methods.

5. Curriculum Requirements: All levels require 45 hrs. of general education including between 6 and 12 hrs. in arts of communication, human adjustment, biological science, physical science and math, social science, humanities and applied arts. General professional requirements include 6 hrs. in foundations of education; 6 hrs. each of methods and student teaching.

Elementary education requires 21 hrs. of specialization to include the following methods of teaching: materials for use with children, nature study or science, social studies, health and/or physical education, art, music, and arithmetic.

Junior high school separate class certificate requires 18 hrs. English; 12 hrs. math; 18 hrs. science; 18 hrs. social studies. Candidates for broad field or comprehensive certificate must meet the four areas above or hold a certificate including 12 hrs. each in English, math, science, and social studies.

Secondary certificate requires between 20 and 30 hrs. in teaching subject field.

6. Evaluation to Complete Teacher Education: Teacher candidates must pass the Florida Teacher Certification Exam (see #7). IHEs set minimum GPA requirements using SBE and Board of Regents guidelines. Students must demonstrate academic proficiency prior to graduation. The IHE is held accountable by the state for developing high performing instructional personnel. The state's trend is from process/product standards to product standards. Quality indicators are required to measure generic and subject area competencies. Remediation is available to all prospective teachers, opportunities are provided to develop areas needing improvement, and retesting is allowed.

7. Certification Process: Since 1980 candidates must pass the Florida Teacher Certification Exam (minimum scores are set by the SBE with recommendations from the Education Standards Commission and other interested educators). This test measures basic skills, professional education competencies and writing skills.

A requirement for the initial (regular) teacher certificate is the successful completion of the "Beginning Teacher Program." This program was implemented in 1982 and requires one year of supervision and evaluation. Beginning teachers must be evaluated for demonstration of a number of generic competencies through a "performance measurement system". Workshops and materials are used to train evaluators of beginning teachers. State aid is provided for this program. Evaluation of the program and validation of the instrument used is planned. After completion of the program, regular certification is issued for 5 years. 6 additional credits or inservice in lieu of credits are required for certificate renewal.

8. Staff Development: District inservice education programs, funded by the state, are required. LEAs must submit a plan to the SEA for approval. Programs are based on the needs of the district's teachers and are based on effective teaching research. Inservice activities are coordinated with the annual evaluations of all teachers and principals. Inservice points are awarded which may be used for recertification. The 1983 legislature appropriated an additional \$9.2 million for intensive summer inservice institutes for math and science teachers, with emphasis placed upon those teaching math and science out-of-field.

9. Other: There are teacher shortages in math, science, foreign language, and some areas of special and vocational education. Recent minimum high school graduation requirements will likely result in the need for more teachers. The SEA is beginning a "Teach in Florida" publicity campaign and will help LEAs with recruiting. The 1983 legislature passed a loan program to attract teachers to critical shortage areas.

A new law eliminates tenure for instructional and administrative personnel. Two year contracts will now be renewed on the basis of performance evaluations by trained evaluators. This policy has a "grandfather" clause, therefore not affecting those currently having tenure.

A law effective in 1983 requires that education school programs must have an 80 percent pass rate on the teacher certification test to win state approval. Effective in 1985, 30 hrs. in upper division special courses will be required for high school teachers.

The 1983 legislature created the Florida Quality Instruction Incentives Council to oversee the development of a state merit pay program. The legislature also passed a merit pay/career incentive program which is to be modified by the Council. The Council will also develop subject area certification tests and teacher evaluation instruments. LEAs are authorized by legislation to employ non-certified recent PhDs or candidates to teach in shortage areas. Efforts to develop high performing certification levels for teachers and principals (administrators) are currently being initiated. Salary increments will be assigned to each level.

10. Contact: Dr. Garfield W. Wilson, Director  
Office of Teacher Education, Certification,  
and Staff Development  
Florida State Department of Education  
G-20 Collins Building  
Tallahassee, Florida 32301  
904-488-5724

1. State: Georgia\*

2. Standards and Certification Body: The Georgia Advisory Council on Education (a two-year old body which replaced the Georgia Teacher Education Council which had been in existence for 38 years) develops criteria for the evaluation of college programs. These criteria are then approved by the SBE, which has legal responsibility for teacher certification and teacher education program approval. The SEA is the administrative arm of the SBE. On occasion, the legislature passes laws which affect curriculum or specific certification requirements.

3. Standards Used for the Approval of Teacher Education Programs: Southern Association, state guidelines, and NCATE accreditation in lieu of state evaluation.

4. Admission to Teacher Education: Admission is made at the end of the sophomore year. Criteria vary by IHE although the SEA requires a minimum GPA of 2.0 which is set by the Georgia Advisory Council on Education. Students may continue to take general education courses until they attain the minimum GPA.

5. Curriculum Requirements: 60 qh. general education; 45 qh. teaching specialization; 20 qh. pedagogy; one quarter of full-time student teaching; and 5 qh. in the recognition and instruction of children with special needs. General education requirements have been expanded or clarified in math and science. All students in general education must complete two courses in math and two courses in science along with four courses in humanities and four courses in social studies as part of general education. In the past, requirements were four courses in a combination of math and science and some students were exempting college math entirely.

6. Evaluation to Complete Teacher Education: All state schools require students to pass the Regents Exam in general education; there is also a GPA requirement of 2.0 set by the Georgia Advisory Council on Education.

7. Certification Process: Georgia uses a performance-based certification system which has two aspects: the Georgia Teacher Certification Test has been required since 1978 and measures subject matter knowledge; and on-the-job assessment of new teachers which began in 1980. Cut-off scores on the test are set by a committee of 20 outstanding teachers in each teaching field, based on a study of the test items. Applicants who fail the certification test may continue to study and retake the test; however, they can teach for only one year without passing the test. Candidates receive a non-renewable certificate valid for 3 years, during which time they must demonstrate acceptable performance on 14 generic competencies. The new teacher is assessed by three individuals--principal or other administrator, a peer teacher, and an external data collector (from one of 17 regional assessment centers in the state). Evaluation is based on the Teacher Performance Assessment Instruments. Assessments are conducted in the fall and spring with interim staff development based on the needs shown in the first assessment. Upon demonstration of all 14 competencies, a performance-based certificate is awarded which allows the teacher to advance on the salary schedule. After three years, certificate renewal requires 10 qh. credits or inservice in lieu of credits, and is good for 5 to 10 years. Two advanced certificates each require three years teaching experience and advanced degrees.

8. Staff Development: For veteran teachers, inservice is based on local needs. For new teachers, a profile developed through the assessment of beginning teachers is used as a basis for staff development. The state provides \$50 per beginning teacher to



support this effort. Planned staff development resulting in staff development units may be used to renew teaching certificates.

9. Other: There is a shortage in math, science, industrial arts, speech pathology, and some areas of special education. In 1982, emergency certificates were issued to 353 math and 512 science teachers not having regular certification. A new forgivable loan program to train new teachers of math, science, and special education and to retrain teachers in surplus fields to teach in shortage fields has been adopted.

The governor has appointed an Education Review Commission which is spending two years studying funding, the requirements of an adequate education program, service delivery, comparative analysis of other states, and personnel requirements. The Personnel Committee will likely make many recommendations concerning the preparation, certification, recruitment, staff development, and salary of teachers and school leadership personnel including some type of career ladder.

10. Contact: J. William Leach  
Division of Staff Development  
Georgia Department of Education  
1858 Twin Towers East  
Atlanta, Georgia 30334  
404-656-2559

1. State: Hawaii\*

2. Standards and Certification Body: Teacher certification policies are set by the SBE. The SEA has been given statutory authority by the legislature to set certification standards. Policies relating to teacher education are set by IHEs.

3. Standards Used for the Approval of Teacher Education Programs: NASDTEC, regional accrediting association, SEA, IHEs.

4. Admission to Teacher Education: Admission is determined at the end of the sophomore year and varies by IHE based on GPA and test scores (SAT, ACT, or an oral or written exam). IHEs determine the minimum GPA with concurrence from the SEA as part of the state approval of the teacher education process. The GPA requirement is based on the general education core of approximately 55 semester credits. Test score policies are set by each IHE. An interview may also be required. Probationary status is possible if the student meets GPA requirements.

5. Curriculum Requirements: General education comprises 44 percent of the curriculum, the teaching specialty 24 percent, and pedagogy 33 percent. For secondary education certification, an IHE-approved major is required that meets SEA/NASDTEC standards.

6. Evaluation to Complete Teacher Education: Minimum GPA of 2.5 is set by IHEs as part of meeting SEA standards for teacher education programs.

7. Certification Process: After graduation from an approved program, a 2 year provisional certificate is awarded. Performance is observed frequently by the principal or other designated person. The Basic Certificate is valid for life and requires 2 years of successful teaching in Hawaii. The Professional Certificate, also valid for life, requires a fifth year of teacher education or a master's degree in teacher education including two years of successful teaching in Hawaii. Emergency certification is available when no certified person is available for hire.

8. Staff Development: Inservice training is provided for all school employees. An SEA staff person in charge of each program can arrange for technical assistance for implementing state programs in schools. IHEs also offer a series of courses equivalent to inservice training. Credits earned can be applied toward salary increments, but inservice training is not specifically tied to certificate renewal. Hawaii, while one statewide school system, has 7 administrative districts, each having an Inservice Training Advisory Council to advise on inservice needs. State aid is provided for local inservice programs.

The SEA has a new "Project for Assessing Teachers in Hawaii" in which teachers plan an individualized performance evaluation program based on a selection from more than 300 performance objectives. Principals and teachers meet at least two times a year to identify needs and to chart progress on the plan.

Teachers holding the Professional Certificate may be selected to the Education Management Training Program to prepare for positions as vice-principals and principals.

9. Other: The use of tests for certifying teachers is under consideration. There is a shortage in math, science, agriculture, bilingual education, and school counselors. State law requires annual performance evaluation of all teachers and educational officers.

10. Contact: James H. Nohara  
Hawaii Department of Education  
Office of Personnel Services  
P.O. Box 2360  
Honolulu, Hawaii 96804  
808-548-6373

1. State: Idaho\*

2. Standards and Certification Body: The SBE establishes policies related to teacher education and approves certification standards; Professional Standards Commission (legislation).

3. Standards Used for the Approval of Teacher Education Programs: NASDTEC; SBE.

4. Admission to Teacher Education: Selection is the responsibility of the IHE; some use GPA and/or ACT or SAT scores.

5. Curriculum Requirements: Elementary education--24 hrs. of professional requirements include educational philosophy, educational psychology, and curriculum methods, 6 hrs. each of student teaching and developmental reading; 42 hrs. of general education including 12 hrs. each of English and social studies, 6 hrs. of natural science, 3 hrs. of fine arts, and 6 hrs. of fundamental arithmetic.

Secondary education--20 hrs. of professional requirements including foundations of education, 6 hrs. of student teaching, and 3 hrs. of reading in the content area. Subject matter requirements are 30 hrs. in a major and 20 hrs. in a minor or 45 hrs. in a single area.

6. Evaluation to Complete Teacher Education: GPA of 2.5.

7. Certification Process: The Standard Certificate is valid for 5 years. The Advanced Certificate requires a master's degree or a fifth year of education and is valid for 5 years. A recertification requirement has been approved by the SBE requiring 6 semester credits or its equivalent. Three of the 6 credits must be college credit; the remaining credits may be inservice.

8. Staff Development: The SBE recently passed a requirement that all LEAs develop and implement a District Professional Development Plan. This requirement is effective September 1984.

9. Other: The Idaho Commission on Excellence has recommended that requirements for renewal of the initial certificate be adopted. The Professional Standards Commission is planning to review standards for receiving the initial certificate and renewing it.

The Governor's Task Force on Education has recommended higher teacher salaries and demonstration of subject matter mastery for teachers to be certified, and the institution of a periodic recertification process.

There is a shortage of math and special education teachers.

10. Contact: Dr. Darrell K. Loosle  
Jordan Office Building  
State Department of Education  
Boise, Idaho 83720  
208-334-4713

1. State: Illinois\*

2. Standards and Certification Body: The SBE, in consultation with the State Teacher Certification Board, carries out the statutes set forth by the state legislature by setting standards and regulating compliance of IHEs.

3. Standards Used for the Approval of Teacher Education Programs: SBE.

4. Admission to Teacher Education: Admission is made at the end of the sophomore year; the use of GPA and tests varies by IHE.

5. Curriculum Requirements: Elementary education (K-9)--78 hrs. of general education including language arts, science, social science, humanities, math, and health and physical education. 16 hrs. of professional education including educational psychology, elementary education and reading methods, history and/or philosophy of education, 5 hrs. of student teaching, and electives. 26 hrs. of general electives are also required.

Secondary education (6-12)--general education (42 hrs.) and professional education (16 hrs.) similar to elementary requirements; 32 hrs. in the major area of specialization or 72 hrs. (24 hrs. each) in three minor areas of specialization, and electives. Prior to student teaching, 100 hrs. of clinical experience is required, observing and interacting in a classroom situation. Applicants for certification must complete coursework in the psychology, identification, and instruction of the exceptional child.

6. Evaluation to Complete Teacher Education: Evaluation practices of IHEs are required but vary from institution to institution. They include GPA, faculty recommendations, and evaluations of student teaching.

7. Certification Process: Standard Certificate is renewable every 4 years through registration and payment of fees. Certification requirements do not apply to Chicago.

8. Staff Development: All LEAs provide inservice/staff development; regional SEA staff provide technical assistance. IHEs and Teacher Centers also offer inservice.

9. Other: A "Study of the Quality of the Preparation and Performance of Educational Personnel" was recently completed for the SBE. It recommended funding for staff development, a program for beginning or reentering teachers, and requirements for certificate renewal. In 1982-83, 65 percent of vacancies were filled by returning teachers.

There are no critical shortage areas; relative shortages exist in math, natural science, special education and industrial/vocational education. Oversupply exists in social sciences, elementary education, and physical and business education.

Legislation is awaiting the governor's action to establish a scholarship program to retrain teachers in math and science. A master teacher program has been initiated to honor outstanding teachers. \$1,000 stipends would be given to about 500 teachers selected by regional committees and three days of release time would be granted for these teachers to help other teachers and to develop materials.

10. Contact: Susan K. Bentz  
Assistant Superintendent  
100 N. First St.  
Springfield, Illinois 62777  
217-782-3774

1. State: Indiana\*
2. Standards and Certification Body: For the most part, the legislature has given the Teacher Training and Licensing Commission the authority to set standards and certification requirements. Various advisory committees provide input before the Commission takes action.
3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association; state guidelines.
4. Admission to Teacher Education: Admission is made at the end of the sophomore year with GPA requirements varying by IHE.
5. Curriculum Requirements: Elementary--requires program of 124 hrs. including 70 hrs. of general education and subject matter concentration to include language arts, science, social studies, math, arts, and electives. 30 hrs. professional education including foundations of education, educational psychology, methods and materials, pre-student teaching field experiences, classroom management, reading (6), measurement and evaluation, social awareness, and 9 weeks of full time student teaching. 24 hrs. of electives.  
Junior high/middle school (grades 5-9)--40 hrs. general education including humanities (18-22); life and physical sciences (8-12); and social and behavioral sciences (8-12). Subject matter concentration must include a primary area of 24 hrs. and supporting area(s) of 18 hrs. 27 hrs. professional education courses similar to elementary requirements; and 15 hrs. of electives.  
Secondary school (9-12)--40 hrs. general education; between 36 and 52 hrs. in a major and 24 hrs. in a minor (optional); and 24 hrs. professional education as required for the junior high school license.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Initial Certificate is valid for 5 years and can be renewed for another 5 years with 12 credits. The Permanent Certificate requires a master's degree and 3 years experience. Teachers must attain the Permanent Certificate. See Other.
8. Staff Development: LEAs design and offer their own inservice programs; SEA staff can be called on for assistance. In 1983-84 the legislature appropriated \$6 million for training teachers to use computers for instruction.
9. Other: The SEA has recommended that the state no longer issue lifetime licenses and that applicants to teacher education programs be required to pass a basic skills test. These proposals have been sent to the Teacher Training and Licensing Commission, a subcommittee of the SBE which licenses teachers.  
There are teacher shortages in math, chemistry, physics, and general sciences. When high school graduation requirements are raised in 1986, these shortages will likely get worse. The 1983 legislature passed a bill to provide forgivable loans to attract students to shortage areas. Money was also appropriated to retrain teachers to teach in shortage areas. The legislature also provided tax incentives to business and industry to employ teachers during the summer (if a teacher does not return to the classroom, the incentives are cancelled). The Governor's Select Advisory Commission on Elementary and Secondary Education has called for the introduction of a merit pay program for teachers.

10. Contact: James Peak, Credentials Specialist  
Teacher Education and Certification  
Indiana Dept. of Public Instruction  
Room 229, State House  
Indianapolis, Indiana 46204

1. State: Iowa\*
2. Standards and Certification Body: State Board of Public Instruction (legislation); State Advisory Committee on Teacher Education and Certification (advisory to the State Board and the SEA).
3. Standards Used for the Approval of Teacher Education Programs: State Board of Public Instruction (SBE).
4. Admission to Teacher Education: Determined by IHEs.
5. Curriculum Requirements: All IHEs within the state offering teacher education programs leading to certification must be approved by the State Board. Programs are developed in accordance with the following: (1) general education; (2) a minimum of 30 hrs. in a recognized major field; (3) professional education including integrated laboratory experiences and supervised teaching. Each program must include an approved human relations (multi-cultural, non-sexist education) course.
6. Evaluation to Complete Teacher Education: Determined by IHEs.
7. Certification Process: The initial certificate is the Professional Certificate which is valid for 10 years and can be renewed with 6 credits and one year experience or inservice in lieu of half the credits. The Permanent Certificate requires a master's degree and 4 years experience. As of August 1980, each teacher renewing a certificate must complete an approved human relations (multi-cultural, non-sexist education) course.
8. Staff Development: 15 Area Education Agencies provide inservice and publish a catalog of courses. LEAs and IHEs also offer inservice. Inservice that is applied to certificate renewal must be approved by the SEA.
9. Other: There is a teacher shortage in math and some areas of science and the legislature has funded a program of forgivable loans to attract teachers to these areas.  
The 1984 legislature passed a bill to set up a new teacher certification system and establish a new board of educational examiners, appointed by the governor, to approve programs and award certification. The bill has not yet been signed by the governor. Under the law, prospective teachers would have to pass certification tests, the recertification period would be changed to 5 years, and there would be a one-year internship prior to professional certification.
10. Contact: Orrin Nearhoof  
Iowa Dept. of Public Instruction  
Grimes State Office Building  
Des Moines, Iowa 50319  
515-281-3611



1. State: Kansas\*
2. Standards and Certification Body: Professional Teaching Standards Advisory Board; Professional School Administrator Advisory Board; SBE.
3. Standards Used for the Approval of Teacher Education Programs: State standards are based on NASDTEC standards.
4. Admission to Teacher Education: Varies by IHE. For the seven Regents Institutions (state schools), the Board of Regents requires a minimum GPA and successful completion of a basic skills test (the Pre-Professional Skills Test). IHEs must publish admission and evaluation standards. Effective Spring 1985, early field experiences will be required prior to admission to teacher education.
5. Curriculum Requirements: In January 1982, a change was made from standards requiring specific semester hours (transcript analysis) to NASDTEC standards and IHE recommendation verifying completion of an approved program. While current standards are not based on semester hours, but on broader criteria, Woellner (1983) reports curriculum requirements as follows: Elementary--50 hrs. of general education including oral and written communication, literature, and language (12); natural science and math (12); history and social and behavioral sciences (12); and electives (14). 24 hrs. of professional education including understanding the individual (6); understanding the school as a social institution (6); competence in elementary instruction, including 5 hrs. in directed teaching (8); and professional education electives (4). 15 hrs. in courses dealing with content and method of elementary school education, including teaching reading (6); and supervised practicum in teaching reading.  
Secondary--50 hrs. of general education as for the elementary certificate; 20 hrs. of professional education including courses in educational psychology (6); understanding the school as a social institution (6); and competence in secondary instruction including 5 hrs. in directed teaching (8). Academic requirements vary by subject area.  
The University of Kansas has a new program requiring a fifth year of study for certification. The fifth year includes 19 weeks of student teaching in addition to the 250 hrs. required before the bachelor's degree.
6. Evaluation to Complete Teacher Education: A GPA requirement of 2.5, effective September 1985, replaces the current GPA requirement of 2.0.
7. Certification Process: The Initial Certificate is valid for three years. The 5-Year Certificate requires additional credits and two years recent accredited experience during the term of the three year certificate. Renewal requirements depend on the degree held by the teacher. Some state-approved inservice can be applied toward renewal.
8. Staff Development: SBE regulations, effective May 1983, permit voluntary participation of LEAs in the new Kansas Inservice Education State Plan (for all certified personnel). LEAs prepare a 5-year plan (with goals and objectives) using SEA guidelines, but based on local needs. LEAs must establish a professional development council and develop evaluation criteria. The SEA acts as a facilitator and leader; funding is borne locally. Approved programs can be used for certificate renewal.
9. Other: The 1984 legislature approved an appropriation to validate a teacher certification test. A bill to implement the exam, which would be required for certification by May 1, 1986, was expected to pass in the legislature.

In 1983 the SBE sent the Governor recommendations that included a year of probationary work for new teachers under a master teacher and a state-run professional development program. The recommendations were resubmitted in 1984.

There is a shortage in some areas of math, science, special education, industrial arts, and English. New high school graduation requirements may affect these shortages.

10. Contact: Kathleen A. Homlish, Director  
Teacher Education and Certification  
Kansas State Department of Education  
120 E. 10th St.  
Topeka, Kansas 66612  
913-296-3142

1. State: Kentucky
2. Standards and Certification Body: Kentucky Council on Teacher Education and Certification (legislation).
3. Standards Used for the Approval of Teacher Education Programs: NCATE, NASDTEC, Southern Association of Colleges and Schools, state guidelines.
4. Admission to Teacher Education: Effective 1981, all applicants to teacher education programs must score at the 12th grade level on a standardized test in English and math. An overall GPA of 2.5 is required for admission to student teaching. The SEA reviews IHE selection standards.
5. Curriculum Requirements: Elementary (1-8)--45 hrs. of academic requirements including communication and humanities (18); math and science (12); and health, physical education or nutrition (3). 26 hrs. of general requirements including school music and art (4 each); social sciences, English, and math (6 each). 12-18 hrs. of preprofessional preparation including foundations of philosophy, psychology, and anthropology. 24 hrs. of professional requirements including human growth and development and the curriculum (3-6); introduction to education and/or school organization (2-6); fundamental processes and learning materials (6-12); and student teaching (6).  
Junior high/middle school (5-9)--requires the general education component; 27 hrs. of professional preparation including supervised teaching (8); human development and learning theory (8); basic concepts concerning education (2); fundamental processes and learning materials (6); and the middle grades (8). 60 hrs. of specialization to be distributed between two teaching fields (24 for each); and one additional subject concentration (12).  
High school--25 hrs. to include 150 clock hrs. of clinical and field experience; 12 weeks supervised student teaching (or a full academic quarter or trimester). 45 hrs. of general academic requirements (see requirements for elementary education). 12-18 hrs. of preprofessional requirements and 17 hrs. of professional requirements (see elementary requirements). An area of concentration requires a minimum of 48 hrs. exclusive of methods courses; teaching minors require 21-24 hrs.
6. Evaluation to Complete Teacher Education: GPA of 2.5 in major and overall.
7. Certification Process: The Initial certificate is valid for 10 years. Renewal requires master's degree or 32 credits (5th year planned program) or inservice in lieu of some credit requirements. Permanent certificate requires 3 years teaching experience after the initial certificate is renewed.
8. Staff Development: Each LEA is allocated 4 inservice days per year. LEAs develop a master plan and calendar based on locally determined needs and submit the plan to the SEA for approval. SEA staff are available for technical assistance and maintain a library of resources.
9. Other: A recent state commission recommended that students in teacher education programs be required to pass a test covering basic skills, subject area knowledge, and professional skills. After passing the test, a one-year certificate would be given and supervision would be provided for the new teacher. New accreditation standards calling for annual evaluation of instructional personnel were piloted in 25 of 180 LEAs in 1981-82 with the expectation of statewide adoption. The state has a forgivable loan program for students training in math and science education.

1. State: Louisiana\*

2. Standards and Certification Body: Certification standards are set by the SBE and the legislature. The standards are administered by the SEA through the Bureau of Higher Education and Teacher Certification.

3. Standards Used for the Approval of Teacher Education Programs: NCATE and other accrediting standards are used in developing "Louisiana Standards for Certification of State Personnel". Programs must have Southern Association accreditation prior to state approval.

4. Admission to Teacher Education: Admission is made at the end of the freshman year and requires a GPA of 2.2 (set by the legislature) and an interview. Legislation requires that IHEs counsel applicants on their suitability and aptitude for teaching and the availability of jobs both geographically and by subject matter. A requirement for minimum ACT scores for entry into teacher education is pending before state courts.

5. Curriculum Requirements: Elementary--46 hrs. of general education including English, social studies and science (12 each); math (6); and health and physical education (4). 21 hrs. of specialized education including children's literature, speech, Louisiana history and/or geography, art, music (3 each); health and physical education (4); and nutrition (2). 30 hrs. of professional education including history, foundations or philosophy of education and/or introduction to education (3); educational psychology and/or principles of education (3); introduction to exceptional children (3); elementary level professional teaching courses (12); and student teaching (9).

Secondary and Special Education--same general education requirements as elementary. 27 hrs. of professional education including history of, introduction to, foundations of, and/or philosophy of education (3); educational psychology and/or principles of teaching (3); professional education courses (6) including adolescent psychology (3); teaching of reading (6); and student teaching in subject field (9). Additional specialized academic education areas vary by subject.

Teacher education programs must include practical experience in actual classroom situations during the sophomore year. The program must also include field experiences in schools of varied socioeconomic and cultural characteristics.

6. Evaluation to Complete Teacher Education: A GPA of 2.5 is required to graduate and the NTE must be taken to get certification. Students may retake courses to bring up their GPA and may take the NTE as many times as is necessary.

7. Certification Process: The Acts of 1977, #16, requires that applicants for teacher certification "shall have passed satisfactorily an examination, which should include English proficiency, pedagogical knowledge, and knowledge in his area of specialization." This testing requirement (see #6 above) became effective in 1978.

The Type C certificate is valid for 3 years and may be extended for an additional 3 years with 6 credits or at the request of an employing superintendent. Type B certificate requires 3 years teaching in the certified field. Type A certificate requires a Master's degree and 5 years teaching. Types B and A are valid for life.

8. Staff Development: State funding for two days of inservice per year is provided. Programs are based on local needs and designed by teachers and principals.

The state offers to pay tuition at any state university for teachers who have taught for 3 years, have acquired tenure, and wish to further their career. Under the state's Professional Improvement Program, which began in 1981, tenured teachers develop

a 5-year professional development program. PIP participants are required to earn a specific number of points for academic endeavors and a specific number of points for inservice workshops and seminars conducted by their colleagues. All work, including academic and inservice, must be in that person's major area of responsibility or major field. Once teachers begin accumulating points, they receive a salary increase based on the points earned.

9. Other: There is a shortage of math, science, industrial arts, special education, elementary education, and foreign language teachers. A recent legislative proposal would provide a loan program to attract teachers to shortage areas. There are currently over 800 teachers without certification in the subjects they are teaching.

There has been a steady decline in the number of teachers certified in the state: 6,433 in 1974 and 2,832 in 1981. In the Fall of 1981 there were over 600 vacancies after school opened.

Approximately 76 percent of students completing teacher education requirements who take the NTE achieve an appropriate score.

10. Contact: Michael H. Glisson, Director  
Bureau of Higher Education and Teacher Certification  
Louisiana Department of Education  
P.O. Box 44064  
Baton Rouge, Louisiana 70804  
504-342-3490

1. State: Maine\*
2. Standards and Certification Body: Policies are set by the SBE and implemented by the SEA.
3. Standards Used for the Approval of Teacher Education Programs: The SBE sets general standards only.
4. Admission to Teacher Education: Varies by IHE.
5. Curriculum Requirements: Elementary--Liberal education courses must comprise at least 50 percent of the undergraduate curriculum. 30 hrs. of professional education are required including knowledge of learner and learning processes; knowledge of educational context or systems; and methods of teaching reading. Not less than 6 of the 30 hrs. must be in supervised or laboratory teaching.  
Secondary--Requirements include liberal education courses of 50 percent of the undergraduate curriculum, evidence of establishing a teaching field(s) according to either 30 hrs. in a major and 18 hrs. in a minor, or 50 hrs. in an area of specialization. 18 hrs. of professional education courses (same as 10: elementary) with not less than 6 of the 18 hrs. in supervised or laboratory teaching.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Provisional Certificate is valid for 5 years and requires 6 credits for renewal. The Professional Certificate is valid for 10 years and can be obtained with 30 credits (at least one half in certification field) and 4 years experience. See Other.
8. Staff Development: LEAs plan, provide, and fund staff development programs with assistance available from the SEA. Inservice is one option through which the Provisional Certificate can be renewed. The SEA evaluates and approves each teacher's individual renewal plan. In some cases, LEAs can acquire responsibility (through SEA review and approval) for renewing its own teachers' certificates. See Other.
9. Other: Teacher shortages exist in special education and industrial arts and shortages are predicted in math and science. There is a program of on-the-job field training of speech and hearing specialists.  
A 1984 law establishes career ladders for teachers and authorizes \$500,000 to be used in part to conduct pilot studies of the concept. The legislation also contains a new teacher certification law establishing three certification levels--provisional, professional, and master teacher. The provisional certificate will be issued for a two year period and will be renewable only under extenuating circumstances. The professional certificate will be issued to experienced teachers for a five year period and will be renewable. The law also requires that teachers have strong liberal arts and science backgrounds in addition to courses required in the major fields of study. Also, the SBE will be permitted to issue "visiting permits" to allow individuals with work experience to teach.  
The University of Southern Maine has initiated an experimental six-month program to attract people from other professions into teaching. It is aimed at individuals who have a bachelor's degree and are interested in a mid-career change. The Commission on the Status of Education in Maine has recommended higher pay for beginning teachers and several changes in teacher certification standards, including the creation of a master teacher status.

10. Contact: Steven Hamblin, Director of Teacher Certification  
Maine Department of Education  
Station 23  
Augusta, Maine 04333  
207-289-2441

1. State: Maryland\*
2. Standards and Certification Body: Professional Standards and Teacher Education Advisory Board. Teacher certification is governed by by-laws of the SBE.
3. Standards Used for Approval of Teacher Education Programs: NASDTEC.
4. Admission to Teacher Education: Varies by IHE.
5. Curriculum Requirements: Elementary: 80 hrs. of general education; 26 hrs. in elementary education (including methods of teaching reading); 8 hrs. of student teaching. Secondary: 18 hrs. of professional education including 6 hrs. of student teaching; between 24 and 36 hrs. in subject area (depending on subject area); English and Social Studies teachers must have 3 hrs. in teaching reading.
6. Evaluation to Complete Teacher Education: Some IHEs require the NTE.
7. Certification Process: Standard certificate is valid for 5 years and can be renewed once. Advanced Professional Certificate requires 3 years successful teaching plus 30 semester hrs. of a planned program of inservice education. A master's degree or 30 hrs. of inservice (15 at IHE, 15 in LEA) can substitute for the 30 hr. planned program. Teachers must attain the Advanced Certificate after 10 years.
8. Staff Development: Since inservice is required to gain advanced certification, a fairly extensive amount of inservice is available through LEAs, the SEA, a statewide inservice council, and two Professional Development Centers.
9. Other: There is a shortage of science teachers and a severe shortage of math teachers--50,000 students received math instruction from non-math certified teachers. In 1982, no chemistry or physics teachers and only 17 math teachers were prepared in Maryland.  
The Commission on Quality Teaching (appointed by the SBE) made recommendations in October 1982. The Commission proposed new testing and GPA requirements for initial certification; a support program for first year teachers; a requirement that new teachers meet statewide standards for effective teaching to be eligible for the Standard Professional Certificate; and incentives to increase teacher supply.
10. Contact: Dr. Herman E. Behling, Jr.  
Assistant State Superintendent  
Maryland State Department of Education  
200 W. Baltimore St.  
Baltimore, Maryland 21201  
301-659-2141



1. State: Massachusetts\*

2. Standards and Certification Body: The legislature passes laws authorizing the SBE to regulate teacher preparation and certification. The Massachusetts Advisory Commission on Educational Personnel is advisory to the SBE which adopts and publishes standards and procedures. The SEA approves teacher education programs and issues certificates.

3. Standards Used for the Approval of Teacher Education Programs: SBE; the NASDTEC Standards Committee has determined that Massachusetts standards are equivalent to NASDTEC standards.

4. Admission to Teacher Education: Varies by IHE.

5. Curriculum Requirements: All levels require 36 hrs. of course work defined by standards related to grade level of the certificate sought and a pre-practicum of 21 hrs. The pre-practicum must include at least 3 courses in field-based training related to the grade level of the certificate sought. A practicum is required of at least 30 clock hrs. of supervised experience in which competencies related to standards must be demonstrated.

The state raised teacher certification standards in September 1982. The new standards increase the requirements for preservice education, particularly in the knowledge of subject areas to be taught rather than education courses, and increase practice teaching requirement.

6. Evaluation to Complete Teacher Education: The SBE adopted new regulations, effective September 1982, shifting emphasis of teacher certification from coursework to demonstrated competence in five areas as determined by college supervisors and cooperating teachers during the student's practicum.

7. Certification Process: Statutes include a provision, which has never been implemented, that teacher candidates receive a two-year provisional certificate and be evaluated during those two years of teaching. In actuality, a permanent certificate is issued to the candidate. The SEA expects full implementation of the two-year provisional certificate and local evaluation in 1985.

8. Staff Development: The Commonwealth Inservice Institute, funded by the state and foundations, provides grants for programs responding to the specific needs of a school.

9. Other: There is a teacher shortage in some areas of special education and in industrial arts; shortages are predicted in science and math.

In January 1982 a bill was submitted in the legislature requiring applicants for teacher certification to pass a test of basic skills and subject matter knowledge. It did not pass. There is a major thrust in the legislature and supported by the governor to strengthen teacher preparation and certification. The SEA expects major changes to come during the 1984 legislative session.

The University of Massachusetts, several industries, and LEAs are participating in a Math/Science/Technology Education Project. The project includes a 14-month program of courses, paid corporate internships, and on-the-job training leading to certification in physics, chemistry, or math and a master's degree. Graduates of the program must teach for three years in the public schools. The Harvard Graduate School of Education has developed a retraining program for mid-career professionals who wish to teach math or science.

10. Contact: Thomas P. O'Connor, Director, Teacher Preparation,  
Certification, and Placement  
Massachusetts Department of Education  
1385 Hancock St.  
Quincy, Massachusetts 02169  
617-770-7529

1. State: Michigan\*

2. Standards and Certification Body: The SBE has legislative authority to establish rules and regulations. The SEA administers the regulations, reviews programs, and recommends approval of programs to the SBE.

3. Standards Used for the Approval of Teacher Education Programs: SBE; NASDTEC.

4. Admission to Teacher Education: The SBE requires IHEs to establish selection criteria which insure the admittance of high quality teachers. Admission to teacher education is made at the end of the freshman year with criteria varying by IHE. There is a GPA requirement of 2.0 for entrance into student teaching.

5. Curriculum Requirements: Elementary--academic requirements include three minors of 20 hrs. each or a major of 30 hrs. and one minor of 20 hrs. There is a limit on the number of academic requirements that can be education courses. Professional requirements include 20 hrs. of education courses (principles, methods, psychology, history, and electives); 6 hrs. of directed teaching and laboratory experience; and 6 hrs. of reading.

Secondary--Academic requirements include 30 hrs. in a major subject and 20 hrs. in a minor (neither the major nor the minor can be in education). 20 hrs. of professional courses are required, along with 6 hrs. of student teaching and 3 hrs. of reading.

6. Evaluation to Complete Teacher Education: Varies by IHE.

7. Certification Process: The Provisional Certificate is valid for 6 years. If that certificate expires before the Continuing Certificate is attained, it can be renewed for 3 years with 10 credits (a second renewal of 3 years can be obtained with 18 credits). The Continuing Certificate is permanent and requires 18 credits and 3 years of successful teaching. Teachers must attain the Continuing Certificate.

8. Staff Development: A specific dollar amount is allocated for each teacher in an LEA for inservice. LEAs develop and implement the program based on local needs. Staff development activities may count toward credit requirements for further certification.

9. Other: There is a teacher shortage in vocational education, bilingual education, and some areas of special education. A Certification Commission has been established to revise certification policies and a number of related legislative amendments are pending.

The "Proposed State System for Educational Personnel Development" is being reviewed by the SEA. It focuses on the need to enhance professional development (inservice) and make it a part of a total individualized training program covering the college program through all parts of a teacher's career.

The SBE is developing a teacher training plan, which would include revision of certification standards. In addition, the legislature has approved a proposal to increase the number of instruction specialists in the SEA who would work with teachers.

10. Contact: William M. King  
Michigan Department of Education  
Box 30008  
Lansing, Michigan 48909  
517-373-3310

1. State: Minnesota\*
2. Standards and Certification Body: The Minnesota Board of Teaching has authority for teacher licensure. The SBE has authority for administrator and supervisor licensure.
3. Standards Used for the Approval of Teacher Education Programs: Minnesota Board of Teaching standards (equal to or greater than NCATE or NASDTEC standards).
4. Admission to Teacher Education: Admission is made at the end of the sophomore year; criteria vary by IHE.
5. Curriculum Requirements: Elementary--Graduation from an accredited teacher education program and completion of an approved program in professional education for elementary school. Secondary Graduation requirement as above, an academic major, and 18 hrs. of professional requirements, all through an approved program. Student teaching is required for elementary and secondary licensure.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Initial Certificate is valid for 2 years and can be renewed with one year of teaching experience. The Continuing Certificate must be renewed every 5 years with 120 units obtained through inservice, college credit, publications, or being a supervisory teacher.
8. Staff Development: A new law, "Technology and Educational Improvement", includes several staff development elements. A grant program is available for inservice in math, science, and social studies. Twenty models for inservice based on school effectiveness research are being pilot tested. A high technology component, with an advisory group of diverse membership, provides grants to LEAs for inservice in technology. Another part of the new law provides for the retraining of teachers.
9. Other: The legislature created the Board of Teaching to grant "to teachers the major role in determining the standards and rules for teacher preparation and licensure, continuing education, and professional service."
10. Contact: Dr. George B. Droubie  
Personnel Licensing and Placement  
Minnesota Department of Education  
610 Capitol Square Building  
St. Paul, Minnesota 55101  
612-296-2046

1. State: Mississippi\*

2. Standards and Certification Body: The legislature empowers the SBE to establish rules and regulations which are administered by the SEA.

3. Standards Used for the Approval of Teacher Education Programs: NCATE. The SBE will set standards for program approval beginning in 1986.

4. Admission to Teacher Education: In state-supported IHEs, a qualifying score of 170 on the COMP Test (College Outcome Measures Project) during the sophomore year is required for admission to teacher education. Students who score at least 18 on ACT or have a GPA of 3.2 through the first semester of the sophomore year may be exempt from the COMP requirement with the exception of the speaking and writing areas. Non-public IHEs determine their own admission policies.

5. Curriculum Requirements: Elementary--48 hrs. of general education are required including career education (3); children's literature (3); English (9) including 6 of composition and grammar; fine arts (3); comprehensive health (3); science and math (15) including 3 each in biological science, physical science, math, geometry and measurement, and electives; social studies (9); and speech (3). 36 hrs. of professional education, and 18 hrs. of specialized education are also required.

Secondary--48 hrs. of General education requirements include English (12); fine arts (3); career education (3); science and math (12) to include 3 each in biological science, physical science, math, and electives; social studies (9); speech (3); survey of exceptional children (3); and comprehensive health (3). 21 hrs. of professional education and approximately 30 hrs. of specialized education (disciplines) are also required.

Special subject teachers need 48 hrs. of general education; 21 hrs. of professional education; and 30 hrs. of specialized education.

6. Evaluation to Complete Teacher Education: A minimum GPA is required and some IHEs require a passing score on the NTE for graduation. IHEs are also required to assess certain teaching competencies.

7. Certification Process: A passing score on the NTE Commons, Core Battery, and/or Specialty Area Exams is required for certification. Class A certificate is valid for 5 years and can be renewed with 6 semester hrs. or inservice in lieu of 3 hrs. Class AA certificate is valid for 10 years and requires a master's degree and 2 years of experience. Class AAA certificate is valid for 10 years and requires a specialist degree or 45 semester hrs. above the master's degree with 21 semester hrs. in the field of endorsement with an overall average of "B" on all graduate work, and 3 years of teaching experience. Class AAAA certificate is valid for life and requires a Ph.D. and 5 years of teaching experience.

A provision in the Mississippi Education Reform Act of 1982 requires that beginning teachers be evaluated each year during their provisional status (up to 3 years). By 1984 a plan must be formulated--including evaluation instruments--and be pilot tested.

8. Staff Development: The new reform act requires LEAs to submit a Comprehensive Inservice Staff Development Plan by 1984-85. Funds will be requested from the legislature to be given to LEAs with approved plans, part of which must be used for beginning teachers. The SEA currently provides technical assistance for inservice and works with the Mississippi Educational Television Authority to broadcast inservice to teachers.

9. Other: The Education Reform Act of 1982 totally restructures teacher and administrator education, certification, and development. It becomes effective in the 1986-87 school year. The reform act requires that a study be conducted of teachers teaching out-of-field, covering both conditions and remedies. Other provisions include a plan for personnel appraisal and compensation and the establishment of a Commission on Teacher and Administrator Education, Certification and Development which will set standards for teacher education programs and certification and renewal. The new law also establishes a professional development program for educators. Completing professional development programs will entitle them to additional salary increments.

There is a teacher shortage in science, math, and industrial arts. Less than 100 of the 216 chemistry teachers are fully certified. The legislature has approved loans to train new teachers in math and science and has appropriated funds for forgivable loans for summer study to retrain and recertify teachers in math and science.

10. Contact: James J. Hancock  
Mississippi Department of Education  
P.O. Box 771  
Jackson, Mississippi 39205  
601-359-3483

1. State: Missouri\*
2. Standards and Certification Body: Teacher Education and Certification Advisory Committee (established by SBE policy).
3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association, State guidelines.
4. Admission to Teacher Education: IHEs were required to begin testing for admission in 1981 to collect data to be used to set minimum standards. Effective July 1983, students must attain a score of 800 on the SAT or 18 on ACT and have a GPA of 2.5. Candidates not meeting these requirements may retake the college admissions tests or other accepted national tests and complete remedial courses.
5. Curriculum Requirements: General education requirements for all levels include courses in communication skills, social studies, natural sciences, math, and electives. Elementary requirements include 60 hrs. of professional courses including foundations for teaching (10); methods (15); and 10 hrs. of clinical experiences (a minimum of 2 hrs. of field experience prior to student teaching, and a minimum of 5 hrs. in student teaching); economics, geography, health, art or music, sociology or anthropology; and 21 hrs. in the area of concentration.  
Middle School--Professional requirements as described for elementary level; courses in math, economics, geography, health, art or music, sociology or anthropology; and 21 hrs. in the subject in which certification is sought.  
Secondary--40 hrs. of general education to include credit in at least 3 of the following fields: English, social studies, natural science, foreign language, math and humanities. 18 hrs. of professional requirements including educational psychology courses (4-5); history or philosophy of education, tests and measurement, administration, curriculum, etc. (2-3); methods (4-5); and student teaching (5). Semester hour requirements for teaching fields vary by subject (most require 30 hrs.).
6. Evaluation to Complete Teacher Education: To be certified, students must attain a GPA of 2.5.
7. Certification Process: The Initial Certificate is valid for life. See Other.
8. Staff Development: The SEA provides technical assistance to LEAs implementing the voluntary Instructional Management System to help teachers organize instruction based on effective schools research.
9. Other: The 1984 legislature approved a bill to require all students finishing teacher education programs and seeking high school certification to take a "nationally available exam" to evaluate their competence in "the specific subject area where they are certified to teach." The bill also requires that the state coordinating board for higher education place on probation any teacher training program in which less than 70 percent of the students achieve the national norm; if less than 60 percent meet the norm, the board will have the power to terminate the program. The legislature also passed bills to give the SBE authority to establish teacher certification standards (IHEs currently establish their own standards) and to replace lifetime teacher certificates with a requirement for periodic relicensing.  
There is a teacher shortage in math, science, industrial arts, and English. The number of teachers trained to teach English has dropped by 40 percent in the last few years. The state sponsors a summer institute focussing on math skills to retrain

elementary teachers for grades 7 to 9 (costs are shared by the SEA and the LEA). This retraining is important since only 40 percent of newly trained math teachers go into teaching.

10. Contact: R.V. Wilson  
Missouri Department of Education  
P.O. Box 480  
Jefferson City, Missouri 65102  
314-751-3486



1. State: Montana\*
2. Standards and Certification Body: The SBE sets standards which are recommended by the SEA.
3. Standards Used for the Approval of Teacher Education Programs: NASDTEC standards, modified for the state, are used for program approval.
4. Admission to Teacher Education: Teacher education standards outline general admission criteria. These criteria are arrived at cooperatively among IHEs, the SEA, LEAs, and other educational organizations. Individual IHEs establish their own GPA and test score requirements.
5. Curriculum Requirements: Elementary--while there is no specific requirement as to the number of professional preparation courses, approximately 30 credits are generally required, including the following courses: human growth and development, teaching of reading or language arts, social studies and arithmetic, and student teaching or appropriate intern experiences.  
Secondary--30 credits in an approved major and 20 credits in an approved minor, or 40 credits in a single field of specialization; and 16 credits of professional preparation including student teaching are required.  
Both elementary and secondary certification requires completion of general academic courses as specified by individual IHEs.
6. Evaluation to Complete Teacher Education: GPA of 2.0 is required. Some IHEs have raised the exit GPA requirement.
7. Certification Process: The Standard Certificate is valid for 5 years and can be renewed with 6 academic quarter credits and one year of teaching experience. Inservice, approved in advance, may be used in lieu of the academic credits. The Professional Certificate requires a master's degree and 3 years of teaching experience. There is also a provisional certificate, valid for 3 years and not renewable. All certificates must be renewed every 5 years.
8. Staff Development: Staff development is required and the SEA allows 7 days per teacher a year (some of this time is spent on conferences, etc.). The SEA coordinates inservice offerings of all state agencies.
9. Other: The state is examining the use of evaluation for certificate renewal, discussing provisional certification for new teachers, and studying administrator certification.
10. Contact: Dr. John R. Voorhis  
Office of Public Instruction  
State Capitol  
Helena, Montana 59620  
406-444-3150

1. State: Nebraska\*
2. Standards and Certification Body: The legislature enacts statutes authorizing the SEA to develop and adopt rules, regulations, and procedures. The Statutory Committee of the Nebraska Council on Teacher Education recommends changes of certification rules and regulations to the SBE.
3. Standards Used for the Approval of Teacher Education Programs: State standards, North Central Association of Colleges and Secondary Schools, and NCATE.
4. Admission to Teacher Education: Admission is generally made at the the sophomore level. IHEs set GPA and other requirements. Student counseling must include supply and demand information.
5. Curriculum Requirements: Bachelor's degree and regularly approved program for the preparation of teachers are required, which shall include a subject field or two subjects.
6. Evaluation to Complete Teacher Education: Recommendation from an approved IHE that the student has met all standards of the institution.
7. Certification Process: The Pre-standard Certificate is valid for 5 years and can be renewed with 6 approved credit hours taken within 3 years of the expiration date of the certificate. The Standard Certificate is valid for 7 years and requires 2 years of verified successful teaching experience. The Professional Certificate is valid for 10 years and requires a master's degree or a fifth year of study and 2 years of current verified successful teaching experience. See Other.
8. Staff Development: LEAs plan and offer inservice with technical assistance available from the SEA. In some LEAs inservice is tied to teacher salary advances. The Task Force on Educational Quality, appointed by the Commissioner of Education, is currently examining inservice programs.
9. Other: The 1984 legislature mandated competency tests in the basic skills and in the subject area specialty for all new teachers. The testing standards will be established by the SBE and will take effect in the Fall of 1984. The SBE has also been authorized to develop, by July 1985, an "entry year assistance program" to help beginning teachers become more successful in the classroom.

There is a teacher shortage in math and some science areas. The legislature passed a bill to provide loans to train math and science teachers. The SEA will implement the program. The Task Force on Educational Quality has called for increased teacher salaries, longer contracts, and a master teacher plan.
10. Contact: H.L. McCoy, Director  
Teacher Education and Certification  
Nebraska Department of Education  
P.O. Box 94987  
Lincoln, Nebraska 68509  
402-471-2496

1. State: Nevada\*
2. Standards and Certification Body: The SBE adopts certification standards consistent with state legislation. The Commission on Professional Standards in Education (established by the governor through legislation) is advisory to the SBE.
3. Standards Used for the Approval of Teacher Education Programs: The SBE has recently adopted new standards.
4. Admission to Teacher Education: The University Board of Regents have initiated a pilot program in which a GPA will be established for second year students who enroll in the College of Education. Basic education courses will be provided to bring students up to the desired level.
5. Curriculum Requirements: Elementary--completion of an approved program including 6 credits in the teaching of reading; or 30 hrs. of professional education including supervised teaching (8), methods courses (8), and teaching of reading (8). Secondary--a recognized major (36 hrs.) and minor (24 hrs.) is required. An approved program of secondary school teaching ; or 22 hrs. of professional secondary education including supervised teaching (8), and a course in the methods and materials of teaching a field of specialization are required.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Initial Certificate (bachelor's degree) is valid for 5 years and can be renewed with 6 credits. The Professional Certificate requires a master's degree and 3 years of teaching experience, and is valid for 6 years. The certificate of a person holding a specialist degree and 3 years of experience is valid for 8 years. The certificate of a person holding a doctorate and 3 years of experience is 10 years. These advanced certificates require 3 credits for renewal.
8. Staff Development: The SEA provides technical assistance and workshops. Inservice can be used for salary increases and certificate renewal.
9. Other: There are some teacher shortages in math and science. The Commission on Professional Standards is examining certification standards, admission criteria, testing for certification, and a supervised first year of teaching. The Commission is also evaluating inservice teacher training programs as a result of the establishment of a state-approved program approach leading to certification.
10. Contact: Douglas M. Stoker  
Nevada Department of Education  
State Mail Room  
Las Vegas, Nevada 89158  
702-386-5401

1. State: New Hampshire\*
2. Standards and Certification Body: The Professional Standards Board and the Council for Teacher Education are advisory to the SBE which sets policies and standards for teacher education and certification. The SEA administers the standards.
3. Standards Used for the Approval of Teacher Education Programs: SBE standards (similar to NASDTEC).
4. Admission to Teacher Education: Varies by IHE.
5. Curriculum Requirements: General education requirements are comprised of the liberal arts, which include the broad areas of humanities, mathematics, the biological and physical sciences, and the social and behavioral sciences. Professional education requirements must include the foundations of education, methods and materials of teaching, and supervised laboratory experiences designed to provide the competencies required in the education profession. Each teaching major or field of specialization must be built on a written statement of the competencies needed by teachers in this area. Each prospective teacher must be enrolled in a program which leads to a degree in a major field of specialization. In addition, each undergraduate program designed to prepare teachers in a major area of concentration must meet the specific standards for that program. These standards vary by subject area.
6. Evaluation to Complete Teacher Education: Varies by IHE. The SBE is currently considering a testing policy.
7. Certification Process: The Beginner Certificate is valid for 3 years. The Experienced Educator Certificate requires 3 years of experience and is renewable based on at least 50 hrs. of inservice every 3 years. Through an Individualized Professional Development Plan, substantively qualified candidates can obtain formal certification to teach math and science. See Other.
8. Staff Development: Teachers must complete at least 50 hrs. of approved staff development activity every 3 years for recertification. LEA staff development programs are required but are implemented and funded locally. LEAs develop individual plans conforming to LEA needs and goals. This Master Plan is submitted to the SEA for approval.
9. Other: Teacher shortages in math, physical sciences, industrial arts, and some areas of special education have resulted in individuals becoming certified under individualized certification plans during the last three years. A program of loans to train math and science teachers has been introduced in the legislature but not enacted. New teacher certification policies have been outlined in proposed legislation and departmental regulations for further study and public hearings. The SBE has recently received two studies, each recommending changes to existing certification and/or teacher education requirements. The Committee to Study Certification, appointed by the SBE, has recommended expanding the number of avenues to state certification to allow individuals with liberal arts degrees to enter teaching, to periodically test teacher candidates during their training, and to increase professional development activities for experienced teachers.

In April 1984 the SBE unanimously voted to require all new teachers to pass test measuring their competencies in English, math, and communication skills. No date has been set for implementation.

10. Contact: George H. Lewis, Director  
Office of Teacher Education and Professional Standards  
New Hampshire State Department of Education  
101 Pleasant St.  
Concord, New Hampshire 03301  
603-271-2407

1. State: New Jersey\*

2. Standards and Certification Body: The New Jersey State Board of Examiners issues and revokes certificates. The SBE sets standards for certification and teacher preparation programs. The SEA evaluates and approves college programs for certification purposes.

3. Standards Used for the Approval of Teacher Education Programs: SBE and NASDTEC.

4. Admission to Teacher Education: Admission to the teacher training program is made at the end of the sophomore year. Students must have had practical school experience, a 2.5 GPA, and demonstrated acceptable levels of proficiency in the basic skills (pass the basic skills test given to freshmen or demonstrate the elimination of the deficiency through a written or oral assessment at the beginning of the junior year).

5. Curriculum Requirements: Approximately 60 hrs. general education including some aspect of technology and electives; 18 hours in courses related to the theory of learning; a minimum of 30 hrs. professional education including practical experience in a school and student teaching; a minimum of 30 hrs. in the arts/humanities, behavioral/social sciences and/or math, science, technology disciplines (intro courses here may satisfy up to 12 hrs. of the general education requirements); 6 hours of reading; and knowledge of hygiene/physiology. See Other.

6. Evaluation to Complete Teacher Education: Minimum GPA of 2.5 is required as well as knowledge of subject matter major through completion, at the end of the senior year, of a comprehensive written or oral test devised or selected by the IHE, including teaching specialty and pedagogy. Retesting is open. Direct observation is also made of the candidate.

7. Certification Process: Permanent certification is granted after successful completion of an approved program, recommendation, or transcript evaluation. See Other.

8. Staff Development: Inservice training is under consideration. SEA and county offices have reorganized to clearly assess the inservice needs of schools and to design and offer programs to meet those needs. Three Regional Curriculum Service Units will serve as brokers between schools and the SEA.

9. Other: The SBE recently approved certification (through internship) for people who demonstrate a knowledge of subject matter through testing, but are not trained as teachers. In 1983, the SBE limited the seniority rights of teachers to the subject areas and grade levels actually taught. This revision is aimed at keeping the most qualified and experienced teachers in the classroom. The creation of an Academy for the Advancement of Teaching and Management has been proposed as part of the governor's and commissioner's reform program. The academy would allow teacher and administrators to study and apply effective schools practices in the classroom.

Current shortages exist in special education, math, science (especially in less affluent LEAs), bilingual and vocational education. Few students in NJ colleges are currently majoring in math or science education. A large number of teachers, especially in math, have substandard certification. The legislature has appropriated funds to recertify teachers in math and science.

The teacher education curriculum requirements of 18 hrs. related to the theory of learning and 30 hrs. of professional education courses are being studied by a special panel which has been appointed to define minimum essential knowledge and skills for beginning teachers. These requirements may be changed.

10. Contact: Leo F. Klagholz  
New Jersey Department of Education  
225 West State St.  
Trenton; New Jersey 08625  
609-984-1216

1. State: New Mexico\*
2. Standards and Certification Body: The SBE adopts certification regulations upon the recommendation of the Professional Standards Commission.
3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association, state guidelines. Teacher education programs must be approved by the SBE.
4. Admission to Teacher Education: The SBE requires that students pass basic skills tests in reading, writing, and math before they can be admitted to a teacher education program. IHEs set cut-off scores and most have remediation programs.
5. Curriculum Requirements: Elementary--48 hrs. of general education are required including 4 of the following 8 areas represented with a minimum of 8 hrs.: humanities and/or social science; behavioral science; biological and/or physical science; foreign language; communicative arts; math; fine and practical arts; health and/or physical education and/or recreation and/or safety. 27 hrs. in elementary subject matter including reading, language arts and literature, arts and crafts, social studies, math, science, music, and health and physical education (the first 4 areas must be represented with 3 hrs. in each area; 8 of the 9 areas must be represented). Single subject matter areas require 24 hrs.; two-subject matter areas each require 18 hrs. 24 hrs. of professional education requirements include 6 hrs. of student teaching; and 18 hrs. distributed over a minimum of 3 of the following 5 areas--human growth and development; areas related to school counseling; methods and techniques; orientation in education; and educational psychology.  
Secondary--General education and professional requirements are similar to elementary requirements. Requirements for subject matter endorsements can be met under one of three plans. Plan 1 requires 24 hrs. in one teaching field and 24 hrs. in a second teaching field. Plan 2 requires 36 hrs. in one composite teaching field and 24 hrs. in a second teaching field. Plan 3 requires 54 hrs. in one composite teaching field.
6. Evaluation to Complete Teacher Education: The new Staff Accountability Plan (described below) requires that students enrolling in teacher preparation programs after July 1, 1983 must pass exams in reading, writing, and math prior to completing their training program. The exam and the performance standard is selected by the IHE with approval of the SBE. Remediation is also required.
7. Certification Process: The new Staff Accountability Plan stipulates that by July 1, 1983 all applicants for initial certification achieve a passing score (set by the SBE and the SEA) on the NTE Core Battery. In addition, by July 1984, applicants seeking initial certification/endorsement(s) in 22 specific areas must pass an appropriate content specialization exam. By the same date, currently certified teachers, who seek to add a certificate or endorsement in any of the 22 areas must pass the appropriate content exam.  
The Standard I Certificate is valid for 4 years and is renewable with 8 credits or inservice in lieu of 4 credits. The Standard II Certificate is valid for 4 years and is renewable with 30 credits above the bachelor's degree which may include 8 credits of inservice, or a master's degree. The 5 Year Continuing Certificate requires 30 credits or inservice in lieu of 8 of the credits plus 3 years of experience. The 10 Year Continuing Certificate requires a master's degree and 3 years of experience. Evaluations are being planned for all certificate renewals.



8. Staff Development: Inservice is required by the SBE and up to 4 credits of inservice can be used for recertification. The SBE does not require staff development to be provided by the LEA or credit.

9. Other: There are teacher shortages in math, science, and special education. As a condition for program approval after July 1983, all teacher preparation programs must submit a basic skills accountability plan including basic skills testing of teacher trainees. Another provision of the Staff Accountability Plan identifies six teacher competencies and 63 indicators of effective teaching. Once the competencies are incorporated into evaluation instruments and field tested, the SEA will make recommendations to the SBE regarding the use of the instrument for recertification decisions. The Plan also incorporates a structured support system for beginning teachers during their initial certification period.

10. Contact: Jim Pierce  
New Mexico State Department of Education  
Santa Fe, New Mexico 87503  
505-827-6581

1. State: New York\*
2. Standards and Certification Body: The Teacher Education, Certification, and Practices Board is advisory to the State Board of Regents. The SEA and the Commissioner of Education have the statutory responsibility for teacher certification.
3. Standards Used for the Approval of Teacher Education Programs: SEA.
4. Admission to Teacher Education: Varies by IHE.
5. Curriculum Requirements: Early childhood and upper elementary--24 hrs. of professional education courses including 6 hrs. of teaching of reading, and supervised student teaching. To be eligible to teach an academic subject in grades 7 through grade 9, additional hours of concentration are required as follows: English (30); foreign language (24); general science (36); math (18); and social studies (30).  
Secondary--12 hrs. of professional education courses; college supervised student teaching; and academic concentration in the following subjects: English (36); foreign language (34); math (24); social studies (36); and science (36).
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: As of September 2, 1984 all new certification candidates will be required to complete the NTE Core Battery. The Provisional Certificate is valid for 5 years. The Permanent Certificate requires a master's degree and 2 years experience. This certificate is valid for life.
8. Staff Development: Inservice is designed, funded, and operated locally. The SEA neither requires nor approves local offerings. Funds have been requested from the legislature for the development of state guidelines for comprehensive inservice planning. but have not been allocated.
9. Other: There are teacher shortages in science and math but are not considered critical. Bills have been considered by the legislature to provide loans to train math and science teachers, to provide graduate fellowships for current math and science teachers, and to establish an inservice program to retrain teachers from other disciplines in math and science, but no action has been taken (the bills will be resubmitted in the 1984 session).  
SEA support of the current permanent licensure policy is based on the belief that professional recognition will attract higher quality teachers.
10. Contact: Vincent C. Gazzetta  
New York State Education Department  
Room 5A 11, Cultural Education Center  
Albany, New York 12230  
518-474-6440

1. State: North Carolina\*

2. Standards and Certification Body: Proposed policies are reviewed by the Advisory Council on Teacher Education (established by the SBE) which makes recommendations to the State Superintendent. The Superintendent and SEA conduct a final review and submit recommendations to the SBE for adoption.

3. Standards Used for the Approval of Teacher Education Programs: SBE.

4. Admission to Teacher Education: Effective Spring 1985, students must take the NTE (general knowledge and communications skills portions) and admissions counseling will be required. Currently admissions criteria vary by institution.

5. Curriculum Requirements: Coursework set by IHE; competency based teacher education (new standards adopted July 1983). IHEs must show how the required competencies are produced by the plan developed. NEA reports curriculum divisions as follows: General Education--20%; Teaching Specialty--40-60%; Pedagogy--20%; 180 classroom hours of student teaching are required.

6. Evaluation to Complete Teacher Education: A passing score on the NTE (measuring professional and subject area knowledge) is required.

7. Certification Process: Completion of an approved program, a recommendation from the IHE, and a passing score on the NTE with cut-offs set by the SBE. The NTE is locally validated and contains basic skills and professional studies components. Currently a five year Standard Professional Certificate is issued for initial certification. Nine additional credits or some combination of teaching experience or inservice are required for renewal.

Effective in 1984, a 2 year initial certificate will be issued to beginning teachers. During those 2 years teachers will be evaluated and provided with a support system. After the 2 year program, a 3 year continuing certificate will be awarded. The Continuing Certificate is then renewable for 5 year periods.

8. Staff Development: The SEA approves LEA inservice programs. LEAs require inservice and credit toward certificate renewal can be earned. Some state aid is provided.

9. Other: The Quality Assurance Program, adopted by the SBE and the board of governors of the university system, mandates new standards for teacher training institutions, for admission into teacher training, and for revised certification.

There is a teacher shortage in math, science and vocational education. Approximately \$1 million a year is available for scholarships based on supply and demand. In 1983 the legislature provided \$1.4 million to retrain teachers for math/science, mostly through summer institutes. An LEA--Charlotte-Mecklenberg--is close to adopting career ladders for teachers leading to increased pay.

Effective July 1983, no teacher will be allowed to teach a subject in which they have less than 18 credits. Current teachers must earn 6 credits in each of the next 3 years to retain certification in the subject they are currently teaching.

Recent research (Schlechty and Vance, 1983) examines the effects of increased standards in teacher education programs on enrollments.

10. Contact: J. Arthur Taylor, Director  
Division of Certification  
North Carolina Department of Public Instruction  
Raleigh, North Carolina 27611  
919-733-4125

1. State: North Dakota\*
2. Standards and Certification Body: State Superintendent (SEA) establishes criteria after consulting with the North Dakota Teachers' Professional Practices Commission (legislation) and holding public hearings.
3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association, State guidelines. The Board of Higher Education approves teacher training programs in public IHEs using NCATE standards.
4. Admission to Teacher Education: IHEs establish their own admission policies which include a GPA requirement and communications/basic skills evaluations.
5. Curriculum Requirements: All levels require 20 hrs. of professional education courses including student teaching.
6. Evaluation to Complete Teacher Education: Minimum GPA of 2.5.
7. Certification Process: The Entrance Certificate is valid for 2 years. The renewal certificate is valid for 5 years based on 2 years of experience and three positive recommendations of supervisors. Succeeding 5 year renewals require 1 semester hrs., 30 days minimum active teaching, and three positive recommendations. These policies recently replaced a lifetime certificate.
8. Staff Development: While SEA staff are available for technical assistance, inservice is mainly offered through local initiative. There are no state guidelines or approval procedures for local inservice programs.
9. Other: Competency testing for teachers is being reviewed by a legislative study committee. In addition, the state has replaced a lifetime certificate with an entrance and renewable certificate. An intensive summer training program was initiated in 1983 to train teachers qualified in other areas to gain certification in math and science. The state pays 75 percent of the cost of the program.
10. Contact: Ordean M. Lindemann  
North Dakota Department of Public Instruction  
Bismarck, North Dakota 58505  
701-224-2297

1. State: Ohio\*
2. Standards and Certification Body: The SBE establishes standards and courses of study for teacher preparation and certification.
3. Standards Used for the Approval of Teacher Education Programs: Ohio "Standards for Colleges and Universities Preparing Teachers" have been adopted by the SBE.
4. Admission to Teacher Education: Criteria are set and vary by IHE.
5. Curriculum Requirements: Elementary—29 hrs. of professional education courses to include understanding the learner and the learning process, school in relation to society, and elementary school curriculum topics. 60 hrs. of general education to include visual arts, English, health and physical education, math, science, music, and social science.  
Secondary—21 hrs. of professional education courses similar to the elementary requirements above; and 30 hrs. of general education distributed over science and math, social studies, English and/or a foreign language, fine arts, philosophy, and/or theological studies. Requirements for comprehensive and specific teaching fields vary according to the field.  
In addition, the teacher education program shall include: 1) the teaching of reading as it pertains to the field for which certification is sought; 2) human relations related to both teaching in a culturally pluralistic society and working effectively with all types of students; 3) analysis and evaluation of one's performance skills as they relate to teaching behavior; 4) dealing with behavior problems; 5) selection, preparation, and utilization of educational media to facilitate learning; and 6) clinical and field-based experiences equivalent in time to one full quarter, in addition to student teaching.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Provisional Certificate is valid for 4 years and can be renewed upon successful teaching experience or 6 credits. The Professional Certificate is valid for 8 years and requires 18 credits beyond the bachelor's degree plus 27 months teaching under the Provisional Certificate. The Permanent Certificate requires a master's degree and 45 months teaching under the Professional Certificate. Temporary year certification is available on request with evidence of a shortage. Teachers are considered for tenure based upon teaching experience and possession of the Professional Certificate.
8. Staff Development: The SEA Office of Inservice Development administers the funds appropriated by the legislature through the Teacher Development Program. These funds and the policies formulated to administer them are intended to help teachers gain new skills, refine abilities, and become familiar with new teaching methodologies and knowledge. The office provides technical assistance for approximately 95 projects within each of the four regions of the state.
9. Other: There are some teacher shortages in industrial arts, math, vocational education, library science, some areas of special education, and physical sciences.  
The Ohio Commission on Excellence in Education has recommended that the state's tenure law be revised to ease the dismissal of incompetent teachers and that competency tests be developed for those seeking certification either for the first time or for a new field. The commission also recommended that teacher salaries be raised, contracts be extended, advancement opportunities be created, and a supervised fifth year

"seminar" for new teachers be established. Some of these recommendations will take the form of requests to the legislature in 1984.

10. Contact: Paul W. Hailey, Director  
Division of Teacher Education and Certification  
Ohio Department of Education  
65 S. Front Street, Room 1012  
Columbus, Ohio 43215  
614-466-3593

1. State: Oklahoma\*

2. Standards and Certification Body: The Oklahoma Professional Standards Board (PSB) is advisory to the SBE which approves standards. The SEA administers the standards and evaluates programs, reporting the results to the PSB and SBE.

3. Standards Used for the Approval of Teacher Education Programs: SBE.

4. Admission to Teacher Education: A minimum GPA requirement of 2.5 is set by the PSB with the approval of the SBE. IHEs screen with competency tests and interviews on a number of criteria.

5. Curriculum Requirements: Elementary--50 hrs. of general education which must include work in the first six of the following areas: English, social studies, math, science, fine arts, health and physical education, foreign language, reading, practical arts, general humanities, and psychology. 21 hrs. of professional education courses to include psychology of learning and child growth and development, social foundations of education, evaluation, student teaching (6 hrs. minimum), and the psychology of exceptional children. 25 hrs. of specialized education in subject field content and/or methods and materials. 18 hrs. of academic concentration in one of the first eight areas listed above under the category of general education plus one of nine areas of special education.

Secondary--General education requirements are that 50 hrs. be completed in any six of the areas listed above. Professional education requirements as above. Specialized area education requirements vary by subject.

6. Evaluation to Complete Teacher Education: There is a minimum GPA requirement. See #7 below.

7. Certification Process: There is a testing requirement for certification. The tests cover 34 content areas; 26 of them are covered by a single test (general test). The other 8 are covered by a combination of three or more tests (umbrella and specific area tests). The test may be taken in the junior year after 90 hours of teacher preparation have been completed. Upon passing the test, a license is issued to new teachers for the first year of teaching, which is a supervised internship including staff development and evaluation. If needed, this license can be renewed once. The Standard Certificate is valid for 5 years and can be renewed with 8 credits or 3 years of experience. The Full Certificate requires one year of experience and an evaluation.

8. Staff Development: The SEA requires that all teachers receive at least 75 hours of inservice every 5 years. LEA inservice programs are funded by the state at \$2.50 per student, per year. LEAs must submit plans prepared by a local staff development committee to the SEA for approval. While the SEA provides extensive technical assistance, the emphasis is on local planning to meet local needs.

9. Other: Some teacher vacancies are reported in math and science, and occasionally in elementary education, special education, language arts, social studies, health, physical education, and school counseling.

Teacher education and certification reform was part of H.B. 1706 enacted in 1980 and effective in 1982. The bill established three criteria for teacher competence: (1) completion of an approved program, (2) successful completion of an entry year of teaching, and (3) a passing score on a standardized, externally prepared, administered and scored content knowledge exam. Tests were developed by the SEA working with a



panel of Oklahoma educators. National Evaluation Systems assisted in the development of the tests and is under contract to administer and score them.

10. Contact: Dr. Thomas A. Newton  
State Department of Education  
2500 North Lincoln Blvd.  
Oklahoma City, Oklahoma 73105  
405-521-3607

1. State: Oregon\*
2. Standards and Certification Body: Teacher Standards and Practices Commission (TSPC).
3. Standards Used for the Approval of Teacher Education Programs: Standards are set by the TSPC; accreditation by the Northwest Association is required.
4. Admission to Teacher Education: Admission is made at the end of the sophomore year. All IHEs voluntarily use the California Achievement Test (students are required to score at the 60th percentile in reading and language; 50th percentile in math) for admission and establish a minimum GPA requirement. Remediation and retesting are permitted.
5. Curriculum Requirements: The Basic Teaching Certificate requires 36 qhs. of teacher education and must include teaching strategies, methods, media, curriculum, educational foundations and law, behavioral foundations, supervised teaching or internship, and consumer education. Elementary education, subject matter, and special education are all endorsements to the Basic Certificate and require the same core of 36 qrs. of professional education.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Basic Certificate is valid for 3 years. Renewal for high school and special education teachers requires a fifth year of study. For other teachers, 9 credits or one year of successful teaching is required for renewal. Inservice can also be required at local discretion. The Standard Certificate is valid for 5 years and requires 45 credits including professional education and subject matter courses, 2 years of successful experience on the Basic Certificate, and an evaluation by LEA personnel. High school and special education teachers must attain the Standard Certificate. See Other.
8. Staff Development: Inservice is planned and conducted locally. The SEA does not require inservice but can provide technical assistance.
9. Other: There are teacher shortages in math, physics, chemistry, special education, and psychology. Some LEAs have had merit pay plans for as long as 15 years, and some offer sabbaticals, career ladders or other benefits, often as part of collective bargaining agreements.  
In December 1983, the TSPC took formal action to require basic skills testing for initial certification in teaching, personnel, and administration areas. Beginning January 1, 1985, tests of basic skills in writing, reading, and math will be required for certification. The TSPC is currently selecting tests, establishing administrative procedures, and deciding how to set cut-off scores. Tests will be selected by July 1984 and cut-off scores will be established by October 1984.
10. Contact: David V. Myton  
Teacher Standards and Practices Commission  
730 12th St., SE  
Salem, Oregon 97310  
503-318-6813

1. State: Pennsylvania\*
2. Standards and Certification Body: The Professional Standards and Practices Commission is a review and advisory group to the SBE. The SEA develops policies to implement the regulations and procedures for program approval.
3. Standards Used for the Approval of Teacher Education Programs: SBE.
4. Admission to Teacher Education: Criteria are set by each IHE and must be published. Admission standards are included in the items reviewed during program approval visits.
5. Curriculum Requirements: Completion of an approved program for an area of endorsement and a Bachelor's degree.
6. Evaluation to Complete Teacher Education: IHEs evaluate the competencies of their students at the end of the teacher education program according to role competencies that reflect state standards.
7. Certification Process: The Initial Certificate is valid for 6 years and is not renewable. The Permanent Certificate requires 24 credits and 3 years of experience, or inservice in lieu of the credits. See Other.
8. Staff Development: Staff development is a required element in the mandated long-range plan for LEAs.
9. Other: There is a critical shortage of physics teachers, and shortages in chemistry, industrial arts, and some areas of special education. Many emergency certificates are issued for English and social studies teachers. \$2 million was recently approved for loans/scholarships for math and science teacher training.  
The SEA wants minimum GPA and SAT score standards for admission and GPA and competency testing for certification. As part of an "Agenda for Excellence" the governor recently called for an "excellence in teaching" award program, fewer pedagogical courses in the teacher education curriculum, a test of basic skills and subject matter competency for aspiring teachers, and a one-year apprenticeship for beginning teachers prior to any certification.  
In May 1984 the SBE announced that beginning in 1987, new teachers will be required to pass competency tests prior to certification.
10. Contact: Dr. Peggy L. Stank, Chief  
Division of Teacher Education  
Pennsylvania Department of Education  
333 Market Street  
Harrisburg, Pennsylvania 17108  
717-787-3470

1. State; Rhode Island
2. Standards and Certification Body: SEA; Rhode Island Certification Advisory Committee.
3. Standards Used for the Approval of Teacher Education Programs: The SEA uses NASDTEC standards to approve programs and resources of IHEs who ask for approval. Program approval is not required, however.
4. Admission to Teacher Education: IHEs set their own standards.
5. Curriculum Requirements: Elementary--30 hrs. of education courses including 6-12 hrs. of student teaching. Secondary--Education course requirements as for elementary. Academic requirements vary by subject area.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: The Provisional Certificate is valid for 4 to 6 years, depending on the area, and is not renewable. The Professional Certificate is valid for life and requires a master's degree or 36 credits and 3 years of experience.
8. Staff Development: During the 1970s the SEA played a major role in inservice programs. While the emphasis on quality has continued, the SEA role is now limited to special education. SEA staff are, however, available to LEAs for technical assistance.
9. Other: The SEA is reviewing a certification testing policy and there has been some legislation introduced. The SEA would like to require a minimum GPA and standardized testing for admission to teacher education but can't do so without a mandated approval process. The SEA would also like to see a standardized test used as an exit requirement.

The Rhode Island Certification Advisory Committee has been active in reviewing and improving teacher certification procedures and has changed course requirements and certification levels and types.

1. State: South Carolina\*

2. Standards and Certification Body: The SBE promulgates regulations which are implemented by the SEA.

3. Standards Used for the Approval of Teacher Education Programs: NASDTEC.

4. Admission to Teacher Education: The South Carolina Education Entrance Exam (EEE) is a reading, writing, and math basic skills test that students must pass to be fully admitted to a teacher education program. Three opportunities are provided to pass the exam and students repeat only the sections they fail. Reporting forms contain diagnostic information and IHEs must assist the student in improving his performance.

5. Curriculum Requirements: Elementary--45 hrs. of general education including English (12); fine arts (4-6); and health and physical education (2-3). 18 hrs. are required in the field of specialization. 21 hrs. of professional education are required including 12 hrs. in child growth and development, principles and philosophy of education, elementary school materials, curriculum, teaching of arithmetic or general methods; 3 hrs. of teaching reading; and 6 hrs. of directed student teaching. Required liberal arts courses include English, art, music, and health (3 hrs. each), and 6 hrs. of math.

Secondary--General education requirements are as described above. 12-60 hrs. in the area of specialization are required. Professional education requirements of 18 hrs. include adolescent growth and development, principles and philosophies of education, principles of learning, materials and methods, and 6 hrs. of student teaching.

In addition, an individual who completes an approved teacher education program in South Carolina or any other state and successfully completes the appropriate subject area certification exam may be certified.

6. Evaluation to Complete Teacher Education: Student teaching is evaluated using the Assessments of Performance in Teaching Instrument which was designed to measure the minimal competence of student teachers and beginning teachers.

7. Certification Process: Since 1945 the NTE has been used to certify teachers. The South Carolina Teaching Area Examinations are used to measure areas in which NTE subject area tests are not available. Students completing an approved program and satisfying all certification requirements are given a one-year provisional contract. During that first year the teacher is evaluated three times using the Assessments of Performance in Teaching Instrument. If needed, programs are then developed to help the new teacher remedy deficiencies. The provisional contract can be renewed one more year. The Standard Certificate is valid for 5 years and can be renewed with 6 credits or inservice in lieu of 3 credits. The Professional Certificates, described below are also valid for 5 years.

Class II requires 18 credits. Class I requires a master's degree. Class I (Specialist) requires a master's degree plus 30 credits. Class I (Advanced) requires a Ph.D.

8. Staff Development: State aid of \$10 per teacher, per year is provided for inservice, which is planned and implemented locally. SEA staff provide technical assistance; recently this has occurred in the basic skills area. Inservice credit can be used toward continuing certificate renewal.

9. Other: There are teacher shortages in math, science, library science, special education, English, and elementary education. In 1983 the legislature provided \$1 million for teacher retraining and certification; priority areas are math, science, and computer science. Several activities are being encouraged to ease expected teacher shortages. A state task force, composed of key individuals from business and industry, is exploring merit pay alternatives.

10. Contact: Elmer L. Knight  
South Carolina Department of Education  
1429 Senate St.  
Columbia, South Carolina 29201  
803-758-8527

1. State: South Dakota\*
2. Standards and Certification Body: SBE.
3. Standards Used for the Approval of Teacher Education Programs: NASLTEC, state guidelines.
4. Admission to Teacher Education: Varies by IHE; a state task force is currently studying admission standards.
5. Curriculum Requirements: Elementary--approved programs must include 26 hrs. of education courses including student teaching (6), methods and content courses, educational psychology, and electives. 29 hrs. of subject area concentration are required.  
Secondary--the following education courses are required: student teaching (6); methods (3); educational psychology (2); teaching reading (3); electives (6); and Indian studies.
6. Evaluation to Complete Teacher Education: A minimum GPA is required.
7. Certification Process: The Basic Certificate is valid for 5 years and can be renewed with 6 credits or inservice in lieu of 3 credits. The Advanced Professional Certificate requires a master's degree or 30 credits plus 5 years of experience. Effective July 1983, this certificate is no longer issued.
8. Staff Development: The SEA's Local Field Site Program offers approximately 12 regional inservice workshops. SBE regulations, effective in 1985 and 1986 require certified teachers to have at least 15 hours of inservice per year. LEAs will file plans tied to school accreditation. Non-compliance could result in the loss of state aid.
9. Other: There are teacher shortages in physics and industrial arts. The shortage of math teachers is moderate (only 18 units are needed for math certification). The SEA favors the development of increased standards for student selection. An SBE task force has been established to review and make recommendations on this topic.
10. Contact: Richard Parker  
Division of Elementary and Secondary Education  
Kneip Building  
Pierre, South Dakota 57501  
605-773-4774

1. State: Tennessee\*
2. Standards and Certification Body: The SBE has the legal responsibility for promulgating standards for program approval and regulations for teacher certification. The Advisory Committee for Teacher Education and Certification serves in an advisory capacity.
3. Standards Used for the Approval of Teacher Education Programs: SBE standards are required. NCATE, NASDTEC, and Learned Society recommendations and standards are used only in an advisory way.
4. Admission to Teacher Education: Candidates must present a passing score on the California Achievement Test given at the point of entrance into teacher education or satisfactory scores on either the SAT or ACT taken prior to college entrance. Cut-offs for the CAT are: Mathematics-30; Reading Comprehension-30; and combined scores on Language Mechanisms and Language Expression-47. Cut-off scores are 765 for the SAT or 17 for ACT. The CAT can be retaken three times. If still unsuccessful, the student can start the series again after a three year period.
5. Curriculum Requirements: General core requirements of 60 quarter hrs. are recommended to be distributed as follows: communications (9); health, physical education and personal development (9); humanities (15); science (12); social sciences (12); and math (3). Professional education requirements of 36 qhs. include psychology, philosophy, history, and social foundations of education, human growth and learning, measurement, evaluation, guidance, curriculum, education for exceptional children, school organization and management, audio-visual aids, and student teaching (6). Requirements for endorsements for elementary and secondary subjects vary. New changes for initial endorsement for elementary grades 1-8 become effective September 1, 1984.
6. Evaluation to Complete Teacher Education: A basic skills test must be passed during the senior year. It may be taken only once. Students must also attain a minimum GPA of 2.0.
7. Certification Process: Applicants must present scores on the NTE Core Battery, however, cutoff scores have not yet been determined. The Professional Certificate is valid for 10 years and can be renewed with 8 quarter hrs. of appropriate credits and 5 years of teaching experience. Certificate based on master's degree or above may be renewed with 5 years of teaching experience during the 10 year life of the certificate. Local evaluation is also required by the SBE to renew the certificate.
8. Staff Development: Five days of inservice training are required. An additional five days are optional.
9. Other: The testing policies described above were mandated by the SBE in November 1979. The NTE requirement was effective January 15, 1981. There is a shortage of math teachers. Spot shortages, especially in rural areas, exist in special education, speech pathology, and industrial arts. Severe shortages in many fields are predicted for the next five years.  
New legislation, designed to produce better schools by improving the abilities and resources of classroom teachers, gives Tennessee the first comprehensive career incentive pay system for teachers. The \$50 million system will give the state's best and most experienced teachers an opportunity to earn up to \$10,000 more a year. Key features of the plan include: a five-step career ladder with pay supplements in the upper steps ranging from \$1,000 to \$7,000; advancement up the career ladder tied to



more rigorous evaluation of teachers; introduction of a probationary year for new teachers prior to certification; tougher standards for teacher training; and a program to provide teachers' aides in the lower grades. The reform act extends the school year by five days, creates a tuition loan program for students planning careers in math and science education, and addresses education governance, computer skills, education of the gifted, and textbooks. A one cent increase in the state's sales tax will be used to pay for these initiatives. The General Assembly also approved a ten percent across-the-board pay increase for all teachers.

10. Contact: Roy M. Roberts  
Tennessee State Department of Education  
125 Cordell Hull Building  
Nashville, Tennessee 37219  
615-741-1644

1. State: Texas\*
2. Standards and Certification Body: The SBE approves the standards and requirements for program approval upon recommendation by the Commissioner of Education and the Commission on Standards for the Teaching Profession. The Commission on Standards serves as the approving body for IHE programs, utilizing the standards and requirements approved by the SBE. The SEA provides the staff review, consultation, and monitoring support for all approved programs and institutions.
3. Standards Used for the Approval of Teacher Education Programs: SBE.
4. Admission to Teacher Education: Admission is made at the end of the sophomore year; criteria vary by IHE. IHEs must provide entrance counseling. Effective May 1984, all students applying for entrance to a teacher training program must pass the Pre-Professional Skills Test measuring basic skills in reading, writing, and math. The test may be taken three times.
5. Curriculum Requirements: A program which includes studies of the Federal and Texas constitutions, American history, English studies, professional education courses of 30 hrs. for elementary and 18 hrs. for secondary (a minimum of 6 hrs. of student teaching), and an academic concentration of 36 to 48 hrs. is required.
6. Evaluation to Complete Teacher Education: Varies by IHE.
7. Certification Process: Currently, there are two certificates issued--the Provisional (baccalaureate level) and the Professional (graduate degree level). Both certificates are permanent. See Other for new classifications effective May 1986 and for a new certification testing requirement.
8. Staff Development: The state mandates eight days of inservice for all teachers. Each school must submit a plan showing a minimum of five days of inservice education and not more than three preparation (work) days. One of the eight days must be devoted to special education.
9. Other: There are teacher shortages in bilingual education, several science fields, and vocational education. Many emergency certificates are offered for math and science. Starting in 1986, a candidate must pass a certification exam at graduation prior to certification. The selection or development of the exam is still pending. New certificate classifications effective May 1, 1986 are a three-year provisional certificate which is renewable one time; a seven-year standard certificate which is renewable indefinitely with three years of successful teaching experience (recommended by LEA) and 12 semester hrs. of upper-division or graduate coursework; and a professional certificate, valid for life, which is earned with a master's or doctorate degree. The new testing requirements for admission and certification were enacted into law in 1981.

Local Cooperative Teacher Education Centers are a joint effort of IHEs, LEAs, and professional organizations. Their functions include studying teacher education program needs and enhancing the experiences of student teachers.
10. Contact: Marvin Veselka, Associate Commissioner  
Texas Education Agency  
201 E. 11th St.  
Austin, Texas 78701  
512-834-4041

1. State: Utah\*

2. Standards and Certification Body: The SBE approves certification standards and teacher education programs; the State Board of Regents (higher education) approves degree programs. The legislature provides the legal framework for enactment of certification regulations, which are interpreted and enforced by the SEA. The SEA also conducts program approval visits, monitoring, and technical assistance in program development.

3. Standards Used for the Approval of Teacher Education Programs: NCATE, NASDTEC, SBE.

4. Admission to Teacher Education: While IHEs set their own requirements, a qualifying GPA and passage of a basic skills test are standard requirements of IHEs.

5. Curriculum Requirements: Elementary (1-6)--At least 30 percent of the total credits required for graduation must be in an approved subject matter field. The professional education preparation must not be less than 20 percent of the total credit requirements and must include supervised field experiences.

Middle Education (5-9)--Completion of an approved program of professional education. 36 hrs. of subject matter concentration with 24 hrs. in the primary area and 12 hrs. in the supporting area; or 18 hrs. in each of two primary areas; or 12 hrs. in each of three supporting areas.

Secondary (7-12)--Teaching major and minor, or composite major, must be at least 34 percent of total credits. 30 hrs. are required in the teaching major (at least half in an approved subject). A teaching minor requires 16 hrs.; a composite major requires 46 hrs. Professional education requirements cannot constitute less than 17 percent of total credits and must include student teaching, psychology, and teaching of reading in content areas.

6. Evaluation to Complete Teacher Education: Varies by IHE. A testing policy is being considered.

7. Certification Process: The Basic Professional Certificate is valid for 5 years and can be renewed with 6 credits or 3 years experience. The Professional Certificate is valid for 5 years and requires a master's degree or 36 credits plus 3 years experience or inservice in lieu of the experience.

8. Staff Development: The SEA, IHEs, and LEAs offer inservice. Stipends are provided by the state to teachers for attendance at selected workshops, which can be used for credit.

9. Other: There are teacher shortages in math, vocational education, some areas of science, and special education. The state has the fastest growing enrollment in the U.S. For over 30 years selected individuals have been given scholarships to train as teachers. The current focus is on math, science, and special education. There is a program, partly funded by a foundation, to retrain math and science teachers.

The governor's plan, "Solving the School Crisis Phase II" includes recommendations for new career patterns for teachers which would provide more flexibility and higher salaries. The SEA has proposed a teaching career plan with three levels and three salary schedules: apprentice teacher (2-3 years), professional teacher, and teacher leader.

The state legislature provided minimal funding for implementation of a "career ladder" system in the schools. Specifics of the program have not been mandated. The scholarship program has also been strengthened, still emphasizing areas of critical teacher shortage.

10. Contact: Vere A. McHenry  
Utah State Office of Education  
250 E. 500 So.  
Salt Lake City, Utah 84111  
801-533-5965

1. State: Vermont\*

2. Standards and Certification Body: Certification Review Board (established by the SBE).

3. Standards Used for the Approval of Teacher Education Programs: The SBE uses NASDTEC and state standards.

4. Admission to Teacher Education: Admission is made at the end of the sophomore year based on GPA and test results as set by IHEs. IHEs also provide career counseling.

5. Curriculum Requirements: Elementary--adequate background in English composition and language, literature, speech, arts and crafts, health and physical education, math, music, sciences, and social studies. Courses in the methods of and materials for teaching the above subjects are also required.

Secondary--SBE emphasizes a strong academic background and a reliance is increasingly placed on approved programs.

6. Evaluation to Complete Teacher Education: Varies by IHE; new standards were adopted September 1, 1982.

7. Certification Process: The First Regular Certificate is effective until 3 years of experience have been gained. After the 3 years and an evaluation, the Continuing Certificate is awarded and is valid for 7 years. To renew the Continuing Certificate, teachers need 9 credits of "activity" every 7 years. If prior approval is granted inservice can count toward certificate renewal.

8. Staff Development: While the SEA does not formally approve LEA inservice, the SBE recently approved an Inservice Institute which will help LEAs design programs designed to meet their own needs and goals. The SEA has 12 to 15 consultants who provide technical assistance and the SEA offers one-week inservice workshops around the state.

9. Other: The SBE has approved a wide-ranging set of proposals to improve teacher training. The proposals include measures to evaluate teacher education programs and to establish teacher training institutes for college graduates who have had no formal training for teaching.

There is a shortage of teachers in math, some areas of science, and special education. When graduation requirements are increased greater shortages may occur. The SEA and the state college system are planning new methods and standards for the approval of state college education programs.

The legislature has approved partially forgivable loans for math, science, and computer science teacher training. Teacher certification testing legislation failed to get out of committee in 1979.

10. Contact: Donn McCafferty, Chief  
Educational Resources  
Vermont State Department of Education  
State Office Building  
Montpelier, Vermont 05602  
802-828-3124

1. State: Virginia\*

2. Standards and Certification Body: The SBE sets requirements for teacher certification. The Teacher Education Advisory Committee is appointed by the SBE and advises the SBE on teacher education and certification policies.

3. Standards Used for the Approval of Teacher Education Programs: SBE; the Council of Higher Education; the Southern Association of Schools and Colleges; NCATE; and NASDTEC.

4. Admission to Teacher Education: IHEs determine and publish admission standards. The SBE has required that admissions requirements for teacher education must equal or exceed those for other programs. Some programs have strengthened requirements in the subject areas. Beginning and incoming teachers are required to take the NTE, although no proficiency levels have been set.

5. Curriculum Requirements: All levels require 48 hrs. of general studies to include 12 hrs. in each of the following areas: humanities; social sciences, natural sciences and math, and 6 hrs. each in school health and physical education. Professional requirements include 12 hrs. with 3 hrs. distributed among the areas of human growth and development, curriculum and instructional procedures, and foundations of education. 6 hrs. of student teaching are required plus 200 clock hrs. in direct laboratory experience.

Early Education (NK-4)--60 hrs. of specialized requirements to include reading, language arts, social science, math, science, art and music, physical education and health, and electives.

Middle Education (4-8)--60 hrs. of specialized courses to include 6 hrs. each in the specialized areas described in Early Education. A concentration of 15 hrs. in two areas must be selected from language arts, social science, math, or science.

Secondary (9-12)--Endorsements for a specific subject field may be inclusive of any requirements specified in that field under the general studies courses stipulated above for all teachers. Endorsements for specialized areas vary by subject.

6. Evaluation to Complete Teacher Education: All IHEs require the achievement of a minimally acceptable GPA determined by each institution.

7. Certification Process: Beginning July 1980, applicants for certification must submit NTE Common and Area Exam scores to the SEA. A validity study will be used by the SBE to determine cut-off scores for certification by July 1984.

The Collegiate Professional Certificate is valid for 5 years and requires 6 credits or inservice in lieu of 3 credits for renewal. The post-graduate Professional Certificate is valid for 5 years and requires a master's degree or Ph.D. and 3 years experience.

8. Staff Development: Staff development is required and courses completed may be used for certificate renewal. As part of the Standards of Quality Program, the SEA provides technical assistance to school divisions as they implement their programs of professional development.

9. Other: There is a shortage of teachers in math, special education, and some areas of science. Increased graduation requirements will probably exacerbate these shortages. The SEA has proposed a forgivable loan program in their 1984-86 biennial budget to attract teachers. Four IHEs receive funding to retrain teachers in math.

Beginning July 1, 1984, the state will issue 2-year non-renewable provisional certificates to beginning teachers. During that period an evaluation team will assess the teachers' performance on 7 major competencies. Three models for the program are currently being field tested.

SBE regulations permit liberal arts graduates with no teacher training to receive a provisional certificate to teach secondary school academic areas. They must take 9 credits and be observed in the classroom during their provisional period.

Three LEAs have differentiated pay schedules in place. A legislative resolution has requested the SBE to determine the feasibility of pay for performance and master teacher plans. The governor has announced that future budgets will include \$500,000 for pilot projects to test several performance-based and master teacher plans.

10. Contact: Dr. James M. Patton, Director  
Teacher Education and Certification  
Virginia Department of Education  
P.O. Box 6Q  
Richmond, Virginia 23216  
804-225-2097

1. State: Washington\*
2. Standards and Certification Body: By law, the SBE establishes teacher education program approval and certification standards. The SEA assists the SBE in developing standards and administering certificates (the SEA is legally assigned to issue certificates).
3. Standards Used for the Approval of Teacher Education Programs: The SBE set standards for program approval. Those standards require that IHEs use NCATE and NASDTEC standards as guides.
4. Admission to Teacher Education: Selection and retention standards required for program approval include eight criteria which IHEs must address. They include basic skills competency and counseling students about teacher supply and demand. "Provisional" admission standards are also used.
5. Curriculum Requirements: Completion of a state-approved teacher education program. NASDTEC standards are used as guidelines for subject matter/specialization endorsements. Because of increased curriculum requirements, many students require more than four years to complete the program.
6. Evaluation to Complete Teacher Education: IHEs must validate students' mastery of skills.
7. Certification Process: First year teachers are classified as "provisional" employees; the local board of directors are authorized to determine contract renewal. Decisions not to renew contracts are final and not subject to appeal. The Initial Certificate is valid for 4 years. Additional credits are required for certificate renewal and teachers must formally enroll in a planned continuing level program. The Continuing Certificate is valid for as long as one teaches plus seven years and requires 45 quarter hours of additional credit in graduate level study and 3 years experience.
8. Staff Development: The state is organized into nine Educational Service Districts (ESD) whose major function is inservice, and each establishes a committee to coordinate activities within the ESD. Funding for this model program development is from a portion of certification fees and regular inservice funding. In the SEA, a Staff Development Council coordinates staff development, holds a statewide conference, publishes materials, maintains a clearinghouse of staff development information, trains leaders for staff development, and provides technical assistance. The legislature recently appropriated \$250,000 for inservice in math, science, and computer technology to be distributed to LEAs on a grant basis, and has established regional computer demonstration centers which are responsible for providing training, technical assistance, and hardware and software evaluation.
9. Other: Critical teacher shortages exist in math, science, and industrial arts. There are also shortages in foreign languages and health education. The legislature recently enacted a forgivable loan program for students training in secondary math and science education. People holding degrees in math or science may qualify for these incentive loans if they return to college to complete certification courses.  
The Temporary Committee on Educational Policies, Structure, and Management has recommended that all new teachers pass a competency test, be on probation for 3 years,



and teach only subjects they are certified to teach. It also favors a career ladder approach leading to master teacher status, with salary increases at each step.

10. Contact: Dr. Edwin L. Lyle  
Associate for Teacher Education  
Washington Department of Public Instruction  
Old Capitol Building  
Olympia, Washington 98504  
206-753-3222

1. State: West Virginia
2. Standards and Certification Body: SBE.
3. Standards Used for the Approval of Teacher Education Programs: SBE.
4. Admission to Teacher Education: Qualifying GPA is set by the IHE. IHEs must also counsel students.
5. Curriculum Requirements: Elementary—40 hrs. of general studies including humanities, science and math, social studies, and physical education. 20 hrs. of professional education courses are required. 53 hrs. of specialization are required including art (4); health, physical education and safety (6); language arts (9); math (6); music (4); science (12); and social studies (12). Optional specialization requirements vary by subject.  
Secondary—General studies and professional education requirements as for above. Requirements for specialization vary by subject.
6. Evaluation to Complete Teacher Education: Varies by IHE. See Other.
7. Certification Process: The Initial Certificate is valid for 3 years and can be renewed with 6 credits and an evaluation. The 5-Year Permanent Certificate requires a Master's degree, 5 years experience, and an evaluation. The Permanent Certificate requires 18 years experience (during this time the 5-Year Permanent Certificate has been renewed three times). See Other.
8. Staff Development: Staff development is part of the state needs assessment process and is one of 12 areas of SEA focus. The SBE designates three instructional days per year for continuing education; topics are based on LEA needs. The SEA monitors the program.
9. Other: Beginning in 1985, students in approved teacher preparation programs will be required to pass a basic skills proficiency test, a content area test, and a professional education performance assessment.  
There is a shortage of teachers in special education, math, science, and speech pathology. One contributing problem is teacher salaries, which have been frozen for two years. The SBE is designing a model of on-the-job-training in shortage areas for people with degrees who are not trained as teachers or who are teaching in other fields. This program tries to tie emergency certification with intensive training. The SBE is also investigating merit pay alternatives.

1. State: Wisconsin\*

2. Standards and Certification Body: Advisory Council for Teacher Education and Certification; SEA.

3. Standards Used for the Approval of Teacher Education Programs: NASDTEC, specialty organizations, State guidelines. The SEA is beginning the rule-making process to establish state review and approval of standards for entrance to and graduation from teacher preparation programs.

4. Admission to Teacher Education: The SEA prefers that IHEs set GPA requirements. Students may take courses to raise their GPA and may be admitted on probation. Competency test requirements will be instituted in the future.

5. Curriculum Requirements: Elementary--A minimum of 26 credits in a professional education sequence to include methods, psychology of learning, 5 semester credits of student teaching, teaching of reading, human relations, and 3 semester credits related to exceptional children. Teachers licensed to teach through grade 8 may teach grade 9 in subjects where an approved minor has been completed.

Secondary--A 34 credit teaching major or a 22 credit teaching minor (if the applicant has a teaching major as well) is required. 18 credits of professional education courses are required (see above). Statutory requirements include courses in conservation, consumers' cooperatives and marketing, depending on teaching field.

6. Evaluation to Complete Teacher Education: Varies by IHE.

7. Certification Process: The regular license is valid for 5 years and can be renewed with 6 credits or inservice in lieu of the credits. This policy was effective July 1983 and replaced a permanent license which was issued upon evidence of 3 years of successful teaching in Wisconsin while holding a regular Wisconsin license.

8. Staff Development: State law requires inservice for all teachers. If credit is to be applied toward certificate renewal, the inservice must be approved by the SEA.

9. Other: There is a teacher shortage in industrial arts, English, agriculture, and some areas of special education. Some provisional licenses have been issued in math and science.

The Task Force on Teaching and Teacher Education, appointed by the State Superintendent of Public Instruction, released its report on January 31, 1984. The study recommends stricter requirements for entrance into teacher education, more field experiences, stronger liberal arts requirements, testing of teacher candidates, and probationary licenses. The study also recommends career ladders, merit pay, and higher salaries.

The SEA is proposing to the legislature a scholarship fund for those majoring in math or science education, grants for math and science teachers to get advanced training, grants to retrain teachers from other fields i. math or science, and a master teacher program.

10. Contact: Lond Rodman  
Wisconsin Department of Education  
125 S. Webster St.  
P.O. Box 7841  
Madison, Wisconsin 53707  
608-266-1879

1. State: Wyoming\*

2. Standards and Certification Body: The SEA provides technical assistance to the SBE and the Professional Standards Board which conducts research on teacher education and develops standards. The Deputy State Superintendent and the Director of Certification and Accreditation Services are voting members of the Professional Standards Board.

3. Standards Used for the Approval of Teacher Education Programs: NCATE, North Central Association, and other regional accrediting associations.

4. Admission to Teacher Education: Admission is made at the end of the freshman year based on results of the California Achievement Test and an interview. The University of Wyoming, the only teacher training institute in the state, has new standards.

5. Curriculum Requirements: All levels require 40 hrs. of general education including at least six of the following areas: English, fine arts, foreign language, health and physical education, humanities, math, practical arts, psychology, science, and social studies. 24 hrs. of professional education include each of the following: human growth and development, research, evaluation, methods, materials and media, foundations of education, school organization, exceptional children, teaching of reading, and human relations.

Elementary--24 hrs. of professional education covering each teaching area.

Intermediate (5-8)--Endorsement required by completing a middle school program, or an elementary program which includes middle school education courses, or completion of a secondary school program which includes middle school education courses.

Secondary--Professional education requirements focus on secondary grades. One or more teaching endorsements are required.

6. Evaluation to Complete Teacher Education: IHEs make a recommendation that the applicant has successfully completed an approved program of study.

7. Certification Process: The Initial Certificate is valid for 5 years and can be renewed with 5 credits or inservice in lieu of the credits. The Professional Certificate is valid for 10 years and requires a master's degree and 5 years experience. Renewal of the Professional Certificate is based on 10 hours of IHE coursework, SEA-approved inservice, or professional growth credit.

8. Staff Development: LEAs file inservice plans, based on local needs, with the SEA. Inservice used toward certificate renewal must be approved by the SEA. The SEA also provides technical assistance. A 1979 regulation requires all new and veteran teachers to acquire 2 credit hours in each of three fields--special education, reading, and human relations.

9. Other: There is a projected shortage of physics teachers. The legislature recently approved a measure to provide support to teachers for attendance at summer institutes to acquire additional skills in science, math, technology, or foreign language. Scholarship are being awarded to secondary school teachers to prepare them to teach science, math, foreign languages, computer science, and telecommunications.

10. Contact: Dennis Donohue  
Certification and Accreditation Services Unit  
Wyoming State Department of Education  
Hathaway Building  
Cheyenne, Wyoming 82002  
307-777-6261

CHAPTER 3

CASE STUDIES

Once information on the policies in all states was obtained, sites for four in-depth case studies were selected. The case studies were desired to obtain detailed, comparative information on the structure, operation and impact of state policies that other methodologies, such as surveys, cannot obtain. This chapter summarizes the methodology used to conduct the case studies and presents the findings from the four states-- California, Colorado, Georgia and Oklahoma.

Case Study Methodology

Site Selection

The primary criteria for selecting sites were the point(s) where the state's policies impact on the entry of individuals into the teaching profession; and the number and type(s) of filters in the teacher supply pipeline. These criteria were derived after a classification of the state profiles showed variation in (1) the number of filters in the teacher education and teacher certification process, and (2) the extent to which state policies reflect a centralization of authority in the hands of the state or a decentralization of authority to the institutions of higher education (IHE's) and/or to local school districts.

Figure 2 shows five models of state policies. The letters indicate whether the responsibility for setting policies and/or establishing standards at each point in the pipeline rests with the state(s) or with institutions of higher education (I).

Figure 2

Classification of Pipelines

State Control	Model	Entrance into Teacher Ed	Teacher Ed Curriculum	Completion of Teacher Ed	Entry-level Certification	Advanced Certification
Low ↓ High	1	I	S/I	I	S/I	S
	2	I	S/I	I	S	S
	3	I	S/I	S	S	S
	4	S/I	S/I	S	S	S
	5	S	S/I	S	S	S

S = State policy/state standard applied  
 S/I = State policy/IHE discretion applied  
 I = IHE sets policy and standard

Model 5 (High State Control) exemplifies a situation where the state sets criteria and specifies minimum proficiency levels for students admitted into teacher education programs, for students completing these programs and for individuals obtaining both levels of certification. At the other end of the continuum, Model 1 (Low State Control), the state sets minimum policies (e.g., parameters for an approved program of teacher education) and gives IHEs control over the selection and preparation of teaching candidates. Models 2, 3 and 4 present situations where the state intervenes in more points along the pipeline and give IHEs increasingly less discretion in the setting of standards.

A secondary consideration in selecting case study sites was date(s) of policy implementation since we wanted to be able to study the effects of each type of filter. This criterion greatly limited the number of states available for study. Several states had recently legislated changes in teacher education and certification policies but would not begin to implement them until 1984 or 1985. In addition, we hoped to include states from different regions of the country. This also proved difficult since southern states seem to be taking the lead in strengthening state control over teacher education. Finally, we wanted to avoid focusing exclusively on testing as a filtering mechanism.

Within these constraints, we identified twelve states to be considered as case study sites. These were entered into a site selection matrix (See Figure 3). The four states finally chosen for case studies were California, Colorado, Georgia, and Oklahoma.

Figure 3

Site Selection Matrix Showing Characteristics of Case Study States

Point(s) of Intervention

Number and Type(s) of Filters	Teacher Education		Teacher Certification	
	Entrance	Completion	Initial	Advanced
One	Test	CO	CA	
	Other			
Two or More	Tests			
	Test plus other		GA, OK	GA, OK

### The Case Study Process

After the states were selected, letters were sent to the chief state school officers describing the project and asking permission to interview state education department personnel. All four states contacted agreed to participate. One hour interviews were conducted with 15 to 20 respondents in each state. Respondents included staff of state agencies responsible for setting and administering state policies on teacher education and certification, representatives of teachers organizations and other statewide education interest groups, key legislative leaders, members of state boards of education, and representatives of institutions of higher education with teacher preparation programs. In addition, project staff collected documents describing the operation of state programs and, where available, data on the impact of testing and other policies.

In order to ensure comparability across the four states, interview questions were developed around four topics: (1) the structure and operation of state policies, (2) the history of state policies and current political environment, (3) the rationale and impact of state policies, and (4) education issues facing teachers in each state. More specifically, respondents were asked:

- . What are the state policies that regulate teacher preparation, certification and licensing in your state?
- . Who is responsible for developing and implementing these policies?
- . What relationship, if any, exists among these policies?
- . What were the origins of the state policies on teacher education and certification and who was involved in designing them?
- . What was the expected impact of these state policies and what have been the consequences of these policies on the flow of individuals into the teaching profession?
- . What kinds of new and/or revised state policies are currently being considered in your state?

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These topics were then used to organize the four public case studies which follow and to structure the cross-state analysis.



## CALIFORNIA

### Structure and Operation of State Policies

The state of California regulates three stages of the teacher preparation and licensing process: (1) the content of teacher education programs; (2) entry-level certification and (3) advanced certification. Three different types of policies are used: approved programs, basic skills testing and prescribed staff development.

#### Teacher Education Programs

To qualify for a preliminary certificate in California, a prospective teacher must receive a baccalaureate degree in a field other than professional education, complete an approved professional preparation program, and demonstrate proficiency in a subject matter area, in reading, and in the provisions and principles of the U.S. Constitution. These proficiencies can be demonstrated through completion of an approved subject matter program and other required courses or through passage of subject matter and other examinations.

Students generally complete an approved subject matter program, which also serves as their degree major. Course requirements differ for single subject and multiple subject credential programs. For a single subject credential, which enables a teacher to teach specific subjects in a departmentalized school (generally at the secondary level), the program must be in one of 16 "statutory" subjects, such as English, social science, mathematics, etc. To ensure that teachers are trained in those subjects "commonly taught" in the public schools, the state prescribes the content area of two-thirds of the courses taught in subject matter preparation programs other than languages and mathematics. For example, a single subject program in social science must include required courses in, or directly related to, U.S. history, history of California, U.S. government, world history and world geography. The remaining one-third of the program must be designed to give "breadth and perspective" to this core.

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For a multiple subject credential, which allows the holder to teach in a self-contained classroom, usually at the elementary school level, the student takes a broader curriculum. The multiple subject matter program consists of a minimum of 84 units distributed over four areas: English (including grammar, literature, composition, and speech); mathematics and the physical or life sciences; social sciences (other than education or educational methodology); and humanities and the fine arts (including foreign languages).

California limits both the quantity of prerequisites to student teaching and the overall length of the professional preparation program. Under legislation passed in 1970 (the Ryan Act), no more than 9 units (12 units including reading) may be required as a prerequisite to student teaching and the total professional preparation program may not exceed one-fifth of a five-year program, at least one-half of which must be in student teaching. Student teaching must be a full-time, one semester (not less than 12 units) experience and provide for a cross-cultured classroom experience.

To qualify for permanent certification, teachers must complete a fifth year of study at an approved institution of higher education (IHE). The law does not specify how the fifth year is to be used. Typically those individuals who hold a preliminary credential will earn a master's degree and/or specialist or services credential. However, many individuals who took few professional preparation courses as undergraduates will use the fifth year to complete their education coursework, including student teaching. Although the intent of the Ryan Act was that students would complete their professional preparation as part of their undergraduate program, data collected at the California State University (CSU) campuses show that nearly two-thirds of single and multiple subject credential candidates were admitted to teacher education programs as graduate students (Morey, 1983).<sup>1</sup>

### Basic Skills Testing

Since February 1983, applicants for teaching and service credentials have been required to pass a teacher proficiency test, the California Basic Educational Skills Test (CBEST). The exceptions to this rule are individuals seeking an adult education subject credential in other than an academic subject or a vocational education subject credential, those credentialed solely for the purpose of teaching adults in apprenticeship programs, and children's center staff who are not required to obtain a baccalaureate degree. CBEST is also required to receive or renew emergency teaching certificates.

CBEST is designed to measure college-level skills of reading comprehension, English composition and mathematical reasoning. In order to pass CBEST, an examinee must have a total score of 123, with a minimum score of 37 on each of the three sections. The test-taker may repeat the test as often as he or she wishes, and must retake only that section failed. The original legislation, AB 757, requires passage of the test for initial certification. The law was amended in 1983 to require that

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<sup>1</sup>It has been estimated that the 19 CSU campuses produce about 65 percent of new in-state teachers annually (Morey, 1983).

students take, but not necessarily pass, CBEST before admission to teacher education programs. This policy is intended to provide students with diagnostic information. Several respondents noted, however, that since CBEST was designed to be a screening mechanism, little useful diagnostic information can be gleaned from the results.<sup>2</sup> In addition, scores are not reported to the colleges and universities unless requested by the individual student. As a result, it is difficult for institutions to develop remedial programs focused on skills tested by CBEST.

The law does not require remediation for students who fail CBEST, and few institutions provide it. The California State University system provides state-funded remediation to all entering freshmen and lower division transfer students who do not score satisfactorily on an English Placement Test. Since Fall 1983, students have been required to pass an Entry Level Mathematics examination as well, but systematic remediation is not provided to those who do not meet the specified competencies.

### Staff Development

Preliminary certification is granted for five years. After completion of a fifth year of study, one unit of study in health education, and an approved course of study and practice in the education of exceptional students, a Clear Credential is issued. Life credentials are issued to teachers who have completed two years of service on a Clear Credential issued before September 1, 1985. Individuals earning a Clear Credential after this date must renew their certificates every five years. Renewal requirements include at least one-half year of service and the completion of 150 hours of professional growth activities. Acceptable activities include university courses, conferences, staff development programs, service as a mentor teacher, curriculum development projects, systematic programs of observation and analysis of teaching, and participation in educational research or innovation efforts.

### Teacher Trainee Program

Legislation passed in 1983 also created an alternative certification route, the Teacher Trainee Certificate. Individuals who possess a bachelor's degree and have passed CBEST and a subject matter test may teach their subject area major or minor in a high school or in a departmentalized junior high school. Teacher trainees must also complete a district designed, professional development plan under the guidance of a mentor teacher. School districts may hire teacher trainees only when they have a documented shortage of certificated staff. At the end of two years, the local school district may recommend that the trainee receive regular certification. Pending legislation would require that a Clear Credential be issued with no other credential requirements, including completion of a fifth year. Implementation of this program will begin in

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<sup>2</sup>In a report on the use of the CBEST, Richard Watkins concluded that tests such as CBEST can only make the most general predictions about outcomes and their results alone cannot be used for prescription (California Postsecondary Education Commission, 1984).

the 1984-85 school year. Some sources expressed concern that the implementation of this program might lead to increased variation in the certification standards since each school district can now set its own guidelines for recommending that a Clear Credential be awarded.

### Administrative and Policymaking Roles

#### The State Legislature

In California, the state legislature plays a major role in setting teacher education and credentialing standards. The Fisher Act of 1961 severely reduced the number of credential areas and required a non-education major for certification. The Ryan Act, passed nine years later, created the Commission on Teacher Credentialing and provided the option of subject matter exams, an approved professional program concept, and a requirement that all teachers have preparation in the teaching of reading. The CREST requirement was legislated in 1981 and California's major school reform bill of 1983 (SB 813) removed lifetime certification and established the teacher trainee program.

#### The Commission on Teacher Credentialing

The authority for certifying education personnel, developing certification and program standards, and approving teacher preparation programs at IHEs rests with the Commission on Teacher Credentialing (CTC). Formerly called the Commission on Teacher Preparation and Licensing, the CTC was created by the legislature in 1970 as an agency separate from the State Department of Education but responsible to the State Board of Education. The Commission is comprised of 17 voting members, which by law must include an elementary and a secondary school teacher, 2 local school board members, and 1 local school superintendent, and 4 ex-officio members representing the major higher education systems and the Superintendent of Public Instruction.

The Commission actively pursues its own legislative agenda. In 1982 it unsuccessfully sponsored legislation to give IHEs more flexibility in both subject matter and professional preparation programs, eliminate life credentials and establish a two-stage credentialing process. State Senator Gary Hart included elimination of lifetime credentials in SB813 the following year and the CTC reintroduced the other components of their bill in the 1983-84 session.

The Commission itself has been the target of proposed legislation. Legislation introduced in the Assembly in the 1984 session, the Bader bill, would have abolished the CTC and returned its functions to the State Department of Education. The rationale behind the proposal is that having separate agencies making policies for the classroom and for

teachers is neither efficient nor effective. The bill reflects discontent with the operation as well as the structure of the Commission, however. Many observers charge that the members of the Commission spend too much time writing regulations and guidelines and too little time addressing major policy issues, such as how to make teaching more attractive and more professional. Lack of staff, funding and computer capability limit CTC's research capacity and its ability to keep track of many of the 1.1 million holders of credentials in the state. The CTC is also viewed as too responsive to the concerns of teacher education institutions and not responsive enough to needs of the public or the teaching profession.

#### State Board of Education

The State Board of Education must approve any regulations adopted by the CTC except those relating to CBEST. Several respondents noted that in the past, State Board members practiced little oversight. Now, however, Board members have become more interested in the issue of teacher credentialing and are playing a more active role in reviewing CTC proposals.

#### Institutions of Higher Education

Institutions of higher education are given discretion in two areas: establishing criteria for admission into teacher education programs and developing criteria for evaluating students at the end of these programs. The CTC's approved program guidelines state that an IHE's requirements for admission to its teacher preparation program, including minimum grade point average, must be at least comparable to requirements for other areas of professional study at that college or university. A 2.5 minimum grade point average is the most frequent standard across the 19 CSU campuses; 4 campuses have a higher requirement for Single Subject Credential programs. Effective Fall 1985, students at all CSU campuses will have to be in the top half of their class to be admitted to the teacher education program. While a minimum grade point average is required for formal admission to a teacher preparation program, other criteria can be applied either at the time of admission or prior to student teaching. These include hours of experience with children, a personal interview, and, at a growing number of schools, passage of CBEST.

IHEs must also certify that their students have acquired the minimum academic and professional skills "required for entry into the credential area," including demonstrated competence in reading, writing and speaking English. Some schools require students to pass a subject matter competency test; others only require satisfactory completion of required courses.

### The Origin of Current Policies

Teacher credentialing has been a subject of study and legislation in California since 1954 when Superintendent of Public Instruction Roy E. Simpson asked the California Council on Teacher Education to examine the state's credentialing structure. Seven years and several study commissions later, the Fisher Act was signed into law. This legislation made six major changes to the system: (1) increased subject matter requirements at the expense of professional preparation; (2) limited teaching assignments to areas of academic preparation; (3) distinguished between academic and non-academic preparation; (4) required a non-education major for certification; (5) required a fifth year of preparation for elementary as well as high school teachers; and (6) required preparation in an academic field for administrators (Brott, 1984).

Controversy ensued over the complex regulations developed by the State Board of Education to implement the Fisher Act. In 1965, an Assembly Committee on School Personnel and Teacher Qualifications was created to investigate the implementation of the legislation. In March 1969, the committee's chairman, Leo Ryan, introduced legislation to remove the credentialing function from the State Department of Education. An amended version of Ryan's bill was signed into law in 1970.

The system of credentialing established by the Fisher and Ryan Acts was not designed to assure the quality of teachers, except through the approval of programs completed by teacher candidates. In the late 1970s, Gary Hart and other state legislators became increasingly disenchanted with the ability of the GTC and teacher education schools to produce quality teachers through the approved program approach. Hart had sponsored legislation in 1977 requiring statewide pupil proficiency testing. He then became concerned that teachers lacked sufficient knowledge to help students master basic skills competencies and in 1980 introduced a bill to require prospective teachers to pass a basic skills test before admission to a teacher education program. The IHEs, who wanted to keep control over the admissions process, fought to make testing a credentialing requirement. The teachers' organizations successfully opposed a proposal by the California School Boards Association that the testing requirement be extended to veteran teachers.

Little legislative opposition emerged to Hart's amended teacher testing bill, which created CBEST, and it was signed into law in 1981. Unlike earlier teacher credentialing legislation which encompassed the findings of numerous study commissions, Hart's bill was based primarily on anecdotal information. Data available from two southern California school districts that tested newly-hired, credentialed teachers did show that about 30 percent of those tested failed one or more sections of a basic skills test. And, as several respondents noted, the time was politically right for Hart's initiative.

The legislation, AB 757, required the Superintendent of Public Instruction to adopt "an appropriate state assessment instrument" to measure proficiency in basic reading, writing and mathematics skills, with the assistance of the CTC and an advisory board. The advisory board was to include representatives of local school boards, school administrators, parents and postsecondary institutions, but the majority of members were to be classroom teachers. After the State Department of Education had developed the test and established appropriate cutoff scores, the CTC would have the responsibility for further test revisions and changes in passing scores.

The Advisory Board developed preliminary recommendations regarding the nature and level of skills to be assessed in each basic skill area and contracted with Educational Testing Service for the development of a custom-tailored examination. After the first two administrations of CBEST, the Advisory Board recommended moderate to high passing scores. The Superintendent set the scores at a slightly higher level than those recommended: 70 percent correct reading, 65 percent correct for mathematics and 67 percent correct for writing (California State Department of Education, 1983).

#### Rationale and Impact of State Policies

The intended purpose of CBEST is to screen out potential teachers who are not reasonably proficient in the basic skills. During the first year of its administration, 68 percent of the 33,500 first-time-test-takers passed the exam. Pass rates varied considerably across institutions and racial/ethnic groups, however. Seventy-six percent of the white test-takers passed CBEST, compared to 26 percent of the Blacks, and 39 percent of the Mexican-Americans (See Table 1). The pass rates at IHEs ranged from a low of 33 percent at California State University at Dominguez Hills to a high of 90 percent at the University of California-Davis (Commission on Teacher Credentialing, 1983b).

These results did not surprise Superintendent Honig. Data from the first two test administrations, used to set passing scores, had showed that 71 percent of the minority test-takers would fail compared to 38 percent of the non-minority test-takers under the cutoff scores selected. The press and most legislators, however, generally supported his decision. An editorial in the Los Angeles Herald-Examiner echoed the sentiments of other major daily newspapers.

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<sup>3</sup>These figures are for institutions with 30 or more examinees during the year.

Table 1

Percent of Examinees Passing the CBEST in  
the First Year of Administration

	<u>First-time Test Takers</u>		<u>Repeaters</u>	
	<u>Number of Examinees</u>	<u>Percent Passing</u>	<u>Number of Examinees</u>	<u>Percent Passing</u>
White	24,540	76%	2,493	46%
Black	2,040	26	560	19
Oriental or Asian American	1,259	50	360	26
Mexican-American	2,133	39	781	28
Other Hispanic	851	38	280	24
Other	1,216	63	184	35

Source: California Commission on Teacher Credentialing, "Report on Results from the July Administration of the California Basic Educational Skills Test (CBEST)," November 14, 1983, Table 1.



...Thus we think state schools chief Bill Honig was right to stand by the exams and to insist that the required passing grade be maintained...In fact, with 38 percent of all prospective teachers failing basic tests, we think Honig should go a step further and call for proficiency testing of current teachers as well." (January 21, 1983.)

Institutions with high failure rates moved to raise admission standards for their teacher education programs. As mentioned earlier, several CSU campuses now require passage of CBEST before admission to professional preparation programs or to student teaching and some campuses raised minimum grade point average requirements as well.

The response of minority groups to CBEST has been muted. One respondent noted that it is difficult for minority legislators to argue against the fact of the test since they would be viewed as opposing standards. Instead, questions have been raised about test bias and about the "speededness" of the test. Assembly Speaker Willie Brown and Assembly Education Committee Chairwoman Teresa Hughes are concerned about the differential impact of CBEST on minorities. One response was the 1983 amendment requiring IHEs to test all students seeking admission to teacher education programs for basic skills proficiency so that the need for remediation would be identified early in a student's college career. The legislature may undertake a major interim study of the operation and impact of CBEST in the fall of 1984, but there has been no discussion of eliminating the test. Hope was expressed that the newly legislated elementary and secondary school proficiency standards and high school graduation requirements will provide minorities with a stronger educational background in the future and that this improved educational system will enhance their performance on CBEST.

One way to assess the impact of CBEST on teacher supply is to examine changes in the number of teachers applying for credentials. Applications for first issue teaching credentials decreased from 19,767 to 17,822 between 1981-82 and 1982-83, while applications for emergency credentials dropped from 18,870 to 14,860. Most of this latter decrease was for substitute credentials. The data, however, are inadequate indicators for two reasons. First, no one knows how much of this change is due directly to teachers not passing, or not wanting to take, CBEST. There may have been parallel decline in the number of students finishing teacher education programs in California and/or applying for certification from out-of-state. The drop in the number of applications for certification as a substitute can also be due to low salaries, the rebounding economy and/or poor working conditions. Second, the CBEST requirement was implemented in February 1983, in the middle of the year for which data are reported. A more definitive pattern should appear when 1983-84 data become available.

Several of the respondents felt that in the long-run CBEST will aggravate teacher shortages, particularly in bilingual education. Concrete data on the extent of California teacher shortage does not exist. Analyses prepared by the Policy Analysis for California Education (PACE) project at the University of California, Berkeley, predict a need for 91,000 to 111,000 teachers between 1984 and 1991 (PACE, 1984). The 18,000 new teaching credentials issued by the state each year would be sufficient to meet this demand. However, teachers are not being certified in the subject areas with the greatest shortages. For example, more than one-half of single subject teaching credentials issued between 1980-81 and 1982-83 were in the fields of physical education, English and social science. Only 12.5 percent were in mathematics and science. The shortage of teachers was projected to be 1,180 to 1,580 positions in mathematics and science in 1983-84 and 8,600 to 11,600 positions in bilingual education (PACE, 1984). In 1982-83, nearly 2000 emergency credentials were issued in single subject areas and 3600 were issued in special education.

The high failure rate on CBEST among minorities has major implications for the composition, as well as the supply, of teachers in California. The racial/ethnic make-up of the teaching force currently does not match that of the state's students. While 44 percent of the students are non-white, only 17 percent of the teachers are non-white. The Hispanic population is growing so rapidly that, by the year 2000, Hispanics will comprise the largest single segment of the school-age population in California. Yet, only 5 percent of prospective teachers passing CBEST last year were Hispanic and 2.3 percent were Black.

#### Emerging Issues

Issues of teacher quality and teacher supply will remain on the political agenda in California for at least the next two years. In June 1984, a blue ribbon commission, the Commission on the Teaching Profession in the State of California, was appointed to study issues of recruitment, training and credentialing. The Commission, funded by a grant from the Hewlett Foundation, is sponsored by Superintendent Honig and the chairs of the Assembly and Senate Education Committees. The 14 members will include individuals from business, labor, the media and the judiciary, as well as from education. The Commission, which will report in 18 months, will take a broad look at state-wide strategies to improve the attractiveness and quality of teaching. It is planned that the Commission's recommendations will provide a framework for comprehensive legislation.

There appears to be limited interest and support for subject matter testing in California. The California Business Roundtable has proposed that prospective secondary school teachers pass subject matter tests, but respondents stated that there is currently little pressure from other groups for such testing and that it would be strongly opposed by the higher education sector. A bill has been introduced in the Assembly,

however, that would require the CTC to develop three student-centered evaluation models, including subject matter testing, by March 1985. These models could replace, or supplement, the approved program approach. Currently only teachers who are assigned to a subject area they have not taught before must take a subject matter test.

The CTC has proposed a two-stage certification process that would replace the fifth year of study with a two-year program of advanced preparation based on the individual teacher's needs. This program, designed in consultation with a mentor teacher and a college advisor, would consist of university course work and/or staff development. Legislation required to enact this plan failed in both the 1982 and 1984 sessions, however.

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## COLORADO

### Structure and Operation of State Policies

Colorado regulates three stages of the teacher preparation and licensing process: (1) admission to teacher education programs; (2) the content of teacher education programs; and (3) teacher certification and re-certification. Three types of policies are used: basic skills testing, approved programs and prescribed staff development.

#### Entrance Into Teacher Education Programs

Since January 1983, students must pass basic skills tests in oral and written English communication skills and mathematics before formal admission into an approved teacher education program in Colorado or assignment to student teaching. Students must have been tested (but not necessarily pass) before their first field experience. The California Achievement Test (CAT) is used to assess competencies in written English and mathematics. The passing score for both areas was set at the 75th percentile score for high school seniors nationally. Institutions of higher education (IHEs) may use one of two mechanisms to screen students for competency in oral English: completion of a college or university level public speaking course with an earned grade of B- or better, or assessment by a panel of judges at a state-designated testing center.

Students who fail any section of the tests may be retested three additional times within a four year period. Those failing the second or third time, however, must wait 10 weeks between testing periods to allow for remediation. Testing centers, which are every Colorado college or university that offers approved teacher education programs, must provide remediation opportunities for all students failing portions of the tests. State regulations define these opportunities as focusing on the development of basic competencies in the three tested areas. These services do not have to be provided directly by the testing center or college. One respondent from a small, private liberal arts college noted that, because of limited resources, their institution referred the small number of students needing remedial services to programs in a neighboring community college. While the Colorado legislature established the remediation requirement, it did not provide state funds to establish remedial programs and IHEs can charge students no more than "the established rates for such services of the institution." The current standards for admission also include experiences with youth groups "that suggest a potential for success in teacher education" and adequate physical and mental health.

These policies replace requirements legislated in 1975 that IHEs screen incoming teacher education students for oral and communication

skills adequate for the demands of teaching and for competence in computational skills. Institutions were free to select assessment instruments and competency levels.

### Teacher Education Programs

Colorado has 14 approved teacher education programs in 15 IHEs. The state has approved these programs since 1961, initially using standards set forth by NASDTEC and other professional organizations. Institutions became disenchanted with the review process in the early 1970s, and the State Board of Education placed a moratorium on program approval until new standards were codified and approved in 1976. The standards are general, leaving IHEs considerable discretion in designing teacher education programs and, with the exception of the testing requirements, in setting admission standards. Approved programs must offer learning experiences in (1) the humanities, social sciences and natural sciences; (2) subject areas taught in Colorado public schools; and (3) professional studies and experiences, including those necessary to develop skills in growth and development, the teaching-learning process, communication and human relations, foundations and professionalism and student teaching. Programs must also include early field experiences and learning experiences in legal issues, teaching of reading and exceptional child education. The state does not prescribe minimum course hours in any of these areas, including field experience.

### Certification Requirements and Staff Development

Individuals are eligible for certification upon completion of an approved teacher education program, student teaching, and passage of the CAT. Applicants who are graduates of out-of-state institutions must also take the CAT unless they have already passed a comparable basic skills test at the same competency level. Teachers with five or more years of experience may apply for certification and have the approved program requirement waived if the individual scores at or above the 75th percentile on the professional education section of the NTE.

Colorado does not have lifetime certification. Teachers can obtain two types of certificates, both renewable at five year intervals. The Type A certificate, which requires only a baccalaureate degree, requires 6 graduate credits or inservice training in lieu of 4 credits for renewal. The Type B certificate, the Professional Teacher Certificate, requires a master's degree and 3 years teaching experience.

## Administrative and Policymaking Roles

### The State Legislature

The state legislature and State Board of Education are both responsible for setting teacher preparation and teacher certification policies in Colorado. The Teacher Certification Act of 1975 requires all teachers to be certified and establishes general certification requirements. The State Board of Education was given considerable authority to develop rules and regulations implementing this legislation. In 1981, the legislature enacted HR 1412, requiring a basic skills competency test for teacher certification and two years later amended the legislation to change the testing requirement for non-college prepared vocational education teachers from basic skills testing to testing in the area of endorsement. In 1984, the legislature considered several proposed reforms to the teacher preparation and certification system. When no consensus formed around any bill, the legislature asked the State Board of Education to study these issues and report back the following session.

### The State Board of Education and Colorado Department of Education

The legislature generally gives the State Board of Education considerable discretion in implementing its mandates. For example, HB 1412 gave the State Board of Education the authority to develop a competency testing program in communications and mathematics, as well as to administer it. The Board, which has seven members elected for six-year terms, also sets standards by which the state approves teacher education programs.

The State Department of Education approves teams that review teacher education programs once every five years. The Department also certifies education personnel and administers the teacher competency test.

In 1983, the State Board of Education appointed six task forces involving people from throughout the state to study selected curricular areas, the education profession, school time and family and school responsibilities. The purpose of this activity entitled "Project Renaissance", is to identify needed changes in the state's educational system and recommend new legislation, revisions to State Board of Education rules and regulations, and changes in local school district policies.

### Colorado Commission on Teacher Education and Certification

Programs are evaluated every five years by the Colorado Commission on Teacher Education and Certification. The Commission interprets the State Board of Education standards and determines whether teacher education programs meet them. IHEs must report annually to the Commission on

changes they have made in their teacher education programs. The Commission uses these reports, surveys of first and third year teachers conducted by the State Department of Education, and visitations with IHEs, students and student-teaching supervisors in assessing programs.

### Colorado Commission for Higher Education

Broad admission standards to public IHEs are set by the Colorado Commission for Higher Education, which authorizes all degree programs in public and private postsecondary institutions in the state, including teacher education programs. In 1978, that body established mission statements and admission standards for the state's two research institutions, the University of Colorado at Boulder and Colorado State University. The legislature limits the number of Colorado students admitted to these institutions, while no entrance requirements are placed on other state colleges. IHEs set their own admission standards for teacher education programs, except for the teacher competency test requirement.

### Institutions of Higher Education

Institutions of higher education are given discretion in most areas of teacher preparation, and therefore vary considerably in program structure and content. The state uses a competency-based approach to program approval. In meeting any given competency, one IHE may require students to take a course, while others may require a section of a course. Some colleges teach methods as separate education courses, while others incorporate these materials in courses taught in the disciplines. The greatest variation is found in the way that teacher education programs are packaged. For example, the University of Colorado at Boulder does not have an undergraduate major in education. Prospective teachers major in arts and science and take a 30-hour education minor. Admission into this program comes in the senior year while at other state colleges students are placed in field experiences as early as their freshman year.

### The Origin of Current Policies

Concern over teacher quality surfaced in Colorado in the mid-1970s. In 1977, the State Board of Education issued regulations requiring IHEs to assess the competencies of students entering teacher education programs in communications and mathematics. Evaluation instruments and cutoff scores were determined by individual institutions. Some IHEs used SAT or ACT scores, some required that students pass introductory college courses, and at least one used the California Achievement Test. In 1981, HB1412 took this requirement one step further by mandating the use of a uniform instrument with a state-prescribed competency level.



The sponsor of the House bill was a former school board member interested in major change. There was, reportedly, a growing perception in the state, especially in the business community, that the high schools weren't doing their job. This concern was reflected in falling SAT scores and was furthered by the recession which brought greater public awareness of the employment focus of education. There was also a growing public awareness of the changing nature of education and what it was supposed to do. This was accompanied by feelings of frustration with the public schools.

The State Board of Education was given the responsibility of developing the teacher competency program cooperatively with IHEs and interested state education organizations. Since the legislature did not authorize funds to develop a new competency test, preference was given to existing instruments. The Colorado Council of Deans of Education (CODE) took the lead in identifying tests already in use. A number of considerations led to the choice of the CAT: ease of administration, coverage of mathematics and written English, its current use by one IHE for teacher education admissions, the preference for a nationally norm-referenced test, and cost. Long discussions then ensued about the appropriate cutoff score, which was set at the 75th percentile for graduating high school seniors. The rationale for this standard was that the upper 1/2 of high school seniors normally attend college and prospective teachers should be at least as literate as the average college-bound student. Representatives of both teachers organizations in Colorado noted that they were not directly involved in the test development activity.

#### Rationale and Impact of State Policies

Policymakers in Colorado enacted a teacher competency test as a way of screening out aspiring teachers who lack basic skills before they have their first classroom experiences. Of the first 2000 students who took the CAT between January and June 1983, 68 percent passed spelling, 69 percent passed language usage and mechanics and 57 percent passed mathematics. As shown in Table 1, the pass rates were higher in all three categories for students educated outside of Colorado.

Table 1

Basic Skills Competency Test for Teachers

January - June 1983

<u>Category</u>	<u>Percentage Passing</u>		
	<u>In-State</u>	<u>Out-of-State</u>	<u>Combined</u>
Spelling	64%	78%	68%
Language	65%	79%	69%
Mathematics	55%	62%	57%

Source: Status of K-12 Public Education in Colorado 1983, annual report of the Colorado Department of Education. Denver: Colorado Department of Education, September 1983, p. 20.

One explanation for this disparity is that the out-of-state applicants are generally college graduates and, in many cases, experienced teachers, while the majority of in-state test takers are college sophomores and juniors.

Differences also exist among Colorado IHEs in the percentage of students passing the test. Not surprisingly, up to 85 percent of the students at the more selective public and private colleges, such as the University of Colorado at Boulder, Colorado State University and Colorado College, passed various portions of the test. At institutions with open admissions policies and/or relatively large minority enrollments, the passage rates were significantly lower, dropping to 30-40 percent at Adams State College and Fort Lewis College, both located in southern Colorado. In making these comparisons, one must keep in mind that students from different institutions take the test at different points in their college career and that these figures include out-of-state test-takers who chose to take the CAT at that institution, as well as students enrolled at the school.

Since test results are not reported by sex or by racial/ethnic group, it is difficult to speak directly to the impact of the testing requirement on minority groups. Although failure rates are significantly higher at those institutions educating large numbers of minority students, there appears to have been little public discussion in Colorado of this problem. One respondent noted that the year that HB1412 was enacted 40 percent of the members of the House Education Committee were non-white, and that provisions allowing students to take the test four times in four years and requiring IHEs to provide opportunities for remediation were responses to concerns raised by minority legislators. There have been no court challenges to the testing mandate yet, since no student has exhausted the opportunity to take the test four times. It is also too early to tell what impact the test will have on teacher education enrollments.

Some INEs have increased admission requirements to teacher education programs. One institution, for example, requires more college mathematics courses and a higher grade point average of prospective teachers.

Another institution, which has a comparatively large minority population, has developed a fairly comprehensive program to provide assistance to students who need remediation. A half-time staff member coordinates the program, identifies the kind(s) of remediation needed, and refers the student to the appropriate academic department, to the campus' academic improvement center, or to a similar center at a nearby community college. The institution feels that, while it is important to keep anyone who does not have the basic skills out of teaching, it is discriminatory to keep students who had poor high school preparation out of teacher education programs. The institution sees itself as having the responsibility to help individuals overcome an educational deficit; it is then the students' responsibility to do what is needed to meet the state standards..

There has been some concern about the importance of all prospective teachers passing both parts of the CAT, especially for individuals with markedly differential abilities. (One individual asked, "Why should an English teacher have to pass a math test?") The mathematics portion of the test appears to present more problems than does the written English section, according to individuals at several institutions. At one institution it was noted that the individuals failing the mathematics section were primarily humanities and arts majors who had not been required to take any mathematics in their college program. At other institutions, minority group members (especially Hispanic women who were described as coming from a culture where math is not a woman's subject) were mentioned as having problems with the math test. The year in which the CAT is given also has an impact. Students who take the test shortly after finishing high school reportedly have fewer problems with the math test than those who do not take it until one or two years later. Also, adult students returning to college have more difficulty with the math test than do younger students.

If the passing rates on the CAT continue to hover around 65%, the testing policy could have a negative impact on the supply and composition of teachers in Colorado. The number of students graduating from Colorado teacher education programs has dropped 54 percent in the last ten years, from 5,722 in 1973-74 to 2,655 in 1981-82. In that latter year, 25 percent of the graduates specialized in elementary and early childhood education, 14 percent in special education and less than 5 percent in mathematics and science. About one-half of newly certified teachers come from outside Colorado. The demand for teachers is expected to grow, along with Colorado's population, which increased 31 percent between 1970 and 1980. The decline in school enrollments was reversed in 1982 and the student population is expected to grow 19 percent between 1982 and 1990. The teacher shortage is expected to be most severe in the areas of mathematics, physical science and special education. Shortages already extend over more subject areas in rural school communities, while many metropolitan districts have imposed hiring freezes or are laying off teachers.

Of the 30,000 teachers employed in Colorado school districts, 3 percent are Black and 5 percent are Hispanic, while 4 percent of the state's population is Black and 12 percent is Hispanic. While over 12,000 students were eligible to participate in the state's English language proficiency program in 1982-83, only 24 teacher education graduates specialized in bilingual-bicultural education that year.

### Emerging Issues

Colorado sees itself as a changing state. The governor is reported as seeking educational reform in order to attract more industry (especially hi-tech firms) to the state. The legislature was faced with a number of education issues in its 1984 session: a voucher initiative, removal of teacher tenure, evaluation of veteran teachers, and changes in the state's certification law. An attempt to place a voucher initiative on the ballot in November 1984 was derailed when the state Supreme Court declared it invalid on technical grounds. The initiative included a required core curriculum for all high school students (Colorado currently does not have statewide course requirements for high school graduation); provisions for merit pay tied to teacher performance; and a voucher plan for sectarian schools. HB1338 included two provisions affecting veteran teachers: removal of the state tenure law and a requirement that all local school districts establish written evaluation procedures for teachers. The first part of the bill was defeated; mandated evaluation, designed to address disparities in the quality of evaluation plans across the state, passed both houses of the legislature.

Senator Al Meiklejohn, chairman of the Senate Education Committee, sponsored a comprehensive certification bill to create a licensing system for new teachers, principals and school administrators. The legislation, SB212, would have established a state-level council to advise the State Board of Education on training, education and certification requirements, curriculum qualifications, examinations, and terms of experience for each category of personnel. In three years, new members of these groups would be tested on professional knowledge, as well as in basic skills, with the content of the professional knowledge tests determined by the State Board of Education. SB212 was defeated in the House after strong opposition by school administrators. It was supported by IHEs and the teachers organizations who agreed with Meiklejohn that this approach would enhance the professionalization of teaching. In its stead, the legislature passed a joint resolution asking the State Board of Education to place more emphasis on subject matter and less on methodology in teacher preparation programs.

Vouchers, tenure and certification will reappear on the agenda of the 1985 legislative session. An omnibus bill incorporating the recommendations of Project Renaissance will be introduced that calls for changes

in teacher certification and tenure laws, more evaluation and support for teachers, and more subject area preparation for secondary school teachers and extensive in-field, in-classroom experience for all teacher education students. The legislature will also review the proposals of other task forces: the State Board of Education's Task Forces on English, Mathematics, Science, Social Studies and Foreign Language, and a blue ribbon commission appointed by the Governor.

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## GEORGIA

### Structure and Operation of State Policies

While Georgia has certified teachers since 1911, the last 20 years or so have seen a major shift to a performance-based system of certification. Performance-based certification is based on the satisfaction of three requirements. First, candidates must complete a teacher education program that is approved by the state. Second, candidates must pass the Teacher Certification Test, a criterion-referenced test designed to assess an individual's teaching field content knowledge. Third, during the initial three years of employment, candidates for renewable certification must demonstrate acceptable teaching performance as measured by the Teaching Performance Assessment Instruments.

Georgia policies described below relate to the approval of teacher education programs, entrance into teacher education, the content of the teacher education curriculum, teacher certification and classification, and staff development. The origin of these policies and their impact on aspiring teachers and on the teacher education programs that prepare them are then described, followed by a brief discussion of emerging issues in the state.

#### Approval of Teacher Education Programs

Teacher education programs in Georgia must be approved by the State Board of Education (SBE) and may also be approved by the National Council for the Accreditation of Teacher Education (NCATE). Programs are evaluated for SBE approval every five years using criteria contained in the manual, "Criteria for Evaluating Teacher Education Programs in Georgia." Programs approved by NCATE are evaluated using state criteria and NCATE standards and schedules.

In addition, on November 8, 1983, the State Board of Regents authorized a formal procedure for review and improvement of teacher education programs whose graduates for the past five years have had a cumulative passing rate of less than 70 percent on the Teacher Certification Test (TCT). While this policy is not expected to be necessary in the future, it can be used to discontinue teacher education programs in state university system institutions of higher education (IHEs) that fail to improve.

#### Entrance into Teacher Education

Admission to teacher education is generally made at the end of the sophomore year of college. Criteria vary by IHE, although institutions governed by the State Board of Regents (state schools) must require a minimum grade point average (GPA) of 2.0. This requirement is set by the Georgia

Advisory Council on Education (GACE) which advises the SBE on teacher education and certification issues. New admission standards have been established by the Regents and will be implemented in the Fall of 1984. These new requirements are an overall GPA of 2.5 or better, successful completion of the Regents Exam (measuring reading and writing skills), a grade of "C" or better in an introduction to education course, and demonstration of competence in the use of oral and written language. IHEs have the discretion to establish additional or higher admission standards. Students not meeting the GPA requirements are permitted to take additional courses until they meet the minimum requirement. All students entering the state university system must take the SAT. Remedial courses are required for students who score below a certain level on the test. New minimum standards have also been established for admission to graduate teacher education programs.

### Curriculum Requirements

Georgia uses a minimum standards approach in setting teacher education curriculum requirements. Minimum requirements for general and professional education are approved by the SBE. Sixty quarter hours (qh.) in general education courses must be distributed as follows: 20 in humanities, to include 10 in English; 20 in math and science to include 10 in each field; and 20 in social science.

Forty qh. of professional education courses are required and must include the following. Ten qh. are required in the Foundations of Education to include course work in the nature of the learner and in historical, philosophical, and sociological foundations. Ten qh. in curriculum and methods courses are required which are specific to the age level and the certificate sought. Five qh. of special education courses are also required. Finally, student teaching must provide for at least 15 qh./9 semester hrs. of college credit and must consist of a full-time, daily, in-school placement for 9 to 12 weeks.

### Certification and Classification

The SBE requires that all applicants for initial certification who completed an approved teacher education program after September 1, 1978 must pass the Georgia Teacher Certification Test (TCT) in their major fields. In addition, persons completing master's degree programs in school counseling or administration and supervision after September 1, 1980 must pass the TCT in their field. Persons completing master's degree programs for media specialist and speech and language pathology after September 1, 1978, and those completing reading specialist, school psychologist, and psychometrist must pass a test in their area as well. The TCT consists of 28 criterion-referenced tests and is given three times a year. Applicants who fail the test may teach for one year on a probationary license. Applicants may retake the test as often as they wish. Candidates must pay \$35 for each administration.



Upon passing the TCT, a non-renewable professional certificate is issued to the candidate. This certificate is valid for three years and requires the teacher to pass the Teacher Performance Assessment Instruments (TPAI) before attaining a renewable performance-based certificate. The TPAI was instituted May 1, 1980 and assesses 14 essential, generic competencies. The instrument is composed of five sections: (1) Teaching Plans and Materials; (2) Classroom Procedures; (3) Interpersonal Skills; (4) Professional Standards; and (5) Student Perceptions. The 14 competencies are assessed by 45 indicators; each indicator has four or five descriptors. The candidate is assessed by a supervisor (principal or other administrator), a peer teacher, and an external data collector from one of the 17 regional assessment centers in the state. Five of the 14 competencies are assessed through an interview; the remainder are assessed through observation. Candidates are assessed six times over a three year period. Staff development is provided for beginning teachers by the LEA based on the results of the TPAI. When first implemented, two assessments were required to pass the TPAI (Fall and Spring of the first year of teaching). Currently, candidates who attain 85 percent of the competencies on the first assessment can meet the requirement. With two or more assessments, they must meet 75 percent of the competencies.

It is the SBE's policy to classify school personnel so that the adequacy of an individual's preparation to practice as a professional educator in a given discipline is recognized through certification. School personnel are classified according to disciplines, functions, formal educational attainments, and status with respect to current requirements. Teacher salary schedules, set by the legislature and the SBE are tied to educational attainment and professional status. Fields of certification provide recognition of the discipline, area of specialization or study completed by an individual during college preparation. Students who major in English, for example, may be certified in the field of English. Georgia certifies in 155 teaching fields.

Types of certification provide recognition of three school personnel functions--teaching, leadership, and service. Levels of certification recognize formal educational attainments marked by diplomas or degrees. The SBE provides for an entry and advanced level of specialization in each field. Six levels are recognized. (The first two levels are recognized with the stipulation that they are valid only for vocational-technical fields). The one-year level corresponds to a high school diploma; the two-year to an associate's degree; and the four-, five-, six-, and seven-year levels respectively, correspond to bachelor's, master's, educational specialist, and doctoral degrees. Titles of certificates reflect an individual's educational and employment status. The SBE issues the nine certificate titles described below. (The first four are issued on the condition that an employer must request the certificate jointly with the educator.)

Provisional Certificates are issued to a person who is completing requirements for professional certification while employed. These certificates are not issued above the five-year (master's) level. Probationary

Certificates are issued to a certificated person who is completing requirements to add a new field at the highest level of certification held by that person while employed in the field being added. Initial probationary certificates cannot be issued in certain fields. Provisional/Probationary Certificates are issued to people simultaneously completing requirements in professional education and requirements for adding a field while employed in the field being added. These certificates are not issued above the four-year (bachelor's) level. Emergency Certificates are issued to recognize a professionally prepared teacher who lacks recent study. These are not issued above the five-year (master's) level. Life Professional Certificates are issued as duplicates to persons who qualified for permanent certification prior to July 1974, and who have continued to earn the school experience required to maintain the permanent certificate. Life certificates are no longer issued. Professional Renewable Certificates are issued to employed persons who completed applicable requirements after permanent certification was discontinued and prior to the adoption of performance-based requirements. Nonrenewable Provisional Certificates must be requested jointly by the teacher and employer and recognize persons who completed an approved program, but must satisfy performance-based criteria, particularly the certification test, and who may need to complete one or more course requirements. These are not issued above the five-year (master's) level. Nonrenewable Professional Certificates are issued to personnel who must satisfy TPAI criteria and who may need more course requirements. Finally, Performance-Based Certificates recognize professional school personnel who have satisfied special state course and performance-based requirements.

### Staff Development

Staff development can take different forms, depending on the needs of the local education agency (LEA). LEAs must provide staff development activities for beginning teachers based on a needs analysis of the competency profiles generated by the TPAI. A system of supportive supervision which includes a resource guide keyed to (TPAI) competencies, released time for beginning teachers and peer teachers, and courses for graduate credit or staff development units related to on-the-job needs is available to LEAs as they develop plans for beginning teacher staff development. Based on TPAI results, LEAs conduct inservice training themselves, or they can set up workshops which can be conducted by Regional Education Service Agencies if there are a number of teachers with similar staff development needs. It should be pointed out, however, that a beginning teacher is not required by the state to participate in staff development. The state requires only that an LEA make relevant staff development available to the beginning teacher. Staff development is not required for veteran teachers, although structured staff development can be used for certificate renewal in lieu of additional college credits.

The state legislature funds three types of staff development. The only required staff development is for beginning teachers which is funded at \$48 per teacher. Nominal grants (\$3 per teacher) are available to an LEA for any

type of activity that improves teacher and administrator competencies (e.g. conferences, tuition) and addresses system-wide needs. The third program, which is also voluntary, supports certificate renewal through staff development. In all of these cases, the State Education Agency (SEA) must approve LEA plans and budgets.

### Administrative and Policy-making Roles

The agencies involved in the formulation and administration of teacher education and certification policies in Georgia are the Georgia State Board of Regents, the Georgia State Board of Education, the Georgia State Department of Education, the Georgia Advisory Council on Education, and the state legislature. The Georgia Professional Standards Commission and the Governor's Education Review Commission also play a role.

#### The State Board of Regents

The Regents are a constitutional body and the governing board of the 33 public IHEs in the state, serving about 135,000 students. The Regents approve all academic programs (including teacher education programs), monitor quality, approve all IHE employment and resource decisions and are empowered to open, close, or place on probation a college program. The governor appoints 10 Regents by district and five at-large.

#### The State Board of Education

While the Regents are responsible for teacher education, the SBE is responsible for teacher certification. The SBE is legally required to prescribe policies which certify and classify school personnel. Since these policies include approving the structure and content of teacher education programs, both the Regents and the SBE claim responsibility for teacher education program approval. In pre-NCATE days, approval of programs by the SBE was necessary for quality control, particularly for some rural IHEs. Although the public teacher education programs in the state must now meet NCATE approval, most IHEs ask the state for program approval as well. The SBE will now certify graduates of state-approved or NCATE programs or allow students to use course counting methods to satisfy certification requirements. The SBE was responsible for designing and implementing Georgia's performance-based certification system, including the TCT and the TPAI.

#### The State Department of Education

The SEA is the administrative arm of the SBE, and implements the teacher education and certification policies set by the Board. The Division of Staff

Development has four units: Performance-Based Certification; Teacher Preparation; Teacher Certification; and Teacher Recruitment. The SEA has played a major role in the design and operation of the performance-based certification system.

### The Georgia Advisory Council on Education (GACE)

GACE replaced the Georgia Teacher Education Council which had been in existence since the 1930's. Composed of deans of schools of education and other educators, the Teacher Education Council advised the SBE on teacher education and certification matters. Because it had assumed a good deal of power and because of some conflicts with the SBE, it was disbanded and replaced by GACE in 1982. GACE is made up of 30 educators equally apportioned among IHE representatives, LEA administrators, and classroom teachers; two members of the general public (a PTA representative and a local school board member) also are members. Its duty is to advise the SBE on education issues that may arise from GACE itself, the SBE, or anywhere else. An Executive Board determines agenda items to be studied. GACE has three committees--Certification, Personnel, and Administration and Curriculum. Recommendations from GACE are sent to the SBE for assignment to an SBE committee for consideration. While at this time the SBE has not taken action on any recommendations of GACE, the issues GACE has addressed include merit pay, changes in teacher certification, stricter monitoring of teacher education programs, and easing the entry of liberal arts graduates into the teaching profession. GACE also develops criteria for the approval of teacher education programs, including GPA admission requirements.

### The State Legislature

The Georgia legislature seems sensitive to business and industry's concern over the quality of the state's educational delivery system. Thus, the publication of comparative data on SAT scores and other education measures on a state-by-state basis draws a strong reaction from the legislature. What typically seems to occur is that other agencies in the state (SEA or SBE), sensing that the legislature is about to act, step in and assure the legislature that they will handle the problem. In 1974 for example, the legislature enacted a law (Adequate Program for Education in Georgia) that included demonstrated competency as a criterion for certifying education personnel. The legislature gave the SBE broad discretion to design and implement the assessment programs. The TCT and TPAI are state regulations, not statutory requirements.

### Other Actors

Two other groups who play a role in the education and certification of teachers in Georgia are the Georgia Professional Standards Commission (GPSC)

and the Governor's Education Review Commission (GERC). GPSC was created by the General Assembly in 1976 to make recommendations to the SBE regarding standards for "the preparation, certification, and professional growth of those persons who teach or perform educational duties in the school systems or schools" of Georgia. The GPSC has 19 members who are appointed by the governor. Membership is broadly representative of the education community and includes teachers from all levels, school administrators, IHE faculty, members of local boards of education, and an SEA staff member. Issues for the commission are identified through public hearings. Once an issue is selected, extensive research and analyses are conducted and draft reports are reviewed by all state education groups. While the GPSC can only make recommendations to the SBE, its careful research, early and continuing contact with the state's major education groups, broad dissemination, and sharp policy focus can provide a strong stimulus for action. Issues examined by the GPSC have included reciprocity in certification, teacher education program effectiveness, effectiveness of staff development, and criteria for admission to, retention in, and graduation from teacher education programs in Georgia.

As a result of Governor Joe Frank Harris's campaign commitment, the legislature passed a resolution to create the Governor's Education Review Commission (GERC). In June 1983 appointments to the commission were made--five senators, five representatives, about 15 business people, 15 educators and lay citizens, and a staff director. While GERC's original focus was to be on educational funding, the spate of national education reports and Georgia's rank of 49th on state SAT comparisons led to an expansion of its charge. Several committees have been established and are examining career ladders and the preparation and quality of teachers and administrators; defining a quality basic education along with 76 student outcomes; examining service delivery, classroom size, and community/school relationships; state funding of education; vocational education; and conducting a comparative analysis of other states. The commission has identified seven objectives and 65 issues; papers are being prepared on each.

In teacher education, GERC will probably recommend evaluation of all teacher education programs, more screening of students prior to entrance into teacher education and increased requirements for teacher education. It is also likely that GERC will recommend a career ladder program for teachers. The commission will also rewrite the Adequate Program for Education in Georgia (APEG) law and recommend the introduction of a pupil weighting system to finance Georgia's schools.

#### Origin of the Policies

Performance-based certification for Georgia's teachers has been a goal of the SEA, the Regents, the SBE and its Teacher Education Council (now the Georgia Advisory Council on Education), education associations, IHEs, and the state legislature since the late 1960s. State needs assessments, goals set by

the SBE and the state superintendent of education, and the report of a major legislative study commission in 1973 all supported the notion of certifying educators on the basis of demonstrated competencies. The APEG legislation added the concept of competency to the section on certification and classification of school personnel in 1974.

In response to legislative interest in competency-based certification in the early 1970's, the State Superintendent of Schools and the Chancellor of the University System spearheaded a statewide task force that produced, in June 1973, a plan to implement competency-based preparation and certification in the state by 1978. After passage of the APEG law, the SBE adopted the following policy changes to become effective on or before September 1978.

1. A non-renewable initial certificate valid for three years would enable an individual to seek employment as a teacher and continue preparation in order to demonstrate competencies judged essential for a professional educator.
2. Conversion to a renewable certificate in one to three years would depend on how quickly an individual is able to demonstrate the essential competencies on-the-job.
3. The criteria on which the initial and professional (renewable) certificates are issued would require a knowledge test external to the preparation process in addition to completion of an approved program.
4. The professional (renewable) certificate would be based on demonstrated performance and not merely on experience and/or a master's degree.

These changes separate, in part, the certification and preparation functions by introducing job-related certification measures that are external to college grades, courses and approved programs. These policies replaced the practice of IHEs evaluating their own products. In the past, for example, the Regents have required teacher education graduates in public IHEs to take the National Teachers Exam (NTE) to provide comparisons of Georgia's graduates with a national population. Test results were not tied to certification decisions, however. The NTE requirement was dropped because the Office for Civil Rights complained that the state was not helping students, especially at historically black colleges (HBCs), who scored poorly on the test, and also because some deans were complaining that with the new TCT requirement there was excessive student testing.

To address the teacher certification testing requirement, the SEA put out a request for proposals and contracted with National Evaluation Systems, Inc. in 1975 to develop the test. An ad hoc committee of Georgia public school and

college teachers in each of the teaching field areas worked with NES during all phases of test development. The tests were developed and validated to be job-related and to reflect the minimum content knowledge in a certification area that is necessary to teach in Georgia classrooms. The priorities as to objectives and content of the tests, as well as the cut-off scores, were determined by committees of outstanding Georgia educators in the respective certification fields. The items which measure the objectives were reviewed by the committees for item/objective content match, content accuracy, test bias, and minimal competency. A job analysis was conducted throughout the state to determine the importance of and amount of time spent teaching each objective. The items for each test administration represent the specifications for the objectives and subareas as determined by the committees. The tests were not designed to be a summative evaluation of an individual's college preparation, but rather a test of the subject matter that a teacher would be expected to know in order to be competent to teach.

The policy changes also extended the initial period of pre-service preparation into the initial years of teaching by requiring on-the-job assessments and staff development tied to needs identified through the assessment process. In 1976 the University of Georgia began a state-funded contract to develop the components for the on-the-job assessment of teacher competency (the Teacher Performance Assessment Instruments). Beginning May 1, 1980 beginning teachers must pass the TPAI before converting to a renewable certificate. To operationalize the on-the-job assessment, state funding was provided in 1977 to establish regional assessment centers, train data collectors, and provide staff development for beginning teachers. In addition, funding for student teacher supervision was increased for the first time since the 1950s to compensate those with data collection training. The statewide network of 17 regional assessment centers was established in 1979 to assess beginning teachers on the TPAI. These centers, each with full-time data collectors, are charged with coordinating the twice-a-year assessment of beginning teachers by an administrator, peer teacher, and an external data collector. The centers were fully funded at over \$2.5 million in 1980 to coordinate the on-the-job assessment of all beginning teachers on non-renewable certificates.

The major steps entailed in developing the TPAI included identifying a list of competencies that might be desirable. After analysis an initial list of 219 competencies was reduced to 52. Next, over 4,000 teachers, administrators and college professors participated in the selection of the competencies. Of the 52, 20 were rated as being generic and essential. Behaviors were then identified that corresponded to each competency and the TPAI instruments were developed. Finally, a training program was prepared to help administer the instruments; research and evaluation studies were conducted to determine the reliability and validity of the instruments and the adequacy of the training program; and the instruments and training procedures were revised accordingly.

### Impact of the Policies

This section describes the impact of Georgia's major teacher education and certification policies--TCT and TPAI--on aspiring teachers and on the IHEs that prepare them.

#### Teacher Certification Test

While the TCT has been given to prospective teachers since 1978, results were made public only this year at the request of the Governor's Education Review Commission. Table 1 provides a summary of the results. For the 22,000 candidates who took the test between 1978 and 1982, the overall first-time pass rate was 78.4 percent. The cumulative pass rate after five or more attempts was 86.6 percent, with a cumulative failure rate after five or more attempts of 0.7 percent. The difference between the two percentages is explained by students who fail the test and choose not to retake it. Of the 21.6 percent of the teacher certification candidates who failed the TCT the first time, 8.6 percent did not retake it; the cumulative percent of candidates who chose not to retake the test rose to 12.7 percent after five or more attempts.

There are clear racial differences in the test results. While 87 percent of the white students who took the TCT passed it on the first try, only 34 percent of the black students did so. Partly as a result of this, the Regents have instituted a probation policy for teacher education programs in public IHEs whose graduates for the past five years have had a cumulative passing rate of less than 70 percent on the TCT. Almost 40 programs in 12 IHEs are affected by this policy. These programs are placed on "probationary review" status for a period of two years and must submit a "Plan for Improvement" for each affected program to the Chancellor's office by July 1984. After the Spring 1986 administration of the TCT, one of three decisions will be made with regard to each program involved: removal from probationary review status; continuation of probationary review status for a specified period of time, or discontinuation of the program.

As might be expected, many IHEs in Georgia were strongly opposed to the Regents' probation policy on the grounds that the TCT was designed to evaluate students, not programs. The effects of the policy seem most deleterious to Historically Black Colleges (HBCs) whose programs constitute about half of the programs put on probation. The press coverage that accompanied the release of the TCT scores caused many students at HBCs to think about pulling out of or not entering teacher education programs; parent reaction was also very negative. While the publicity caused much attention to focus on the education departments of these IHEs, most of the content measured by the TCT is covered in courses taken outside of education departments (early childhood education, middle grades education, and health and physical education are the exceptions). Another problem faced by IHEs is that the students who will be



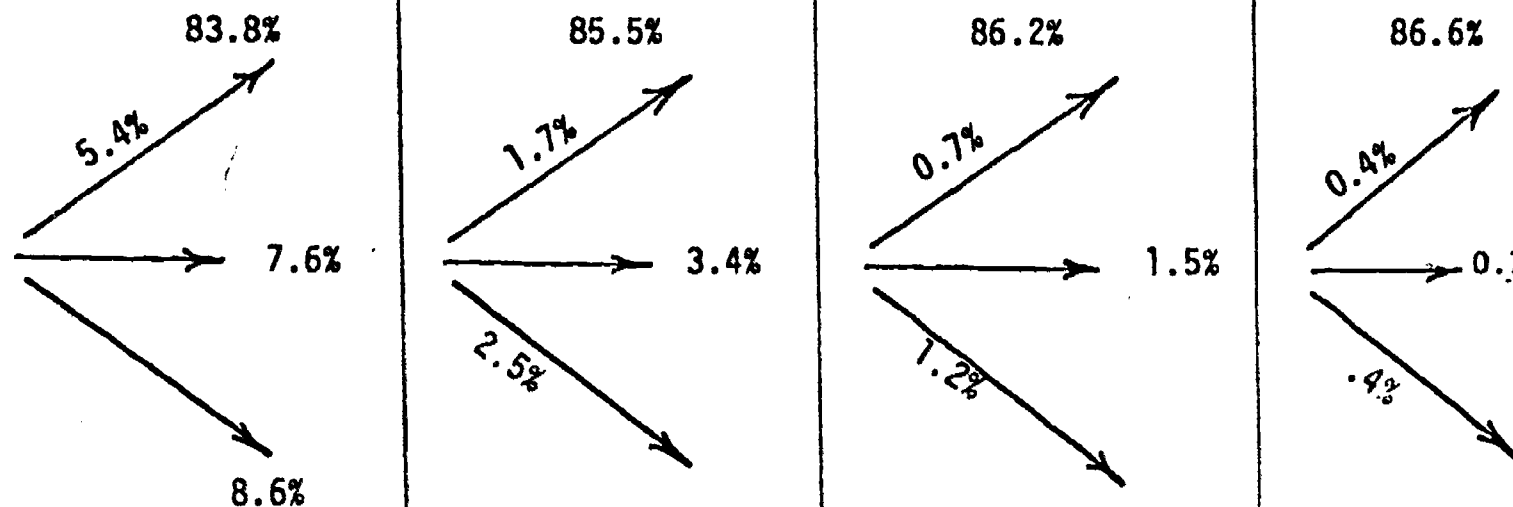
GEORGIA TEACHER CERTIFICATION TESTING PROGRAM

SUMMARY RESULTS 1978 - 1982

ALL FIELDS

Table 1

STATUS	First Attempt	Second Attempt Cumulative	Third Attempt Cumulative	Fourth Attempt Cumulative	FIVE Or More Attempts Cumulative
PASS	78.4%	83.8%	85.5%	86.2%	86.6%
FAIL	21.6%	7.6%	3.4%	1.5%	0.7%
NO RETAKE	N/A	8.6%	11.1%	12.3%	12.7%
RETAKE PASS RATE	N/A	41.3%	33.3%	30.0%	40.1%
CUMULATIVE	N/A	N/A	54.2%	59.3%	62.8%



Source: Georgia State Department of Education

taking the TCT over the next few years are already on campus. Thus, increasing admission requirements will not help these IHEs in the short run. Finally, the structure of the TCT and the limited feedback on student deficiencies that is provided limit the ability of IHEs to develop remedial programs to help their students.

On the more positive side, all of this attention has caused IHEs to reassess the teacher education curriculum and has invigorated the debate over the balance of the curriculum in terms of pedagogy and subject matter. While many IHEs are concerned that all the attention to test results will draw attention away from more important matters, survival dictates that IHEs teach to the test. Course syllabi are being revised and related to TCT objectives; students are being prepped for the test and given instruction in test wiseness; and faculty are being encouraged to incorporate the types of items used in the TCT into the tests that students are given during their coursework. At one HBC in the state, about one-third of the students who fail the TCT the first time do not retake it. Thus, the concern of IHEs with the test wiseness of their students is understandable.

Whether the problem that the TCT has revealed lies with the student or with the IHE is currently a matter of debate among education officials in Georgia. While an SEA official has called it an "institutional problem" rather than a problem created by the individual student, another official takes the opposite view. "The quality of staff, the quality of programs, and level of funding in predominantly black schools is just as good as it is in predominantly white institutions," he said, adding that the difference lies in the precollegiate preparation of the students.

### Teacher Performance Assessment Instruments

While successfully completing the TPAI is a requirement for renewable certification, the instrument was designed also to provide feedback to the potential teacher as a basis for staff development. The instrument is also useful in teacher education, especially during student teaching. Thus, at its inception, it was not expected that many candidates would pass the TPAI on the first assessment. For certification decisions, the new teacher has three years to pass the TPAI. Three assessment cycles have been initiated to date--the first in the Fall of 1980, the second in the Fall of 1981, and the third in the Fall of 1982.

Table 2 summarizes the results for the three assessments for which data are currently available. It should be noted that prior to the Fall 1983 assessment, teachers had to be assessed twice before they could pass the TPAI. Currently, teachers who demonstrate 85 percent of the competencies during the first assessment meet the TPAI requirement; with two assessments they must meet 75 percent of the competencies. TPAI results appear to indicate that about three-fourths of teacher candidates eventually pass the assessment and about one-fourth leave the classroom either because of sub-standard

**Table 2**  
**PERFORMANCE-BASED CERTIFICATION**  
**SUMMARY OF ON-THE-JOB ASSESSMENTS**

Date Assessment Initiated	Category	First Assessment Cumulative	Second Assessment Cumulative	Third Assessment Cumulative	Fourth Assessment Cumulative	Fifth Assessment Cumulative	Sixth Assessment Cumulative
FY 81 (Fall, 1980) N=1758	Mastery		55%	68%	72%	73%	74%
	Non-Mastery	100%	41%	13%	5%	1%	.002%
	Not Assessed		4%	19%	23%	26%	26%
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FY 82 (Fall, 1981) N=2411	Mastery		54%	67%	71%	72.5%	
	Non-Mastery	100%	42%	11%	3%	.8%	
	Not Assessed		4%	22%	26%	26.7%	
<hr style="border-top: 1px dashed black;"/>							
FY 83 (Fall, 1982) N=2213	Mastery	27%	75%	84.4%			
	Non-Mastery	69%	21%	7.4%			
	Not Assessed	4%	4%	8.2%			

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Source: Georgia State Department of Education

performance on the TPAI or because they decide, for some reason, that they do not wish to pursue a career in teaching. Teachers that began the assessment cycle in the Fall of 1982 appear to be performing significantly better on the TPAI than those who were assessed in the first two cycles.

In sum, the TCT and the TPAI are screening out a number of aspiring teachers. About 14 percent of certification candidates have been unable to pass the TCT in their teaching field since 1978. On the TPAI, about 26 percent of beginning teachers have dropped out by the end of the first three years. Less than one percent of those beginning teachers who complete all three years of initial teaching are screened out by the TPAI. The attention that has been focused on teacher education in general, and on the programs of poorer performing IHEs in particular, has caused policy-makers and teacher educators to reconsider teacher education and certification policies. Georgia policy-makers appear to have developed a comprehensive system, that is, they have focussed on increasing standards for admission to teacher education, strengthened the teacher education curriculum, and instituted measures aimed at insuring that aspiring teachers demonstrate subject matter competency and demonstrate that they can transmit that subject matter to students.

#### Emerging Issues

Although the state has limited data on teacher supply and demand, Georgia appears to be experiencing major teacher shortages in math, science, some areas of special education, industrial arts, and foreign languages. New high school graduation requirements and new Regents' requirements for college-bound students are likely to exacerbate these shortages. Effective in 1988, students who plan to enroll in state IHEs will need four units of English; three units each of science, math, and social studies; and two units of foreign language. Currently, there are 14 high schools in the state that do not offer foreign languages.

The state has a teacher turnover of about 7,000 teachers a year. Approximately 3,000 teachers graduate each year in Georgia and about 1,900 of those go into teaching. The 5,000 teacher gap is filled by re-entry or out-of-state teachers (about half come from out-of-state). About 10,000 teachers hold sub-standard certificates; 7,000 hold provisional certificates (they do not have enough professional education courses) and about 2,000 of these need to pass the TCT. 3,000 teachers have probationary certificates in their field because while they have the required education courses, they lack the required number of courses in their teaching fields.

The impact of higher standards for teacher certification on these shortages is unclear. The disproportionate number of black students that are screened out will undoubtedly have a negative impact on education in the state. The next several years will see a sustained level of activity in teacher education and certification as IHEs and other education groups in the

state reexamine teacher education in light of the state's performance-based certification system.

Currently, the SBE is examining alternative routes to certification, including easing the entry of liberal arts graduates into the classroom. The Governor's Education Review Commission is likely to recommend the adoption of a teacher career ladder plan when it reports to the state legislature at the end of this year. Advancement on the ladder would be based on the TCT and on some measure of teacher performance (possibly the TPAI). The inclusion of a measure of student achievement as an additional criterion is also being discussed. The career ladder concept will probably be supported by the state's teacher groups if the base salary is raised significantly and if the student achievement criterion is excised. Finally, the SEA and other education groups in the state are pushing to streamline the teacher certification system and to increase standards for admission into teacher education.

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OKLAHOMA

Structure and Operation of State Policies

The state of Oklahoma regulates teacher preparation, certification, and licensing at six points: (1) at entrance into teacher education, (2) through the teacher education approved program, (3) at exit from teacher education, (4) at initial licensing, (5) at initial certification, and (6) at recertification. The policies involve (a) grade-point average requirements, (b) approved programs, (c) subject matter testing, (d) evaluation of classroom performance, and (e) staff development. Most of the policies regulating teacher preparation were put into place as the result of HB1706, which was passed in July 1980. The policies, which affect all applicants for entrance into teacher education programs, in both public and private institutions of higher education (IHEs), beginning and experienced teachers, and teacher education faculty, became effective in February 1982. The legislation also established minimum salary levels for Oklahoma teachers and specified that the Professional Standards Board provide "leadership for the improvement of teacher education and standards for the certification and licensing of teachers." HB1465, passed in 1982, amended and modified HB1706.

Entrance into Teacher Education

Admissions standards for entrance into teacher education in Oklahoma are:

- o A minimum grade point average (GPA) of 2.5,
- o Evidence of adequate reading, writing, and verbal communication skills,
- o Expressed interest in teaching as demonstrated by prior experience and activities,
- o An academic record that clearly indicates the candidate's commitment to the academic aspects of teaching, and
- o Evidence of personal traits that suggest potential for working with youth, parents, and other constituencies in education.

The GPA standard was set by the state but is administered by the IHE's. The IHE's screen teacher education applicants, using an interview, to determine if they meet the other standards. At present each IHE uses its own standards and measures to determine if applicants have adequate reading, writing, and verbal communications skills. However, the SEA is trying to develop guidelines to provide uniformity of standards. If students do not meet the GPA standard, there is little recourse although some IHE's allow conditional admission.

According to interview sources, the GPA requirement was "an attempt to assuage the reaction of the public," that is to respond to public

beliefs about the academic qualifications of people entering the teaching profession. The interview sources indicated that "there is no correlation between GPA and success in the field." The rationale for setting the 2.5 level was, apparently, that the minimum GPA for graduating from a public institution is 2.0 so, in order to improve quality, teachers should be required to meet a somewhat higher standard.

### Teacher Education

The approved program requirements differ somewhat for elementary and for secondary teachers. However, each approved program must include 50 semester hours of general education emphasized in the first two years of higher education, 30 semester hours of professional education, and work in the area of specialization. The number of hours required in the area of specialization now varies by field but, if proposed changes are approved, all areas will require 40 hours of specialization.

Elementary teachers are required to take general education courses that will establish competencies in communication skills, mathematics, United States history and government, science, behavioral science, arts and humanities; electives may also include contemporary world culture, practical arts, and health and physical education. The professional education sequence for elementary teachers includes 45 clock hours of supervised developmental and sequential pre-student teaching experiences, one semester of student teaching, and coursework in foundations of education, human growth and development, learning, evaluation, exceptional children, media, methods, and student teaching. The specialization component for elementary teachers includes a core of 21 semester hours of courses in the development of reading skills, language arts, mathematics, and children's literature and 19 semester hours of additional courses including each of the following areas: reading, mathematics, science, social studies, art and music, health and physical education, parent and community relations, computer literacy, and classroom management.

Secondary school teachers have the same general education and professional education requirements as elementary teachers. As indicated earlier, the specialization requirements now vary in each area. The new proposals for an approved program in English will require 40 semester hours of academic preparation in English including courses in grammar and composition, linguistics, American literature, English literature, and world literature; an approved program in mathematics will require 40 semester hours of mathematics, with at least 24 hours of credit in mathematics at a level above intermediate algebra, and additional courses in computer science/computer applications and statistics.

Students can be prepared to teach by taking approved programs in either the arts and sciences division or the teacher education division of an IHE. Respondents indicated that the majority of the program would be identical regardless of the division in which the student was enrolled but that the liberal studies component would differ in the two divisions.



Reaccreditation of teacher education programs occurs every five years and involves both self-study and an on-site visit by a committee selected by the State Department of Education. Approval or reapproval involves review of: (1) governance and administration of the teacher education program; (2) the teacher education faculty; (3) facilities; (4) students—including admission to teacher education, retention in teacher education, admission to student teaching, student advisement, and follow-up of program graduates; and (5) curriculum.

Oklahoma has two unusual requirements for program reapproval, mandated under HB1706. The first is required faculty development for all college of education faculty at state colleges. The teacher education faculty development plans must be reviewed by a committee that includes at least one public school classroom teacher. The second is required service in a state-accredited public school. All full-time college of education faculty (including deans) are required to serve in a state accredited public school for at least one half day a week for one semester during every five year reapproval period. Such service can include, but is not limited to, participation on an Entry-Year Assistance committee.

Approval or reapproval recommendations are made by the State Department of Education and are then sent to the Professional Standards Board (PSB). Since all teacher education programs must also be approved by the State Regents for Higher Education, the PSB determines that such approval has been granted before sending its recommendation to the State Board of Education.

#### Exit from Teacher Education

To complete a teacher education program satisfactorily and obtain a recommendation for a first-year teaching license, the student must have a GPA of 2.5 or higher in teacher education, an overall GPA of 2.0 or higher, and no grade below C in the major field or in professional education courses. In addition, prospective teachers must pass one or more tests, measuring knowledge of the field(s) to be taught, in order to be recommended for licensing for the first year of teaching. The IHE's cannot recommend licensing of individuals who have not passed this test.

#### Certification Requirements and Staff Development

Subject matter testing. Passing the state curriculum examination(s) in the subject(s) to be taught is required for an entry-year license, for all standard certificates, and for provisional certificates in areas other than vocational education.

These examinations, called the Oklahoma Teacher Certification Testing Program, were mandated under HB1706. The program includes 76 different tests covering 34 content areas. There are three types of tests: (1) general tests of 120 items covering 26 content areas (these include tests required for certification in elementary education, in

administration, and in other professional service specialties such as librarian or speech pathologist); (2) umbrella tests of 100 items in business education, industrial arts, language arts, mathematics, music, science, social studies, and special education; and (3) specific area tests of 80 items (for example, American history, economics, geography, government, Oklahoma history, sociology, and world history are the specific area tests under the social studies umbrella).

Individuals applying for a license or a new type of certificate take either a general test, an umbrella test and one or more specific area tests, or a specific area test only, depending on the type of credential sought. Elementary teachers take a general test. Secondary teachers applying for major approval credentials take both an umbrella test and one or more area tests. Secondary teachers seeking minor approval credentials are required to take only the area test. The purpose of the testing program is "to ensure the academic achievement of each licensed teacher in the area each teacher expects to teach."

Prospective teachers may take the tests after their junior year or after having completed a total of 90 hours of teacher education. If the individual does not pass the test, it may be retaken as many times as the individual wishes. Additional coursework before retesting is recommended.

The Oklahoma Teacher Certification Testing Program was developed under the supervision of the State Department of Education, with recommendations from the PSB. The PSB was required by HB1706 to "consult with classroom teachers and higher education instructors" in developing these examinations. Although the PSB was also given the responsibility for developing the rules and procedures used in these examinations, the SEA played a major role in this.

The cut scores for the Oklahoma Teacher Certification Test were set as part of the overall test development process. The tests were developed by National Evaluation Systems (NES) with considerable consultation and review by Oklahoma teachers and teacher educators. The SEA, after consultation with teacher educators, decided on a criterion-referenced, diagnostic test to provide feedback to individuals and to the IHE's. Curriculum materials, course outlines, and textbooks were used to develop test content outlines. Advisory committees of public school teachers and higher education faculty were brought together for each area of certification. The Committees, selected to provide representation by geographic area, race/ethnicity, and sex, were asked to review the outlines to see if the area was adequately covered. Then NES developed topic outlines and wrote objectives. The objectives were reviewed by the advisory committees and by selected samples of teachers who also ranked them for importance and for the extent of actual use. Next, NES wrote the test items and there was another round of committee review. This was followed by field testing of the items in the IHEs and final revisions. Independent panels determined the cut scores, using a modified Angoff method. (In this method, each item is presented. Then the panel members are asked to imagine a group with the minimum of knowledge needed to be

successful in the profession and to estimate what proportion of that group would answer the item correctly. The results are summed and this is suggested as the cut score. In Oklahoma, the cut scores were lowered slightly to include the standard error of the estimate.)

An Objective Mastery Report provides information about the test objectives with low statewide pass rates (defined as average scores below 70). Copies of the Objective Mastery Report are provided to the schools and departments of education. It is intended that the report assist faculty in identifying areas which need further emphasis in the teacher education program.

Study guides have been prepared for the Oklahoma Teacher Certification Tests. A typical guide includes: 1) a section of "helpful hints", explaining the nature of the tests, suggestions about how to study for them, and test-taking tips; 2) the learning objectives for the area and its subareas, and 3) a practice test and answer key.

Certification. Oklahoma has five types of certification. The Entry-Year License is valid for one year. This credential is issued to individuals who have completed an approved program and passed the state examination but who have not had at least one year of experience as a classroom teacher. The Standard Certificate is valid for five years and is renewable. This credential is issued to individuals who have completed an approved program, passed the state examination, and who have successfully completed the Entry-Year Assistance Program. Additional graduate level coursework is required for certification in school service personnel areas. The Professional Certificate is valid for seven years and is renewable. This certification will not be issued after 1987 if the proposed certification standards are adopted. There are two levels of Provisional Certification, valid for one or for two years and renewable once. The regular Provisional Certificates require fewer course hours of work in professional education and in the area of specialization than the Standard Certificate, but require passage of the state examinations and completion of the Entry-Year Assistance Program. The vocational Provisional Certificates requirements include a high school diploma, experience in the occupation to be taught, and passage of an approved occupational examination. Emergency Certification is valid for one year and is not renewable.

Entry-year assistance. An individual who has: (a) completed an approved certificate program at an accredited college or university and received a recommendation from that institution, and (b) passed the state curriculum examination(s) in the subject(s) to be taught is eligible for an Entry-Year License and may be employed as an entry-year teacher by a local school board. Under HB1706, a detailed program of assistance and evaluation, the Oklahoma Entry-Year Assistance (EYA) program, must be provided to beginning teachers.

The EYA program is carried out by Entry-Year Assistance Committees composed of three individuals: (1) a teacher consultant, (2) an administrator, and (3) a teacher educator. The committees are charged with reviewing the classroom performance of the beginning teachers and making recommendations for certification. The committee members independently observe and evaluate the beginning teacher at three times during the year using a standard evaluation instrument approved by the PSB and adopted by the State Board of Education. This evaluation instrument covers four areas: human relations, teaching and assessment, classroom management, and professionalism. After each round of observations, the committee members meet with the entry-year teacher, review the evaluations, and make suggestions. At the end of the year the committee may either recommend that the entry-year teacher be certified (last year, the first year of the program, about 98 percent of new teachers were recommended for certification) or that the teacher take part in the EYA program for a second year. If teachers are not recommended for certification after the second year in the EYA program they cannot continue teaching. There is no recourse from the committee's decision.

The EYA programs are administered by local school districts. The superintendent or chief administrative officer is responsible for scheduling the first meeting of the committee. The committee members then elect a chairperson who is responsible for the remaining meetings and for returning the committee's recommendation to the superintendent, who must sign the recommendation document and forward it to the State Department of Education.

The administrator member of the EYA committee is usually the school principal or assistant principal. The teacher consultant is selected by the school principal from a list of nominees developed by the teachers' bargaining unit, where one exists, or through an election process by the teachers. The teacher consultant is most often selected from the same specialty area. The state pays the teacher consultant member of the committee \$500 for the year's work and expects that the teacher consultant will serve as a mentor for the beginning teacher. No teacher can serve as a teacher consultant for more than one beginning teacher at a time. The teacher educator member of the committee is selected from the institution from which the beginning teacher was graduated, to the extent that geographic limitations allow, or from the nearest teacher education institution.

Staff development. Standard certificates and provisional certificates in areas other than vocational education are awarded to individuals who have: (a) completed an approved program, (b) passed the state curriculum examination(s), and (c) successfully completed the Entry-Year Assistance Program as a licensed teacher. Renewal of a Standard Certificate is required every five years. Renewal requires either three years of teaching experience or nine semester hours of professional education or of specialization.

Under HB1706 local boards of education are required to establish staff development programs that may include in-service training programs and higher education courses. Seventy five clock hours of staff development every five years is required for teacher recertification. Each year local boards of education are required to submit staff development plans to the State Board of Education for approval. These local plans must be based on the recommendations of a local staff development committee. The committee must include teachers, parents, and administrators and must consult with teacher educators; the majority of the committee members must be classroom teachers. The committee must conduct a needs assessment to ensure that the needs of certified and licensed teachers and administrators are being met. State funds are allocated to support this staff development.

### Administrative and Policymaking Roles

The Legislature, State Board of Education, Professional Standards Board, State Board of Regents for Higher Education, and State Department of Education are the key groups in making and administering policies related to teacher education and teacher certification.

### Legislature

As indicated earlier, the legislature played a key role in the development of the current policies through mandates contained in HB1706 and HB1465. These pieces of legislation are fairly prescriptive and allow only limited discretion for the other groups. For example, the legislation specified that entrants into teacher education demonstrate competency in oral and written use of the English language. It also charged the PSB with the responsibility of establishing a minimum GPA for entrance into teacher education. It specified the amount of IHE faculty service in public schools necessary for program approval. It specified that the Department, with recommendations from the PSB, develop "curriculum examinations in the various subject matter areas and grade levels" for teacher licensing, as well as when and how often the examinations may be taken. The legislation also specified that the Department develop an Entry-Year Assistance Program to be approved by the Board and specified the manner in which the EYA committee members would be selected and operate. The legislation also specified that a staff development procedure for certified and licensed teachers be instituted and specified procedures for this recertification requirement.

### State Board of Education

The State Board of Education, which is appointed by the Governor, is required to be composed primarily of educators. The Board has oversight responsibility. It was reported that the State Board rarely rejected recommendations of the Professional Standard Board.

### Professional Standards Board

The appointed 28-member Professional Standards Board has responsibility for "reviewing approved programs of teacher education and recommending new programs, reviewing current certification and licensing requirements and recommending standards for new certificates, and encouraging studies and research designed to improve teacher education, including continuing education of teachers, and making recommendations to the State Board of Education." The PSB serves in an advisory capacity to the State Board of Education on all matters of professional standards, licensing, and certification.

The composition of the PSB, as specified in HB1465, is: the State Superintendent of Public Instruction, the Chancellor of Higher Education, the executive secretary of the Oklahoma Education Association, the director of Teacher Education and Certification, one member representing vocational and technical education, seven classroom teachers, one elementary principal, one secondary principal, two superintendents, one member representing private colleges or universities, four members representing state-owned colleges, one member representing state-owned universities, three non-educator members, one certified public school counselor, one school nurse, and one member of the Oklahoma Federation of the Council for Exceptional Children. The educator members are appointed by the State Board of Education from a list of nominees from the teaching profession submitted to the Superintendent of Public Instruction. Procedures for this nomination process are specified. The non-educator members are appointed by the State Board of Education.

Because most of the state's current policies are an outgrowth of HB1706, legislation would be necessary to make major changes. However, the Professional Standards Board has the authority to recommend changes to the State Board of Education.

New draft certification standards were approved by the PSB in September 1983 and submitted to the State Board of Education. New proposed accreditation standards for approved teacher education programs were reported out in June 1984 by a joint committee of the PSB and the Oklahoma Association of Colleges of Teacher Education. The State Board of Education has sent the new standards recommendations to the legislature, which has referred this matter to the education committee. However, the legislature will not be back in session, to approve these, until January 1985. Individuals interviewed indicated that the IHE's are committed to these standards and will see that they are put in place.

### State Board of Regents for Higher Education

is through the State Board of Regents for Higher Education. The Regents also establish programs, grant degrees, and set academic standards. (The 2.5 GPA requirement to enter teacher education was an exception to this; the legislature specified that a GPA be set by the PSB.)

### State Department of Education

The Department, which is headed by an elected superintendent, has regulatory responsibility. It has developed a detailed "Handbook of Policies and Procedures for House Bill 1706," and prepared a detailed packet of materials for use in implementing the Entry-Year Assistance Program and reports on the Oklahoma Teacher Certification Testing Program. An "Objective Mastery Report" helps teacher education programs identify areas which require more emphasis. One source indicated that keeping clear lines of communication open between the Department and the Regents has helped to keep turf problems over teacher education to a minimum.

Because the State Board of Education has a limited staff, the SEA sees one of its roles as researching and reporting on education-related issues, including testifying before the legislature.

State Superintendent John Folks feels that it is the SEA's job to help the legislators make the best laws. When an education-related bill is introduced, SEA staff state that they try to go over the bill line-by-line with the sponsoring legislator, to help "clean up" the language. The SEA staff tell the legislature when and why they oppose suggested bills but take the attitude that it is best to compromise, get together and try to make it the best legislation possible if a bill they oppose is going to pass.

### Origins of the State's Policies

According to some of the individuals interviewed, the current policies had their origins in two 1970's surveys of teacher education in Oklahoma. The first survey, in 1973-74, focused on the admissions process in the IHE's. Teacher education was compared with other programs within each IHE and Oklahoma's programs were compared with those in other states. This study made the colleges feel that they ought to change. In 1978 the state superintendent organized four task force groups to study education topics. One of these was a task force of deans who were asked to study teacher education reform. Although this task force and its recommendations received a lot of public and media attention, the report was not well received by local superintendents, teachers and the state education agency. Consequently, the recommendations were not implemented. However, several individuals felt that the legislative movement that led to HB1706 grew out of this in part.

Other individuals felt that the legislation in HB1706 was the result of growing public concern about the quality of education in Oklahoma. College entrance exam scores on the ACT were going down and the public was reported as seeing this as the schools' fault, said one source. Another said there was "a cry from the public" about needed major reforms. Both agreed that any request for more public funds was seen as requiring

greater public accountability. This resulted in HB1706 being a "bargain" that teacher salaries would be raised along with teacher education and certification standards. Educators reportedly knew that, to get the teacher salary money, the public would demand quality education.

Still other sources said that the legislation derived from a 1979 informal group led by legislator Jim Fried. This group, which included school administrators, teachers, and higher education faculty, reportedly met in Norman, OK and "came up with everything in the bill."

Most sources agree that legislator Fried was a major figure behind HB1706. Prior to this bill, teacher education in Oklahoma used the approved program model. HB1706 was, in part, modeled after legislation in Georgia. After the bill was presented, there were about 100 amendments; 35 of these are included in the final version. Thus, what finally came about was a little different from what had originally been proposed.

Considerable opposition to the proposed legislation arose in the early stages. Individuals in the SEA acknowledge that the department was initially opposed to the subject matter testing requirement for three reasons. First, there was a feeling that teachers fail because they can't teach not because they don't know the subject. Second, the department felt that it is the responsibility of IHEs to insure that their graduates have competence in the subject areas. Finally, they were concerned about the large number of subject areas in which certification tests would be necessary and about the extent of the implementation and monitoring responsibilities. Other sources also indicated that the department had initially opposed the bill. These individuals say that the department now embraces the bill as its own. They feel that the department has "come around and is now offering some leadership."

There was additional opposition to the proposed bill from sources other than the SEA. School administrators were most often mentioned as an opposing group. Superintendents were described as fearing that it would cut off the supply of teachers, or make it harder to get teachers in rural areas. (Two-thirds of Oklahoma's school districts have an average daily attendance of less than 500 pupils.) Another source indicated that this opposition occurred because the legislation would give teachers a more important role and administrators more "paper work."

One source indicated that teacher organizations were not originally supportive of the testing requirement in the proposed legislation and that in-service teachers were also opposed to testing. However, the teacher organizations now feel that HB1706 would not have passed if they had not supported it and pushed it. An SEA source indicated that having HB1706 tied to an across-the-board \$1600 increase in teacher salaries was crucial to its passage. The deans of the colleges of education were also mentioned by one, non-SEA respondent, as providing leadership for the passage of HB1706.



It was clear that despite its early concerns about the testing component of HB1706, the SEA worked to support passage of this legislation. John Folks, then associate state superintendent, was assigned by the Superintendent of Public Instruction as the legislative liaison. Folks was described by some individuals as "changing" when he recognized that HB1706 was going to pass. "He decided to get on with it. He recognized good stuff." Other sources indicated that Folks developed a good working relationship with the legislature. According to one individual, Folks sat in the legislature gallery and worked closely with the supporting legislators when HB1706 was being debated. Several sources stated that once the department realized that testing was going to be part of the legislation, they decided to work to make it the best test possible.

### Impact of the Policies

HB1706 requires that the results of the teacher certification test be published. The rationale for this mandate is that the test is criterion-referenced and provides diagnostic feedback to colleges and to universities. The 1983 Oklahoma Teacher Certification Testing Program Annual Report indicates a pass rate for first time examinees of 80 percent. The cumulative overall pass rate is 88 percent (See Table 1). The results are published by institution. At first this made headlines; now there is less concern. An SEA source indicated that some institutions were concerned about their pass rate. "This has made them work harder." The private IHE's in the state tend to have slightly higher pass rates than the public IHE's but this is seen "more a matter of clientele than of program." The pass rate for minorities is about 50 percent (See Table 2). A study committee from the Black caucus of the legislature was concerned about this. They were invited to and did review test items for bias. (Very few problems were found.) This has helped to quiet criticism.

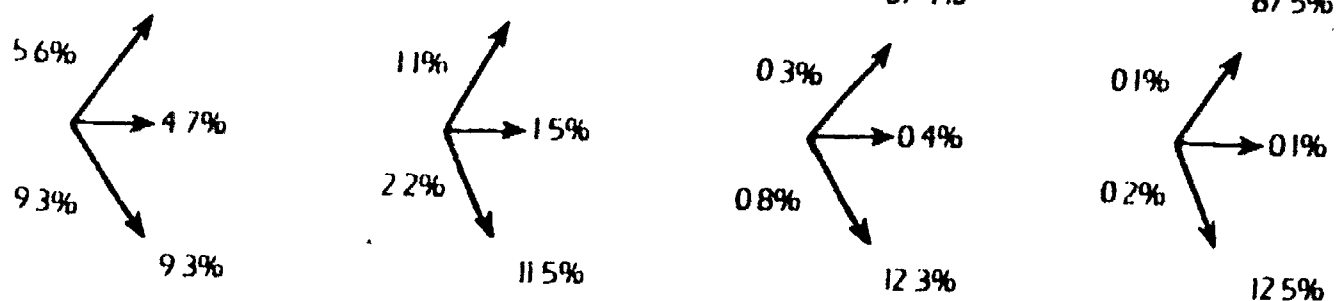
There has also been some concern about the differential pass rates across subject matter areas. While 95% of those taking the elementary education exam eventually pass, only 30% of those taking earth science and 28% of those taking French eventually pass.

Department sources say that the test has weeded out some individuals, that it has required the colleges to "get their act together," and that it provides desirable consistency in curriculum across the colleges and universities. Another SEA source indicated that the tests are beneficial because they keep a few students, who consistently fail the tests, out of the classroom.

According to one SEA source, every IHE has reported that HB1706 has made students more serious about the decision to enter teacher education and more serious about their coursework. Because the test is subject-matter focused, teacher education departments now put pressure on other departments

**TABLE 1**  
**PASS/FAIL PERCENTAGE CHART**  
**ALL EXAMINATIONS - ALL INSTITUTIONS**  
**1982-83 SUMMARY**

<b>STATUS</b>	<b>FIRST ATTEMPT</b>	<b>SECOND ATTEMPT CUMULATIVE</b>	<b>THIRD ATTEMPT CUMULATIVE</b>	<b>FOURTH ATTEMPT CUMULATIVE</b>	<b>FIVE OR MORE ATTEMPTS CUMULATIVE</b>
Pass	80.4%	86.0%	87.1%	87.4%	87.5%
Fail	19.6%	4.7%	1.5%	0.4%	0.1%
No Retake	NA	9.3%	11.5%	12.3%	12.5%
Retake Pass Rate	NA	55.0%	10.0%	3.0%	1.0%
Cumulative	NA	NA	65.0%	68.0%	70.0%



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Table 2

Sex and Race Analysis - 1983

All Examinations

<u>Group</u>	<u>Number Taking</u>	<u>Number Passing</u>	<u>Percent Passing</u>
Male	2396	1751	73%
Female	5808	4593	79%
Black	281	134	48%
Hispanic	36	21	58%
American Indian	239	151	63%
Asian American	7	5	71%
Other	36	30	56%
White	7575	6008	79%

in the IHE's to give their students good preparation. Public concern about the quality of teacher education has been taken off the departments of education and is now focused more widely across the higher education system.

Another SEA source indicated that teacher educators had gained a lot from the legislation, primarily because of the required involvement with public schools. Prior to this legislation, school districts had not wanted teacher educator involvement. This source indicated that, after his experience in a public school, one teacher educator went back and changed 90 percent of his methods course because he realized it was outdated.

Still another source reported that superintendents feel that the entry-year assistance program is the "best thing" about HB1706. They are reported as feeling that the EYA program has a positive impact on the consulting teacher as well as on the beginning teacher. In addition, superintendents are reported as feeling that the public schools interaction with teacher educators is positive. The required collaboration and interaction among new teachers, veteran teachers, administrators, and teacher educators has provided each with fresh perspectives.

A common complaint about the subject matter tests, according to one source, is that what is measured is the core part of the subject matter curriculum taught in the first two years of college or in high school rather than the more advanced part of the subject.

There is also a positive feeling about the staff development requirement which, as one SEA source described it, affects every teacher up to retirement. The trend in staff development now is toward the students' needs; earlier the emphasis had been on things like "teacher burnout."

Superintendents are reportedly still concerned about the long-range impact of these policies. The financial crunch which Oklahoma has experienced since this legislation was passed has brought its average teacher salaries to 40th in the nation. Superintendents, especially those in rural areas, report it increasingly difficult to find certified teachers. Without these teachers they cannot offer the courses that are needed and/or required. The superintendents fear that this could, ultimately, lead to the closing of inadequately staffed schools. One SEA source commented that these concerns are based more on emotion than on evidence.

#### Emerging Issues

The major emerging issue appears to be the new, proposed certification and accreditation standards. As indicated above, the major change is that certification will now require 40 hours in the area of specialization

for all majors, instead of the varying number of specialization hours now required. There is particular concern about how this requirement will affect certification of people to teach in subject matter areas in which they have minored. Currently individuals can teach up to one-half of the day in a minor field. One view is that the individual teaching in a minor, rather than a major, field is an inferior teacher. However, there is considerable concern about the impact in rural areas of changing certification for teaching minors. It is argued that these rural school systems, especially, need teachers who can handle several related certification areas while systems in urban areas which have more students can have more specialized teachers. One respondent suggested that separate certification standards for teachers in large urban and small rural school systems might be required.

Other issues mentioned included:

- o standards for temporary certification and/or substitute teachers;
- o unverified complaints about teacher shortages;
- o access into the teaching profession through avenues other than teacher education (one respondent commented that although it was perceived that "education graduates are not all that sharp and that graduates in other areas are better, this is not really true");
- o the \$80 million decrease in state funding for education (the state has experienced a decline in its economy, especially in the oil industry); this is a special concern because of the need for more funding for teacher education and in-service training;
- o increasing quality standards, especially in the high schools (the state is increasing high school graduation requirements to 20 units, including 4 in English, 2 in math, 2 in science, 1 in American history, 1/2 in world history, 1/2 in Oklahoma history--this is an increase of 1 unit in math and in science and 1/2 unit in world history); there has been an effort to develop statements of expected learner outcomes for each grade level; a program of assessment for all students will be considered at the next legislative session;
- o testing for admission to teacher education has also been discussed; and
- o development of a teacher career ladder, with a master teacher program and/or merit pay, has been discussed as a way of giving teachers more opportunities for advancement.

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## CHAPTER 4

### STUDY STRENGTHS AND WEAKNESSES AND RECOMMENDATIONS FOR FUTURE RESEARCH

The research described in this report has both strengths and weaknesses. These strengths and weaknesses relate to the timing of the study and to the methodologies employed as well as to the findings. In this chapter we will review these strengths and weaknesses and, then, describe needed future research that was identified by this study.

#### Study Strengths

The timeliness of this study is one of its strengths. The research was carried out at a time when interest in the public schools was at the highest level since the Sputnik era of the late 1950s. Policymakers in every state were rushing to respond to this interest and the related concerns about the quality of American education and American teachers.

A second strength is the study's dual methodology. By combining both survey research and case study techniques, it was possible to obtain a broad national view across all states as well as a detailed, in-depth analysis in a small number of states. By emphasizing depth and permitting researchers freedom to pursue emerging topics, the case study approach provided the kind of detailed information on the rationale, structure, operation, and impact of state policies that surveys cannot obtain. The case study methodology used in this study allowed exploration of the topics from a variety of perspectives, including those of legislators and education interest groups as well as state departments of education and institutions of higher education.

The development of individual state profiles enabled us to identify variations among states in policies affecting entrance into the teaching profession. By beginning with a narrative description of the policies in each state, we were better able to discern large and small differences in policies than would have been possible by starting with a survey that forced state policies into arbitrary categories. Documentation of the wide range policies in use by states can be considered a major contribution of this study.

The follow-up questionnaire was used to collect information on the states' decision-making structures. By analyzing the division of teacher education authority and responsibility between state agencies and institutions of higher education, we were able to determine that the balance of power is shifting away from the IHEs and toward the states. With this knowledge, we then used the case studies to explore the tensions that this shift of power is creating.

The questionnaire also allowed us to determine that few states collect data on the impact of their policies. Despite this lack of data across the nation, our case study analysis succeeded in drawing attention to policy impact and, especially, to equity issues relating to who is being kept out of the teaching profession.

### Study Weaknesses

Despite these considerable strengths, this study is not without weaknesses. The timeliness of the topic created three problems. First, changes in state policies occurred rapidly during the year in which the study was conducted. As a result, our data can only provide a snapshot of policies in effect during one school year, 1983-84. Second, many policies that we wanted to study were either recently implemented or legislated but not yet implemented. As a result, there were only a limited number of states where policies had been in effect long enough to make any evaluation of their impact. This placed constraints on our case study site selection process. Finally, the recency of many state policies was a particular problem in analyzing the changing authority of the states and IHEs as it affects teacher education. It is necessary to analyze the actual implementation of policies over time to understand if and how authority is actually shifting.

Another weakness was the paucity of state data on policy impact. We had hoped that it might be possible to use state data to conduct a meta-analysis of impact, but the lack of information and the considerable variation in policies made this impossible. Because existing impact data is scattered, and often impressionistic, it is difficult to determine the extent to which any specific policy is impacting on the supply and composition of the teaching force and the extent to which other factors, such as low salaries, are creating the observed changes. We were unable to conduct any analysis that would tease apart the effects of the many closely related factors that affect teacher supply and quality.

A final weakness is linked to the use of the case study method. Despite its strengths, this methodology limits generalizations. This is a particular problem in studies like this where there is considerable variation in policies among the states and where there are no clearly defined patterns of policies.

### Future Research

These strengths and weaknesses suggest a variety of avenues for future research on the ways that state policies affect the size, composition and quality of the teaching profession.



First, it is important that data be collected to enable a continuing monitoring of the impact of state policies. This task falls to researchers because many state policymakers appear reluctant to mandate the collection of such data or do not have the resources to do so. In addition, data should be collected both before and after a policy is implemented in order to carry out comparisons. Data collection in individual IHEs may be required as well, especially if the policies under study are directed at admission into teacher education programs and/or completion of these programs.

A second research study should examine if and how the composition of people applying to teacher education programs has changed, and the extent to which new state policies have affected these choices. Most existing studies of the changing pool of individuals entering the teaching profession has relied on large-scale national surveys. These aggregated findings may mask state to state differences that can be related to specific state policies or to regional demographics. A related research project should study the extent to which states have developed incentive programs to increase the supply of teachers, the nature of these incentive programs, and their effectiveness in increasing the size, quality, and diversity of the teaching force.

Third, an analysis of the alternative certification routes becoming available in several states is needed. It is important to know the number and kind of individuals who seek to use these alternative routes, to determine if the availability of this alternative shifts the balance of power further away from IHEs, and to examine whether these policies create tension between the state and local school districts in those cases where local authorities have the power to determine eligibility for certification.

Fourth, we heard complaints in each of our case study states about the inequitable impact of policies on rural schools. Do the different staffing patterns needed in large urban and small rural school systems require more narrowly certified teachers in the former and more broadly certified teachers in the latter? Will the use of teachers with broad certifications to meet the staffing needs of rural schools result in a second-rate education for rural students provided by generalist teachers?

Finally, research should address another complaint raised by our case study respondents: There is increased screening of classroom teachers but there is no corresponding screening of administrators. Some individuals even suggested that it was the less able classroom teachers who choose to become administrators and that these individuals are especially ill-suited to manage the new, more highly selected teaching force. Certainly the time seems ripe for a study of educational administrators and the extent to which this key group is, or should be, affected by state policies.

APPENDIX A

QUESTIONNAIRE

Response to State Teacher Policy Profile

1. Name of Respondent \_\_\_\_\_

Address \_\_\_\_\_

Phone for follow-up, if needed \_\_\_\_\_  
(Area Code)

May we include your name in the list of respondents in the project report?  
\_\_\_\_ Yes \_\_\_\_\_ No

Please review each section of the profile and indicate if the description is accurate as given. If the description is not accurate, please supply the correct information. In addition, please answer the specific questions included in some sections. Thank you.

2. Standards and Certification Body

a. Is the description accurate as given? \_\_\_\_ Yes \_\_\_\_\_ No

If No, indicate below the changes that should be made. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. What is the role of the state department of education, state department of higher education, state legislature, and/or state board of education in setting state policies that relate to teacher education and to teacher certification?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Standards Used for the Approval of Teacher Education Programs

a. Is the description accurate as given?  Yes  No

If No, indicate below the changes that should be made.

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4. Admission to Teacher Education

NOTE: Since the focus of the study is on state policy, please differentiate between teacher education requirements and teacher education practices which may have been agreed to by all teacher education institutions but which do not have the force of law.

a. Is the description accurate as given?  Yes  No

If No, indicate below the changes that should be made.

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b. If your policy relates to GPA:

(1) Who determined the cut-off grade level? \_\_\_\_\_

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(2) What is the rationale for the grade cut-off used?

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c. If your policy is based on test scores:

(1) Who determined the cut-off score? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) What is the rationale for the cut-off score used? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(3) If your state uses the ACT or SAT, when does the student seeking to enter teacher education take the test? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

d. In the past five years, has your state raised teacher education entrance criteria? \_\_\_\_\_ Yes \_\_\_\_\_ No. (1) If Yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) How has this change affected teacher candidate supply and/or quality?  
(Check those that apply.)

- \_\_\_\_\_ No change  
\_\_\_\_\_ Supply increased  
\_\_\_\_\_ Supply decreased  
\_\_\_\_\_ Quality increased  
\_\_\_\_\_ Quality decreased



b. Can you suggest any way to clarify our presentation of this part of the profile? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c. In the past five years, has your state made any change in the teacher education curriculum? \_\_\_\_\_ Yes \_\_\_\_\_ No

(1) If yes, in what way(s) has it changed? (Check all that apply.)

- \_\_\_\_\_ Made it more rigorous/challenging
- \_\_\_\_\_ Increased or improved required general studies credits
- \_\_\_\_\_ Increased required professional studies credits
- \_\_\_\_\_ Increased required student teaching/practicum
- \_\_\_\_\_ Extended undergraduate program beyond four years
- \_\_\_\_\_ Other (please describe) \_\_\_\_\_

(2) How do you think the change(s) affected teacher candidate supply and/or quality? (Check those that apply)

- \_\_\_\_\_ No change
- \_\_\_\_\_ Supply increased
- \_\_\_\_\_ Supply decreased
- \_\_\_\_\_ Quality increased
- \_\_\_\_\_ Quality decreased

d. Do you have any evidence that the current curriculum requirements serve as a barrier to any type of student (e.g., liberal arts major, minority, etc)?  
Yes \_\_\_\_\_ No. If Yes, please describe:

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6. Evaluation to Complete Teacher Education

a. Is the description accurate as given? \_\_\_\_\_ Yes \_\_\_\_\_ No

If No, indicate below the changes that should be made.

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b. In the last five years, has your state raised or changed the evaluation standards for completion of teacher education? \_\_\_\_\_ Yes \_\_\_\_\_ No

(1) If Yes, please describe.

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(2) How have the change(s) affected the supply and/or quality of teacher candidates? (Check those that apply)

- \_\_\_\_\_ No change
- \_\_\_\_\_ Supply increased
- \_\_\_\_\_ Supply decreased
- \_\_\_\_\_ Quality increased
- \_\_\_\_\_ Quality decreased



c. If students do not meet the evaluation standards, are alternative routes and/or remediation available?  Yes  No If Yes, please describe: \_\_\_\_\_

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d. Are there data available data about the number and/or type of students who fail to meet the teacher education evaluation standards?  Yes  No  
If Yes, please describe these data. \_\_\_\_\_

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e. If your standards for completion of teacher education include testing:

(1) Who determines the cut-off score used? \_\_\_\_\_

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(2) What is the rationale for this cut-off score? \_\_\_\_\_

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f. If your standards for completion of teacher education include a required GPA:

(1) Who determines the cut-off grade level? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(2) What is the rationale for this cut-off? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Certification Process

a. Is this description accurate as given? \_\_\_\_\_ Yes \_\_\_\_\_ No

If No, indicate below the changes that should be made:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Can you suggest any way to clarify our presentation of this part of the profile? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c. In the past five years, has your state made any changes in the teacher certification standards?            Yes            No

(1) If Yes, what type(s) of changes were made? (Check all that apply.)

- Added an initial certification step for beginning teachers
- Added an advanced certification step for highly experienced (master) teachers
- Added a testing requirement
- Added or increased an in-service training requirement
- Added or increased a competency demonstration requirement
- Increased the educational requirements
- Developed a certification process for individuals with bachelor's degrees but no teacher education
- Added or increased an observation of teaching requirement
- Put more stress on certification renewal, less on life certification
- Other (please describe) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) How have the change(s) affected the supply and/or quality of teachers?  
(Check all those that apply)

- No change
- Supply increased
- Supply decreased
- Quality increased
- Quality decreased

d. Are there data available about the number and/or types of individuals who are screened out by your certification requirements?            Yes            No

If Yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

e. Do you have any evidence that these certification requirements serve as a barrier to any type of student (e.g., liberal arts major, minority, etc)?

           Yes            No. If Yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

f. If an individual fails to meet the certification requirements, are alternative routes and/or remediation available?            Yes            No

If Yes, please describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

g. If your certification requirements include testing:

(1) Who determines the cut-off score used? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) What is the rationale for this cut-off score? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

h. If your certification requirements include demonstration of competencies or observation of teaching:

(1) Who sets the evaluation criteria? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) Who conducts these observations? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

i. If your state has more than one level of certification (e.g., Basic and Advanced), must teachers move from one level of certification to another?

\_\_\_\_\_ Yes \_\_\_\_\_ No. If Yes, please explain \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Staff Development

a. Is the information accurate as given? \_\_\_\_\_ Yes \_\_\_\_\_ No

If No, indicate below the changes that should be made.

\_\_\_\_\_  
\_\_\_\_\_

If this information is not included in your profile, please answer the following questions.

b. Is staff development required?        Yes        No

c. How is staff development linked to recertification requirements?

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d. Who sets the staff development course requirements?

       No course requirements

       State Department of Education

       Other state agency

       Local school district

e. Do local school districts receive state funding in support of inservice programs?        Yes        No

f. In the past five years has your state made any changes in the staff development requirement?        Yes        No. (1) If Yes, describe:

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(2) How have the changes affected teacher supply and/or quality?

       No change

       Supply increased

       Supply decreased

       Quality increased

       Quality decreased

9. Other

a. Is the information in this section correct as given? \_\_\_\_\_ Yes \_\_\_\_\_ No

If No, what changes should be made? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Are there other state initiatives concerning teacher education and/or teacher certification that we should know about? \_\_\_\_\_ Yes \_\_\_\_\_ No.

If Yes, please describe \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THANK YOU

Please return by February 8th to: Study of State Teacher Policies R-08  
Educational Testing Service  
Princeton, NJ 08541-0001