A REVIEW OF STATE TEACHER POLICIES: WHAT ARE THEY, WHAT ARE THEIR EFFECTS, AND WHAT ARE THEIR IMPLICATIONS FOR SCHOOL FINANCE?

By Susanna Loeb & Luke C. Miller
Institute for Research on Education Policy & Practice (IREPP)
School of Education, Stanford University

December, 2006

This work was conducted for the California school finance and governance project, *Getting Down to Facts: A Research Project to Inform Solutions to California's Education Problems*, funded by the Bill and Melinda Gates Foundation, William and Flora Hewlett Foundation, James Irvine Foundation, and Stuart Foundation. We'd like to thank Greg Wright, Jonathan Elkin, and Elena Grewal for their valuable assistance in pulling together information on State teacher policies. Additionally, the quality of this product benefited from the comments and feedback of Michael Podgursky, Michelle Reininger, Julia Koppich, attendees at the 2006 Conference of the American Education Finance Association, Denver, Colorado, and the members of the Personnel working group of the *Getting Down to Facts* project.

SUMMARY

California and States across the nation are attempting to meet the challenge of staffing classrooms with high quality teachers. Each State has designed and implemented a web of policies targeted at teachers – from regulations on teacher education programs and certification to salary structures and recruitment and retention incentives. Despite the plethora of teacher policies, little is known about the variation in the specifics of the policies across States, their effects on teacher quality or student outcomes, or their implications for school finance. This study, seeks to fill some of these knowledge gaps by detailing and reviewing a large number of teacher policies across all fifty States and the District of Columbia. It also describes, more generally, what research tells us about teacher labor markets and promising approaches for strengthening the teacher workforce.

This report collects information on State teacher policies in eight broad areas:

- Pre-service training policies cover State accreditation requirements for teacher preparation programs regarding minimum subject matter coursework and field and clinical experiences as well as measures by which States hold the programs accountable for the quality of the teacher candidates they train.
- Licensure and certification policies address the authority of State professional standards boards, required teacher assessments for initial licensure, second-stage license requirements, alternative routes to certification, and State implementation of the highly qualified teacher provision of the No Child Left Behind Act of 2001 (NCLB).
- o *Tenure policies* detail the processes through which teachers transition from probationary to non-probationary status and their due process rights.
- o *Professional development policies* detail professional development requirements, induction and mentoring programs, and teacher performance evaluations.
- Recruitment, retention, and assignment incentives policies common among States
 include tuition support, loan assumption, salary bonuses and housing assistance. State
 incentives for teachers to complete the National Board for Professional Teacher
 Standards (NBPTS) certification process are also reviewed.
- Salary structure policies encompass State-level minimum salary schedules and output-based pay structures such as career ladders, merit pay, and pay-forperformance programs.
- o *Teacher association policies* speak to teachers' collective bargaining rights as well as related right-to-work laws.
- o *Teacher retirement policies* center on the teacher retirement systems and detail system management, membership in the system, mandatory contribution rates, service

requirements for vesting and benefits, calculation of retirement benefits, and health insurance coverage.

By pulling together information on all eight policy areas across the fifty States and the District of Columbia, we characterize the State-level context in which schools and districts operate. State statutes and regulations are our primary source of data on teacher policies. Other sources of data include NASDTEC's *Knowledgebase* database, Education Week's *Quality Counts 2005*, individual State websites, and State policy summaries by the Education Commission of the States. ²

The paper is laid out in three sections. It begins by providing an overview of teacher labor markets in general and reviews the recent dynamics in California. Next, it discusses each of the eight policy areas in turn. For each area, it presents California's approach and then compares and contrasts it with approaches taken by other States. Conclusions from this review of State policies and the effectiveness literature include, for examples:

- States' role in teacher labor markets is neither small nor simple. States have passed bundles of laws that reach into every aspect of the teacher workforce. California is not an exception.
- O While States have implemented a slew of policies, they have systematically evaluated very few of them. If this approach does not change we will be in no better position to choose effective policies in the future than we are today.
- The current structure of salary schedules presents several problems. First, it tends to treat all schools in a district in the same way. This creates a situation in which the appeal of a school for teachers is based solely on working conditions. Since teachers, on average, express preference for higher-scoring students, this policy disadvantages schools with the lowest-performing students. In addition, current salary structures treat all specialization in teaching equally, making it more difficult to attract teachers to fields such as math and science that have good alternative occupational opportunities or to fields such as special education or bilingual education that require either additional training or additional effort during employment.
- O While typical salary structures do not include incentives based on teacher performance, the research to date is not clear as to whether such incentives are beneficial or not. The research does show that it is difficult to design and monitor an effective system that creates appropriate incentives for teachers.
- O There is substantial evidence that while some professional development and more formal education can improve teacher effectiveness, generic credits do not. For example, teachers with masters' degrees are, on average, no more effective than those with out. However, teachers who participate in some sustained professional development that is linked closely to the work that they do in their classrooms, do, on average, become more effective. There is little evidence on the effects of pre-service education requirements. That which does exist is mixed, some finding positive effects and some no effects. On the other hand, there is strong evidence that pre-

service requirements affect the pool of potential teachers. Early-entry (intern) routes into teaching with reduced pre-service coursework tend to attract a larger pool of candidates. We have a lot to learn about which requirements improve teaching and which deter good teachers from entering the classroom; the evidence so far suggests that policies that address these factors can have substantial impacts because they affect both the pool of teachers and the experiences that these teachers bring with them into the classroom.

O Teacher tenure in California occurs earlier in teachers' careers than it does in most States. While there is no evidence, that we know of, concerning the effects of early tenure on student outcomes directly, there are indications that this policy is problematic for districts and schools in the State. In theory, schools and districts can dismiss tenured teachers with poor evaluations, yet we currently know very little about teacher evaluation procedures, the evaluation clauses in teacher contracts, or how these affect teacher assessment and career trajectories.

In considering specific policy approaches it can be useful to think more broadly about the role of the State in the teacher workforce. Perhaps the outstanding issue in State teacher policy is how interventionist States should be in determining the allocation of resources related to teachers within districts and schools. One role of the State is to coordinate across districts, perhaps adjusting for differences in needs or providing information and resources that districts would not be able to attain on their own. The role for the State within districts is less clear and varies more across States. Districts, left on their own, often have done poorly at allocating teacher resources across schools. Schools with the lowest-scoring students and the highest proportions of nonwhite students and students in poverty often employ less experienced teachers and those with lesser qualifications. State and even Federal policies can help reduce these differences, either through incentive programs that are directed at teachers or by greater incentives on districts to insure that evident differences in teacher resources disadvantaging the lowest-achieving students do not persist. California, for example, targets incentives to attract National Board certified teachers to difficult-to-staff schools. There is some evidence from North Carolina that monetary incentives can extend teachers stay in schools; however, there is less evidence on whether these types of incentives can attract new teachers to these schools.

State policy does more than address the differences across districts and across schools within districts. California, for example, has mandated a number of professional development programs. It also has a minimum salary level, though this is not binding in most districts. The direct involvement of the State in within-district resource allocation could be beneficial if (1) the State has better information than school or district leaders about what policies and practices would benefit students; (2) have a greater ability to regulate the implementation of policies and practices that would benefit students; or (3) have goals for students that are more in keeping with residents' goals. There may be cases in which this is the case and cases in which this is not the case. Having the information to assess the extent to which a State role is warranted would put us in a much better position to design and implement effective policies to attract, develop and retain the most effective teachers.

LIST OF ACRONYMS AND ABBREVIATIONS USED

AB Assembly Bill

ABCTE American Board for Certification of Teacher Excellence

ABS Average Base Salary

ADEPT Assisting, Developing, and Evaluating Professional Teaching

AFC Average Final Compensation

AFDC Aid for Families with Dependent Children

AFT American Federation of Teachers
API Academic Performance Index

APLE Assumption Program of Loans for Education

ASRS Arizona State Retirement System

BA Bachelor of Arts

BOCES Board of Cooperative Educational Services
BTSA Beginning Teacher Support and Assessment
CalSTRS California State Teacher Retirement System

CaMSP California Mathematics and Science Partnership Program

CBA Collective Bargaining Agreement

CBEST California Basic Educational Skills Test

CCTC California Commission on Teacher Credentialing

CDE California Department of Education

CEU Continuing Education Units

CFASST California Formative Assessment and Support System for Teachers

CFT California Federation of Teachers

CFTL The Center for the Future of Teaching and Learning

CLU Continuing Learning Unit

COBRA Consolidated Omnibus Budget Reconciliation Act

CSET California Subject Educational Test CSMP California Subject Matter Project

CSR Class-Size Reduction

CSTP California Standards for the Teaching Profession

CSU California State University
CTA California Teachers Association
DBSP Defined Benefit Supplement Program
DCPS District of Columbia Public Schools

DOE Department of Education

DPAS Delaware Performance Assessment System

DSTP Delaware Student Testing Program
ECS Education Commission of the States
ELLA Early Literary Learning in Arkansas
ESL English as a Second Language

EYT Entry Year Teacher

FAC Final Average Compensation

FAS Final Average Salary

FICA Federal Insurance Contributions Act

FTE Full-Time Equivalent

FY Fiscal Year

GED General Equivalency Diploma GPO Government Pension Offset HAS Highest Average Salary

HOUSSE Highly Objective Uniform Standards of State Evaluation

HQT Highly Qualified Teacher
IHE Institution of Higher Education
IIP Individual Induction Plan

INTASC Interstate New Teacher Assessment and Support Consortium

IPDP Individual Professional Development Plan

ITSDR Instructional Time and Staff Development Reform

LEA Local Education Authority
MIP Member Investment Plan

MPSERS Michigan Public School Employee Retirement System

MRPDP Mathematics and Reading Professional Development Program

MSSE North Carolina's Math/Science/Special Education Teacher Bonus Program

MTRS Massachusetts Teacher Retirement System

NBPTS National Board for Professional Teacher Standards

NBC National Board Certificate

NBCT National Board Certified Teacher

NCAC National Center for Alternative Certification

NCLB No Child Left Behind

NEA National Education Association
NRTWC National Right to Work Committee
NTE National Teacher Examination

NYC New York City

OASDI Old Age, Survivor, and Disability Insurance OPSRP Oregon Public Service Retirement Plan

PAR Peer Assistance and Review

PEERS Missouri's Public Education Employee Retirement System

PERA Public Employees' Retirement Association
PERB Public Employment Relations Board

PERS Oregon's Public Employees Retirement System

PGP Professional Growth Plan

PSRS Missouri's Public School Retirement System
PTTP Paraprofessional Teacher Training Program
RICA Reading Instruction Competence Assessment

SB Senate Bill

SCEOC South Carolina Education Oversight Committee

SSIL Social Security Integration Limit

STSP Short-Term Staff Permits

SY School Year

TAP Teaching as a Priority

TFE Teaching Foundations Examination
TLP South Carolina's Teacher Loan Program

TPE Teacher Performance Expectations

TRA Minnesota's Teacher Retirement Association TRIP Teacher Recruitment Incentive Program

TRS

Teacher Retirement System
Tennessee Value-Added Assessment System
Wisconsin Education Association Council **TVAAS** WEAC

WEP Windfall Elimination Provision

State Teacher Policies:

What are They, What are Their Effects, and What are Their Implications for School Finance?

I. PURPOSE

California and States across the nation are attempting to meet the challenge of staffing classrooms with high quality teachers. Each State has designed and implemented a web of policies targeted at teachers – from regulations on teacher education programs and certification to salary structures and recruitment and retention incentives. Despite the plethora of teacher policies, little is known about the variation in the specifics of the policies across States, their effects on teacher quality or student outcomes, or their implications for school finance. This study, seeks to fill some of these knowledge gaps by detailing and reviewing a large number of teacher policies across all fifty States and the District of Columbia. It also describes, more generally, what research tells us about teacher labor markets and promising approaches for strengthening the teacher workforce.

This report collects information on State teacher policies in eight broad areas:

- O Pre-service training policies cover State accreditation requirements for teacher preparation programs regarding minimum subject matter coursework and field and clinical experiences as well as measures by which States hold the programs accountable for the quality of the teacher candidates they train.
- o *Licensure and certification policies* address the authority of State professional standards boards, required teacher assessments for initial licensure, second-stage license requirements, alternative routes to certification, and State implementation of the highly qualified teacher provision of the No Child Left Behind Act of 2001 (NCLB).
- o *Tenure policies* detail the processes through which teachers transition from probationary to non-probationary status and their due process rights.
- o *Professional development policies* detail professional development requirements, induction and mentoring programs, and teacher performance evaluations.
- o *Recruitment, retention, and assignment incentives policies* commonly include including tuition support, loan assumption, salary bonuses and housing assistance. State incentives for teachers to complete the National Board for Professional Teacher Standards (NBPTS) certification process are also reviewed.
- o *Salary structure policies* encompass State-level minimum salary schedules and output-based pay structures such as career ladders, merit pay, and pay-for-performance programs.
- o *Teacher association policies* speak to teachers' collective bargaining rights as well as related right-to-work laws.
- o *Teacher retirement policies* center on the teacher retirement systems and detail system management, membership in the system, mandatory contribution rates, service requirements for vesting and benefits, calculation of retirement benefits, and health insurance coverage.

By pulling together information on all eight policy areas across the fifty States and the District of Columbia, we characterize the State-level context in which schools and districts operate. State statutes and regulations are the primary source of data on teacher policies.³ Other sources of data include NASDTEC's *Knowledgebase* database, Education Week's *Quality Counts 2005*, individual State websites, and State policy summaries by the Education Commission of the States.⁴

The remainder of the paper is laid out in three sections. It begins by providing an overview of teacher labor markets in general and reviews the recent dynamics in California. Next, it discusses each of the eight policy areas in turn. For each area, we present California's approach and then

compare and contrast it with approaches taken by other States. For the purpose of across-State comparisons, the District of Columbia is considered a State meaning there are 51 observations rather than 50.⁵ We draw several key conclusions from this review of State policies and the effectiveness literature in Section IV.

II. DYNAMICS OF TEACHER LABOR MARKETS AND RECENT TRENDS IN CALIFORNIA

Teacher labor markets are determined by the supply of individuals interested in teaching, by the demand of hiring authorities for teachers and by the institutions and policies in which these two sets of actors operate. In this section we describe the teacher labor market and then discuss teacher supply and demand and the California context. Much of the remainder of the report focuses on the role of institutions and policies.

Who Teaches

Approximately three and a half million college graduates teach in elementary and secondary schools in the United States. These teachers represent almost ten percent of all working college graduates. An even larger proportion of current college graduates consider teaching after graduation. Within four years of receiving a bachelor's degree, for example, 36 percent of the class of 1992–93 had applied for a teaching job, become certified to teach, or considered teaching. Of these young adults, more than a third had actually taught.⁷

These college graduates are responding to an historical trend that demands increasing numbers of teachers. The number of elementary and secondary public school teachers has grown steadily in the last half century. In 1955, there were 1.14 million public elementary and secondary school teachers in the United States. Fifty years later, this number had tripled reflecting both increases in elementary and secondary school enrollment and decreases in the ratio of students to teachers. Enrollment increased drastically in the 1960s as students of the baby boom generation began to attend school, and then rose again in the late 1980s and early 1990s as the children of these baby boomers entered the education system. While the student population dropped off in the late 1970s, the number of teachers remained nearly constant, leading to a decrease in the student-teacher ratio. From 1955 to 1990, the average number of students per teacher declined from 26.9 to 17.2. The decrease in the student-teacher ratio accounts for a large part of the increase in the cost of public school education over the past few decades. Small class size has been shown to increase student achievement, but we have little evidence on the effects of alternative resource allocations. It is therefore difficult to judge whether the huge quantity of resources devoted to reducing class size has been allocated in the most effective way for meeting educational goals.

Gender. Most teachers, particularly at the elementary level, are women. Women make up a higher fraction of elementary school teachers than secondary school teachers. In 1996, 83 percent of elementary school teachers were women, compared with 57 percent of secondary school teachers. Although the share of women teachers has changed very little over the last 50 years, the share of women college graduates entering the teacher labor market has dropped dramatically. This shift is largely due to vast increases in the number of women obtaining bachelor's degrees. In the mid-1960s, less than ten percent of women between the ages of 25 and 34 had obtained a bachelor's degree. By the mid-1990s, however, more than 1 in 4 women completed college. In 1964, over half of working female college graduates were teachers, but this percentage had fallen to less than 15 percent in 1996. In addition to large increases in the number of women college graduates, the last 30 years have seen substantial gains in the wages available to women in non-teaching fields. This change in opportunities has affected the characteristics of women in the teacher workforce, reducing

the percent of teachers who come from the very top of the achievement distribution of high school graduates.⁸

Race/Ethnicity. In addition to being predominantly female, the teacher workforce is primarily white. In fact, the proportion of African-American and Hispanic students is nearly three times the percentage of African-American and Hispanic teachers. An important factor contributing to the under-representation of African-American and Hispanic college graduates in teaching is the under-representation of African-Americans and Hispanics among college graduates. Among college graduates in 1999–2000, for example, 78 percent were white, nine percent were African-American and six percent were Hispanic. The lack of minority teachers may have important consequences for minority student learning. Many studies have examined the relationship between teachers' race or ethnicity and student outcomes and have found no effects, but a recent study using experimental data concluded that having a teacher of the same race improves learning. The study estimates that such a match between a student and his or her teacher for one year improves reading and math achievement by three to four percentile points. If these results are valid, the lack of minority teachers in today's schools may be harming minority students.

Age. The average age of teachers has increased over the past 50 years and many are now reaching retirement age. Two forces are driving the increase in the average age of teachers. First, the teachers who were hired to educate the children of the baby boom generation are now reaching retirement age. Second, those entering teaching today are older than in the past. In 2000, only 17 percent of teachers were under 30 years of age and only 11 percent have less than three years of experience. At the other end of the age spectrum, 29 percent of teachers are at least 50 years old and 35 percent have more than 20 years of experience. There is little evidence that very experienced teachers are more effective than moderately experienced teachers, but new teachers, especially those in their first year tend to be both less effective and more variable in their ability to improve student learning.

Education. Almost all teachers have bachelor's degrees and more than half of teachers have at least master's degrees as well. Much controversy surrounds the evidence for whether specific degree attainment improves teacher effectiveness in the classroom. This is partly because of the inherent difficulty of assessing these effects. The performance of students in two classes in the same school, one with a teacher who has a master's degree and one with a teacher who does not, may be very similar. This may be a result of master's degrees failing to help teachers be more effective, or it might be attributable to schools hiring less-educated teachers because they have some special skill that we, as outsiders, cannot observe. Data have not been available that would allow us to assess teachers before and after their education to ascertain whether obtaining advanced degrees changes the effect these teachers have on their students. On average, however, teachers with master's degrees do not appear to be more effective at promoting student learning. One exception is that high school math teachers with master's degrees in math do appear to contribute more to student learning than their less-educated colleagues. There is little evidence in either direction about content-focused masters' degrees in other fields.

Teacher's Own Achievement. Teachers vary in their academic performance. Many teachers perform well on standardized tests, though on average teachers tend to score below the average for all college graduates. The average ability of teachers relative to their cohort has not changed dramatically over time. For example, the average female teacher in 1960 scored higher than 67 percent of other high school graduates. This figure dropped to 64 percent in 1992. However, the proportion of teachers from the very top of the test score distribution has dropped dramatically over the last 40 years; almost 25 percent of new female teachers in the 1960s scored in the top 10 percent

of their high school graduating classes. By 1992 this number had dropped to 10 percent. Job opportunities that have opened up for female college graduates in occupations outside of teaching appear to have led to the loss of from the teacher workforce of some of its highest scoring teachers.¹⁴

A number of studies have found that student achievement improves more in classes in which the teachers have higher test scores. ¹⁵ Not surprisingly, teacher content knowledge also appears to help student achievement. Almost all high school teachers have a major or a minor in the main subject area in which they teach. High school teachers are far more likely to have degrees in traditional academic fields (66 percent) than are elementary school teachers (22 percent) or middle school teachers (44 percent). Over the last 20 years, there has been an increased tendency for teachers to major in traditional academic fields. Half of all teachers with three or fewer years of experience have degrees in these academic fields, compared with approximately one third of highly experienced teachers. ¹⁶

It is not enough for teachers to earn a degree in a specific academic field in order to utilize their content knowledge to aid their students. They also must be teaching in that area of expertise. Most teachers do, in fact, have a graduate or an undergraduate major or minor in their main teaching field. The share of teachers with a major or minor in their primary teaching field is somewhat lower for mathematics teachers than for teachers in other subject areas (90 percent of 9th through 12th grade teachers, compared with 96 percent in English, Foreign Language and Social Studies and 94 percent in Science). It is also lower in the middle school grades (7th and 8th) than in the high school grades. Many teachers teach some classes outside of their main teaching assignment, and they are much less likely to hold a major or minor in these areas. As a result, almost one quarter of seventh through twelfth grade classes in core academic fields are taught by teachers without a major or minor.¹⁷

Teacher Supply

The supply of teachers is driven by three main factors: wages, non-wage job characteristics and entry requirements, all three of which need to be judged relative to opportunities in other occupations.

Wages. A substantial research literature demonstrates that teachers respond to wages in their decision of whether to teach and, if they do, where to teach. In fact, teachers appear to be at least as responsive to wages in their decisions to quit teaching as are workers in other occupations. Teacher wages have increased in real terms over the past 40 years, however so have the wages for other college graduates. Because of this, salaries of teachers have fallen behind salaries in non-teaching jobs for women college graduate since the 1970s. Teacher salaries are close to those of social workers, ministers and clerical staff. Lawyers, doctors, scientists, engineers, managers and sales and financial service workers earn substantially more. There is significant variation across the country in teacher wages, driven largely by differences in the wages of non-teaching college graduates across the country. There is less variation within local labor markets, and little to no variation for teachers with similar years of schooling and teaching within districts. Within local areas salary differences tend not to be systematic. For example, in some areas suburban districts pay more on average than urban districts while in other areas urban districts pay more than suburban districts.

Working Conditions. Because of the limited variation in salary across schools within districts, and even across districts in many areas, decisions of teachers are often driven more by working conditions than by salary. This does not mean that salaries cannot be used to affect teachers decisions, just that they are not currently the driving force leading to the sorting of teachers in most places. Teachers appear to value many aspects of working conditions. The most convincing evidence

shows that teachers migrate to schools with higher achieving students and that white teachers migrate to schools with a higher proportion of white students.²⁰ However, survey evidence also suggests that characteristics of administrators and workload as measured by class size and other factors are also important.²¹ Finally, teachers assess schools based on their location, preferring schools that are closer to where they live or where they grew up.²²

Entry Requirements. Entry requirements also affect teachers' decision making. A number of recent programs discussed in more detail below have reduced the entry requirements for teachers. This reduction has substantially increased the pool of individuals interested in becoming teachers. These new candidates often have stronger academic backgrounds than teachers entering from more traditional routes.²³

Teacher Demand

Teachers' preferences are not the only factors affecting who goes into teaching, where teachers teach and whether they stay or leave. The choices of hiring authorities are also important. Districts with effective hiring processes – aggressive recruiting, early job offers – are able to hire teachers that less effective districts are not. A recent study by The New Teacher Project showed that large districts are losing qualified candidates due to poor hiring processes. ²⁴ Differences in the preferences of hiring authorities also may affect teachers: some districts or school may value one factor such as experience while another may value another factor such as content-knowledge or familiarity with the community. Only a small group of studies evaluates hiring practices and their effects on teachers and students. ²⁵

The Distribution of Teachers Across Schools

The result of teachers' preferences and the hiring process is substantial variation in teachers across schools. There has been systematic sorting of the least qualified teachers into schools with the highest minority enrollments, the largest low income enrollments and the most academically disadvantaged students. Much of this sorting occurs within large urban districts. A slew of recent policies at the national, State and local level have aimed at alleviating these differences.

California

Demographics. There were more than 306,000 teachers employed by Californian public schools during the 2004-05 school year. Data available online from the California Department of Education characterizes California's teacher labor force as predominately female and white – 72 percent each. Another 15 percent are Hispanic. Teachers of African American and Asian heritage each comprise another five percent of California's teachers. As Chart 1 demonstrates, this racial/ethnic distribution is dramatically different than the distribution for students.

CHART 1: Race/Ethnicity of California's Teachers and Students, 2004-05

Race/Ethnicity	Teachers (%)	Students (%)
White, Not Hispanic	72.1	31.3
African American	4.5	8.0
Hispanic or Latino	14.5	46.8
Asian	4.6	8.1
Pacific Islander	0.2	0.6
Filipino	1.2	2.6
American Indian or Alaska Native	0.6	0.8
Multiple or No Response	2.3	1.7

SOURCE: CDE, DataQuest (http://dq.cde.ca.gov/dataquest/)

Experience. The average California teacher had 12.8 years of experience with 10.5 of those years in their current district. In 2004-05, 6.3 percent of California's teachers were in their first year of teaching and another 5.3 percent were in their second year (CDE).

Education. The California State University system trains the majority of California's new teachers – 55 percent of all new preliminary credential recipients in 2003-04. Approximately 40 percent of new teachers are graduates of independent universities and about 4 percent graduated from the University of California system.²⁷ Additionally, almost 35 percent of all California teachers held a graduate degree (CDE).

Supply and Demand. California's public education system experiences an annual attrition rate of approximately 4.6 percent. By 2009 the State likely will need to replace nearly 60,000 teachers; more than 100,000 by 2014. This is not the first time California has experienced such a need. In the 1990s a growing student population combined with retirements, strained hiring in some districts. The class size reduction program (CSR), initiated in 1996, compounded this demand by providing districts with funding to reduce class sizes in kindergarten through third grade from an average of 30 students to 20 or fewer students. During the first two years of implementation, California's K-3 teacher workforce grew by 38 percent.

The implementation of CSR highlighted the hierarchy among districts in California. Experienced teachers jockeyed for the newly created positions in those districts with the competitive edge in the labor market (i.e., higher salaries, high-performing students, and better working environments). This left districts in difficult-to-staff areas to hire individuals with less education and frequently without full State certification. Between the 1995-96 and 1997-98 school years, the gap in the percent of K-3 teachers with only a bachelor's degree between schools in the highest and lowest minority student quartiles increased by 6.1 percentage points to 20.7 percent. The magnitude of the sorting of teacher quality among schools was even more pronounced with regard to State certification. By 1997-98, the gap between the highest and lowest minority quartile in the percent of K-3 teachers without full State certification grew almost 12 times as big to 18.7 percent. Although California responded to this situation with a variety of new policies and programs intended to increase the supply and quality of teachers (some of which are discussed below), the inequitable distribution of certified teachers persisted in 2005-2006.

The Federal role has also grown during the past five years. The *No Child Left Behind Act of 2001* required that all students be taught by "highly qualified" teachers by 2006. The States had substantially flexibility in defining teacher standards and yet no State reached the goal of 100 percent highly qualified teachers (HQT) by the end of the 2005-2006 school year. In order to staff all classrooms with highly qualified teachers and meet the requirements of NCLB, States are shifting away from the use of emergency permits (which do not require holders to demonstrate subject-matter competency) to alternative-route certifications (which do require holder to demonstrate competency). California has reduced the number of teachers not fully credentialed from over 42,000 in 2000-01 to around 20,000 in 2004-05 and eliminated emergency permits altogether in July 2006. Approximately 8,000 teachers in 2005-06 were teaching with emergency permits, waivers, or preintern certificates and would not be deemed highly qualified under NCLB.³² The number of University Intern Credentials (one of several alternative-route certificates California issues) increased 64 percent from roughly 3,700 in 2001-02 to about 6,200 in 2003-04.³³

Recent Developments. Since we collected information on State teacher policies, several significant developments have occurred in California that promise to influence teacher recruitment, retention, and quality and thus student achievement. In late Spring 2006, a settlement was reached between the California Teachers Association and Governor Schwarzenegger regarding the failure to

full fund the Proposition 98 minimum school funding guarantee for 2004-05 and 2005-06. The Quality Education Investment Act (SB 1133, Torlakson) will provide \$2.9 billion over seven years to K-12 schools and community colleges. Funds will be targeted at the lowest performing schools – those in the lowest two deciles on the 2005 API – for the purpose of (1) improving the quality of academic instruction and level of student achievement; (2) developing exemplary practices to create the working conditions and environment that will attract and retain qualified staff; (3) improving instruction and services for students; and (4) improving the distribution of qualified and experienced teachers. This funding will support 500 to 600 schools, approximately one-third of the 1,600 eligible public schools.

Other bills passed by the legislature in 2006 related to California's teacher policies include:

- SB 472, (Alquist) aims to:
 - Allocate more resources to professional development activities for teachers of English language learners.
- SB 1209 (Scott) aims to:
 - Achieve a more equitable distribution of teachers hold alternative-route Internship Credentials;
 - Streamline entry into the profession by simplifying teacher credentialing test requirements (allows the substitution of other tests like the GRE for the basic skills test CBEST) and reducing barriers for out-of-state teachers;
 - o Improve hiring and assignment practices through new Personnel Management Assistance Teams;
 - Provide incentives for veteran teachers to serve as mentors in low performing schools;
 - o Enable districts and bargaining units to develop incentive pay systems designed to encourage teachers to accept positions in challenging school settings; and,
 - o Establish a longitudinal teacher data system to track the teacher workforce.
- SB 1655, (Scott) aims to:
 - o Provide for greater principal discretion over voluntary teacher transfers to low-performing schools.

III. STATE TEACHER POLICIES

Each of the eight policy areas listed above are addressed in turn below. The discussion of each area follows a common pattern. We begin with an overview, highlighting the major goals of the State policies. Next we detail the action California's policymakers have taken with respect to the policy area. California's approach is then compared and contrasted with the approaches taken by other States across the country. Throughout our discussion of State policies, we present data in two formats—charts and tables. Charts contain information particular to California's approach. Tables present data on across-State comparisons. At the end of each section we describe available evidence of the effectiveness of the State policies in achieving their aims.

Pre-Service Teacher Education Policies

At the birth of the common school movement in America in the early-1800s, education in America was highly decentralized and left mostly to individual families and towns. Student attendance was low and inconsistent. In many areas, teachers were expected to have completed only schooling equivalent to the level at which they taught. However, compulsory attendance laws, a key element in common school movement, changed American education forever. The resultant growth in

student enrollment necessitated the building of numerous school buildings and the hiring of many more teachers. In additional to providing universal free education, the State also assumed the dominant role of preparing teachers.

As the movement to provide all children with schooling progressed, society's view of the teachers' role and their expectations of the qualifications teachers brought to the classroom evolved. States responded by opening schools with the expressed purpose of training individuals to serve as teachers. The first normal school was opened in Lexington, Massachusetts, in 1839. State-operated normal schools opened all across the country over the next several decades—Michigan in 1849, Minnesota in 1859, Maine in 1863, Iowa in 1876, Texas in 1879, and Oregon in 1882. Throughout the 20th Century these institutions evolved from Normal Schools to Teachers Colleges to State Universities. For example, the California State Normal School was founded in 1862 as California's first normal school. The name was changed in 1921 to San Jose State Teachers Training College and to San Jose State College in 1935. It has been known as San Jose State University since 1974. State regulations and requirements for teacher preparation evolved during this time as well to require longer training periods with more coursework, content and pedagogical knowledge development, and teaching practice.

States, through policies and regulations, continue to exert significant influence on the preservice training teachers receive prior to entering the classroom as the teacher of record. Despite the marked growth in programs offering alternative routes to earn a teaching certificate, most new teachers continue to enter the labor force through the traditional route of completing an undergraduate or graduate teacher preparation program. State-supported universities continue to produce the majority of teacher candidates.

States' policies regarding teacher education programs are therefore a significant means through which States can influence teacher quality. Policies generally stipulate the amount of subject matter coursework and clinical experiences (student teaching and/or observations) all teacher candidates must complete in order to be eligible for full State certification. While most teachers are required to complete some amount of clinical experiences, minimum subject matter coursework requirements tend to target high school teachers. Middle school teachers are increasingly covered by these requirements since the passage of the *No Child Left Behind Act of 2001* (NCLB). States also hold teacher preparation programs accountable for the quality of the teachers they train through such means as publishing pass rates/ratings of institutions, publishing report cards for institutions, holding them accountable for the classroom performance of their graduates, and identifying low-performing programs.

California's Approach. The design and structure of the current 98 teacher preparation programs accredited by the California Commission on Teacher Credentialing (CCTC) have been and continue to be shaped by CCTC's standards for preparation programs, standards for the teaching profession, and teacher performance expectations. Each program was evaluated and deemed to meet or exceed the Standards of Quality and Effectiveness for Professional Teacher Preparation Programs adopted by CCTC in September 2001. This document details 18 standards organized into four domains: program design, governance, and qualities; preparation to teach curriculum to all students in California's schools; preparation to teach all students in California schools; and supervised fieldwork in the program. These program standards are intended to ensure that teacher candidates meet the 13 teacher performance expectations (TPEs) that are aligned to the six domains of the State's Standards for the Teaching Profession adopted in January 1997. A complete list of all these standards and expectations is provided in Chart 2.

CHART 2: California's Standards for Teacher Preparation Programs, the Teaching Profession and Teacher Performance

Teacher Performance	
Program Standards	Teaching Profession Standards and Teacher Performance Expectations
Standard 1: Program Design,	Standard 1: Engaging and Supporting All Students in Learning
Governance, and Qualities	1.1 Connecting students' prior knowledge, life experience, and interests with learning goals
1.1 Program design	1.2 Using a variety of instructional strategies and resources to respond to students' diverse
1.2 Collaboration in governing	needs
the program	1.3 Facilitating learning experiences that promote autonomy, interaction, and choice
1.3 Relationships between	1.4 Engaging students in problem solving, critical thinking and other activities that make
theory and practice	subject matter meaningful
1.4 Pedagogical thought and	1.5 Promoting self-directed, reflective learning for all students
reflective practice	TPE 1: Making content accessible
1.5 Equity, diversity and access	TPE 2: Student engagement
to the core curriculum	TPE 3: Developmentally-appropriate teaching practices
Standard 2: Preparation to Teach	TPE 4: Teaching English learners
Curriculum to All Students in	Standard 2: Creating and Maintaining Effective Environments for Student Learning
California Schools	2.1 Creating a physical environment that engages all students
2.1 Opportunities to learn,	2.2 Establishing a climate that promotes fairness and respect
practice and reflect on	2.3 Promoting social development and group responsibility
teaching in all subject areas	2.4 Establishing and maintaining standards for student behavior
2.2 Preparation to teach	2.5 Planning and implementing classroom procedures and routines that support student
reading-language arts	learning
2.3 Pedagogical preparation for	2.6 Using instructional time effectively
subject-specific content	TPE 6: Social antique and
instruction	TPE 6: Social environment
2.4 Using computer-based technology in the classroom	Standard 3: Understanding and Organizing Subject Matter for Student Learning
Standard 3: Preparation to Teach	3.1 Demonstrating knowledge of subject matter content and student development 3.2 Organizing curriculum to support understanding of subject matter
All Students in California Schools	3.3 Interrelating ideas and information within and across subject matter
3.1 Preparation for learning to	3.4 Developing student understanding through instructional strategies that are appropriate to
create a supportive, healthy	the subject matter
environment for student	3.5 Using materials, resources, and technologies to make subject matter accessible to students
learning	TPE 7: Specific pedagogical skills for subject matter
3.2 Preparation to use	Standard 4: Planning Instruction and Designing Learning Experiences for All Students
educational ideas and	4.1 Drawing on and valuing students' backgrounds, interests, and developmental learning
research	needs
3.3 Professional perspectives	4.2 Establishing and articulating goals for student learning
toward student learning and	4.3 Developing and sequencing instructional activities and materials for student learning
the teaching profession	4.4 Designing short-term and long-term plans to foster student learning
3.4 Preparation to teach English	4.5 Modifying instructional plans to adjust for student needs
learners	TPE 8: Learning about students
3.5 Preparation to teach special	TPE 9: Instructional planning
populations in the general	Standard 5: Assessing Student Learning
education classroom	5.1 Establishing and communicating learning goals for all students
Standard 4: Supervised Fieldwork	5.2 Collecting and using multiple sources of information to access student learning
in the Program	5.3 Involving and guiding all students in assessing their own learning
4.1 Learning to teach through	5.4 Using the results of assessments to guide instruction
supervised fieldwork	5.5 Communicating with students, families, and other audiences about student progress
4.2 Selection of fieldwork sites	TPE 10: Monitoring student learning during instruction
and qualifications of field	TPE 11: Interpretation and use of assessments
supervisors	Standard 6: Developing as a Professional Educator
4.3 Candidate qualifications for	6.1 Reflecting on teaching practice and planning professional development
teaching responsibilities in	6.2 Establishing professional goals and pursuing opportunities to grow professionally
the fieldwork sequence	6.3 Working with communities to improve professional practice6.4 Working with families to improve professional practice
4.4 Pedagogical assessments and formative assessments	6.5 Working with colleagues to improve professional practice
during the program	6.6 Balancing professional responsibilities and maintaining motivation
during the program	TPE 12: Professional, legal and ethical obligations
	TPE 13: Professional growth
SOURCE: CCTC (January 1997), CCTC	

SOURCE: CCTC (January 1997), CCTC (September 2001)³⁵

California's program standards document opens with the following Statement: "The professional teacher preparation program and its prerequisites include a purposeful developmentally designed sequence of coursework and field experiences that effectively prepare candidates to teach all K-12 students and understand the contemporary conditions of schooling." Toward that end, teacher license candidates must demonstrate subject matter competency by either passing a subject-matter test (see the Licensure and Certification policy section) or completing a CCTC-approved single-subject preparation program. CCTC accreditation standards require candidates from these programs to complete a minimum number of credits in the subject which they seek to teach. For example, English teacher preparation programs must require a minimum of 36 semester units (or 54 quarter units) of core coursework in English and related subjects as well as 12 semester units (or 18 quarter units) of coursework that provides extended study of English. According to the standards, extended study requirements allow candidates' knowledge in a specific subject domain to gain breadth, depth, perspective and concentration. Chart 3 displays minimum coursework requirements for preparation programs in other subjects.

CHART 3. Minimum Subject Matter Coursework for Teacher Candidates Prepared within California

Subject	Adopted	Core Coursework	Extended Study
Agriculture	1999	45 semester / 67 quarter	N/A
Art	2004	36 semester / 54 quarter	12 semester / 18 quarter
Business	1999	30 semester / 45 quarter	15 semester / 22 quarter
English	2003	36 semester / 54 quarter	12 semester / 18 quarter
Foreign Language	2004	33 semester / 50 quarter	N/A
Health Science	1999	30 semester / 45 quarter	15 semester / 22 quarter
Home Economics	1999	30 semester / 45 quarter	15 semester / 22 quarter
Industrial and Technology	1999	45 semester / 67 quarter	N/A
Mathematics	2003	30 semester / 45 quarter	15 semester / 22 quarter
Music	2004	30 semester / 45 quarter	15 semester / 22 quarter
Physical Education	2004	24 semester / 36 quarter	21 semester / 32 quarter
Science	2003	24 semester / 36 quarter	21 semester / 32 quarter
Social Studies	2003	30 semester / 45 quarter	15 semester / 22 quarter

SOURCE: Single Subject Matter Handbooks available at www.ctc.ca.gov/educator-prep/STDS-subject-matter.html#SSMP-HANDBOOKS

CCTC accreditation standards require that teacher candidates complete some form of early field experiences. These include one or more of the following activities: planned observations, instruction or tutoring experiences, and other school based observations or activities. As will be seen in the following section, California requires teacher candidates to successfully complete student teaching. However, there is no CCTC-accreditation requirement that this clinical experience be of some minimum length.

Each teacher education program's accreditation is reassessed by CCTC using the program standards described above every five to seven years. In addition to these program evaluations, each year CCTC identifies low-performing programs and publishes institution passage rates on four types of exams—California Basic Educational Skills Test (CBEST), Reading Instruction Competence Assessment (RICA), academic and other content exams (e.g., California Subject Educational Test (CSET), Praxis II, etc.). This information is included in the State's annual report on teacher preparation programs submitted to the U.S. Department of Education as required by Section 207 of Title II of the Higher Education Act.

Approaches Taken by States across the Nation. While we were unable to gather accreditation requirements across States, NASDTEC's Knowledgebase contains information on specific subject matter requirements for teachers at different levels. It is not clear whether these

requirements pertain to the State's accreditation standards or its licensure requirements. California's policies demonstrate that these are not necessarily the same. While the accreditation standards for single-subject preparation programs require candidates to complete a minimum number of coursework units, the licensure requirements allow teachers to demonstrate subject matter competency by either completing this coursework or passing a subject area examination. Despite this disclaimer, these are a good proxy for coursework requirements for accreditation.

Table 1 shows that most States require a major or a minimum number of coursework units. Twenty-six States require the completion of a major while California and 28 other States specify a minimum amount of coursework. NASDTEC does not specify how much coursework is required in this latter group. In some States, the minimum unit requirements may equate to a major (like in California) while in other candidates may only need to complete units generally viewed as a minor.

TABLE 1. Subject Matter Coursework Requirements for Middle and Secondary Teacher Candidates

Coursework Requirements	Frequency	States
Major	26	AL, CT, DE, ID, IL, KS, KY, LA, MD, MN, MS, MO, NE, NV ^a , NJ,
		NM, NY, ND ^b , OH, OK, PA, SC, TN, VT, VA ^a , WY
Minor	10	ID, IL, IA, LA, MI, MT, NV, TN, WI, WY
Minimum Number of Units	29	AL, AR, CA, CO, CT, DE, DC, ID, IA, KY, LA, MI, MO, MT, NE,
		NV, NH, NM, NY, ND ^b , OK, RI, SC, SD, TN, TX, VT, WA, WI
No Requirements	9	AK, AZ, GA, IN, ME, MA, OR, WA, WV
Unable to Determine	3	HI, NC, UT

^a Major required for secondary teachers only; ^b North Dakota teachers of grades 7-8 in middle and junior high schools must satisfy minimum unit requirements while teachers of grades 7 and 8 in high school settings must hold a major in their subject. High school teachers must have a major in the subject taught.

NOTE: Within a State, the minimum degree/coursework requirements may vary across subjects or within individuals across endorsement areas (i.e., the teacher needs a major for the first subject endorsement but can add additional endorsements with coursework less than a major). SOURCE: See Table A-1 in Appendix 1.

Numerous States appear twice in Table 1. Why? NASDTEC does not provide much in the way of an explanation. Yet it does rule out differences across middle and secondary teachers. State coursework requirements are the same for both middle and high school teachers with a few exceptions (North Dakota and Virginia) which require more coursework for secondary than middle school teachers. We surmise that the duplications are due to different coursework requirements across subjects within States. According to *Education Week* there are several States which require teachers to hold a major in the primary endorsement area but allows additional endorsements to be added with only a minor.

TABLE 2. Minimum Requirements for Student Teaching at State-Approved Teacher Preparation Programs

Minimum Amount of Time	Frequency	States
More than 15 full-time weeks	3	CO, MD, WI
10 to 15 full-time weeks	20	AK, CT, FL, GA, IA, KS, KY, MN, MS, NE, OK, OR, PA, RI, SC,
		SD, TN, TX, UT, VT, WV
Less than 10 full-time weeks	4	IN, MI, MO, NY, VA
Semester	10	AL, DE, IL, LA, MA, MT, NH, NJ, NM, OH
Minimum Semester Hours	2	AZ, NV
No Minimum Requirement or	10	AR, CA, DC, HI, ID, ME, NC, ND, WA, WY
Unable to Determine		

SOURCE: See Table A-1 in Appendix 1.

Field experiences and student teaching provide opportunities for teacher candidates to draw connections between coursework and professional practice. At least 37 States require their teacher candidates to complete some form of field experience (often classroom observations) prior to their student teaching. As a student teacher, candidates assume greater instructional responsibilities under the supervision of an experienced teacher. At least 41 States have established a minimum amount of time teacher candidates must spend as a student teacher. Most (20 States) require between 10 and 15 full-time weeks. Another ten States require candidates spend a semester student teaching, a similar amount of time. NASDTEC also reports that at least 22 States (including California) require that student teachers be evaluated on the basis of a single statewide set of requirements.

The most common way States hold preparation programs accountable for teacher quality is by identifying low-performing institutions (see Table 3). California and 44 other States do so. Twenty-four other States in addition to California publish institution passage rates or institution ratings. Only 12 States publish report cards on each program, and 14 States hold programs accountable for the classroom performance of their graduates. Five States (Alabama, Arizona, Delaware, Idaho, and Utah) do not use any of these accountability practices.

TABLE 3. Means by which States Hold Teacher Preparation Programs Accountable for Teacher Quality, 2004-05

Means	Frequency	States
Publishes Pass Rates/Ratings of	25	AL, AR, CA, IL, IN, KS, KY, LA, MD, MA, MO, OH, OK, NE,
Institutions		NY, NC, SC, TN, VA, WV
Publishes Report Cards on	12	AL, IL, KS, KY, LA, OH, NC, SC, TN, WV
Institutions		
Holds Institutions Accountable for	14	AL, CT, FL, IN, KY, LA, MO, OH, OK, NC, SC
the Classroom Performance of		
Their Graduates		
Identifies Low-Performing	45	AL, AR, CA, CO, CT, FL, IL, IN, IA, KS, KY, LA, MD, MA,
Institutions		MO, NE, NJ, NM, NY, NC, OH, OK, PA, SC, TN, VA, WV, WI
None of the Above	5	AK, AZ, DE, ID, UT

SOURCE: See Table A-2 in Appendix 1.

Effectiveness of these Policies. Unfortunately, very little is known about the effectiveness of different aspects of pre-service teacher education. While all States have policies regarding teacher education, there is very little available data that includes information on both teachers' preparation experiences and the outcomes of those teachers' students. Without this data, researchers simply cannot analyze the effect of teacher preparation on students. This is important to note because lack of evidence of effects on student outcomes in this area does not necessarily imply that there are no effects – only that we do not know what those effects are. In these cases, policy decisions cannot be based on causal research evidence.

As noted above, some researchers have accessed information on teachers' masters degrees and found little relationship between these degrees, on average, and student outcomes, though high school math teachers with graduate degrees in math do appear to add more to student learning than other math teachers. Given the substantial investment needed to obtain a masters degree, State policies supporting unspecified masters' degrees for teachers do not appear worthwhile.

Graduate degrees vary meaningfully in their content, so that a lack of an overall effect, does not imply that specific coursework cannot be useful. Two studies have examined the number of subject-specific courses teachers took. Eberts and Stone (1984) find no relationship between the number of college-level math courses a teacher took and the math gains of 4th grade students. In

contrast, Monk and King (1994) and Monk (1994) find that students of teachers who took more math courses had better high school math gains but the effects are generally modest.³⁷ It may be that a teacher's additional math courses make a difference for those teaching high school but not for those teaching elementary students. Similar research for other subject areas either does not exist or, in the case of science, is inconclusive. Thus the evidence provides some modest support for the value of subject-specific coursework, though given the small research base, this is only evident for high school math.

The evidence for other areas of teacher preparation is even sparser. Most teacher preparation programs contain multiple courses on aspects of pedagogy. Most of the few studies that examine the relationship between pedagogy coursework and student achievement cannot be considered causal and only a few provide general correlational evidence. Monk (1994) finds that content-related pedagogy coursework in mathematics is positively associated with student achievement and is more closely associated with higher gains than is additional content coursework. The one exception is a recent working paper by Harris and Sass (2006) that uses Florida administrative data and does not find a link between student test score gains and coursework in pedagogy, education theory or subject content.³⁸

Nearly all preparation programs also include field experiences, such as student teaching, where these skills may be learned and practiced. Many close observers of teacher education believe that field experiences exert an important influence on teacher preparation. Nonetheless, there is only limited research that links field experience to student achievement and none that sorts out the content and duration of field experiences that are most influential. As summarized by Wilson, Floden and Ferrini-Mundy (2002) and in Clift and Brady (2005), evaluations of field experiences typically focus on teachers' perceptions of the problems of how experiences are structured or self-identified changes in beliefs or practice. Harris and Sass (2006) do not find a link between field experiences and teachers' value-added to student achievement. Perhaps the most convincing evidence on the effects of field experience comes from studies that follow teachers during the first few years in the classroom. These studies show clearly that teachers improve with experience.

To summarize, there is a remarkable lack of evidence on the effect of almost any aspect of teacher preparation on the outcomes of students.

Licensure and Certification Policies

Teachers must be appropriately licensed and/or certified to be the classroom teacher of record in every State and the District of Columbia. These requirements act as a minimum quality control measure as they enable States to ensure teachers have completed the required pre-service training as discussed in the previous section and/or passed required exams. As pre-service training requirement evolved, more and more States adopted teacher licensure and certification laws. Texas passed a certification law in 1879. Maine offered State certification in 1895 and made it mandatory in 1913. The first teacher licenses in Wisconsin were issued in 1937. Opponents of these policies argue that they suppress rather than raise the average quality level of the teacher labor force. Licensure and certification requirements increase the costs of entering teaching, and thus may discourage individuals with good prospects in alternative occupations from becoming teachers.

Most States have a professional standards board that oversees, with varying degree of autonomy, the State's teacher licensure and certification regulations and procedures. The responsibilities of many of these boards include other areas of teacher policy as well such as the accreditation of both traditional and alternative-route teacher preparation programs, professional practices, and recruitment and retention incentive programs. In determining the States' teacher

licensure policies, these professional boards are responsible for selecting or suggesting the type and number of assessments teacher candidates must pass in order to earn their initial license. Licensure assessments can be grouped into four broad categories: basic skills, subject matter knowledge, subject specific pedagogy, and general pedagogy. Here we review State policies regarding the first three categories. We do not address general pedagogy.

The last decade has witnessed a marked increase in the number of teacher candidates entering the profession from alternative (otherwise known as early-entry) program. These programs have earned the "alternative" moniker because they offer an alternative to traditional teacher preparation programs – i.e., those run by a university or college and including an undergraduate or graduate degree – for individuals wishing to become teachers. These programs expedite the preparation process with participants frequently teaching concurrent to their training. The reduced pre-service preparation in alternative routes has been hotly debated in many States. We review State policies regarding how alternative-route candidates, prior to teaching, demonstrate subject matter competency as well as whether or not they are required to complete pre-service training and practice teaching and/or fieldwork. Additionally, we report on whether or not participants must complete a mentoring program.

Regardless of which type of preparation program – traditional or alternative – teachers complete, all teachers in school receiving Title I funding must satisfying the "Highly Qualified Teacher" (HQT) provision of the *No Child Left Behind Act of 2001*. The federal HQT definition is three-pronged. A HQT must (1) hold a baccalaureate degree, (2) be fully State certified, and (3) demonstrate subject matter competency in each core academic subject they teach.⁴³ Each State was responsible for aligning their State licensure system to federal requirements. In many States, the professional standard boards were handed the task. Our review of each State's implementation reveals significant variation across the States with regard to what it means to be fully State certified and demonstrate subject matter competency.

California's Approach. The California Commission on Teacher Credentialing (CCTC) was established in 1970 by the Ryan Act as an autonomous State agency in that the rules and regulations it adopts need not be reviewed or approved by any other State agency prior to taking effect. The Commission has four ex-officio non-voting members and 15 voting members, 14 of whom are appointed by the Governor with the consent of the Senate and represent the key stakeholder groups: active teachers, school administrators, school boards, colleges and universities, and the public. The Superintendent of Public Instruction or his/her designee is the fifteenth voting member. According to its website, the "Commission serves as a State standards board for educator preparation for the public schools of California, the licensing and credentialing of professional educators in the State, the enforcement of professional practices of educators, and the discipline of credential holders in the State of California." The authorizing statute details 17 responsibilities of the CCTC (Cal Educ. Code §44225), listed in Chart 4.

Teaching Credential Requirements for Candidates Trained in California: CCTC issues three forms of credentials—Internship, Preliminary, and Professional Clear—as well as several permits and waivers. There are multiple types of each credential and permit that are aligned to the subject and content taught by the credential holder. The most common are single-subject and multiple-subject. A multiple-subject credential authorizes the holder to teach in a self-contained classroom such as an elementary classroom. We detail the requirements of each in turn below. The requirements pertain to individuals prepared within California. Requirements for teacher candidates prepared in other States are presented separately.

CHART 4. Statutory Responsibilities of the California Commission on Teacher Credentialing, 2005

Statutory Responsibilities

- 1. Establish professional standards, assessments, and examinations for entry and advancement in the education profession.
- 2. Reduce and streamline the credential system to ensure teacher competence in the subject field or fields, while allowing greater flexibility in staffing local schools.
- 3. Review and, if necessary, revise the code of ethics for the teaching profession.
- 4. Establish standards for the issuance and renewal of credentials, certificates, and permits.
- 5. Determine the scope and authorization of credentials, to ensure competence in teaching and other educational services, and establish sanctions for the misuse of credentials and the misassignment of credential holders.
- 6. Collect, compile, and disseminate information regarding exemplary practices in supporting and assessing beginning teachers.
- 7. Establish alternative methods for entry into the teaching profession, and into other certificated roles in the schools, by persons in varying circumstances, including persons who have been educated outside of California, provided that each applicant satisfies all the requirements establish by the commission.
- Adopt a framework and general standards for the accreditation of preparation programs for teachers and other certificated educators.
- 9. Appoint classroom teachers, school administrators, other school services personnel, representatives of the public, and public or private higher education representatives to one or more standing committees, which shall be given authority to recommend to the commission standards relating to examinations, performance assessments, program accreditation, and licensing.
- 10. Consult with classroom teachers, faculty members from institutions of higher education that maintain accredited programs of professional preparation for teachers, administrators or other school services personnel, and other experts to aid in the development of examinations and assessments, and to study the impact of examinations and assessments on the teaching profession.
- 11. Adopt standards for all examinations and assessments which shall ensure that all prospective teachers demonstrate an understanding of the history and cultures of the major ethnic populations of this State and of teaching strategies for the acquisition of English language skills by non-English-speaking pupils.
- 12. Review requests from school districts, county offices of education, private schools, postsecondary institutions, and individual applicants for the waiver of one or more of the provisions of this chapter or other provisions governing the preparation or licensing of educators.
- 13. Develop models for voluntary use by California colleges and universities to assist in the screening of applications for admission to the teacher education programs.
- 14. Encourage colleges and universities to design and implement concentrated internship programs for persons who have attained a bachelor's degree in the field in which they intend to teach.
- 15. Grant a field placement certificate to any candidate who has been admitted to an accredited program of professional preparation, and who must complete a supervised practicum in public elementary or secondary schools as a condition for completion of the program.
- 16. Propose appropriate rules and regulations to implement the act which enacts this section.
- 17. Adopt subject matter assessments for teaching credentials after developing those assessments jointly with the Superintendent of Public Instruction.

SOURCE: Cal Educ. Code §44225

Most California teachers begin their career with a Preliminary Teaching (or Level I) Credential. To be eligible for a Preliminary Teaching Credential, candidates must hold a bachelor's degree in a subject other than professional education and complete a CCTC-approved university-based traditional fifth-year or blended (i.e., 4 year) program including successful student teaching. They must satisfy the Developing English Language Skills and the U.S. Constitution requirements and complete a foundational computer technology course. 45

Candidates must also pass several examinations. All candidates must pass the CBEST, a test of basic skills, and demonstrate subject matter competency. Single-subject candidates can either (1) pass the required subject specific test(s), the California Subject Examination for Teachers (CSET), (2) complete a CCTC-approved subject matter program (see Chart 3 for programs' coursework requirements), or (3) for specialized science subjects only 46, pass the appropriate test or take the required coursework. Multiple-subject candidates must pass the multiple-subject CSET to demonstrate competency. They must also pass the RICA. A Preliminary Teaching Credential is valid

for five years by which time the teacher must progress to a Professional Clear Credential or lose California teaching privileges.

Teachers holding a Preliminary Teaching Credential have three options by which they can earn a Professional Clear (or Professional Teaching or Level II) Credential. If they earn a National Board for Professional Teacher Standards (NBPTS) certification, a Professional Clear Credential will be issued in the subject of the national certificate. The second option is to complete a CCTC-approved professional teacher induction program. The third option, only available to teachers who received their Preliminary Teaching Credential prior to 30 August 2004, is to complete a fifth year of study at a CCTC-approved teacher preparation program. At the conclusion of the program, they must secure a recommendation for a Professional Clear Credential from this program.

Internship Credentials are awarded to individuals completing an alternative-route teacher preparation program. There are three types: University Internship Credential, District Intern Credential, and Individualized Internship Certificate. Candidates must be enrolled in either a CCTC-approved program which required them to demonstrate subject matter competency as a prerequisite of enrollment. CCTC issues candidates the internship credential appropriate to the type of alternative-route program in which they are enrolled. (Program types are discussed below.) These credentials are valid for two years and renewable for one additional year at the end of which they must be eligible for either a Preliminary Teaching or Professional Clear Credential.

In addition to the credentials detailed above, CCTC also issues several forms of permits and waivers—Emergency Permit, Provisional Internship Permit (PIP), Short-term Staff Permit (STSP), and Credential Waiver. The Emergency Permit was to be phased out by 2006 and replaced with the PIP and the STSP. Emergency Permits were valid for one year and renewable annually for up to four years. CCTC issues these permits and waivers only in response to a request from an employer.

PIPs are available only for anticipated hires where the employing agency applying for the permit verifies a "diligent search" has been made and a fully-credentialed teacher could not be found. An applicant must hold a baccalaureate degree, pass the CBEST and meet certain coursework requirements. ⁴⁹ The employing agency must (1) provide orientation, guidance, and assistance to permit holder, (2) assist the permit holder in developing a personalized plan detailing how the holder will meet the subject matter competence, (3) assist the permit holder in enrolling in subject matter training and assist the holder in meeting the subject matter competency requirement, (4) appraise the holder of the steps needed to earn a credential and enroll in an internship program, and (5) post a notice of the intent to employ the permit holder. A PIP is valid for one year and renewable for one additional year. Renewal is contingent upon the applicant having taken all the appropriate subject matter tests, but not having passed them all. A PIP holder enrolls in an internship program once s/he passes all the required tests.

STSPs are available only for unanticipated hires for which recruitment efforts have not netted a fully credentialed teacher. An applicant must hold a baccalaureate degree, pass the CBEST and meet the same coursework requirements as a PIP applicant. The employing agency must provide orientation to curriculum and instructional techniques and classroom management to the permit holder, assign a mentor, and provide a written justification why the STSP is required. A STSP is valid for one year and is nonrenewable.

A Credential Waiver is available for candidates who have not demonstrated subject matter competency and waives one or more requirements of a full teaching credential. Holders of a Credential Waiver must demonstrate progress toward a full credential. They are valid of one year and are renewable on a case-by-case basis but can not be renewed more than twice.

Alternative-Route to Certification Programs: CCTC has approved five types of alternative-route programs whose participants are eligible for the Internship Credential:

- ♦ *University-based programs* are one- or two-year programs administered by colleges and universities in partnership with local school districts. Participants are eligible for a University Internship Credential.
- ♦ District-based programs are operated by districts that have developed and implemented a Professional Development Plan, in consultation with a college or university with a CCTC-approved teacher preparation program. Participants are eligible for a District Intern Credential.
- ♦ The *CalStateTeach program* is a special type of University-based program that allows participants to complete coursework through a distance-learning program of self-study in 16 months. Participants are eligible for a University Internship Credential.
- ♦ All University-based and District-based programs must offer an *Early Completion Internship Option* which allows participants who have demonstrated subject matter competency to opt out of the coursework requirements and demonstrate pedagogical skills through a performance assessment. Participants are eligible for either a University Internship or District Intern Credential, depending on the program in which they are enrolled.
- ♦ *Individualized internship programs* are available for candidates who meet the subject matter competency requirements of NCLB and are currently enrolled in a CCTC-approved teacher preparation program. Participants are eligible for an Individualized Internship Certificate.

Chart 5 details the prerequisites for participants to receive any type of Internship Credential.

CHART 5: Prerequisites for Internship Credential by Alternative-Route Program, 2005

University-based, District-based,	Early Completion Option	Individualized Internship
and CalStateTeach Programs		Programs
1. Receive an employment offer	1. Receive an employment offer	Receive an employment offer
from a district,	from a district,	from a district,
2. Hold a baccalaureate degree,	2. Hold a baccalaureate degree,	2. Hold a baccalaureate degree,
3. Pass the CBEST,	3. Pass the CBEST,	3. Pass the CBEST,
4. Demonstrated subject matter competency (program or exam),	4. Pass the Teaching Foundations Examination (TFE)	4. Demonstrated subject matter competency (program or exam),
5. Meet U.S. Constitution requirement (program or exam)	5. Demonstrated subject matter competency (program or exam),	5. Meet U.S. Constitution requirement (program or exam)
6. Obtain character and identification clearance, and	6. Meet U.S. Constitution requirement (program or exam)	Obtain character and identification clearance, and
7. Enroll in a CCTC-approved alternative-route program	7. Obtain character and identification clearance, and	7. Enroll in a CCTC-approved teacher preparation program
	8. Enroll in either a university or	8. Together with supervisor from
	district internship program	the program develop a two-year
		Individualized Teacher
		Preparation Plan during the first
		90 days of employment

SOURCE: www.ctc.ca.gov

New Legislation: SB 1209 (Scott) and a series of bills passed in 2006 have changed some aspects of teacher credentialing. SB 1209 increases intern funding for districts from \$2,500 per intern up to \$3,500 per intern. These funds are meant to reduce mentor-intern ratios, to provide more

pre-service education for those teaching English learners, and to help ensure that low-performing schools do not have more interns than the district average. The legislation also requires the CTC to recommend ways to expedite and enhance the credentialing process for teachers in special education. The 2006-07 budget also includes \$500,000 for the CTC to implement the TPA, and includes an additional \$1.5 million to expand the Governor's Science and Math Teacher Initiative to quadruple annual production of credentialed science and math teachers by 2010. ⁵⁰

Teaching Credential Requirements for Candidates Trained Outside California: CCTC provides four options for candidates who received their teacher training outside California to earn a Preliminary Teaching Credential and to advance to the Professional Clear Credential. The requirements differ according to the number of years of experience the candidate has and whether or not they were trained in a State with equivalent teaching credential standards to California's. All teachers trained outside of California must first qualify for a Preliminary Teaching Credential before advancing to a Professional Clear. Additionally, they must pass the CBEST during the first year of holding a Preliminary Teaching Credential or lose their California teaching privileges. An exception to this rule is made for those out-of-State teachers with a National Board certification. Any out-of-State teacher certified by the National Board will be awarded a Professional Clear Credential in the subject area(s) of their national certificate.

Applicants with 5 or more years of teaching experience out-of-State can earn a Preliminary Teaching Credential if they have a baccalaureate degree or higher; completed a preparation program in elementary education (for multiple subject credential) or secondary education (for single subject credential), including earning a minimum grade of "C" in student teaching; hold or be eligible for a comparable teaching credential in another State; and provide evidence of rigorous performance evaluations on which the applicant received a rating of "satisfactory" or better. Candidates for a single subject credential must have also have an academic major in the subject of the credential sought. After receiving the Preliminary Teaching Credential, these teachers advance to a Professional Clear Credential by passing the CBEST during the first year of holding the Preliminary Teaching Credential, and completing 150 clock hours of activities that contribute to the individual's teaching competence, performance, and effectiveness, and that assist the applicant in meeting or exceeding standards for professional preparation established by the Commission.

Applicants with 3 or 4 years of teaching experience out-of-State can earn a Preliminary Teaching Credential by meeting the same requirements as for those applicants with five or more years of out-of-State teaching experience. After receiving a Preliminary Teaching Credential, these teachers advance to a Professional Clear Credential by passing the CBEST during the first year of certification and completing a CCTC-approved professional teacher induction program.

Applicants who were trained in a State determined to have equivalent standards can earn a Preliminary Teaching Credential if they have earned a baccalaureate degree or higher; have completed a preparation program on or after January 1, 1997 in a State determined to have equivalent standards to the California Single Subject (in the relevant subject) or Multiple Subject Teaching Credential; and hold or be eligible for a comparable teaching credential in another State. These teachers advance to a Professional Clear Credential once they meet the following requirements:

- 1. Pass CBEST during the first year of certification
- 2. Satisfy the Developing English Language Skills requirement
- 3. Satisfy the U.S. Constitution requirement
- 4. Demonstrate subject matter competency
- 5. Satisfy the teaching special populations requirement

- 6. Satisfy the computer education requirement
- 7. Must meet one of the following requirements:
 - a. Hold a master's degree or complete either a fifth year of study beyond the bachelor's degree
 - b. Complete a fifth year of study at a CCTC-approved teacher preparation program
 - c. Complete a CCTC-approved professional teacher induction program

If the applicant was trained outside of the U.S., they must meet the health education requirement by either completing a unit requirement in health education or completing a CCTC-approved professional teacher induction program.

Applicants with less than 3 years of teaching experience or trained in a States without equivalent standards must meet the following requirements:

- 1. Have a baccalaureate degree or higher
- 2. Hold or be eligible for a comparable teaching credential in another State;
- 3. Satisfy one of the following:
 - a. Have completed a preparation program in elementary education (for multiple subject credential) or secondary education (for single subject credential), including earning a minimum grade of "C" in student teaching or
 - b. Verify completion of three years of successful full-time single subject or multiplesubject teaching.

In order to advance to a Professional Clear Credential, these teachers must meet the same requirements as those who were trained in States with equivalent standards; however, the methods of meeting those requirements differ.

California's Implementation of NCLB's "Highly Qualified Teacher" Provision: The California Department of Education (CDE) was responsible for California's implementation of the "Highly Qualified Teacher" provision of the No Child Left Behind Act. 52 This required CDE to determine what CCTC-issued teacher credentials would be considered "fully State certified" and how teachers, particularly veteran teachers, would demonstrate subject matter competency. CDE was also charged with responsibility for guaranteeing that all teachers in schools receiving Title I funding were "highly qualified" by the end of the 2005-06 school year. Teachers holding CCTC-issued Preliminary Teaching, Professional Clear, and Internship Credentials are considered to be fully State certified with respect to NCLB. The permits and waivers discussed above are not NCLB-compliant; however, this was not always the case. Originally, California's plan called for teachers known as 'pre-interns' to be considered highly qualified. Such teachers were required to meet the same content coursework requirements as holders of the current PIPs and STSPs (neither of which are NCLB-compliant under the State's current NCLB guidance). The U.S. Department of Education rejected this proposed definition in the fall of 2002.

California established multiple options for demonstrating subject matter competency that differ across grade level taught and the teachers' experience as required by NCLB. As presented above, all new elementary, middle, and high school teachers must pass a CCTC-approved subject matter test, usually the CSET, in each core academic subject area taught in order to receive a Preliminary Teaching Credential. These tests satisfy NCLB's subject matter competency requirement. New middle and high school teachers may also complete a CCTC-approved subject matter program to demonstrate competency.⁵³ Veteran teachers have more options. In addition to the options available to new teachers, veteran middle and high school teachers can demonstrate competency by completing an undergraduate academic major, coursework equivalent to an undergraduate academic major (i.e., 32 semester units) or a graduate degree. If a veteran teacher at

any grade level holds a National Board Certificate in the core academic subject taught (i.e., not a generalist certification), they are deemed to have subject matter competency as permitted by the federal legislation.⁵⁴

As authorized by NCLB, all veteran teachers regardless of grade level taught can also demonstrate subject matter competency by acquiring at least 100 points on California's high objective uniform State standard of evaluation (HOUSSE) rubric for each core academic subject area taught. Points are awarded in six categories:

- 1. Prior teaching experience in core academic subject area taught: 10 points per year for a maximum of 50 points
- 2. Coursework in core academic subject area taught: points per activity range from 30 to 60 points with a maximum of 60 points⁵⁵
- 3. Standards aligned professional development within last six years in core academic subject area taught: 5 points per each 20 hours of activities with no maximum
- 4. Leadership and service to the profession in core academic subject area taught: 30 points per year with no maximum
- 5. Completion of a successful observation assessment: 20 points per observation with no maximum
- 6. Completion of a successful portfolio assessment: 100 points

Examples of professional development aligned to California's *Standards for the Teaching Profession* include the Reading and Mathematics Professional Development Program authorized by AB 466 in 1999, approved Beginning Teacher Support and Assessment (BTSA) programs, and participating in, but not yet completing, the National Board Certification program. Leadership and service roles include mentor, academic curriculum coach, supervising teacher, college/university instructor in content area or content methodology, BTSA support provider, department chair, and receiving national or State recognition as an outstanding educator in content area. A successful portfolio assessment requires the teacher to demonstrate competence in standards 3.1-3.5 and 5.1 of California's *Standards for the Teaching Profession* (see Chart 1).⁵⁶

Each year, CDE is statutorily required to submit a report to the U.S. Secretary of Education pertaining to the State's performance in meeting the NCLB's goals. According to the 2003-04 report, 48 percent of core academic subject classes were taught by non-highly qualified teachers. These classes were concentrated in high poverty schools (60 percent versus 40 percent of classes in low poverty schools) and at the elementary level (51 percent of classes versus 47 percent of secondary classes). The CDE submitted a report in July 2006, which a peer review panel concluded was deficient in a number of areas. The federal government agreed with the panels findings, and as a result the state submitted a revised plan in September 2006. In addition to the actions included in the revised plan, the California Department of Education is providing targeted technical assistance throughout the year to over 1,700 schools to help them meet the highly qualified teacher goal by the end of the 2006-07 school year. The secondary of Education is providing targeted teacher goal by the end of the 2006-07 school year.

Approach Taken by States across the Nation. Forty-two States have a professional standards board with some responsibility for the development of teacher licensure rules and regulations (see Table 4). ⁵⁹ The majority of these boards (28 States) are advisory in that all their decisions are forwarded to another State agency with rule-making authority for consideration. Boards in eleven States, including California, have autonomous boards. The boards in Maryland, Texas, and Vermont are semi-autonomous with respect to teacher licensure policies and regulations. In these States, board decisions are final and official unless another agency (usually the State board of education) either overrules their decisions or in specific instances approves their decisions.

TABLE 4. Level of Autonomy for Standards Boards Responsible for Teacher Licensure Regulation Development, 2005

Level of Autonomy	Frequency	States
Autonomous	11	CA, DE, GA, HI, IA, KY, MN, NV, ND, OR, WY
Semi-autonomous	3	MD, TX, VT
Advisory	28	AK, AR, CT, FL, ID, IL, IN, KS, LA, MA, MI, MS, MO, MT,
		NH, NM, NY, NC, OH, OK, PA, RI, SD, TN, VA, WA ^a , WV, WI
No Professional Standards Board	9	AL, AZ, CO, DC, ME, NE, NJ, SC, UT

^a Washington's board became autonomous in 2006.

NOTE: This autonomy rating pertains only to the boards' involvement in developing rules and regulations regarding the licensure and certification of teachers. In some States, the degree of autonomy possessed by the boards varies across their responsibilities. SOURCE: See Table A-3 in Appendix 2.

Required Assessments for Licensure: Examinations and assessments are a very common means by which States ensure their teachers have the necessary skills and knowledge to be successful in the classroom. States have placed greater emphasis on these tests since the advent of NCLB. As we discuss in greater detail later, for example, all new elementary teachers are federally required to pass a subject matter examination in order to be deemed highly qualified.

NASDTEC contains information on three common types of licensure examinations: subject matter, basic skills, and knowledge of teaching (i.e., general and/or subject-specific pedagogy). Again, we are can not be confident that States reported these requirements all impacting *all* candidates or just *some* candidates. For example, 44 States reported requiring a subject matter test. One very likely reason why so many States require this type of exam is the highly qualified teacher provision of NCLB. Yet the law only requires a subject matter examination for new teachers who do not have a major in the subject they seek to teach. We can not be sure that all teachers, even those with a subject major, in each of these States must take a subject-matter examination. Despite this uncertainty about the breadth of the testing requirements, we believe this information is a good proxy for State licensure requirements.

TABLE 5a. Examination Requirements for Candidates for Initial Teacher License

Frequency	States
2	CO, UT
4	AK ^a , CA ^b , NE, ND
1	RI
12	DE, GA, IN, MA, MI, MO, NH, NY, NC, VT, WA,
	WI
9	ID, KS, KY, NJ, OH, SC, SD, TX, WY
21	AL, AZ, AR, CT, DC, FL, HI, IL, LA, ME, MD, MN,
	MS, NV, NM, OK, OR, PA, TN, VA, WV
2	IA, MT
	2 4 1 12 9

^a Alaska's new three level certification system effective September 29, 2005 requires teachers pass a basic skills test to receive the three-year non-renewable Initial Certificate. In order to advance to the Professional Certificate, they must pass a content area examination.

All but two States require candidates for initial teacher license to pass at least one examination (see Table 5a). Twenty-one States require all three types of tests. Subject matter examinations are the most commonly required (44 States). Basic skills tests are required in 35 States.

^b California requires single-subject candidates (i.e., secondary teachers) to demonstrate subject matter competency by either completing a sequence of content coursework or passing a subject area examination. Multiple-subject candidates (i.e., elementary) must pass a subject area examination. NOTE: NASDTEC only collected information on three categories of tests: subject matter, basic skills, and knowledge of teaching. SOURCE: See Table A-4a in Appendix 2.

Many of these States require candidates to pass these exams prior to admission to teacher preparation programs or student teaching. Thirty-three States require candidates to pass an examination of their knowledge of teaching. Iowa and Montana did not require any of these three assessments. However, Montana does require elementary candidates who complete preparation programs on or after July 1, 2006 to earn a minimum score of 8 based on a multi-dimensional content test which includes a minimum grade point average, performance-based assessment of student teaching, and performance on the PRAXIS II subject area test.

Most States have a multiple-stage teacher licensure system (see Table 5b). These are touted as a means to help ensure teacher quality through accountability and support. Teachers begin their careers with the first stage license and advance to the second-stage license after meeting additional requirements. The most common requirement is that teachers have a specific number of years of experience. Almost all of these States, however, also require teachers to meet other requirements. Other common requirements include passing a State performance assessment (17 States) or a local district performance assessment (15 States), earning a master's degree (12 States), and completing a minimum number of semester hours of coursework (12 States).

TABLE 5b. Requirements for Secondary-Stage Teacher License

Requirement	Frequency	States
Internship	8	IL, IN, KY, MA, NM, PA, VT, WV
Specific Number Years of Experience	30	AZ, CO, CT, DE, IL, IN, IA, KY, ME, MD, MA, MI,
		MO, MT, NE, NH, NM, NY, NC, OH, OR, PA, RI, SC,
		TN, TX, UT, VT, WV, WI
Specific Number of Semester Hours	12	CT, IL, MD, MI, MT, OR, PA, RI, VT, WA, WV, WI
State Test	6	AK, AZ, IL, SC, TX, UT
State Performance Assessment	17	AK, AZ, AR, CA, CT, DE, IN, IA, KS, MA, NM, OH,
		OK, PA, SC, UT, WV
Local District Performance Assessment	15	CO, IA, ME, MA, MI, MO, NM, PA, RI, SC, TN, UT,
		VT, WV, WI
Fifth Year of Course Work	7	AL, CA, KY, MI, MT, OR, WV
Master's Degree	12	AL, IL, KY, MD, MS, MT, NY, ND, OR, TX, VA, WI
Employment	17	AZ, CA, DE, IL, IN, KS, ME, MA, NE, NM, OH, RI, SC,
		TX, UT, VT, WA
Second-Stage License Required	31	AK, AZ, AR, CA, CO, CT, DE, IL, IN, IA, KS, KY, ME,
		MD, MA, MI, MO, NH, NM, NY, NC, OH, OK, OR, PA,
		RI, SC, TN, VT, WA, WI
Second-Stage License Voluntary	9	AL, MS, MT, NE, ND, TX, UT, VA, WV
No Second-Stage License	11	DC, FL, GA, HI, ID, LA, MN, NV, NJ, SD, WY

SOURCE: See Table A-4b in Appendix 2.

In the majority of States, teachers are required to advance to the second stage, but the timeframe for advancement differs. California provides teachers a five year period; Alaska allows three years; and Arizona, two. In nine States, teachers have the option, but are not required, to earn a second-stage license. For example, teachers in Texas can earn a Master Teacher Certificate by completing a State-approved Master Teacher preparation program and passing the Master Teacher certification exam. New Mexico's three-stage licensure system, which became effective July 1, 2004, is both required and voluntary. Teachers are required to advance from Level I to Level II by the end of their fifth year by completing an approved mentoring program, completing at least three years of teaching, and developing and completing a Professional Development Dossier by which the teacher demonstrates competencies in nine areas. After three years of teaching experience at Level II, teachers have the option of earning a Level III-A license by either earning a master's degree or a

National Board for Professional Teaching Standards Certificate and completing a Professional Development Dossier that demonstrates increased teaching competencies.

Alternative-Route to Certification Programs: According to the National Center for Alternative Certification, the number of alternative route programs grew from 90 programs nationwide in 1991 to 115 programs in 2005 (NCAC, 2006). The number of individuals issued teaching certificates after completing these programs jumping from less than 10,000 in 1990-91 to roughly 50,000 in 2004-05. They name California (along with New Jersey and Texas) as the "oldest and most established States offer[ing] the most prolific alternative routes in terms of production of new teachers—per year." Currently, Alaska and Rhode Island are the only States without an official alternative route program.

A hallmark of alternative-route programs is the on-the-job training. As the number of alternative-route programs grew so did the number of individuals teaching in classrooms who had not yet completed a professional preparation program. NCLB emphasized the use of alternative routes to certification programs to staff all classrooms with a highly qualified teacher. Teachers teaching under alternative route certificates can be considered highly qualified only if they first demonstrate subject matter competency. The majority of States (31) require candidates to pass a subject area content exam. Less common requirements include having a major (or graduate degree) in the subject area (6 States) and an evaluation of college and graduate transcripts to determine if completed coursework demonstrates sufficient subject knowledge (8 States).

TABLE 6. State Policies Regarding Alternative Route to Certification Programs

TABLE 0. State Folicies Regarding Alternative Route to Certification Frograms			
Requirements	Frequency	States	
Method of Assuring Conte	nt Mastery		
Subject Area Content	31	AL, AR, CA, CO, CT, DC, DE, FL, GA, IL, IN, LA, MD, MA, MN, MS,	
Exam		MO, NV, NH, NY, OH, OK, OR, SC, SD, TX, UT, VA, WA, WV, WI	
Major in Certification	6	KS, MI, NC, ND, PA, TN	
Subject Area			
Transcript Coursework	8	IA, ME, MT, NE, NJ, NM, VT, WY	
Evaluation			
Varies by Program	2	ID, KY	
Data Not Available	2	AZ, HI	
Validity Span of Certificat	e Earned thro	ough Alternative Route	
Less than 1 year	1	CT	
1 year	17	AL, AZ, HI, IN, IA, KY, ME, MD, MA, MI, MS, MO, NE, ND, TN, WV,	
•		WY	
2 years	5	AR, CA, DE, NJ, OH	
3 years	16	DC, FL, GA, ID, KS, LA, MT, NV, NM, NY, OK, OR, PA, SC, UT, VT	
4 or 5 years	4	IL, MN, MS, VA	
Varies by Program	4	CO, SD, TX, WI	
Data Not Available	3	NH, NC, WA	
Is the Certificate Earned t	Is the Certificate Earned through the Alternative Route Renewable?		
Yes	19	AZ, CA, IN, KY, ME, MD, MI, MN, MO, NE, NH, NJ, NM, OK, TN,	
		VT, VA, WV, WY	
No	25	AL, AR, CO, CT, DC, DE, FL, GA, HI, ID, IL, IA, KS, LA, MA, MS,	
		MT, NV, NY, OH, OR, PA, SC, SD, UT	
Varies by Program	1	WI	
Data Not Available	4	NC, ND, TX, WA	
No Official Programs	2	AK, RI	

SOURCE: See Table A-5 in Appendix 2.

There is substantial variation across the States in the nature of alternative routes. Some States issue separate licenses for candidates from alternative route programs while others issue these candidates the same licenses as those issued to candidates from traditional programs. For example, in California, alternative route participants are issued an Internship Credentials. While they teach as the teacher of record, they complete requirements for the first stage Preliminary Credential. Yet in Vermont, alternative route candidates do not become the teacher of record until they successfully complete the Peer Review program and are issued the standard 3-year Initial License. The first certificates issued to alternative route participants vary in how long they are valid and whether or not they can be renewed. Most commonly these certificates are valid for one or three years (17 and 16 States, respectively). They are renewable in 19 States and non-renewable in 25 States.

State implementation of NCLB's "Highly Qualified Teacher" Provision: As mentioned previously, NCLB defines a highly qualified teacher as an individual holding a bachelor's degree, fully State certified, and demonstrating subject matter competency in each core academic subject area taught. While the law provides some guidance for States, much of the details assumed by this definition are left to the individual States. Defining subject matter competency has proven the most challenging.

NCLB includes different options for elementary and secondary teachers and for new and veteran teachers. According to NCLB, a new elementary teacher must pass a State-approved test of subject knowledge and teaching skills in reading, writing, mathematics, and other areas of the basic elementary curriculum. Middle and high school teachers can demonstrate subject matter competency by either passing a subject matter test or by completing, in each core academic subject taught, an academic major, a graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification or credentialing. The law also authorizes States to develop a "highly objective uniform State standard of evaluation", i.e., HOUSSE, by which veteran teachers at any level can be deemed to demonstrate subject matter competency. The definition of subject matter competency leaves much detail to States. What score on what tests constitutes demonstrating subject knowledge and teaching skills? How much coursework is "equivalent to an undergraduate academic major?" What does a "highly objective uniform State standard of evaluation look like? As we demonstrate below, the vagueness of the NCLB definition has lead to considerable variation across States in what a "highly qualified teacher" looks like.

Table 7 shows that there is significant variation across States in the number of semester credits considered equivalent to a major. South Dakota requires only 12 credit hours while Utah requires 46 semester hours for composite majors, like elementary education. Twenty-five States, including California, consider between 30 and 32 semester credits equivalent to a major. In 11 States, teachers can demonstrate subject matter competency by completing 24 semester credits. There are five States that require more than 32 semester credits and five States that require less than 24.

NCLB includes language that allows middle and secondary teachers to demonstrate subject matter competency by earning an advanced certification or credentialing in each of the academic subjects taught. Thirty-seven States (including California) recognize subject-specific certificates issued by NBPTS an advanced credential demonstrating subject matter competency (see Table 8). However, 16 States have decided to extend this option to elementary teachers, contrary to NCLB. Additionally, several States consider a generalist National Board Certificate (NBC) as demonstrating subject matter competency. Nine States make this option available to elementary teachers and four to middle and high school teachers. NCLB does not recognize a generalist NBC as a valid means of demonstrating subject matter competency.

TABLE 7. State Definitions of "Coursework Equivalent to a Major" as a Means to Demonstrate Subject matter Competency, 2005

Minimum Credits	Frequency	States
More than 32	5	DC, ID ^a , NV ^b , ND ^c , UT ^e
30-32	25	AL, AK, CA, CT, DE, ID ^a , IL, KS, MD, MI, MT, NE, NV ^b , NH,
		NJ, NY, ND ^c , OH, OR, RI, SC, UT ^e , VT, WA, WY ^f
24	11	AZ, AR, CO, IN, IA, ME, NC, OK, TN, TX, WY ^f
Less than 24	5	GA, MS, ND ^c , SD ^d , WV
Varies across subject area	5	FL, MA, MO, NM, VA
Not defined/Unable to determine	5	HI, KY, MN, PA, WI

^a Idaho defines a major equivalent as 44 semester hours for elementary teachers and 30 semester hours for secondary teachers. ^b Nevada defines a major equivalent as 36 semester hours for comprehensive majors and 30 semester hours for single-subject majors. ^c North Dakota defines a major equivalent as 42 semester hours for composite majors, 32 semester hours for single-subject majors, and 16 semester hours for middle school.

NOTE: We equate the following terms that appear in State definitions: credits, semester hours, semester credits, and credit hours. SOURCE: See Table A-6 in Appendix 2.

TABLE 8. States where National Board Certification Satisfies Subject matter Competency Requirement of the Highly Qualified Teacher Provision of NCLB, 2005

Type of NBCT	Frequency	States			
Fully-Satisfies Requirement					
Middle and High School Teachers					
Core Academic Subject	33	AZ ^a , AR, CA ^a , CT, DE, HI ^a , ID, IL ^a , IN, KS ^a , LA ^a , ME, MD,			
		MA, MS ^a , MO, NE ^a , NH, NM, NY, NC, ND, OH, OK, PA, RI,			
		SC ^a , SD, TN ^a , UT, WA ^a , WV, WI ^b			
Core or Generalist	4	AK ^a , KY ^a , MI ^a , VA ^a			
Elementary School Teachers					
Core Academic Subject	11	AZ ^a , DE, HI ^a , IL ^a , KS ^a , NE ^a , NM, OH, SC ^a , WA ^a , WV			
Generalist	4	AK ^a , KY ^a , NY ^a , OR ^a			
Core or Generalist	5	LA ^a , MD ^a , MI ^a , NH, VA ^a			
Partially-Satisfies Requirement	Partially-Satisfies Requirement				
Middle and High School Teachers					
Core Academic Subject	2	L^b, NV^a			
Core or Generalist	5	AL, DC ^a , MN ^a , PA ^a , SD ^a			
Elementary School Teachers					
Generalist	2	CA, IL ^b			
Core or Generalist	6	AL, DC ^a , MN ^a , NV ^a , PA ^a , SD ^a			
Does Not Satisfy Requirement					
Middle and High School	9	CO, FL, GA, IA, MT, OR, TX, VT, WY			
Teachers					
Elementary School Teachers	24	AR, CA, CO, CT, FL, GA, ID, IN, IA, ME, MA, MS, MO, MT,			
		NC, ND, OK, RI, TN, TX, UT, VT, WI, WY			

NOTE: (1) Options apply to both "new" and "not new" unless indicated as follows: ^a "Not new" teachers only; ^b "New" teachers only. (2) National Board Certification is considered to partially satisfy the subject matter competency requirement if the teacher must meet the provision and at least one other thing (excluding passing a content test). SOURCE: See Tables A-6 and A-7 in Appendix 2.

Additionally, a NBC partially fulfills the subject matter competency requirement in many other States through the HOUSSE option. For example, veteran elementary teachers in Nevada satisfy the requirement if they have at least three years of teaching experience and hold an NBC. In other States like California, an NBC earns points in the HOUSSE rubric. An NBC in a core academic subject partially fulfills the subject matter competency requirement for middle and high school teachers in seven States and for elementary teachers in six States. A generalist NBC partially

d South Dakota equates a minor to a major, and defines a minor as 12 credit hours. Utah defines a major equivalent as 46 semester hours for a composite major and 30 semester hours for a single-subject major. Wyoming defines a major equivalent as 24 semester hours for secondary teachers and 30 semester hours for elementary teachers.

satisfies the requirement for middle and high school teachers in five States and for elementary teachers in eight States.

Although the legislation stresses content coursework and subject knowledge tests for new teachers, States were given, and many have taken, wide latitude in designing their HOUSSE option for veteran teachers to demonstrate subject matter competency. The NCLB legislation provided States with the following guidance regarding acceptable HOUSSE design:

- 1. Set by the State for both grade appropriate academic subject matter knowledge and teaching skills;
- 2. Aligned with challenging State academic content and student academic achievement standards and developed in consultation with core content specialists, teachers, principals, and school administrators;
- 3. Provides objective, coherent information about the teacher's attainment of core content knowledge in the academic subjects in which a teacher teaches;
- 4. Applied uniformly to all teachers in the same academic subject and the same grade level throughout the State;
- 5. Takes into consideration, but not be based primarily on, the time the teacher has been teaching in the academic subject;
- 6. Made available to the public upon request; and
- 7. May involve multiple, objective measures of teacher competency.

Table 9 presents many of the common "multiple, objective measures of teacher competency" appearing in States' highly qualified teacher definitions for veteran teachers.

States differ in the measures of competency used and in whether they fully satisfy the NCLB requirement. Coursework and years of teaching experience factors into most States definitions. Two States, Ohio and Vermont, permit some veteran teachers to fully satisfy the requirement with coursework less than a major in the core subject area taught while such coursework partially satisfies the requirement in 35 States (including California). Either non-content coursework or coursework outside the subject taught partially fulfills the requirement in 16 States, including California.

In no State does experience alone qualify a veteran teacher as subject matter competent as prohibited by the federal legislation. However, teaching experience partially satisfies the requirement in 37 States. Experience enters into the definitions in two ways. For example, teachers in Alabama are deemed competent if they have both at least five years of experience and a National Board Certification in the core subject area. In 12 States, teachers who have a minimum amount of experience and meet at least one other condition can be deemed competent. Another 29 States including California, awards teachers points per year of experience toward some minimum amount on the HOUSSE rubric.

Other measures of competency include State-issued teacher certificates, performance evaluations, and professional development and other professional activities. Based on the State's requirements for teacher licensure, 12 States have deemed all holders of specific types of teaching certificates to be highly qualified. In six States, specific types of certificates partially satisfy the competency requirements. Veteran teachers who receive a minimum rating on one or more performance evaluations can fully satisfy the requirement in nine States (including California) and partially in ten others. The professional development and other professional activities category is by far the largest and appears in State definitions under multiple terms including professional development, scholarship, leadership, service, awards, recognitions, presentations, and publications. It is possible in five States (including California) for teachers to fully satisfy the requirements by completing enough these activities. Such activities partially fulfill the requirement in 35 other States.

TABLE 9. Examples of the "Multiple, Objective Measures" of Subject Matter Competency Appearing in States' Highly Qualified Teacher Definitions for Veteran Teachers, 2005

Options	Freq.	States			
Fully-Satisfies Requirement					
Coursework less than a major in	2	OH ^a , VT ^f			
subject area taught					
Specific type of State-issued teaching certificate	11	DC ^{a,d} , FL, KY, MD ^b , MS, MT ^a , NE ^d , NH ^a , NC ^d , OH ^a , OR ^a			
Minimum rating on performance evaluation	9	CA, CT, IA, NC, SC, TN, VA, WV, WY ^d			
Completed teacher induction program	2	KY, MI			
Professional development and other	5	CA, MS ^c , NH, OH, VA			
professional activities					
Partially-Satisfies Requirement					
Coursework less than a major in	35	AL, AK, AZ, AR, CA, CO ^a , DE, FL, GA, HI, ID, IL, KS, KY, LA, ME,			
subject area taught		MD, MA, MI, MN, MS, NJ, NM, NY, ND, OH, OK, OR ^d , PA, RI, TN, TX, UT, VA ^d , WY			
Other coursework	16	AL, AK, AZ, CA, DE, ID, ME, MD, MA, MS, NY, ND, OH, PA, TN, VA			
Specific type of State-issued teaching certificate	6	AL, AK, ID, IN, SD, WI			
Minimum years of teaching experience in subject area taught	12	AL, DC, IL, MI, MO, NV, NM, OR ^d , SD, TN, TX ^e , VA			
Some years of teaching experience in	29	AL, AK, AZ, AR, CA, DE, FL, GA, HI, ID, IL, IN, KS, KY, ME, MD, MN,			
subject area taught		MS, NJ, NY, ND, OH, OK, PA, RI, TN, TX, UT ^d , WY			
Minimum rating on performance	10	FL, GA, MN, MO, NE, NM, NY, TN, UT ^e , WY ^e			
evaluation					
Professional development and other	35	AL, AK, AZ, AR, CO ^a , DE, FL, GA, HI, ID, IL, IN, KS, KY, LA, ME, MD,			
professional activities		MA, MI, MN, MS, NE, NJ, NY, ND, OH, OK, PA, RI, TN, TX, UT ^d , VA,			
		WI, WY			

Options are available only to all "not new" teachers unless indicated as follows: a "New" and "not new" teachers; b "Not New" elementary teachers and both "New" and "Not New" secondary teachers; Middle school teachers only; d Secondary teachers only; Elementary teachers only; Not New" elementary and high school teachers and both "New" and "Not New" middle school teachers NOTES: (1) A provision is considered to partially satisfy the subject matter competency requirement if the teacher must meet the provision and at least one other thing (excluding passing a content test). (2) "Coursework in subject area taught" is required to be content, not pedagogical in focus. "Other coursework" may either be (a) content or pedagogical coursework outside the subject area taught or (b) coursework in the subject area taught but that is pedagogical rather than content focused. (3) "Minimum years of teaching experience" indicates provisions were the State requires teachers to have at least a certain number of years of experience to be deemed "highly qualified" whereas "some years of teaching experience" are those provisions were teachers accumulate points per each year of teaching experience toward some overall minimum total required to be deemed "highly qualified". (4) "Professional development and other professional activities" appear in State definitions under various titles including professional development, scholarship, leadership, service, awards, recognitions, presentations, and publications. SOURCE: See Tables A-6 and A-7 in Appendix 2.

TABLE 10. Maximum Weight States Give to Years of Experience in Determining if Subject Matter Competency for Veteran Teachers, 2005

Weight	Frequency	States
52% to 60%	3	IL ^a , TN ^b , UT
50%	24	AL ^c , AK, AZ, AR, CA, DC, FL, GA, IL ^a , IN, ME, MD, MI, MN, MS, MO,
		NV, NY, OR, SD, TN ^b , TX, VA, WY
40% to 49%	6	HI, ID, KS, KY, OK, PA
24% to 32%	7	AL ^c , DE, NJ, NM, ND, OH, RI
No direct weight	14	CO, CT, IA, LA, MA, MT, NE, NH, NC, SC, VT, WA, WV, WI

^a In Illinois, teaching experience carries a maximum weight of 50% if the teacher meets the minimum endorsement requirements for the core subjects taught and 60% in the HOUSSE rubric. ^b In Tennessee, teaching experience carries a maximum weight of 50% if the teacher's effect on student achievement identified through TVAAS is above the mean or not detectably different from the mean and 52% in the HOUSSE rubric. ^c In Alabama, teaching experience carries a maximum weight of 50% for teachers with the appropriate National Board Certification, and 30% in the HOUSSE rubric. NOTE: Maximum weight was calculated from two sources. First, if the State's HQT definition deems a teacher subject matter competent if she has a minimum amount of teaching experience, for example, and fulfills multiple other provisions, all carrying equal weight, the maximum weight assigned to teaching experience was calculated to be 1 divided the number of provisions. Second, the maximum weight was calculated using the HOUSSE rubrics where the maximum weight was equal to the maximum points awarded for either experience or content coursework less than a major divided by the total points needed. SOURCE: Author's calculations based on data in Tables A-6 and A-7 in Appendix 2.

As discussed previously, many States have adopted a rubric-style HOUSSE option whereby teachers accumulate points for various objective measures of subject matter competency. A teacher is deemed subject matter competent once she amasses some minimum number of points, commonly one hundred points. While NCLB stresses the importance of coursework to subject matter competency for new teachers, it allows States to emphasize other measures of competency for veteran teachers.

Table 10 shows how much emphasis, represented as a percent of the total points needed, States place on teaching experience. Among those States placing any weight at all on teaching experience, the maximum weight ranges from 24 percent in Ohio to 60 percent in Illinois. The majority of States (including California) allow veteran teachers to amass up to 50 percent of the necessary points through experience. States also differ significantly in the minimum length of time it takes teachers to earn the maximum allowable points for experience. Teachers accumulate the maximum weight after just one year in Texas (for elementary teachers) but need 19 years in Oklahoma and 20 years in Alabama (for teachers without a NBC). In California and 13 other States, teachers must have taught at least five years in order to earn the maximum allowable experience points.

Walsh and Snyder (2004) raised a concern that HOUSSE options for veteran teachers overemphasize teaching experience at the expense of content coursework in determining subject matter competence. Table 11 calculates the maximum weight placed on content coursework less than a major versus years of teaching experience in the core academic subject area taught. ⁶²

TABLE 11. Relative Maximum Weight States Give to Coursework Less than a Major in Subject Area Taught Versus Teaching Experience in Determining Subject Matter Competency for Veteran Teachers, 2005

Relative Maximum Weight	Frequency	States
Weight on coursework less than a major,	5	CO, LA, OH ^a , VT, VA ^b
but none on experience		
3.1 to 3.6	3	NJ, ND, RI
2.0 to 2.2	3	HI, IN, WY
1.7 to 1.9	8	AZ, IL ^c , KS, KY, OK, PA, TX, UT
1.1 to 1.4	7	AL, AR, CA, FL, GA, IL ^c , OH ^a
1.0	5	MI, MN, NM, OR, VA ^b
0.6 to 0.9	7	DE, ID, MD, MA, MS, NY, TN
0.2 to 0.5	2	AK, ME
Weight on experience but none on	4	DC, MO, NV, SD
coursework less than major		
No weight on experience or coursework	10	CT, IA, MT, NE, NH, NC, ND, SC, TN, WI
less than a major		

^a Ohio allows "not new" teachers to either accumulate 90 clock hours post-initial licensure of professional development (including coursework) or 100 points using the HOUSSE rubric which awards points for both teaching experience and coursework. ^b Virginia only applies weight to experience when the teacher has completed three years of successful teaching and a specific amount of coursework; otherwise, "not new" teachers must accumulate 90 points through coursework and other activities with no points for experience. ^c In Illinois, the relative weight for teachers with elementary or secondary subject area endorsements is 1.7 and 1.2 for teachers with middle grades or reading endorsements.

NOTE: Coursework refers to coursework in subject area taught less than a major or major equivalent and relative maximum weight is based only on each State's HOUSSE provisions. (2) Maximum weight was calculated from two sources. First, if the State's HQT definition deems a teacher subject matter competent if she has a minimum amount of teaching experience, for example, and fulfills multiple other provisions, all carrying equal weight, the maximum weight assigned to teaching experience was calculated to be 1 divided the number of provisions. Second, the maximum weight was calculated using the HOUSSE rubrics where the maximum weight was equal to the maximum points awarded for either experience or content coursework less than a major divided by the total points needed. SOURCE: Authors' calculations based on data in Tables A-6 and A-7 in Appendix 2.

Among the 41 States recognizing both measures of subject matter competency, the relative maximum weight ranges from 0.2 in Alaska to 3.6 in Rhode Island. Sixty five percent (26 States

including California) place greater emphasis on coursework. Coursework is at least twice as important as experience in determining subject matter competency in six States and more than three times as important in three States. Four States award credit for coursework but no credit for experience while the opposite is true in another four States. While these statistics might appear to discredit concerns that experience is overemphasized, it should be noted that veteran teachers by definition have experience. It is likely that some veteran teachers have been deemed subject matter competent without completing any relevant content coursework.

Effectiveness of these Policies. This section has addressed certification, alternative routes to teaching and NCLB Highly Qualified Teacher requirements. Here we discuss what is known about the effectiveness of these policies, in turn.

Certification: Interpreting evidence on the effect of certification is tricky. Almost all teachers are certified and those that are not tend to be concentrated in the most the difficult-to-staff schools. These schools often have low-achieving students, though uncertified teachers are unlikely to be the primary cause of this low-performance. The results of the best research in the field are inconclusive. Using longitudinal data on students and teachers in North Carolina, a recent study by Clotfelter, Ladd and Vigdor (2006) finds a positive relationship between teacher certification and student outcomes. Previous studies had not generally found such an effect. For example, Jepsen and Rivkin (2002) find that in the aftermath of class-size reduction in California, there was no evidence that teacher certification status affected third-grade student outcomes.

Alternative Certification: Given the substantial increase in early-entrant teachers in recent years, especially in difficult-to-staff schools, there is broad interest in the effects of alternative routes. One result is clear: these new pathways into teaching have the potential of increasing the pool of individuals interested in teaching. Nearly all alternative certification programs reduce the cost of becoming a teacher by substantially reducing the requirements that teachers must fulfill and/or by allowing teachers to complete requirements while they are earning a salary as a teacher. There is evidence that some alternative certification programs have been able to recruit teachers with strong qualifications compared to those entering teaching through traditional teacher preparation programs. For instance, in 2003 Teach for America (TFA) had 16,000 applicants for 1,800 available slots and as a result was able to be highly selective in terms of teacher qualifications. This is impressive but even in districts where TFA has its greatest presence its teachers represent a small fraction of entering teaching workforce. There is also some evidence that alternative programs are more likely to attract older and more minority candidates than traditional programs, and that retention rates of alternative path teachers can be similar to that of those coming through more-traditional universitybased routes, though both these factors vary substantially across districts and programs.⁶⁴ Teach for America teachers, for example, are, on average, younger than other starting teachers and have substantially higher turnover rates.

Boyd, Grossman, Lankford, Loeb and Wyckoff (2006) show that in recent years teachers recruited to teach in New York City public schools through the alternate route New Teaching Fellows program constitute about 25 percent of all new teachers and have qualifications (e.g., certification exam scores, undergraduate college rankings and SAT scores) which, on average, substantially exceed those of unlicensed teachers or even those prepared in traditional preparation programs. Teaching Fellows are on average a more diverse group than traditionally prepared teachers, with relatively more males and 50 percent more Hispanics and Blacks. However, the experience of the Teaching Fellows program is not a test of the absence of licensure. Alternate route teachers in New York City are provided a stipend to subsidize their graduate education, likely inducing an increased interest independent of the reduced entry requirements. In addition, they are

required to complete the same requirements as other teachers to receive their second-stage certification. This likely dampens interest in the program, as requirements have been delayed but not eliminated.

The effect of alternative routes on student outcomes is less clear. While there is a random assignment study in process that assesses a range of alternative route programs, most of the research to date has focused on the TFA program, an elite program, though there is work on the Teaching Fellows. At least six studies have examined the relative effectiveness of TFA teachers. 65 The results across studies are similar but have some differences depending on specification and the school districts examined. The evidence indicates that, on average, students of first year TFA teachers perform at least as well as those of other first year teachers in the same schools, including teachers from traditional preparation programs, in math but, if anything, slightly worse in English Language Arts. By their second or third year of experience TFA teachers have student gains that are somewhat better than other teachers in math and about the same in ELA. Similar results, though not quite as positive, hold for the New York City Teaching Fellows. These evaluations bundle two characteristics of teachers—their general ability and their preparation to teach. TFA and the New York City Teaching Fellows strongly emphasize recruitment and selection and their teachers have better general qualifications but receive substantially less pre-teaching preparation to teach. Thus, the results of these evaluations may mean that the higher general qualifications of TFA and Teaching Fellow teachers partially offset the more substantial preparation of traditional route teachers.

It is important to note that all of the studies to date that examine the effects of teacher preparation on student outcomes compare one program to another and do not indicate performance in an absolute sense. Thus, all programs may be doing a fine job or they may all produce relatively weak gains in achievement. Kane, Rockoff and Staiger (2006) and Boyd, Grossman, Lankford, Loeb and Wyckoff (2006) show that there is wide variation among teachers within each pathway, suggesting that there remains much to learn about the knowledge and skills of teachers that are most effective in producing student achievement gains.

NCLB Highly Qualified Teacher requirements: As noted above, at least partially as a result of NCLB, States have dramatically reduced their reliance on uncertified teachers. In many cases, the uncertified teachers have been replaced by early-entrant/alternative route teachers. We don't know very much about what makes a highly effective teacher. Because of this, it is difficult to know whether requiring HQT will, in the long run, be beneficial to students.

NCLB's focus on teacher quality is broader than ensuring that every core academic class is taught by a highly qualified teacher. It also requires States to guarantee that poor and minority students are not taught at higher rates by inexperienced, unqualified, and out-of-field teachers. The Department of Education was very late in monitoring State progress with respect to their equity plans. However, at least in New York City, there have been dramatic changes in the distribution of teachers across schools since the passage of NCLB. For example, in 2000, 27 percent of teachers in the highest-poverty schools in NYC were novices with less than 3 years of experience, compared with 15 percent in the lowest-poverty schools, for a gap of 12 percentage points. By 2005, only 22 percent of teachers in the highest-poverty schools were novices, while the percentage in low-poverty schools actually rose to 18 percent, so that the gap had narrowed to about 3.6 percent. The same basic pattern held with other teacher qualifications, including SAT verbal and math scores, and the percentage who attended least-competitive colleges. For example, the gap in the percent of teachers who failed their general knowledge certification exam on their first try fell from 25.5 percent in 2000 (36.6 percent in high poverty schools compared with 11.1 percent in low poverty schools) to 14.1 percent in 2005 (26.4 percent in high poverty schools compared with 12.3 percent in low poverty

schools). In general, the gap between the lowest and highest poverty schools closes as a result of improvements in the highest poverty schools, although in some cases the lowest poverty schools made modest improvements. ⁶⁶

In summary, recent policies to reduce coursework requirements and require demonstration of subject matter competency for new teachers has substantially changed the pool of potential teachers, especially in many large urban areas. These new candidates often have substantially greater abilities as measured by their performance on standardized tests. However, it is not clear whether this change has yet improved teaching. The link between teachers' own test performance and their value-added to student achievement is weak, as is the link between coursework requirements and student achievement. The studies that have estimated the difference in value-added by route into teaching have found substantially greater variation in effectiveness among teachers within the same route into teaching as between teachers coming from different routes. We have a lot to learn about which requirements improve teaching and which deter good teachers from entering the classroom but the evidence suggests that policies that address these factors may have substantial impacts because they clearly affect both the pool of teachers and the experiences that these teachers bring with them into the classroom.

Tenure Policies

New Jersey passed the nation's first teacher tenure law in 1909. Over the next several decades other States adopted similar laws: New York in 1917, California in 1921, and Michigan, Pennsylvania, and Wisconsin in 1937. The different State statutes use a variety of synonyms for tenure: continuing contract or service, permanent status, career status, and post-probationary status. Regardless of the preferred terminology, these laws have three main components: *tenure requirements*, *reasons for dismissal*, and *process for appeals*. The first specifies the length of the probationary period after which teachers are eligible for tenure. Employers can dismiss a non-tenured teacher at any time for any reason, but tenured teachers can only be dismissed for the reasons provided in the law. The third component details the appeals process a dismissed tenure teacher can pursue in an effort to be reinstated.

Proponents of these laws focus on teachers' rights to due process while opponents criticize them for awarding teachers with jobs for life. Teacher tenure laws were originally proposed by educators and politicians who argued teachers needed to be protected from unfair and unjust terminations driven by reasons such as nepotism and political agendas. Opponents argue tenure amounts to awarding a lifetime job and prevents superintendents and principals from removing poor teachers from the classroom. These arguments continue to be waged across the nation as evidenced by events in Georgia and California. In 2000, Georgia eliminated due process rights for teachers hired after 1 July 2000. Three years later, however, these rights were reinstated. In 2005, California voters soundly rejected Proposition 74, advanced and strongly supported by Governor Arnold Schwarzenegger, which would have extended the probationary period and expanded the reasons for which tenured teachers could be dismissal.

California's Approach. California's teacher tenure law was approved in 1921. At the time, the probationary period was three consecutive years in the same school district plus reemployment, but all teachers (tenured and probationary) were assured due process rights. The probationary period was reduced to two years beginning with the 1983-84 school year and the right to a due process hearing for non-tenured teachers was revoked.⁶⁷

Proposition 74 would have extended the probationary period to five years. Proponents argued it was impossible to assess a teacher's quality after two years. By extending the probationary period

to five years, principals would have more time to assess a teacher's quality and weed out the weakest teachers. Consequently, they argued student achievement would improve. Opponents countered that student performance would actually be harmed because a longer probationary period would create the image of teaching as an insecure profession. Therefore, schools would have a harder time recruiting high quality teachers. ⁶⁸

Proposition 74 also sought to clarify one of the many valid reason for dismissing a tenured teacher. Valid reasons, listed in California's education statute, include immoral or unprofessional conduct; dishonesty; and physical or mental condition unfitting him or her to instruct or associate with children. (See Table A-8 in Appendix 3 for a complete list.) The exact meanings of many of these terms are not defined in the statute. However, Proposition 74 would have added clarifying language for one reason—unsatisfactory performance. ⁶⁹ It would have defined this as two consecutive unsatisfactory performance evaluations.

California's dismissal appeals process must be initiated by the tenured teacher. The first step is a hearing before a three-member Commission on Professional Competence. The teacher is free to select one member of the Commission. A hearing must be held within 60 days of the teacher's request. From there either party can take the dispute to Superior Court.

Approach Taken by States across the Nation. Every State has a teacher tenure law on the books. Laws in North Dakota and Wisconsin deserve special attention. North Dakota's law provides no guidance to school districts regarding to whom or when to award tenure, yet it does specify reasons for dismissal and an appeals process. Wisconsin's law details an appeals process, however leaves specifics about tenure requirements and reasons for dismissal to local collective bargaining agreements.

California is one of ten States that award tenure after two years. All other States require a longer period of service (see Table 12). Teachers in 32 States are eligible to receive tenure after three years. Four years are required in four States, and Connecticut requires 40 months. Indiana and Missouri require five years. Actually, Indiana's tenure rights are two-tiered. Teachers are eligible for semi-permanent status after two years and permanent status after five. There are fewer approved reasons for termination of permanent teachers than semi-permanent.

TABLE 12. Service Requirements for Tenure. 2005

Minimum Number	Frequency	States
of Years		
2 years	10	CA, DC, HI, ME, MD, MS, NV, SC, VT, WA
3 years	32	AL, AK, AZ, AR, CO, DE, FL, GA, ID, IA, KS, LA, MA, MN, MT, NE, NH,
		NJ, NM, NY, OH, OK, OR, PA, RI, SD, TN, TX, UT, VA, WV, WY
40 months	1	CT
4 years	4	IL, KY, MI, NC
5 years	2	IN, MO
No State guidance	2	ND, WI

SOURCE: See Table A-8 in Appendix 3.

Most States require teachers render service during the probationary period in consecutive years in the same district in order to be eligible for tenure. However, there is some variation. Delaware teachers must teach three consecutive years with two years being in the last district. Several States require teachers to teach a certain number of years in the same district, but do not require them to be consecutive. Florida, Ohio, Rhode Island, and Tennessee require three years in a 5-year period, and Kentucky requires four years in a 6-year period. Teachers in Illinois must teach four consecutive years, but there are no restrictions on the number of districts.

Valid reasons for dismissing a tenured teacher vary across States in both number and detail. Several statutes simply State something like "just cause", "good cause" or "good and just cause". Several States list more than twenty reasons in their statute. However, many statutes fail to define the reasons for dismissal leaving much open to interpretation.

A termination decision is final in most States unless the teacher elects to appeal, in which case the typical first step is a hearing before the local board of education. Such hearings are mandated in at least four States—Idaho, Louisiana, North Dakota, and Pennsylvania. The appeals process usually ends in the States' court systems.

Effectiveness of these Policies. We could find no published research on the effects of teacher tenure policies on recruitment, retention, teacher quality, or student achievement. However, there are strongly-held opinions on these matters. California's recent attempt to increase the length of the probationary period placed these opinions in the political spotlight.

From the point of view of opponents of longer probationary periods, any attempt to weaken the tenure process is bad for the teachers and students. They argue that weakening the tenure process will create the impression that teaching is an insecure profession because a longer probationary period increases the risk a teacher will be released at any time for any reason. Consequently, it will be more difficult to recruit quality teachers as increasing numbers of potential teachers opt for other employment opportunities. We did not find evidence to either support or refute these claims. Opponents also note that weakened tenure processes will increase costs as schools will need to spend more on evaluating probationary teacher performance and recruiting and hiring new teachers. These are additional costs; however, no evidence is available with which to judge whether these costs are outweighed by benefits to students of removing poor teachers.

On the other hand, proponents of tenure reform cite improvements in teacher quality as benefits of reforms designed to strengthen administrators' ability to dismiss low-quality teachers. As noted above, policy makers and hiring authorities do not have strong research evidence to help them hire good teachers; none of the typically measured characteristics of teachers are good predictors of how effective they are in the classroom. Because of this, it is important to be able to assess teachers once they are teaching and to have the flexibility to dismiss ineffective teachers. There is evidence that principals can identify poor teachers. One recent study shows that the teachers that principals identify as the least-effective also tend to be the least effective on measures of value-added to student achievement. ⁷⁰ In addition, many California principals cite tenure laws as one of the greatest barriers they face in improving teaching in their school. Importantly, however, these principals do not want to dismiss a lot of teachers, only one or two (50 percent of principals said they would like to dismiss one or fewer and another quarter said only two). 71 To the extent that a teacher's quality can not be fully assessed within the first two years, too many low quality teachers may receive tenure and due process rights. Once tenured, the costs associated with the legal process of dismissing a teacher serve to siphon money from other instructional programs and can prove prohibitive for many districts. By strengthening the ability of administrators to release low quality teachers, opponents of tenure assert that the overall quality of the teacher labor force would increase and, along with it, student achievement.

While State tenure laws make it difficult for districts to dismiss teachers, there is some indication that districts can work within existing laws to increase their flexibility, especially through agreements on teacher evaluation. Several districts are reforming their tenure policies to place greater emphasis on teacher quality. Koppich (2005) describes one such reform effort, Minneapolis's Achievement of Tenure. The process, developed collaboratively between the school district and the local teacher union, melds key components of many State beginning teacher induction programs to

the tenure decision. Each teacher new to Minneapolis schools is assigned an experienced teacher who serves as their mentor throughout the three-year process. Three months prior to the end of the probationary period, teachers must submit a portfolio to a school-based team for review. The teacher is granted tenure if the portfolio demonstrates the teacher has met all requirements including professional development, cognitive coaching, videotapes of their teaching, action research, and annual evaluations aligned with Minneapolis's *Standards of Effective Instruction*.⁷³

In summary, tenure laws are common across states. California is one of the states with the least probationary time prior to tenure. Principals and superintendents in California cite the difficulty of dismissing teachers as one of their greatest barriers to improving student outcomes. Loosening of State laws through extending tenure or redefining valid reasons for dismissing teachers would likely aid districts in this regard. Within the constraints of the current system there is also some flexibility for districts to develop evaluation processes that would aid schools and districts in identifying their least effective teachers and dismissing them. However, this within-district process requires a type of collaboration between bargaining units which has been scarce to date.

Professional Development and Evaluation Policies

Skill and knowledge acquisition does not end for teachers upon the completion of a preparation program. Growth continues through experience and professional development activities. States frequently rely on such activities to inform teachers of new State and federal educational policies as well as newly adopted curriculum and performance standards. While most of the responsibility for organizing and conducting professional development activities lies with individual districts, States have adopted a variety of policies to guide their efforts. For example, many States have adopted professional development standards while others require districts to set aside a minimum amount of time for teachers to participate in activities.

New teachers in many States are immediately involved in professional development by participating in mandatory beginning teacher induction and mentoring programs. These programs are designed to assist new teachers as they seek to apply the skills and knowledge acquired in preparation programs to their own classroom practice. State policies regarding these programs differ along several criteria including the minimum program length, individuals eligible to serve as mentors, and completion requirements.

Performance evaluations are a means to assess teachers' continued professional growth. For example, evaluations figure prominently in the teacher tenure processes described previously. Additionally, teachers receiving unsatisfactory performance ratings are frequently provided with additional professional development activities to enable them to improve in areas identified as weaknesses. Across the States, some performance evaluation systems are designed at the State-level while in other States system development is delegated to individual districts. There is also variation across the States in the frequency with which probationary and non-probationary teachers must be evaluated and whether or not student performance factors into the teacher's evaluation.

California's Approach. The importance of professional development to the teaching profession in California is evidenced by standard six of the *Standards for the Teaching Profession* (CCTC, January 1997): Developing as a Professional Educator (see Chart 2). Professional development factors prominently into the renewal process for teacher credentials. Every five years, California teachers must complete a minimum of 150 clock hours of "professional growth activities." Eligible activities must add to the teacher's competence, performance, or effectiveness in at least one of the following eight domains:

- 1. A subject or subjects the credential holder teachers, or reasonably expects to teach, in kindergarten or in grades 1 through 12.
- 2. A field of specialization in which the credential holder serves, or reasonably expects to serve, in kindergarten or in grades 1 through 12.
- 3. Concepts, principles, and methods of effective teaching, curriculum and evaluation in kindergarten or in grades 1 through 12.
- 4. Concepts and principles of physical, intellectual, social, and emotional development among children and youth.
- 5. Concepts and principles of human communication, learning, motivation, and individuality.
- 6. Languages and cultural backgrounds of groups of children and youth who attend California schools.
- 7. Concepts and principles of effective relationships among schools, families, and communities.
- 8. Roles, organization, and operation of public education and of institutions that promote public education.

There are seven categories of eligible activities, and teachers must complete activities from at least two of them.⁷⁵ Teachers work with a professional growth advisor (i.e., someone with a bachelor's degree and a valid California teaching credential) to craft a 5-year professional growth plan.

In 2004-05, California funded multiple professional development programs for public school teachers in spite of the budget cutbacks of 2003-04 which eliminated one program and curtailed funding for others. Esch, et. al. (2005) contains informative descriptions of the intent and history of these programs. Our brief descriptions of the programs below draw heavily from this research. They group the programs into three types: subject-matter, curriculum, and locally-controlled (see Chart 6).

CHART 6. California Professional Development Programs, 2004-05

Program Type	Program Names		
Subject-matter	California Subject Matter Projects (CSMPs)		
	2. California Mathematics and Science Partnership Program (CaMSP)		
Curriculum	Mathematics and Reading Professional Development Program (MRPDP)		
	2. Reading First Plan for California		
Locally-Controlled	1. Peer Assistance and Review (PAR)		
	2. Professional Development Block Grant		
	a. Instructional Time and Staff Development Reform (ITSDR)		
	b. Teaching as a Priority (TAP)		
	c. Intersegmental Programs: College Readiness Program and Comprehensive		
	Teacher Education Institute		
	Teacher and Principal Training and Recruiting Fund		

SOURCE: Appendix A in Esch, et. al. (2005)

Professional Development Programs: California Subject Matter Projects (CSMPs), one of the programs whose funding was curtailed in 2003-04, is a set of nine projects that offered technical assistance to low-performing schools and to teachers not in compliance with NCLB's highly qualified provision. Each project focuses on a given subject area (writing, reading and literature, mathematics, science, history and social studies, foreign language, physical education and health, the arts, and international studies) and has two goals: (1) improving teachers' content knowledge in the subject area and (2) developing teacher leaders. The projects were created in 1988, reauthorized in

1998 and overseen by the University of California Office of the President. Participants complete intensive summer institutes and follow-up activities during the school year.

California Mathematics and Science Partnership Program (CaMSP) is a competitive grant program created in 2002 with NCLB funding. It targets districts serving high-need student populations to help improve student performance in math and science. The CaMSP assists eligible districts in partnering with an engineering, mathematics, or science department at a California college or university. Program funds are used for California standards-based professional development for mathematics teachers in grades 5 through 9 and for science teachers in grades 4 through 8. Most participating districts use the money to design instructional materials and fund lesson study collaborations.⁷⁷

The Mathematics and Reading Professional Development Program (MRPDP) was established in 2001-02 (AB 466, Strom-Martin, Shelley) as a five-year program. The program targeted schools designated as high-priority or low-performing schools who are required to provide professional development to their math and reading/language arts teachers. Districts were reimbursed for curriculum-based professional development activities at \$2,500 per trained teacher and \$1,000 per paraprofessional per year. Professional development activities are required to be offered by a provider approved by the State Board of Education and to be specific to the teachers' grade level and their schools' adopted curriculum.

The Reading First Plan for California directs funds received through the Reading First Program created by NCLB to districts in order to provide K-3 reading/language arts teachers and all special education teachers with training specific to grade level and the district's reading curriculum. Federal law requires that funds go to schools with the highest percentages of K-3 students reading below grade level and that are identified as needing improvement and serving children in poverty. The plan also funds the California Technical Assistance Center and nine Regional Technical Assistance Centers all of which provide TA to plan grantees.

One of the programs whose funding was reduced in 2003-04, the Peer Assistance and Review (PAR), provides funds for master teachers to assist fellow teachers who received unsatisfactory ratings on their performance evaluation in making the required improvements. The program was created in 1991 (AB X1, Villaraigosa). All districts are eligible to receive funding but are required to submit an application developed with its local bargaining unit.

The Professional Development Block Grant was created in 2004 (AB 825, Firebaugh) and bundles funding for three programs: Instructional Time and Staff Development Reform Program (ITSDR), Teaching as a Priority (TAP), and intersegmental programs. ITSDR reimburses districts with an approved PAR program for professional development in core curriculum areas. TAP is aimed more at recruitment and retention than professional development (see the section on Recruitment, Retention, and Assignment Incentives for more information on this program). The intersegmental programs target college readiness and improved teacher preparation and induction.

The Teacher and Principal Training and Recruiting Fund is another program created by NCLB through which California provides funds to eligible districts who have conducted a local needs assessment. Districts must submit a plan to CDE detailing a plan for spending funds in ways that are aligned with State content standards and will have a direct impact on student achievement. Although funds can be used to prepare, recruit, induct, and train teachers, priority is given to professional development activities intended to improve student performance in the core academic subject areas.

Beginning Teacher Support and Assessment Program (BTSA): All first-time teachers are required to complete California's two-year Beginning Teacher Support and Assessment program

(BTSA). Its primary purpose is to "provide an effective transition into the teaching career for first-and second-year teachers" (Cal Educ. Code §44246.2) (see Chart 5). The program traces its roots to 1992 (SB 1422, Bergeson) and was formally created in 1997 (AB 1266, Mazzoni). In 2004, funding for BTSA programs was folded into the Teacher Credentialing Block Grant (AB 825, Firebaugh). Currently, there are more than 145 BTSA programs throughout the State that take one of three organizational structures: individual districts, districts in collaboration with one another and with colleges and universities, and large consortia with districts, colleges, universities, and county offices. All programs must meet the *Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs* (see Chart 7).

CHART 7: Beginning Teacher Support and Assessment Programs: Statutory Purposes and Standards of Quality and Effectiveness

Sta	tutory Purposes	Standards of Quality and Effectiveness
1.	Provide an effective transition into the teaching	Category I: Program Design, Organization and Context
	career for first- and second-year teachers in	Standard 1: Sponsorship and Administration of the
	California	Program
2.	Improve the educational performance of students	Standard 2: Program Rationale, Goals, and Design
	through improved training, information, and	Standard 3: Collaboration
	assistance for new teachers	Standard 4: School Context and Working
3.	Enable beginning teachers to be effective in teaching	Conditions
	students who are culturally, linguistically, and	Standard 5: Roles and Responsibilities of Site
	academically diverse	Administrators
4.	Ensure the professional success and retention of new	Category II: Delivery of Integrated Support and
	teachers	Assessment to Beginning Teachers
5.	Ensure that a support provider provides intensive	Standard 6: Selection of Support
	individualized support and assistance to each	Providers/Assessors
	participating beginning teacher	Standard 7: Provision of Professional
6.	Improve the rigor and consistency of individual	Development for Support Providers/Assessors
	teacher performance assessments and the usefulness	Standard 8: Formative Assessment of Beginning
	of assessment results to teachers and decision makers	Teacher Performance
7.	Establish an effective, coherent system of	Standard 9: Development and Use of
	performance assessments that are based on the	Individualized Induction Plans
	California Standards for the Teaching Profession	Standard 10: Provision of Individualized
8.	Examine alternative ways in which the general public	Assistance and Support by Support
	and the education profession may be assured that new	Providers/Assessors
	teachers who remain in teaching have attained	Standard 11: Design and Content of Formal
	acceptable levels of professional competence	Professional Development Activities for
9.	Ensure that an individual induction plan is in place	Beginning Teachers
	for each participating beginning teacher and is based	Category III: Resources and Program Development
	on an ongoing assessment of the development of the	Standard 12: Allocation and Use of Resources
	beginning teacher	Standard 13: Program Development, Evaluation
10.	Ensure continuous program improvement through	and Accountability
	ongoing research, development, and evaluation	

SOURCE: Cal Educ. Code §44246.2 and State of California (July 1997)

Each new teacher is assigned a mentor who serves as support provider and assessor. Mentors must complete State-developed training. (See Table A-10 in Appendix 4 for State guidance on mentor selection.) BTSA programs are required to provide time and opportunities for beginning teachers and their mentors to work together on a regular, on-going basis. Assessments of beginning teachers are guided by the California Formative Assessment and Support System for Teachers (CFASST) or an approved local assessment system and are based on the State's *Standards for the Teaching Profession*. The mentor assesses the beginning teacher's performance at the start of the

program and at multiple points throughout the induction program to monitor progress. Assessment information is used to create and update the beginning teacher's Individual Induction Plan (IIP). Successful completion of a BTSA program is required for teachers in order to be eligible for a Professional Clear Credential.

Performance Evaluations: Performance evaluation systems are developed and implemented at the district-level in California following State guidance regarding aspects such as evaluation frequency and mandatory actions following an unsatisfactory rating. Probationary teachers must be evaluated at least annually. Like most States, non-probationary teachers are evaluated less frequently. California requires that all non-probationary teachers be evaluated at least once every other year. Additionally, a teacher who is highly qualified with at least ten years of experience with their current district and a previous "exceeds standards" performance rating must be evaluated at least once every five years. California requires that teacher performance evaluation systems incorporate measures of student performance. The State provides no guidance on who is eligible to serve as evaluators.

Should an evaluation result in an unsatisfactory rating, the teacher must be provided with recommendations on how improvements can be made in the identified unsatisfactory areas. State guidance requires a meeting be held between the teacher and the district to discuss the evaluation and the recommendations. Districts must assist the teacher in improving his or her performance and must reevaluate the teacher at least annually until the teacher receives a satisfactory rating.

TABLE 13. Amount of Professional Development Required for License Renewal

Amount	Frequency	States			
To Be Completed in a Period of	To Be Completed in a Period of Less than 5 years (5 States)				
1 to 5 semester credit hours	4	MO, NH, OR ^a , VT ^a			
5 days	1	MI			
To Be Completed during a Per	riod of 5 Years (4	43 States)			
Less than 6 semester credit	11	AL, AK, MN, MS, MT, NJ, ND, OR ^a , TN ^a , UT, WY			
hours					
6 semester credit hours	22	CO, CT, DE, DC, FL, GA, ID, IN, IA, KS, KY, ME, MD, MS,			
		NV ^a , OH, PA, SC, SD, VA, WV, WI			
8 to 10 semester credit hours	9	CA, IL ^a , KS, LA, MA, NC, RI, TX, WA			
11 to 15 semester credit hours	3	KY, NY, TX			
60 points	1	HI			
Master's Degree	2	KY, MD			
To Be Completed in a Period Between 6 and 10 years (6 States)					
6 semester credit hours	3	NE, NV ^a , TN ^a			
8 to 12 semester credit hours	3	AZ, IL ^a , VT ^a			
Unable to Determine	1	OK			

^a Indicates States with different professional development time frames for different categories of licenses.

NOTE: Where possible, clock hours, contact hours, continuing education units (CEUs), and renewal points were converted to semester credit hours using individual State conversion formulas. Additionally, New Mexico's professional development requirements are unique and therefore do not align with the classification scheme used in this table.

SOURCE: See Table A-9 in Appendix 4.

Approach Taken by States across the Nation. Using NASDTEC's Knowledgebase and our own review of State documents, we were able to identify professional development requirements for every State save Oklahoma. To aide in cross-State comparisons, we converted the requirements to semester credit hours using State conversion formulas where available (see Table 13). Most States' policies require teachers to complete a given amount of professional development activities every five years. And most of these require teachers to complete six semester credit hours. Of States with a

5-year period, New Jersey requires the least professional development (100 contact hours or 2.2 semester credit hours). Kentucky requires the most. Teachers must complete a minimum of 15 semester credit hours in their first five years and complete a master's degree in the second five year period. Maryland also requires teachers earn a master's degree during their second five years of teaching. California is on the high end, requiring 150 clock hours.

Twenty-seven States, including California, require beginning teachers to complete some sort of induction and mentoring program. These programs vary along multiple dimensions including the required minimum length of participation, eligibility criteria for serving as mentors, resources provided to beginning teachers and mentors, and completion requirements. The majority of States (15) require teachers to participate in a program for at least one year (see Table 14). Three States require teachers to participate for at least three years. Colorado and Wisconsin allow individual districts to determine the minimum length of participation.

TABLE 14. Required Minimum Length of Beginning Teacher Induction and Mentoring Programs, 2005

Minimum Length	Frequency	States
1 year	15	AR, CT, IL ^a , IN, KS, KY ^b , MA, NJ, NM, OH, OK, PA, SC, VA, WV
1.5 years	1	LA
2 years	6	CA, IA, MD, MO, NC, RI
3 years	3	DE, MI, UT
District determined	2	CO, WI
Programs not required	24	AL, AK, AZ, DC, FL, GA, HI, ID, ME, MS, MN, MT, NE, NV, NH,
		NY, ND, OR, SD, TN, TX, VT, WA, WY

^a 2 years if Initial Certificate is issued after September 1, 2007. ^b Kentucky is currently piloting (through June 2006) a new two-year teacher internship program as a possible replacement for the one-year program described here. SOURCE: See Table A-10 in Appendix 4.

TABLE 15. Individuals Eligible to Serve as Mentors in Beginning Teacher Induction and Mentoring Programs, 2005

i rograms, 2005		
Eligible to be a Mentor	Frequency	States
Teacher	24	AR, CA, CO, CT, DE, IL, IN, IA, KS, KY, LA, MD, MA, MI, NJ,
		NC, OH, OK, PA, RI, SC, UT, VA, WV
Master Teacher	2	AR, MI
In Same District	5	KS, LA, NJ, OK, RI
In Same School/Building	5	AR, IN, UT, VA, WV
In Same Grade	4	IN, OH, PA, WV
In Same Subject	7	CT, IN, OH, PA, UT, WV
Principal	1	KY
Other	2	KY, MI
District Determined	3	MO, NM, WI

SOURCE: See Table A-10 in Appendix 4.

Fellow teachers typically serve as mentors to beginning teachers although Kentucky and Michigan allow non-teachers to fulfill this role (see Table 15). Fifteen States place additional restrictions on the types of teachers who are eligible to be mentors. ⁸⁰ Mentors must be teachers in the same subject as the beginning teacher in seven States and must teach the same grade in four States. Other eligibility requirements include being a master teacher (two States), teaching in the same district (five States), and teaching in the same school or building (five States).

Beginning teacher induction and mentoring programs can be time and energy intensive, so States offer mentors and beginning teachers a variety of resources (see Table 16). Fourteen States, including California, offer training for mentors, and 12 States finance salary supplements for

mentors. Many induction and mentoring programs stress collaboration between beginning teachers and mentors. To encourage this relationship, 14 States, including California, provide release time for mentors and/or beginning teachers. California's program is the only one that provides the possibility of reduced work load. To aide in the professional acculturation of beginning teachers, programs in nine States, including California, provide professional development activities.

TABLE 16. Resources State/Districts Required to Provide to Mentors and/or Beginning Teachers Participating in Beginning Teacher Induction and Mentoring Programs, 2005

Resource	Frequency	States	
For Mentors			
Training	14	AR, CA, DE, IL, IA, KS, KY, LA, MA, NJ, OH, RI, SC, UT	
Salary Supplement	12	DE, IL, IA, KS, KY, NJ, NC, OK, PA, RI, SC, WV	
For Mentors and/or Beginning Teachers			
Release Time	14	AR, CA, CO, CT, IL, IA, LA, MA, NJ, PA, RI, SC, VA, WV	
Professional Development Activities	9	AR, CA, IL, KS, MI, MO, NJ, RI, WV	
Reduced Work Load	1	CA	

SOURCE: See Table A-10 in Appendix 4.

Successful completion of a beginning teacher induction and mentoring program is linked to licensure in 23 of the 27 States with State-mandated programs (see Table 17). Usually teachers advance to the next level of teaching license as they do in California. Eighteen States provide guidance as to what constitutes a successful completion. Most (11 States) require teachers to pass a performance assessment or evaluation. Colorado and Illinois require teachers complete a formative assessment. Connecticut mandates a portfolio assessment while North Carolina requires teachers to submit a performance-based product for review.

TABLE 17. Completion Requirements of Beginning Teacher Induction and Mentoring Programs, 2005

Completion Requirement	Frequency	States
District Determined	9	KS, MD, MI, MO, PA, RI, SC, VA, WI
State Determined	18	AR, CA, CO, CT, DE, IL, IN, IA, KY, LA, MA, NJ, NM,
		NC, OH, OK, UT, WV
Performance Assessment or Evaluation	11	AR, CA, DE, IN, IA, KY, LA, MA, NJ, NM, OH, WV
Formative Assessment	2	CO, IL
Portfolio Assessment	2	CT, NC
Other	3	CA, OK, UT
Completion Linked to Licensure	23	AR, CA, CO, CT, DE, IL, IN, IA, KY, LA, MD, MA, MO,
		NJ, NM, NC, OH, OK, PA, SC, UT, WV, WI

NOTE: The categories of "State Determined" will probably need to be revisited and reformatted as States may use different phrases for essentially the same thing. SOURCE: See Table A-10 in Appendix 4.

As shown in Table 18, statutes in 38 States (including California) stipulate at least one aspect of a performance evaluation system for teachers. There is substantial variation among these States with regard to the detail of the State guidance. All teachers are evaluated using the same system in five States such as the Delaware Performance Assessment System II and the Georgia Teacher Evaluation System. Arkansas and Missouri mandate the frequency of evaluations but leave most details to local districts. The remaining States fall somewhere between these two extremes. Most systems are similar to California's in that districts design their own systems but must follow State guidelines.

TABLE 18. Types of Teacher Performance Evaluation Systems, 2005

Type of System	Frequency	States
District Developed	2	AR, MO
District Developed following State	24	AK, AZ, CA, CO, CT, FL, IL, IA, KS, KY, LA, MA, MI,
Guidelines		MN, NV, NC, ND, OH, OK, OR, SD, UT, VA, WA
District Developed, but State Approval	4	IN, NE ^a , TN, WY
Required		
Statewide System with District	3	NM, SC, TX
Augmentation Allowed		
Statewide System	5	DE, DC, GA, HI, WV
No Regulations	13	AL, ID, ME, MD, MS, MT, NH, NJ, NY, PA, RI, VT, WI

^a Nebraska only requires that State approval for district systems for performance evaluations of probationary teachers. SOURCE: See Table A-11 in Appendix 4.

The most common type of guidance States provide to districts concerns the frequency with which teachers must be evaluated (see Table 19). Typically, probationary teachers are evaluated more frequently than non-probationary teachers. Nineteen States (including California) mandate that districts evaluate probationary teachers at least once a year. Eleven States require evaluations twice a year while probationary teachers in Minnesota and Nevada are evaluated three times a year. With respect to non-probationary teachers, 17 States mandate annual evaluations while eight States (including California) mandate evaluations on a less frequent basis. Many States allow for less frequent performance evaluations for certain teachers, usually those with previous successful evaluations.

TABLE 19. Frequency with which States Require Teachers' Performance be Evaluated, 2005

Frequency of Evaluations	Frequency	States
Probationary Teachers		
At least once a year	19	AR, CA, CO, DE ^a , FL, GA, HI, IL, IN ^a , KY, LA, MA, MI, NM, NC,
		TN, TX ^a , VA, WA
At least twice a year	11	AK, AZ, KS ^a , NE, ND, OH, OK, OR, UT, WV, WY
At least 3 times a year	2	MN, NV
Other	3	IA, MO, SC
No State guidance	3	CT, DC, SD
Non-Probationary Teachers		
At least once every 3 years	5	IA, KS, KY, LA, MI
At least once every 2 years	3	CA ^a , IL, MA
At least once a year	17	AK ^a , AZ, AR, CO, DE ^a , DC, FL, GA, HI ^a , NV, NM, NC, ND, OK,
		TX ^a , WA ^a , WY
Other	5	MO, OH, SC, TN, WV
No State guidance	8	CT, IN, MN, NE, OR, SD, UT, VA

^a Indicates the States that allow for less frequent evaluations for certain teachers. SOURCE: See Table A-11 in Appendix 4.

With the advent of the accountability age, debate has heated up regarding two aspects of teacher performance evaluations – whether or not teachers are evaluated based on their students' performance and who conducts the evaluation. Most States offer no guidance regarding the appropriateness of evaluating teachers based on the performance of their students. However, student performance is a required component of the teacher evaluation systems in 12 States including California. It is a permissible component in Massachusetts and prohibited in Indiana. In most States, a teacher's supervisor (11 States) or administrator (16 States) is responsible for conducting the performance evaluation. California and 11 other States provide no guidance.

TABLE 20. Whether or not Teachers Evaluated on Student Performance and Who Conducts the Evaluation. 2005

Component	Frequency	States		
Are Teachers Evaluated on their Students' Performance?				
Required	12	CA, CO, DE, FL, GA, KS, LA, NM, OK, TN, TX, VA		
Permissible	1	MA		
Not Permitted	1	IN		
No State guidance	23	AK, AZ, AR, CT, DC, IL, IA, KY, MI, MN, MO, NE, NV, NC, ND,		
		OH, OR, SC, SD, UT, WA, WV, WY		
Uncertain	1	HI		
Who Conducts the Evaluation?				
Supervisor	11	DC, FL, IN, KY, LA, NC, OH, TN, TX, UT, WV		
Administrator ^a	16	AK, CO, CT, HI, IL, IA, KS, LA, NV, NM, OH, OK, SC, TN, UT,		
		WA		
Other	5	DE, GA, MA, SC, TN		
No State guidance	12	AZ, AR, CA, MI, MN, MO, NE, ND, OR, SD, VA, WY		

^a Administrators include superintendents, principals, assistant principals, or principal's designee. SOURCE: See Table A-11 in Appendix 4.

Effectiveness of these Policies. Similar to the research on masters' degrees, the research on professional development finds little benefit of the average professional development program. However, some professional development programs have demonstrated positive effects for teachers and their students. Professional development programs are well suited for experimental studies and there have been a number of them. For example, Saxe, et. al (2001) compared two mathematics programs focused on teaching fractions. One developed teachers' content knowledge and understanding of student learning issues around fractions. The other was more general, involving discussions around practice. The study found that students of teachers in the first group gained more than a standard deviation more than the other group. Si Similarly, McCutchen, et. al. (2002) looked at an early reading professional development program and found differences in first graders phonological awareness, reading comprehension, vocabulary, and spelling based on whether or not their teacher participated in the program. There is also some evidence that mentoring and induction programs help to keep teachers in the profession. For example, Reed, Reuben and Barbour (2006) find that BTSA reduces the likelihood that a new teacher will leave by 26 percent for teachers with multiple-subject certification, and by 16 percent for those with single-subject certification.

While the research on professional development isn't broad enough to pinpoint the appropriate program for each situation, there are some general conclusions. Hill (2006) in a review of the literature identifies four important qualities of high quality programs. First, most effective programs involve a substantial time commitment such as a two to four week summer program. In most cases one day programs are not worthwhile. Second, the content of programs should to be targeted, for example, on specific content-knowledge, subject-matter-specific instruction and/or student learning. Broad programs do not appear to be effective. Third, teachers' professional development should be linked to the district or school's instructional goals and curriculum materials. Teachers are likely to make better use of the materials that their schools and districts provide if their professional development is tied closely to those resources. As Hill points out, currently teachers often do not see their professional developed tied to their schools' programs: on a national survey, only 18 percent reported that their professional development was strongly linked to other school activities, while 44 percent reported few or no links between their professional development and school programs. Fourth, there is a commonly held belief that professional development is more effective if it involves groups of teachers at the same school and includes active participation, such

as reviewing student work, giving presentations, and planning lessons. However, there is not research that assesses the usefulness of these features of professional development characteristics.⁸⁴

Recruitment, Retention, and Assignment Incentives Policies

States have adopted a variety of incentive policies to attract talented individuals to the teaching profession, to retain them, and to encourage them to accept assignments in particular highneed subject areas or schools. The incentive systems adopted by States can be characterized by their breadth, how many stages of a teacher's career it targets. We define five career stages that teachers may pass through from college to retirement:

- 1. Period of teacher preparation prior to initial teacher certification.
- 2. Period following this initial preparation as the teacher begins as a teacher of record.
- 3. Period of additional education as the teacher completes requirements for an additional credential, endorsement, or certification.
- 4. Period following the completion of additional training and/or the receipt of an advanced credential.
- 5. Period of retirement eligibility

Incentives that target the first two and the final stages seek to increase the State's supply of teachers. Policies aimed at the first stage provide funds for initial teacher preparation programs for State residents who commit to rendering service at schools within the State. These generally take the form of State-financed forgivable grants, loans, and scholarships. Policies targeted at the second stage include the assumption of federal loans, salary bonuses, and housing assistance. Teachers eligible for retirement are targeted with policies designed to entice retired teachers or soon-to-be retired teachers back into the classroom without jeopardizing their retirement benefits.

Incentives that target the third and fourth stages of a teacher's career seek to improve and augment the skills and quality of the State's existing teacher labor force. Typical incentives for additional training, certification, or credentialing for certified teachers include tuition assistance for teachers to obtain a certification or endorsement in an additional subject area and support for teachers seeking advanced credentialing such as the NBPTS. Incentives awarded in the post-additional training period generally take the form of salary bonuses for National Board Certified Teachers (NBCTs).

States' incentive systems can also be distinguished from one another by the degree to which they target specific subgroups of teachers. Many incentives are awarded only to teachers who teach subject areas with critical teacher shortages (such as mathematics, science, and special education) or difficult-to-staff schools (such as low-performing schools or schools located in specific geographic areas). Others are further targeted to teachers of critical shortage subjects *in* difficult-to-staff schools. Although eligibility for some incentives are restricted to specific characteristics of the teacher (such as teachers of minority racial or ethnic groups), we focus our attention on the targeting to characteristics of the job assignment.

California's Approach. Several bills were passed by the California Legislature in reaction to the significant difficult that some schools and districts had in recruiting and retaining teachers following the introduction of the CSR program (e.g., SB 1564 (Schiff, 1998), SB 2064 (O'Connell, 1998), SB 1666 (Alarcon, 2000)). These bills created and expanded a network of incentive programs designed to attract and retain high quality teachers and to address the quality inequities between high- and low- performing schools (see Chart 8). Many of these programs were eliminated or substantially curtailed during the budget crisis in the early years of this decade. Programs cut in 2003-04 amounted to about \$150 million.⁸⁵

CHART 8. California's Recent and Current Recruitment, Retention, and Assignment Incentive Programs by Teacher Career Stage, 2005

Career Stage	Incentive Program
Period of initial teacher training	Paraprofessional Teacher Training Program (PTTP)
	2. California Center for Teaching Careers
	Eliminated in 2003-04
	1. Cal Grant T
	2. Governor's Teaching Fellowship
	3. Teacher Recruitment Incentive Program (TRIP)
Period following this initial training	1. Assumption Program of Loans for Education (APLE)
	2. Teaching as a Priority block grant (TAP)
Period of additional training	No Programs
Period following the completion of additional	NBPTS Incentives Program
training and/or the receipt of an advanced credential	
Period of retirement eligibility	1. Longevity Bonus

SOURCE: Esch, et. al. (2004), Cal Ed Code §§44392—44395 and 69612, and www.calstrs.org

Particularly hard hit were programs funding initial teacher education programs for State residents who were willing to commit to render service at California's public schools. Three programs – the Cal Grant T, the Governor's Teaching Fellowship, and the Teacher Recruitment Incentive Program – were eliminated while a fourth program, the California Center for Teaching Careers, was severely curtailed. The Paraprofessional Teacher Training Program was largely untouched.

Both the Cal Grant T program and the Governor's Teaching Fellowship program required recipients to render service in low-performing schools (i.e., with API scores of 5 or lower). The Cal Grant T program provided one-year awards to State residents enrolled in graduate teacher credentialing programs approved by the CCTC. Recipients were required to teach one year in a low-performing school for every \$2,000 received or repay the award. The Governor's Teaching Fellowship program awarded a merit-based \$20,000 fellowship-loan to individuals with a bachelor's degree who were enrolled full-time in a non-intern teacher education program accredited by the CCTC. Recipients were required to teach for at least four years in low-performing schools immediately after earning their Preliminary Teacher Credential. For each year a Fellow failed to meet their service commitment, they were required to repay \$5,000 plus ten percent interest. Between 2000 and 2002, 1,194 prospective teachers received the fellowship-loan.

Working in tandem with these financial incentive programs were a system of recruitment centers which were also eliminated in budget cuts. Created in 2000 (SB 1666, Alarcon), the Teacher Recruitment Incentive Program (TRIP) funded six regional recruitment centers that provided districts with assistance in recruiting potential new teachers. The focus was on recruiting qualified teachers to low-performing and difficult-to-staff schools such as those with high numbers of teachers holding emergency permits. The California Center for Teaching Careers (CalTeach), created in 1997 (SB 824, Green), operated centers at CSU Sacramento and CSU Long Beach. CalTeach acted as a referral service for individuals interested in teaching in California, developed and distributed recruitment publications, provided information on how to become a fully credentialed teacher, and conducted outreach to high school and college students. What remains of these programs are two websites. Ed-Join grew out of TRIP and is now operated by the California County Superintendents Educational Services Association (www.edjoin.org). Many of the services and information provided by CalTeach are now available at the TEACH California website (www.teachcalifornia.org).

California's Paraprofessional Teacher Training Program (PTTP) targets classroom aides by providing assistance with the costs of teacher preparation, academic support, test preparation,

administrative fees for all State-mandated examinations, credential application, and fingerprint processing. The PTTP funds over 40 program sites which seek out teacher candidates within the community. As of December 2003, the program had produced 829 credentialed teachers since 1994-95 with 99 percent still employed in California's public schools.⁸⁶

California continues to operate two incentive programs that provide awards to trained, full-credentialed teachers who accept assignments in high-need subjects and schools – the Assumption Program of Loans for Education (APLE) program and an altered version of the Teaching as a Priority block grant. APLE, operated by the California Student Aid Commission, assumes loans of teachers who teach in subjects with a critical shortage of teachers or hard-to-staff schools. Current critical shortage subjects are secondary mathematics and science, foreign language, special education, reading and language arts specialist, and music. Difficult-to-staff schools are those located in a low-income or rural area, schools with high percentage of emergency permit teachers, low-performing schools, and State special schools. Eligible individuals must be approved to receive or have received an educational loan, be a State resident, and have completed 60 semester units (90 quarter units). Additionally, eligible recipients must either be enrolled in a program leading to a BA or in a teacher preparation program, enrolled in a district intern program, or hold a valid out-of-State teacher certificate.

APLE's loan assumption schedule has three tiers. Recipients who teach in a critical shortage subject or a low-performing school are eligible for up to \$11,000 worth of outstanding educational loans. Up to \$2,000 is dispersed after the completion of the first full school year of eligible full-time teaching and up to \$3,000 is dispersed after each of the next three full school years of eligible full-time teaching. Recipients are eligible for an additional \$1,000 per year (for a total of up to \$15,000) if they teach math, science, or special education. They are eligible for a further \$1,000 per year (for a total of up to \$19,000) should they teach one of these three subjects in a school in the lowest 20th percentile of the API.

The Teaching as a Priority (TAP) block grant was folded into the Professional Development Block Grant in 2004 (AB 825 Firebaugh). It provides districts with funding on a competitive basis to assist in the recruitment and retention of fully credentialed teachers. Eligible schools were those in the lowest 50th percentile of the API with 60 percent of the available funds dedicated to schools in the lowest 30th percentile. These funds could be used for incentives such as signing bonuses, improved work conditions, teacher compensation, and housing subsidies.

The new legislation, SB 1209, establishes the Certified Staff Mentoring program (CSM), which provides \$6,000 to veteran teachers who agree to work in low-performing schools and mentor interns during their first years of induction. So this is another more recent incentive for teachers to move to low-performing schools.

California does not finance incentives targeted at additional education for teachers, but did provide salary bonuses for NBCTs. The NBPTS Certification Incentives Program awarded salary bonuses of \$20,000 to NBCTs who teach at least 50 percent of a full-time position in a high-priority schools (i.e., API score of 5 or lower). The bonus is paid out in \$5,000 increments over four consecutive years.

Finally, embedded in the benefit formula of the California State Teacher Retirement System (CalSTRS) is a retention incentive. Earning 25 years of creditable service is one means by which teachers qualify for full retirement benefits. However, if they postpone their retirement they can increase their monthly benefit. If by 2011 the teacher has 30 years of service, they will receive an additionally \$200 each month. If they have 31 years of service they will receive \$300 and \$400 if they have 32 years of service.

Approaches Taken Across the Nation. There is considerable variation among the fifty States and the District of Columbia in the breadth of their incentive systems. The majority of States finance incentive systems that target more than one stage of a teacher's career. The most common incentive system can be found in 13 States and includes policies aimed at two of the five stages. Ten States target one stage, 11 States target three stages, and another ten States target four stages. Only two States – Arizona and New Hampshire – do not finance any incentive programs. There are five States whose incentive systems span all five career stages – Arkansas, Florida, Louisiana, Maryland, and Massachusetts.

TABLE 21. Summary of the Breadth of State Incentive Systems, 2005

Career Stages Targeted	Frequency	States
Zero	2	AZ, NH
One	10	IN, MN, MT, NE, NJ, NM, OR, PA, SD, TN
Two	13	CO, ID, KS, ME, MI, MO, NV, OH, RI, UT, VT, WI, WY
Three	11	AL, AK, CT, DE, DC, HI, OK, TX, VA, WA, WV
Four	10	CA, GA, IL, IA, KY, MS, NC, ND, NY, SC
Five	5	AR, FL, LA, MD, MA

SOURCE: See Table A-13a in Appendix 5.

Recruitment, retention, and assignment incentives that seek to increase the supply of teachers are somewhat more common than those that improve the quality of the existing labor force both across and within States. Forty-four States have at least one policy targeting supply (i.e., the first, second and fifth career stages) while 39 States have an incentive targeting the quality of current teachers (i.e., the third and fourth career stages). Additionally, States are more likely to operate multiple programs aimed at increasing supply than aimed at improving quality of current teachers. Incentives most frequently provide financial support to individuals during their initial or additional teacher preparation. Thirty-nine States finance such incentives. The least common type of incentive (16 States) is that aimed at retired or soon-to-be retired teachers. Most of these programs (referred to as DROP – Deferred Retirement Option Program – in many States) are similar to that in California in that they provide incentives for teachers to postpone their retirement.

The incentives offered through these State systems can be grouped into five categories. By far the most numerous are those that provide assistance with *tuition and fees* for teacher training. All States except Arizona, Montana, New Hampshire, and Pennsylvania have programs offering such incentives. The second group of incentives, operated in ten States including California, *assumes loan payments* for teachers who have completed training and are rending service as a teacher. Another ten States (including California) finance programs that provide *housing* benefits to teachers while 16 States (including California) underwrite incentives aimed at enticing teacher eligible for *retirement* to remain in the classroom. The fifth group of incentives, and possibly the most visible, provides teachers with *salary* supplements. Thirty-three States (including California) operate a salary supplement program with the most common type making awards to NBCTs.

National Board for Professional Teacher Standards Incentive Programs: One of the most common incentive programs makes use of advanced certification by the NBPTS. Thirty-seven States and the District of Columbia have some sort of NBPTS incentive. There are six broad types of NBPTS incentives – fee reimbursement, release time, stipends, awards, and starting and annual bonuses. The first three types target teachers in the process of applying for the NBPTS advanced credential while the latter three award successful applicants. Most States require teachers receiving these incentives to render service for a specific term or repay the State.

Thirty-one States provide some level of reimbursement for the NBPTS assessment fee, which in 2005 was \$2,300. The majority of these States reimburse at least half the fee. Three States reimburse 100 percent of fee only if the teacher is successful (Hawaii, South Dakota, and Wisconsin). Three other States reimburse 50 percent for unsuccessful applicants and 100 percent for those who earn the certificate (Iowa, South Carolina, and West Virginia). Seven States provide release time, in the form of money for substitute teachers, for applicants to prepare their portfolio. Release time varies from two to five days. Five States award applicants a stipend to cover any costs associated with the NBPTS assessment process. Stipends range from \$150 in Florida to \$2,500 in New York (which includes up to three days for a substitute teacher).

TABLE 22. National Board for Professional Teaching Standards Incentive Policies, 2005

Type of Incentive	Frequency	States
Fee reimbursement	31	
Full	10	AR, HI, IA, NC, OK, SC, SD, WV, WI, WY
75-99%	5	FL, IL, KY, NV, OH
50-74%	3	MD, MS, ND
25-46%	8	CO, DC, LA, MI, MO, RI, VT, VA
Other	5	DE, GA, ME, MA, NJ
Release Time	7	
2 days	2	MO, OK
3 days	4	AR, DC, NY, NC
5 days	1	KY
Stipend	5	FL, KY, NY, OK, WV
Award	4	DC, MT, ND, VA
Starting Bonus	2	AR, HI
Annual Bonus	27	
Limited period	5	CA, ID, MA, SD, WI
Lifetime of certificate	22	AL, AR, DE, FL, GA, HI, IL, IA, KS, KY, LA, MD, MS, NV,
		NY, NC, OH, OK, SC, VA, WA, WV
None	13	AK, AZ, CT, IN, MN, NE, NH, NM, OR, PA, TN, TX, UT

SOURCE: See Table A-12 in Appendix 5.

Awards and starting bonuses, while both one-time awards for successful applicants, operate differently. Awards encourage within-State teachers to seek National Board certification. A starting bonus is a means of both encouraging within-State teachers to apply, but also to recruit National Board teachers from other States. Four States provide a financial award to in-State teachers when they earn their National Board certificate ranging from \$1,500 in North Dakota to \$5,000 in the District of Columbia and Virginia. Starting bonuses are awarded by two States (\$1,500 in Hawaii and \$5,000 in Arkansas).

Twenty-seven States, including California, provide NBCTs with annual salary bonuses. California and the majority of other States offer a fixed annual amount ranging from \$1,000 in Kansas and Ohio to \$7,500 in South Carolina. In five States, the annual bonus is a specific percentage of the NBCTs salary. This percentage ranges from five percent in Nevada to 12 percent in Delaware and North Carolina. States also vary in the number of years NBCTs receive the bonus. Twenty-three States finance the bonus for the lifetime of the certificate (10 years) and others (including California) restrict the bonus to a shorter period.

Targeting Incentives to Specific Job Assignments: In addition to the targeting of incentives to a particular career stage, eligibility for many incentives are further restricted to teachers in specific subject areas and/or schools. States are more likely to restrict eligibility to teachers of critical

shortage subject areas (36 States including California) than hard-to-staff schools (27 States including California). However, within incentive type, a State is more likely to have an unrestricted incentive than a restricted incentive. The exceptions are loan assumption and housing benefits. The majority of unrestricted incentive policies utilize NBPTS certification.

TABLE 23. Summary of Job Assignment Targeting of State Recruitment, Retention, and Assignment Incentives, 2005

	Tyl	e of Eligibil			
Type of Incentive	Critical Shortage Subject Areas	Hard-to- Staff Schools	Critical Shortage Subject Areas in Hard-to-Staff Schools	Somehow Restricted	Unrestricted
Tuition/Fee Support ^a	31	24	6	36	40
Loan Assumption	6	6	1	8	2
Salary ^b	3	4	2	6	29
Housing	0	6	1	7	3
Retirement Benefits	4	2	0	5	12
Number of States	36	27	7	40	45

^a Includes NBPTS assessment fee reimbursement, release time, and stipend policies. ^b Includes NBPTS award, starting bonus, and annual bonus policies.

NOTE: Figures indicate the number of States with at least one policy that is targeted to the specified job assignment. SOURCE: See Table A-13b in Appendix 5.

California is the only State to fully target their NBPTS incentive to a specific subgroup of teachers. ⁸⁹ As a result, NBCTs are over-represented in high-minority, high-poverty, and low-performing schools, a distributional pattern opposite that found in the five other States (Florida, Mississippi, North Carolina, Ohio, and South Carolina) with the highest number of NBCTs teachers. ⁹⁰

Evidence of the Effectiveness of Policies. Despite their popularity, there is sparse research on the effects of these incentive polices on the recruitment, retention, and assignment of teachers in general, and in critical shortage subject areas and difficult-to-staff schools in particular. We found no evaluations of the effectiveness of tuition support, loan assumption or housing incentive programs. However, several States have conducted annual reviews of some of these programs which provide useful insight into how they operate. Three programs in particular provide examples: the South Carolina Teacher Loan Program (TLP), Massachusetts Signing Bonus Program for New Teachers and the North Carolina Math/Science/Special Education (MSSE) Teacher Bonus Program. We also discuss the implications of evaluation findings from a recent study of a NBPTS incentive program for State NBPTS incentive policies.

The available evidence on the effects of these three incentive programs is mixed. The Massachusetts program sought to recruit high achieving candidates to the profession with an intensive seven-week summer training program and a \$20,000 signing bonus distributed over four years yet shut down in failure after three years. The evaluation of North Carolina's program, which paid yearly bonuses of \$1,800 to mathematics, science, and special education teachers in high poverty or low performing schools and also ended after three years, found some positive effects on teacher retention, reducing turnover by approximately 12 percent. South Carolina's program provides forgivable loans to individuals to enroll in a teacher credentialing programs and commit to teach in areas of critical need (either subject or geographic). It continues to operate yet with no strong evaluation of success or failure.

The reports and evaluations of these incentive programs emphasize three key lessons. One, implementation errors doom most programs. Two, targeting the incentives to specific teachers and

schools, while appealing from a policy and financial standpoint, is challenging to carry out. And three, the ability to draw policy-relevant conclusions regarding the programs' effects on teacher recruitment, retention, and assignment is substantially hampered by lack of data.

Successful implementation requires a clear purpose of the program and a plan for disseminating program information to the appropriate people. Massachusetts's program was undone in part due to confusion over the program's goals. Although the authorizing legislation did not explicitly require bonus recipients to teach in high-need districts, program administrators frequently mentioned such targeting as a program goal. Public support for the program faltered after it was revealed this goal was unmet. The percent of recipients initially placed in high-need schools fell with each cohort from 71 percent to 45 percent to 35 percent. ⁹⁶ Information dissemination proved a significant hurdle in the North Carolina program where survey data revealed that principals and teachers had very little knowledge about the program. When asked about how long they expect to receive the bonus, only seven percent of bonus recipients correctly indicated they were eligible as long as they taught their current subject in their current school. Additionally, 17 percent of principals of eligible schools were unaware of their school's eligible. ⁹⁷

Although each of these incentive programs targeted specific teacher populations, each experienced difficulties in defining and reaching these groups. In South Carolina, the definition of the target population definition was expanded over time, hampering the ability of the incentive program to achieve its goal of recruiting and retaining teachers in the highest need areas. When authorized in 1984, only two subject areas were identified as critical need—mathematics and science. By the 2004-05 school year, that list had grown to 16 subject areas. South Carolina also altered its strategy for identifying schools in geographic areas of critical need. The State's strategy for identifying schools in geographic areas of critical need had been so altered that by 2002-03 89 percent of schools qualified. In North Carolina, the target population definition proved so cumbersome that almost 60 percent of the schools on the initial list of 74 eligible schools were in fact ineligible and 20 eligible schools were omitted.

Data limitations prevent these evaluations from assessing the programs' effects on teacher recruitment and retention and student achievement. For example, half of all recipients of loans through South Carolina's TLP have opted to repay their entire loan rather than cancel the loan through eligible teaching while another 10 percent combined some cancellation with monthly repayments. Unfortunately, no additional data was collected on those recipients who chose not to teach, preventing any analysis on the reasons some cancel their loan through eligible service while others do not. Such analysis could provide information on the program's recruitment effects. In Massachusetts, Fowler (2003) reports that as of 2003, 46 percent of the first cohort had ceased teaching after three years while 28 percent of the second cohort was no longer teaching after two years and 17 percent of the third cohort had left the classroom after one year. However, attrition rates are unavailable for comparable teachers in comparable schools that would allow researchers to determine whether or not the bonus program improved teacher retention.

The evidence of the impact of NBCTs on student achievement in North Carolina offered by Goldhaber and Anthony (2005) provides insight into the possible effects of several key aspects of the NBPTS incentive programs implemented in other States. NBPTS certification was found to be somewhat successful in identifying effective teachers. The achievement growth of students of successful applicants exceeded that of unsuccessful applicants by 5 percent of a standard deviation in reading and 9 percent of a standard deviation in mathematics. NBPTS status is by no means a perfect measure of effective teachers – many non-NBPTS teachers show achievement gains with their

students that are larger than many NBPTS teachers. However, there are differences on average, with the students of NBPTS teachers showing greater test-score gains.

The study also found that completing the National Board assessment process had no impact on teacher effectiveness as measured by student test score gains in math and reading. Teachers going through the process added no more to their students' test score gains after they completed the program than before they entered. This result cautions against the use of NBC as a means of professional development. However, given that the process may contribute to teachers' effectiveness in ways not picked up by students' performance on math and reading exams, the evidence is not strong enough to completely condemn National Board certification as a means of professional development. Finally, the study found that that NBCTs have a larger impact on students who are receiving free or reduced-price lunch than on students who are not suggests the usefulness of targeting the incentives to high-need schools, such as in California's policy. 100

Considerable tax-dollars are expended on teacher recruitment, retention, and assignment incentives. The evidence suggests that teachers do respond to incentives. However, we know very little about the effects of different incentives, defined either by type or by amount. State efforts in this area would benefit greatly from additional research, including cost-benefit analysis, on the full array of incentives.

Salary Structure Policies

Policy makers have long been concerned with teacher salaries. In the early 1900s, several States adopted minimum teacher salary laws – Pennsylvania in 1903 (\$35 per month) and Oregon in 1919 (\$75 per month). Currently, more educational dollars are allocated to teacher salaries than to any other educational expense. Teacher salaries therefore figure prominently in education finance debates in every State, giving rise to frequent calls for reforming both how much teachers are paid and the determinants of that pay. Those supporting across-the-board salary increases argue the higher compensation will better position the teaching profession to recruit and retain high quality individuals. Other proposals seek to shift teacher salaries from the current salary structures, based on only education level and years of teaching experience, to ones that pay teachers based on their subject area expertise or their performance in the classroom. Supporters of these proposals believe compensation should be better linked to schools' educational goals and that salaries that distinguish effective teachers will encourage individuals who would be effective teachers to enter the profession.

The first single salary schedules were implemented in 1921 in Denver and Des Moines, but by 1950, almost all teachers were paid in this way. ¹⁰¹ The strength of input-based salary schedules is their objectiveness. Years of experience and educational attainment can be accurately and consistently assessed. A key weakness is that they fail to reward individual effort, reducing individual incentive to perform at their best and to remain in the classroom rather than move to a profession where their effort is rewarded by higher compensation. In addition, they do not distinguish teachers' fields of expertise so that subjects such as math and science with high wages in non-teaching occupations often face shortages at the same time that elementary grades and social studies do not. Similarly, teaching jobs that require more preparation or effort, such as special education, can face shortages while other teaching jobs do not. One alternative to the current structure is to allow for pay differentials based on subject area, grade or the school in which teachers work. Another, more radically different alternative, is to base pay on teachers' contribution to students' outcomes.

Output-based salary structures link teacher compensation to a productive result of the education process such as performance evaluations and student test scores. The results used to

determine compensation amounts can be at the individual, team, or school levels. Career ladders, merit pay, and pay-for-performance policies are examples of output-based salary structures. Such structures are not widely used, and they prove highly controversial when proposed or implemented. The main critique of such structures is the identification of an appropriate performance metric. Are principal evaluations of teachers objective enough to fairly determine compensation? Is it appropriate to hold teachers accountable for the performance of their students when so much that effects that performance is beyond the control of the teachers?

In this section, we review current State laws regarding the structure of teacher salaries. Many States establish a minimum salary schedule for all teachers in their State. These vary in their degree of detail. Additionally, a handful of States have adopted policies that seek to introduce an output-based pay component into the dominant single-salary schedule.

California's Approach. Teacher salaries are a district-based decision arrived at through collective bargaining between school boards and teacher union representatives. Funds from the State, as well as locally raised funds, are used for teacher compensation. Beginning with the 1999-2000 school year, California mandated that all full-time teachers who (1) hold a valid California teaching credential, (2) possess a bachelor's degree, and (3) receive a salary paid from the general fund of the district or county office be paid at least \$32,000. That amount was increased to \$34,000 for the following school year (Cal Educ. Code §45023.1). To our knowledge, all California public school teachers are paid according to the standard input-based salary structure based on years of experience and educational attainment, though many districts add additional bonuses for field of teaching, education and experience. 102

In the early 2000s, California briefly experimented with a school-level output-based salary structure. The Certified Staff Performance Incentive Act (AB 1114, Steinberg, 1999) was signed into law in 1999. It authorized one-time performance bonuses up to \$25,000 per full-time teacher and other certified staff at underachieving schools (i.e., an API rating in the bottom 50th percentile) when student performance on the SAT 9 improved beyond a minimum growth target. However, the performance award program was abandoned after just one round of bonuses in 2001 due to severe implementation and administrative missteps. It remains on the books (Cal Educ. Code §§44650—44654), but has been zero-funded in annual State budgets.

Approaches Taken Across the Nation. Like California, most States leave decisions regarding salary structures to local districts. Additionally, 26 other States also have adopted some type of statewide minimum salary schedule (see Table 24). All teachers in these States must be paid at least the amount specified by the State. These States provide funds to cover some if not all the mandated minimums. Districts generally are allowed to augment the minimums with local funds. Four States (Alabama, Mississippi, Tennessee, and Washington) place some restrictions on district salary add-ons. For example, Alabama requires that the local add-on be the same for all teachers while Mississippi prohibits districts from reducing their local add-on from year to year.

Ten States establish their minimum salary schedules on an annual or biennial basis (depending on their budget cycle) with the others updating their schedule on a less regular basis. Those States that establish on an annual or biennial basis may not alter the salary levels each year, but they must at least reauthorize the current salary schedule. Some State's minimum salary schedules were last updated a decade or more ago (e.g., Illinois in 1980, Pennsylvania in 1988, and Louisiana in 1990). Partly as a consequence, not all of the statewide minimum salary schedules are binding for districts within the State. This information is not readily available, but we were able to cobble together some data. At least one district in 9 of the 27 States pays its teachers exactly the minimums mandated by the State. All districts in another 9 States pay salaries in excess of the

minimums. There are nine States (California, Georgia, Idaho, Iowa, Kentucky, Missouri, New Mexico, North Dakota, and Tennessee) for whom we were unable to determine whether or not the statewide minimum salary schedule was binding for any districts.

TABLE 24. Statewide Minimum Salary Schedules, 2005

Type of Law	Frequency	States
Statewide Minimum Salary Schedule	27	AL, AR, CA, DE, GA, HI, ID, IL, IN, IA, KY, LA, ME,
		MS, MO, NJ, NM, NC, ND, OH, OK, PA, SC, TN, TX,
		WA, WV
Established Annually ^a	10	DE, GA, HI, KY, MS, NC, SC, TN, TX, WA
Local Add-ons Restricted	4	AL, MS, TN, WA
Binding for Any District in State		
Yes ^b	9	AL, HI, MS, NC, OK, SC, TX, WA, WV
No	9	AR, DE, IL, IN, LA, ME, NJ, OH, PA
Unable to determine	9	CA, GA, ID, IA, KY, MO, NM, ND, TN

^a Kentucky's minimum salary schedule is established biennially as part of the State's biennial budget.

SOURCE: See Table A-14 in Appendix 6.

Washington is notable in regard to their minimum salary schedule. It places the heaviest restrictions on local add-ons of all 27 States. Based on the statewide minimum salary schedule and the districts teacher staff, districts are provided with sufficient funds to cover the State's minimum salaries. Technically, districts are only prohibited from paying less than the base State salary to a teacher with a bachelor's degree and no experience and a teacher with a master's degree and no experience. Through local negotiations, districts could pay some teachers more than the State minimum but only if they pay less than the State minimum to another teacher. In actuality therefore, no district deviates from the State minimums. Consequently, teachers in 262 of the State's 296 districts are paid identical salaries. The remaining 34 districts provide higher salaries, but the additional pay is determined by the State and subject to the same local add-on restrictions.

A handful of States have adopted policies pertaining to output-based salary structures. Six States – Arizona, Florida, Indiana, Missouri, Nevada and Utah – have statutes that require or provide financial incentives for districts to adopt career ladder salary structures. Career ladder programs link salaries to the teacher's responsibilities. As the teacher moves up the ladder, they assume greater responsibilities in other areas such as heading departments, organizing professional development activities, and mentoring other teachers. Tennessee and Texas operated programs in the 1980s and 1990s. Three States – Florida, Kentucky, and North Carolina – operate performance pay programs that provide salary bonuses related to student performance. The awards distributed by the programs in Kentucky and North Carolina are school-based, whereas Florida's program links an individual teacher's award to the performance of his or her students.

States which have collective bargaining agreements are much less likely to have state determined salary schedules. Thirty-five States and the District of Columbia have collective bargaining agreements. Of the thirty-five, ten (including DC and HI) have state salary schedules, seven have minimum salary requirements, and 19 have district determined salary structures. Of the fifteen States without collective bargaining agreements, ten have statewide determined salary schedules, one has a minimum salary requirement, and four have district determined salary schedules.

Evidence of the Effectiveness of Policies. The sizeable body of literature on the effect of salaries on teacher recruitment and retention and student achievement can be split into three groups. The bulk of the research by far assesses the effects of salary levels or the salaries relative to those of

^b This includes Hawaii which only has one district.

other professions, i.e., opportunity costs. Studies of the effects of output-based pay schemes such as career ladders and merit pay form the second group. Finally, we know of only one study that examines the effect of minimum salary schedules like those discussed above. This study, Boal (2005), examines their effects on the demand for teachers using the minimum salaries in two nonunion States, South Carolina and Texas. He finds that schools respond to an increase in Statemandated minimum teacher salaries by shrinking their teaching staff force (a short-run demand elasticity of roughly -0.2). ¹⁰³

There is no research that we know of assessing the impact of State-level salary schedules on student achievement. Proponents of local decision-making argue that districts are in the best position to bargain with teachers because they know the needs of their community. Proponents of State salary schedules argue that districts are not able to bargain effectively with their union representatives and end up allocating too much of their districts' resources to teacher salary and benefits. There is likely merit in both these arguments. A recent survey in California found that superintendents were approximately evenly split between those who supported a shift to a State salary structure and collective bargaining at that State level and those that did not.

As noted in Section II, salaries, both in terms of their level and relative to salaries in other professions (i.e., opportunity costs), are known to influence teacher career path decisions – where and how long to teach – and thus the distribution of teacher quality across schools. Higher salaries and lower opportunity costs aid in retention efforts as teachers are more likely to remain in their current jobs and less likely to quit the profession. Schools offering jobs with higher salaries and, thus, lower opportunity costs are also better able to recruit higher quality teachers.

Studies of output-based pay structures often focus on their effects of student achievement and find some positive effects, but not without costs. Dee and Keys (2004) found that Tennessee's career ladder program was successful at identifying effective teachers. Lavy (2004) found positive student achievement effects for an Israeli cash bonus program and Ladd (1999) found positive effects for a school-based award program in Dallas. Eberts, Hollenbeck, and Stone (2002) looked at another merit pay program in Michigan that was not targeted at student achievement and found it reduced the number of high school dropouts but increased the percentage of students who failed. ¹⁰⁶

While the results of these studies support the argument that merit pay can improve student achievement, there also appear to be substantial costs to many of these systems which may or may not outweigh the benefits. First, it is difficult to structure a system that provides incentives to more than a few teachers. The studies above find that for the teachers who, with a bit of effort could get a reward, do often put in that effort and improve student test scores, but that most teachers are so unlikely to get it (or alternatively so likely to get it) that they do not change their behavior. Proponents of merit systems argue that even if the systems do not improve effort they will benefit schools because they will attract into teaching those individuals who believe they will benefit from such a system. The argument is a reasonable one but there is little evidence to evaluate it more systematically.

In addition, teachers tend not to support merit-pay systems and encourage their representative union not to as well. These programs can increase the stress felt by teachers and can lead to unintended behaviors such as cheating, focusing on test-taking skills instead of content, and narrowing of the curriculum. Overall, it appears difficult to design effective programs, though Ballou and Podgursky (2001) point out that they may be easier to implement in smaller organizations. For a further discussion of the advantages and disadvantages of merit-based pay see Lavy (forthcoming).

Teacher Associations Policies

More than four million teachers and paraprofessionals at all educational levels belong to one of the two major teacher unions (AFT and NEA websites). The National Education Association (NEA) is the larger of the two with 2.7 million members. There is a State NEA affiliate in each State. Additionally, there is an NEA local affiliate in more than 14,000 communities. Membership in the American Federation of Teachers (AFT) numbers more than 1.3 million. Forty-three States have a State AFT affiliate as do more than 3,000 communities.

Teacher unionism can be traced back to 1857 with the founding in Philadelphia of the National Teacher Association, the precursor to today's NEA. According to their website, NEA was created "to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States." In 1916 in Chicago, the AFT was formed "to represent the economic, social and professional interests of classroom teachers." Toward these ends, the NEA and AFT have advocated for policies pertaining to such topics as improved working conditions, increased school funding, and teacher tenure rights. Although they are involved in a wide range of issues, arguably their primary and most visible role is their involvement in regular contract negotiations.

The first collective bargaining agreement (CBA) between school officials and teachers was inked in New York City in 1962. It was a consequence of a one-day strike two years prior (ECS, Unions/Collective Bargaining). Although New York City had the first agreement, New York State was not the first State with a collective bargaining law for teachers. Wisconsin passed the first such law for public employees in 1959, but it wasn't until 1964 that the first teachers' bargaining agent was certified (WEAC website). New York's law, the Taylor Law, was passed in 1967.

In 2005, 36 States had laws guaranteeing collective bargaining (CB) rights for teachers. There is considerable similarity in the structure of these laws across the States. Typically, each law has four key sections. First, they specify how a bargaining agent (i.e., the union) is identified, certified and decertified by the covered employee population. Laws in some States prohibit certified and classified educational employees from being covered by the same contract. Generally, a majority vote is required for certification and decertification. Next, the laws detail the obligations of both the employer and the agent during the bargaining process such as the obligation to negotiate in a "good faith effort". In case of a bargaining impasse, the laws spell out a process that the parties must follow. This process typically involves mediation with a third party and fact-finding. However, while both parties are required to participate in these activities, neither side is obligated to go along with the recommendations. This section often addresses the legality of teacher strikes. Finally, these laws specify the scope of representation in the bargaining process. Although variation across States exists, the scope of representation for today's collective bargaining agreements covers a considerable amount of terrain including salaries, health benefits, retirement benefits, working conditions, preparation time, professional development, teacher evaluation procedures, grievance procedures, seniority, transfer and leave policies, and student discipline.

California's Approach. The two major unions have over 455,000 members in California from head start through the University of California system. The California Teachers Association, the State's NEA affiliate, was founded in 1863 and has roughly 335,000 members and over 1,000 local teacher associations (CTA website). The California Federation of Teachers, the State's AFT affiliate, was founded in 1919 and has over 120,000 members and 135 local affiliates (CFT website). The United Teachers of Los Angeles and United Educators of San Francisco are each merged locals and are affiliated with both AFT and NEA. Under California law, a school board can require that an agency shop provision be voted on by the members of the bargaining unit either separately from the

other contract provisions or as part of the total CBA package. Assuming an agency shop provision was adopted, all teachers covered by the CBA must join the union (and thus pay membership dues) as a condition of employment or, if they elect not to join, pay a "fair share" service fee payable to the relevant association (Cal Govt. Code § 3546).

Collective bargaining rights for teachers were authorized by the Rodda Act of 1975. Prior to that labor relations between school officials and teachers were governed by the Winston Act of 1965 which required districts and teachers to meet and confer on subjects of mutual interest. The passage of the Rodda Act sought to achieve a better balance between the two groups in the negotiating process. Unlike the Winston Act, the Rodda Act requires that the results of collective bargaining be detailed in a legally binding contract. It also stipulates that contracts can be valid for up to 3 years and that school boards and unions return to the negotiating table once the contract expires.

In specifying the scope of representation in CBAs, four groups of topics are defined—mandatory, permissive, consultative, and non-negotiable.

- *Mandatory:* defined as "wages, hours, and other terms and conditions of employment" where the later are defined as health and welfare benefits; leave, transfer and reassignment policies; safety conditions of employment; class size; teacher evaluation procedures; organizational security; grievance procedures; the layoff of probationary certificated school district employees; and alternative compensation or benefits for employees adversely affected by pension limitations (Cal Govt. Code § 3543.2); also includes the impact of educational programs and policies adopted at the State-level (i.e., class size reduction, beginning teacher induction) which must be negotiated prior to local implementation
- *Permissive*: must be negotiated upon the request of either party and include disciplinary action (other than dismissal) for non-probationary teachers, procedures for layoffs of non-probationary teachers necessitated by insufficient funds, and additional compensation or salary schedules based on criteria other than years of training and experience
- *Consultative*: items which the teachers have the right to be consulted on but over which the school boards have discretion; defined as the "definition of educational objectives, the determination of the content of courses and curriculum, and the selection of textbooks" (Cal Govt. Code § 3543.2)
- *Non-negotiable:* outside the scope of collective bargaining agreements such as due process for dismissing permanent teachers and seniority rights for layoffs which are detailed elsewhere in California State law.

Over the years, the scope of representation has been altered, primarily resulting from court judgments. The last significant attempt to expand the list of mandatory negotiating items was AB 2160, introduced in the California Assembly in 2002. It sought to make many consultative items mandatory topics of negotiation including "the selection of course content, curriculum, textbooks, and instructional materials, and the development and implementation of local educational standards, professional development plans, and parent involvement programs" (NEA website, www.nea.org/neatoday/0210/news16.html). It was defeated by six votes.

A recent Senate Bill, SB 1655 places restrictions on teacher-transfer rules. Many contracts give teachers who are already employed in the district preference for open teaching positions in the districts (voluntary transfers). A study by the New Teacher Project in 2005 found that this process was hurting schools in large districts because it kept them from making timely offers to new teachers. The bill requires that the voluntary-transfer process be completed by April 15th each year so that principals have time to hire new teachers. It also allows principals in schools in the lowest

three performance deciles to refuse voluntary transfers if they do not think the teacher will benefit their school.¹¹¹

The Public Employment Relations Board (PERB) is the five-member State-level adjudicating body overseeing the collective bargaining process in California. The primary responsibility of the PERB is to seek resolution to bargaining impasses. Their rulings are final unless court review is warranted.

When negotiations between school districts and teacher unions fail to proceed smoothly, there are three routes they can follow to reach a final contract—unfair labor practice complaint, impasse/mediator/fact finding, and work-to-rule/strike. The intractability of the negotiation process increases with each route.

- *Unfair Labor Practice Complaint:* Following review of an unfair labor practice complaint filed by one of the parties, the PERB will either issue a cease and desist or appoint a neutral third party. This neutral party will hold a hearing and issue a report to the PERB who issues a ruling after a review
- *Impasse/Mediator/Fact-Finding:* If negotiations have broken down completely, the PERB appoints a mediator to assist the parties in reaching a resolution to the impasse. If unsuccessful, PERB initiates fact finding and issues a recommended settlement. However, this settlement is not binding and negotiations must resume.
- Work-to-Rule/Strike: At this point, the union may seek to place pressure on the school board by instituting a work-to-rule policy (where teachers observe strict adherence to the contract) or stage a sick-out or informational picketing. The latter two are forms of strikes which the California Supreme Court has ruled permissible only when public health and safety are not threatened.

Approach Taken by States across the Nation. Teacher associations and unions operate in all 50 States and the District of Columbia and wield significant influence in the formulation and implementation of educational policies. As a rough proxy for union influence, States are sometimes dichotomously categorized as collective bargaining States (union-friendly) or right-to-work States (union-busters). The actual political landscape, however, as Table 25 indicates, is substantially more nuanced. For example, there are 11 States with both collective bargaining and right-to-work laws for teachers.

TABLE 25. State Collective Bargaining and Right-to-Work Laws Pertaining to Teachers, 2005

Type of Law	Frequency	States
States with Collective Bargaining Law	v for Teachers	(36 States)
Collective bargaining	25	AK, CA, CO, CT, DE, DC, HI, IL, ME, MD, MA, MI, MN, MT, NH, NJ, NM, NY, OH, OR, PA, RI, VT, WA, WI
Collective bargaining & right-to- work	11	FL, ID, IN, IA, KS, NE, NV, ND, OK, SD, TN
States with No Collective Bargaining	Law for Teach	ers (15 States)
Right-to-work	12	AL, AZ, AR, GA, LA, MS, NC, SC, TX, UT, VA, WY
No collective bargaining or right-to- work laws for teachers	2	KY, WV
Teachers prohibited from collective bargaining	5	GA, MO, NC, TX, VA

SOURCE: See Table A-16 in Appendix 7.

Collective bargaining and right-to-work laws are two separate, but related issues. The first addresses teachers' ability to negotiate an employment contract. The latter deals with the legality of mandatory union membership and, thus, mandatory collection of membership dues or non-member service fees.

As discussed previously, collective bargaining laws enhance the influence of unions by codifying their role as teachers' exclusive representatives. In doing so, unions are guaranteed a place at the negotiating table. Union activities are funded by their members. Collective bargaining laws therefore stipulate which workers are eligible for membership. Should the membership have approved an agency shop provision (usually voted on separately from the contract), a process is delineated by which their membership dues (or "fair share" service fees for non-members) are collected and distributed to the unions. If the old adage "money equals power" is correct, right-to-work laws have the effect of reducing the influence of unions by limiting the amount it collects in membership dues and service fees. However, there are non-CB States such as Texas and North Carolina where the teachers' associations are rather strong and have sizable memberships.

The main thrust of right-to-work laws is the prevention of what the National Right to Work Committee labels "compulsory unionism" (NRTWC website). Toward that end, right-to-work laws prohibit employment based on union membership status. In other words, any form of an agency shop provision is outlawed. The mandatory imposition and collection of membership dues and service fees are thus prohibited under these laws. However, many teachers in these States still contribute to their teacher associations, just on a voluntary basis. In States without collective bargaining, many of the elements of a CBA (such as working conditions, salary, and benefits) are codified in State statutes. If not codified at the State-level, teacher employment conditions are established by local district policies. Teacher associations in these States spend significant resources, particularly at the State level, lobbying on behalf of teachers on these issues.

Therefore, in States with CB rights, teachers work under a negotiated contract while in States where CB rights are not guaranteed, teachers tend to be employed at-will (i.e., without a contract). Additionally, in States with right-to-work laws, teachers can not be forced to financially support teacher associations, but rather are free to do so voluntarily. Yet, teachers in States without right-to-work laws can be required to pay membership dues or service fees, but only if an agency provision is adopted. Thus, in those 11 States with both CB and right-to-work laws, all teachers in districts with an approved bargaining agent render service under a contract collectively bargained, yet teachers only financially support the unions' activities if they voluntarily chose to do so.

There are also significant differences with respect to the influence of unions among the 15 States with no collective bargaining laws covering teachers. Five of these States – Georgia, Missouri, North Carolina, Texas, and Virginia – explicitly prohibit teachers from collective bargaining activities. In the other States, teachers may organize for the purpose of contract negotiations. However, school boards are under no legal mandate to bargain in good faith. Rather, "meet and confer" practices are generally followed with the school board having the final decision on all teacher salary and working condition matters.

States differ in their approach toward teacher strikes and work stoppages (see Table 26). The majority of States (30) prohibit teachers from striking. A little more than half of these States are legally empowered to impose penalties on teachers who strike. These typically take the form of fines and/or jail time. Fourteen States permit teachers to strike, mostly as a result of stalled contract negotiations and only after other avenues to resolution have been exhausted. The right of teachers to strike remains an open legal question in seven States.

TABLE 26. State Laws Regarding Strikes by Teachers, 2005

Type of Law	Frequency	States
Permitted	14	AL, AK, CA, CO, HI, IL, MN, MT, OH, OR, PA, RI, VT, WI
Prohibited without penalties	14	CT, DE, DC, GA, ID, KS, ME, MO, NE, NH, NJ, NC, TN,
for striking		WA
Prohibited with penalties for	16	FL, IN, IA, KY, MD, MA, MI, MS, NV, NM, NY, ND, OK,
striking		SD, TX, VA
Unclear	7	AZ, AR, LA, SC, UT, WV, WY

SOURCE: See Table A-16 in Appendix 7.

Effectiveness of these Policies. Unions increase worker pay and benefits. Teachers unions are no exception. A long series of studies demonstrates this in general and for teachers in particular. Teachers who are union members and teachers in States with greater unionism receive higher salaries. Higher percentages of unionized teachers are also associated with larger fringe benefits. Districts with greater unionism also have steeper wage-tenure profiles, so that there are greater salary increases as teachers gain experience. 115

The evidence on the effects of unions and union strength on student outcomes is much less clear. While some studies find a positive association, others suggest that unions' efforts to increase salaries force a trade-off with other productive inputs thus decreasing achievement and increasing dropout rates. 116

Teachers' unions clearly play an important role in US public schools and in California more than in some other States. Not only do they bargain with districts and States for teacher salaries, benefits and working conditions; they lobby for bills and influence elections of school boards, State legislatures and governors. One concern with political role of unions is that they influence the election the body that they then bargain with, the school board. See Eberts (forthcoming) for a further discussion of the role of unions in education policy.

While the research on the effects of contract provisions is sparse, some recent work has looked at the impact of particular contract provisions – those addressing transfer and hiring provisions. The New Teacher Project, as discussed above, studied contracts in five large urban districts and found that these provisions – which often give current teachers the right to transfer to openings in the district even if the principal of the new school does not want them – hurt schools both because they kept principals from hiring new teachers in a timely manner and because they resulted in the least-effective teachers shuffling from school to school instead of being dismissed. Moe (2006) also found that seniority rules may lead to inequities in teacher resources across schools as more experienced teachers transfer out of schools with high concentrations of students in poverty and non-white students. 119

Teacher Retirement Policies

Fringe benefits, which include retirement, paid holidays, vacation, and health insurance, comprise a substantial portion of teacher compensation – 26 percent according to one estimate. Retirement benefits comprise a significant chuck of this percentage. Each State operates a retirement plan that provides benefits such as service and disability retirement and death or survivor benefits for eligible public school teachers. Although retirement plans could influence a State's ability to recruit teachers, they likely yield greater influence on teacher retention as teachers remain in the classroom long enough to fulfill the service requirements for full retirement benefits.

As discussed in the section on incentives, several States have equipped their teacher retirement plans with mechanisms designed to retain teachers in the classroom. However, this has not always been the case. Maine's first teacher pension law was enacted in 1913. A purpose of the

law was "to increase the efficiency of the public schools by retiring teachers of long service." Long serving teachers were viewed as a hindrance to education progress rather than a component of a quality education. Some states continue to design their retirement systems to entice more experienced teachers to leave the classroom as was the case in Pennsylvania in the 1990s. 122

State plans differ on many key aspects that could influence teachers' termination and retirement decisions. The vast majority of States operate defined benefit (i.e., pension) plans whereby the retirement benefit is pre-defined rather than determined directly by the amount of contributions an employee makes. Some States have added defined contribution components (e.g., 401(k), 403(b), etc.) to their systems, an action likely driven in part by the need to control costs. Defined contribution components have the effect of shifting the burden of providing retirement benefits from the State to individual employees by directly linking benefit levels to the amount contributed by the employee. The need to contain system costs has also led States to alter the mandatory contribution rates for employees and employers, service requirement for vesting, service and age eligibility requirements for full retirement benefits, the retirement benefit calculation formula, and retiree health insurance premiums and coverage. 123

California's Approach. According to the member handbook, "employees of the California public school system, kindergarten through community college, in positions that require a credential, certificate, or permit or require the employee to meet minimum standards adopted by the Board of Governors of the California Community Colleges" are eligible to become members of the California State Teacher Retirement System (CalSTRS, 2005, p. 5). ¹²⁴ The system, created in 1913, is overseen by the 12-member Teachers' Retirement Board comprised of three individuals elected by current educators, five persons appointed by the Governor and confirmed by the Senate, and four ex-officio members. ¹²⁵ As of June 2005, CalSTRS had almost 776 thousand members and assets of \$129.59 billion.

In addition to the Defined Benefit Program (discussed below), CalSTRS offers two retirement savings plans. Contributions and accrued interest to an individual's account with the Defined Benefit Supplement Program (DBSP) augment the service retirement benefits provided by the Defined Benefit Program. All members in the Defined Benefit Program have participated in the DBSP since January 1, 2001. California, like several other States, provides members with an optional defined contribution component. Members can also opt to contribute to a 403(b) tax-deferred savings plan through the Voluntary Investment Program.

Membership in the Defined Benefit Program is mandatory for eligible employees employed on a full-time basis to perform creditable service at any public school in California. The program is financed with contributions by members, their employers, and the State. Members contribute 8.0 percent of their compensation, and their employers contribute 8.25 percent of the member's compensation. The State of California contributes 2.017 percent of members' compensation from the fiscal year in the prior calendar year. The State also contributes 2.5 percent of this compensation to the Supplemental Benefit Maintenance Account in order to maintain benefit levels. The plan provides service and disability retirement and survivor benefits to its retired members. CalSTRS does not provide health insurance coverage. Health insurance may be provided by local districts to their retirees according to local collective bargaining agreements.

Teachers are eligible for full retirement benefits once they have at least 30 years of service and have attained the age of 50 or if they have at least five years of creditable service (at which point they are vested in CalSTRS) and are at least 60 years of age. Years of service are those during which the member made contributions to CalSTRS. It is possible for members to purchase years of service. Vested members can retire as early as age 55, but their benefits are reduced. A member's service

retirement benefit is calculated using the formula presented in Chart 9. The service retirement benefits are estimated to replace approximately 60 percent of teachers' salary (CalSTRS, 2005). They comprise the bulk of teachers' retirement funding as California teachers' compensation is not subject to the Social Security (i.e., OASDI) portion of the federal payroll taxes (i.e., FICA). They do, however, pay into Medicare and are eligible for benefits through that program.

CHART 9. How to Calculate a California Teacher's CalSTRS Service Retirement Benefit

Term	Definition		
Service Retirement Benefit	(Service Credit × Age Factor × Final Compensation) + Longevity Bonus if		
	applicable		
Service Credit	Years of full-time creditable service		
Age Factor	A percentage determined by member's age (in years and months) at retirement.		
	Ranges from 1.10% for age 50 and 0 months to 2.4% for age 63 years and 0 months.		
	It is set at 2.0% at 60 years and 0 months.		
Final Compensation	The highest one-year compensation for members with at least 25 years of service and		
	the highest average compensation during any 36-month period for teachers with less		
	than 25 years of creditable service		
Longevity Bonus	If the teacher accumulates a given amount of creditable service by 1 January 2011,		
	monthly benefits are increased as follows:		
	\diamond 30 years = \$200.00		
	♦ 31 years = \$300.00		
	♦ 32 or more years = \$400.00		

SOURCE: CalSTRS (2005).

As shown in Chart 9, the final compensation used in the benefit calculation is based on either the highest one-year compensation if the teacher has at least 25 years of creditable service or the highest average compensation during any 36-month period of teachers with less than 25 years. CalSTRS changed this policy effective 1 January 2006 so that only the most recent 15 years of salary information are considered.

Approach Taken by States across the Nation. Every State's retirement system offers a defined benefit plan or a plan with a defined benefit component. Nine States (including California) operate plans that include an optional defined contribution component whereby teachers can augment their monthly retirement benefit. Indiana, Ohio, Oregon, and Washington operate hybrid retirement plans in which employee contributions are fed into the defined contribution component and employer contributions finance the defined benefit component. Only two States (Ohio and West Virginia) sponsor stand alone defined contribution plans. However, only in West Virginia are teachers automatically enrolled in the defined contribution plan. ¹²⁹ Ohio, which operates three separate plans, allows teachers 180 days from their first day of paid service to elect a retirement plan.

Plan Descriptions: Plan membership varies across States with regard to both the types of employees and employers eligible for participation. In 28 States (including California), teachers belong to retirement systems in which membership is restricted to educational employees. Teachers in other States are commingled with other public employees. All districts participate in their State retirement plan for teachers with the exception of eight States – Arizona, Colorado, Illinois, Massachusetts, Minnesota, Missouri, Nebraska, New York, and Wisconsin. Typically, specific districts (usually the largest districts) are excluded from membership on the account of a pre-existing district-level retirement system at the time the State system was formed. Arizona is the exception in that not all public and charter school districts have elected to participate in the State system.

TABLE 27. Types of Plans Sponsored by State Teacher Retirement Systems, 2005

Plan Type	Frequency	State
Defined Benefit	40	AL, AK, AX, AR, DE, GA, HI ^a , IL, IA, KS, KY, LA, ME, MD,
		MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC,
		ND, OH ^b , OK, PA, RI, TN, TX, VT, VA, WA ^c , WV ^d , WI, WY
Defined Benefit with Optional	9	CA, CO, CT, DC, FL, ID, SC, SD, UT
Defined Contribution Component		
Hybrid/Combined Plans	4	IN, OH ^b , OR, WA ^c
Defined Contribution	2	OH ^b , WV ^d

^a As of August 2006, Hawaii was in the process of implementing a hybrid plan; ^b Ohio teachers have 180 days from their first day of paid service to select one of the three retirement plans: (1) a defined benefit plan, (2) a defined contribution plan, and (3) a combined plan; ^c Washington operates three separate plans. Teachers who enrolled before 1 October 1977 belong to Plan 1 with those who enrolled after 30 September 1977 and before 1 July 1996 belonging to Plan 2. Both plans are defined benefit plans. Those who enrolled after 30 June 1996 are members of Plan 3, a hybrid plan; ^d West Virginia teachers who enrolled prior to 1 July 1991 or after 30 June 2005 belong to the defined benefit plan. Teachers who enrolled after 30 June 1991 and before 1 July 2005 belong to the defined contribution plan. The State is currently engaged in a lawsuit which seeks to prevent the State from merging the defined contribution plan into the defined benefit plan. SOURCE: See Table A-17 in Appendix 8.

As shown in Tables 28 and 29, mandatory contribution rates vary significantly across States as well as within States across teachers and plans. Employee rates range from 0.0 percent in seven States to 15.0 percent for some members of Washington's hybrid Plan 3. California's 8.0 percent employee rate ranks in the top quintile. Fourteen States have a schedule of mandatory rates for teachers differentiated according to retirement plan or when they enrolled in the State retirement system.

Mandatory employer contribution rates exhibit a similarly large variation across States (see Table 29). They range from 0.58 percent in Illinois to 26.0 percent in Alaska. California's employer rate of 8.25 percent ranks in the middle of the range. Generally, employer rates are higher than employee rates. Employer rates also experience more variability within State from year to year than do employee rates. Almost all employee rates are established through statute. However, more than half of all employer rates are established following regular actuarial reviews of the retirement plans' ability to provide current and projected benefits.

TABLE 28. Mandatory Employee Contribution Rates to Teacher Retirement Systems, 2005

TABLE 26. Mandatory Employee Contribution Rates to Teacher Retirement Systems, 2005				
Contribution Rate	Frequency	States where Teachers	States where Teachers do	
(Percent of Compensation)		Participate in OASDI System	not Participate in OASDI	
0.0%	7	FL, HI ^b , MD ^{b,e} , MI ^b , NY ^b , UT ^b	MD ^{b,e} , NV	
Less than 4.99%	10	DE ^c , IN, IA, KS, MD ^{b,e} , MI ^b , NY ^b ,	MD ^{b,e}	
		$VT^b, WA^{a,b}, WV^b$		
5.0% to 5.99%	15	AL, GA, MN ^{b,d} , NH, NJ, PA ^b , TN,	MD ^{b,e} , MA ^b , MO ^{a,b}	
		VT ^b , VA, WA ^b , WI, WY		
6.0% to Less than 6.2%	7	AR, NC, OR, SD, UT ^b , WA ^b , WV ^b		
6.20% — Old-A	ge, Survivor, a	and Disability Insurance (OASDI) Pay	roll Tax Rate	
Greater than 6.2% to 6.99%	4	ID, PA ^b , SC	TX	
7.0% to 7.99%	15	AZ ^a , DC ^b , HI ^b , MS, MT, NE, NM,	CT, ME, MD ^{b,e} , MA ^b	
		ND, OK, PA ^b , WA ^b		
8.0% to 9.99%	11	DC ^b , LA, RI, WA ^b	AK, CA, CO, IL, KY, MA ^b ,	
			MN ^{b,d}	
10.0% to 15.0%	4	WA ^b	MA, MO ^{a,b} , OH	

^a Indicates that contribution rates are established through an annual or other regular actuarial valuation to insure that the system can meet its short-term projected liabilities. Otherwise, contribute rates are established through statute. ^b Indicates States with contribution rates that vary across groups of teachers and/or retirement plans. See Table A-17 in Appendix 8 for further details. ^c Members in Delaware are required to contribute 3.0% of earnings in excess of \$6,000. ^d In Minnesota, "coordinated members" pay into Social Security while "basic member" do not.

^e In Maryland, members of the pension system also pay Social Security taxes while members of the older retirement system do not. NOTE: Most contribution rates applied to the 2004-05 school year. Please see Table A-17 in Appendix 8 for exceptions. SOURCE: See Table A-17 in Appendix 8.

TABLE 29. Mandatory Employer Contribution Rates to Teacher Retirement Systems, 2005

Contribution Rate (Percent of Compensation)	Frequency	States where Teachers Participate in OASDI	States where Teachers do not Participate in OASDI
Less than 4.99%	7	DE ^a , NH ^{a,c} , NJ ^{a,d} , PA ^a , WA ^a , WI	ILe
5.0% to Less than 6.20%	10	IA, KS ^a , MN ^{b,f} , NY ^a , SD, TN ^a , VT,	MO ^{a,b} , TX ^g
		WY	
6.20% — Old-A	ge, Survivor, a	nd Disability Insurance (OASDI) Payr	oll Tax Rate
Greater than 6.20% to 8.99%	15	AZ ^a , FL, IN ^a , MT ^a , NE ^h , NM ⁱ , NC ^a ,	CA ^k
		ND, OK ^j , OR ^{a,b} , SC, UT ^b , VA ^a , WV ^b	
9.0% to 10.99%	7	AL ^a , GA, ID, MD ^{a,l} , MS ^a	CO, MD ^{a,l} , MN ^{b,f}
11.0% to 13.99%	6	HI ^a , RI ^{a,m} , UT ^b	CT ^{a,n} , KY, MO ^{a,b}
14.0% to 15.99%	5	AR ^a , MI ^a , WV ^b	LA ^a , OH
16.0% to 26.0%	3		AK ^a , ME ^a , NV ^a
Other	2	DC ^{a,o} , OR ^{a,b}	
Unknown	1		MA

^{*} Indicates that contribution rates are established through an annual or other regular actuarial valuation to insure that the system can meet its short-term projected liabilities. Otherwise, contribute rates are established through statute. b Indicates States with contribution rates that vary across groups of teachers and/or retirement plans. See Table A-17 in Appendix 8 for further details. c In New Hampshire, employers contribute 3.7%, and the State contributes 2.0%. In New Jersey, employers contribute 4.96%, and the State contributes 7.64%. In Illinois, the State, through appropriations, contributes a sum such that 90% of the liability for benefits is covered. In Minnesota, employers of "coordinated members" contribute to Social Security while employers of "basic members" do not. In Texas, the State pays 6.0% on behalf of employers.

In addition to mandatory contributions to their State retirement system, teachers in 36 States also have federal social security payroll taxes (i.e., Old-Age, Survivor, and Disability Insurance) deducted from their paycheck. California is one of the 15 States where teachers are exempted from OASDI taxes. However, these teachers may still be eligible for Social Security benefits through other employment or their spouse. There are two federal provisions which may reduce the Social Security benefits teachers receive: (1) the Windfall Elimination Provision (WEP) and (2) the Government Pension Offset (GPO). The WEP affects teachers who receive both a pension from a State retirement plan and Social Security benefits earned through covered employment. In 2005, the maximum reduction was \$313 a month (or \$3,456 annually). The GPO affects teachers who receive both a State pension and Social Security benefits as a spouse, former spouse, widow or widower. Under GPO, the Social Security benefit is reduced by two-thirds the State pension.

Whether or not teachers pay OASDI taxes appears to be correlated with mandatory employee and employer contribution rates for State retirement systems (see Tables 28 and 29). With teachers not earning social security benefits from their employment as teachers, they exhibit heavier reliance on their State benefit to support them during retirement. This places upward pressure on contribution rates. Almost all the States in which teachers are not charged OASDI taxes have mandatory employee and employer contribution rates higher than the 6.20 percent OASDI rate. Additionally, they have the highest rates of all States.

Retirement Benefits: A key aspect of State retirement systems is the service requirements for vesting. Once vested, a member is eligible for a retirement benefit. A vested teacher is able to leave the classroom but postpone drawing a retirement benefit until years later. Many States refer to this as a deferred retirement benefit. The majority of States (32, including California) fully vest teachers after five years of creditable service. See Table 30. Teachers in another 13 States must teach for ten

h Nebraska employers match employee contributions at 101%, and the State contributes 0.7% plus an additional amount if recommended by the actuary. The employer contribution rate in New Mexico increased from 8.65% to 9.40% effective 1 July 2005. In Oklahoma, employers contribute 7.05% and the State contributes 4.0% (of tax revenue). California employers are required to contribute 8.25% and the State contributes 2.017% plus another 2.5% to the Supplemental Benefit Maintenance Account. Maryland employers pay in OASDI on behalf of employees who are members of the Pension System, but not members of the Retirement System. In Rhode Island, employers contribute 11.62% and the State contributes 8.02%. In Connecticut, the employer and the State together contribute 12.5%. The District of Columbia contributes \$9,200 for every employee member. NOTE: Most contribution rates applied to the 2004-05 school year. Please see Table A-17 in Appendix 8 for exceptions.

years before being fully vested. Teachers are immediately vested in the defined contribution portions of plans. In a handful of States, non-vested teachers are eligible for a retirement benefit once they attain a certain age. For example, an active member in New Hampshire with less than 10 years of service can retire with benefits upon turning 60 years old.

TABLE 30. Service Requirements for Vesting in State Teacher Retirement Systems, 2005

Length of Service	Frequency	States
Immediately	5	IN ^a , OH ^a , OR ^a , WV ^a , WI ^a
1 year	1	OH ^a
3 years	3	MN, ND, SD
4 years	4	IA ^a , MS, TN ^a , UT
5 years	32	AK ^a , AZ ^a , AR, CA, CO, DE, DC, HI ^a , IL, KY, LA, ME ^a , MD, MO, MT, NE,
		NV, NM, NY, NC, OH ^a , OK, OR ^a , PA, SC, TN ^a , TX, VT, VA, WA ^a , WV ^a , WI ^a
6 years	1	FL
8 years	1	AK ^a
10 years	13	AL, CT, GA, HI ^a , IN ^a , KS, ME ^a , MA, MI, NH, NJ, RI, WA ^a
12 years or more	2	AK ^a , WV ^a
Other Lengths	2	ID ^a , way

^a Indicates States where the vesting eligibility requirements vary across groups of teachers, plans, and/or plan components. See Table A-18 in Appendix 8 for further details.

SOURCE: See Table A-18 in Appendix 8.

Each State has established eligibility requirement for the various benefits they offer including service, early, and disability retirement. We have restricted our attention to full service retirement benefits. A very common criteria by which teachers qualify for full retirement benefits is the "X years and out" rule whereby the teacher can retire as soon as they have accumulated a specific number of years of service regardless of their age. See Table 31. The target number of years of service ranges from 20 years (3 States) to 35 years (5 States). The most common requirement, established in 17 States, is 30 years of service. Similarly, teachers can qualify for full retirement benefits in ten States once their age and years of service sum to a minimum amount, typically 80 or 85.

TABLE 31. "X Years and Out" Eligibility Requirements for Full Retirement Benefits, 2005

Type of Policy	Frequency	States
20 years and out	3	AK, LA ^a , MA ^a
25 years and out	5	AL, ME, MS, MT, NM ^e
27/28 years and out	4	AR, KY, RI, SC ^b
30 years and out	17	CO ^a , DE, DC ^{a,c} , FL, GA, LA ^a , MD, MA ^a , MO ^e , NC, OH ^a , OR ^a , TN, UT, VT,
		WA ^a
35 years and out	5	CO ^a , CT ^d , NY ^a , PA, WV ^a
No such policy	17	AZ ^e , CA, CO ^{a,e} , DC ^a , HI, ID, IL, IN, IA ^e , KS ^e , MI, MN ^e , NE ^e , NH, NJ, NY ^a ,
		ND ^e , OH ^a , OK ^e , OR ^a , SD, TX ^e , VA, WA ^a , WV ^a , WI, WY ^e

^a Indicates States where the policy applies to some, but not all teachers. See Table A-18 in Appendix 8 for more details. ^b In South Carolina, teachers must have at least 5 years of earned service rather than purchased service. ^c In the District of Columbia, these teachers must have 5 years of creditable service as a DCPS teacher. ^d In Connecticut, at least 25 years of the 35 years required must have been rendered in Connecticut.

SOURCE: See Table A-18 in Appendix 8.

It is important to note that all States credit only those years of service during which the member and/or their employer made contributions to the retirement system. Members are able however to purchase additional years of service. Members are also able to remove their own

^e Indicates States with policies whereby teachers are eligible for full retirement benefits if the sum of their age and years of creditable service is at least some amount, typically 80 or 85.

contributions (but rarely, if ever, their employers' contributions), usually with accumulated interest. Therefore, it is possible for a teacher to use personal contributions from one State's retirement system to buy into another State's system.

Almost every teacher's full (as opposed to early) retirement benefit is calculated using a three element formula based on (1) years of service, (2) final salary, and (3) a service credit percentage. There is substantial variation across the States in their definitions of final salary and the service credit as shown in Table 32. Final salary is always defined as the highest average salary earned over some period of time ranging from one year for some teachers in California to five years in 13 States. Given most teachers are paid according to a standard salary schedule the highest salaried years will tend to be consecutive years. However, fewer than half of the States (24) actually require that the final salary be based on consecutive years.

TABLE 32. Definition of Final Salary Used in Retirement Benefit Calculation, 2005

Average of Highest	Frequency	States
1 year	1	CA ^a
2 consecutive years	2	GA, WA ^a
3 years	22	AL, AK, CO, CT, DE, HI, IA, KS ^a , KY ^a , ME, MD ^a , MT, NH, NJ, NY, ND,
		OH, OK ^a , PA, SC, UT ^a , WI
3 consecutive years	16	AZ ^a , CA ^a , DC, LA, MD ^a , MA, MI ^a , MO, NE, NV, OR, RI, SD, VT, VA, WY
4 years	2	KS ^a , MS
4 consecutive years	2	IL, NC
5 years	7	AZ ^a , FL, IN, KY ^a , TX, UT ^a , WV
5 consecutive years	6	MI ^a , MN, NM, OK ^a , TN, WA ^a
Other amount of time	1	ID^{a}

^a Indicate States where the final salary definition varies across groups of teachers and/or retirement plans. See Table A-18 in Appendix 8 for further details

SOURCE: See Table A-18 in Appendix 8.

A service credit percentage indicates the percent of final salary that a retiree receives as a retirement benefit for each year of service (see Table 33). The name for this percent varies across States and includes benefit factor, age factor, multiplier, and benefit rate. For example, a Maine teacher retiring with 30 years of service will receive 60 percent of their final salary annually as a retirement benefit – i.e., 2.0 percent (Maine's service credit percentage) \times 30 years. The percentage ranges from 0.1 percent in Massachusetts to 3.7 percent in Ohio. In most States, the service credit percentage varies across retirement plans, years of service, and/or the teachers' age at retirement. For example, the 0.1 percent in Massachusetts applies only to teachers who retire at age 41 and the 3.7 percent in Ohio only applies to a teacher's 42^{nd} year and if s/he is a member of the defined benefit plan. Two percent is the most common service credit percentage.

Table 34 summarizes the estimated final salary replacement rates that are detailed in Table A-19 in Appendix 8. Our calculations are based on each State's service credit percentage schedule and are applicable for a teacher first employed in the 2005-06 school year. We assume that the teacher retires (meaning he or she begins receiving a benefit from the State retirement plan) at age 65. This assumption allowed us to estimate full retirement benefits for all States as several reduce the benefits of retirees who retire prior to age 65. Our estimates also assume that all years of experience were either rendered within the State's retirement system (or were credited to the retirement system) and that the current retirement benefit formulas continue to apply when the teacher retires.

TABLE 33. Percent of Final Salary Earned for Retirement Benefit with Each Year of Service, 2005

Percentage	Frequency	States
Less than 1.0%	3	MD ^c , MA ^b , TN ^a
1.0% to 1.49%	13	AR ^a , CA ^b , HI ^b , IN, MD ^c , MA ^b , MN ^a , NY ^b , OH ^c , SC ^b , UT ^c , VT ^c , WA ^b
1.5% to 1.74%	19	CA ^b , DC ^c , FL ^b , ID ^b , IL ^a , MD ^c , MA ^b , MI, MN ^a , MT, NH ^a , NY ^b , OR ^c , RI ^a , SD ^a ,
		TN^a, VT^c, VA, WI^a
1.75% to 1.99%	16	CA ^b , DE ^a , DC ^c , FL ^b , ID ^b , IL ^a , KS, MD ^c , MA ^b , MN ^a , NJ, NY ^b , NC, RI ^a , SC ^b , WI
2.0%	24	AK ^a , CA ^b , DE ^a , DC ^c , GA, HI ^b , ID ^b , IA, KY ^a , LA ^b , ME, MA ^b , MS ^a , NE, NY ^b ,
		ND, OK, OR ^c , PA ^b , RI ^a , SD ^a , UT ^c , WA ^b , WV
2.01% to 2.49%	11	AL, AZ ^b , AR ^a , CA ^b , IL ^a , MA ^b , NM, OH ^c , SD ^a , TX, WY ^a
2.5% to 2.99%	9	AK ^a , KY ^a , LA ^b , MA ^b , MO ^a , MS ^a , OH ^c , NV ^a , PA ^b
3.0% or more	3	LA, OH ^c , RI ^a
Other	2	CO, CT

^a Indicates States multiple percentages are use to calculate every teacher's retirement benefit, typically different rates are applied to different spans of years (e.g., first 10 years, second 10 years, etc.). ^b Indicates States where every teacher's retirement benefit is based on one of many percentages. Typically, the percentages depend on factors such as the plan from which the teacher retires and when the teacher first enrolled in the retirement system. ^c Indicates States in which the retirement benefits for some teachers are based on one percentage while the retirement benefits for others are based on multiple percentages as explained in note a.

NOTE: See Table A-18 in Appendix 8 for details on how the percentages applied in the benefit calculation formulas vary within States. SOURCE: See Table A-18 in Appendix 8.

TABLE 34. Average Estimated Final Salary Replacement Rates Across State Retirement Plans for a Teacher First Employed in 2005-06 and Retiring at Age 65, 2005

	20 Years (%)	25 Years (%)	30 Years (%)	35 Years (%)
All defined benefit only plans ^a	39.9	50.1	60.6	70.9
All Plans where Teachers Do Not Contribute to Social Security	46.7	58.7	71.6	84.8
All Plans where Teachers Contribute to Social Security	40.6	50.9	61.7	72.1
Difference Across Groups	6.1	7.8	9.9	12.7

^a This excludes two hybrid plans (Indiana's plan, Ohio's Combined Plan and Washington's Plan 3) for which the replacement rate could only be estimated for the defined benefit component and not the defined contribution component.

ASSUMPTIONS: Calculations assume the following: (1) teacher first employed for the 2005-06 school year, (2) teacher retires at age 65 but could have stopped teacher prior to age 65, and (3) current benefit calculation formulas remain constant over time.

NOTE: The averages in this table are based on the estimated replacement rates for all retirement plans that were open to teachers first employed in 2005-06 with a few exceptions. We were unable to estimate replace rates for the Maryland Non-Contributory and Tennessee plans as they depend on how a teacher's final salary interacts with the Social Security Integration Limit. We also were unable to estimate a replacement rate for Ohio's defined contribution plan.

SOURCE: See Table A-19 in Appendix 8.

Average replacement rates range from almost 40 percent for teachers with 20 years of service to slightly less than 71 percent for those with 35 years of service. Awareness of this 30 percentage point difference likely influences many teachers to remain in the classroom longer than they might without the promise of a retirement benefit. Additionally, their final salary increases the longer they remain in the classroom. Therefore, teachers get a bigger piece of a bigger pie as their retirement benefit.

Whether or not a State's teachers contribute to the federal Social Security system through OASDI payroll taxes is related to average replacement rates. Higher average replacement rates are found in States where teachers do not pay OASDI taxes than in States where they do. The difference ranges from roughly six percentage points at 20 years of service to almost 13 percentage points at 35 years of service. The higher replacement rates help explain the higher mandatory contribution rates in these States noted above. The scope of this paper does not allow us to judge whether or not average *total* replacement rates are higher in one group of States versus the other. Teachers who had OASDI taxes withheld while teaching are likely to receive more from Social Security than other

teachers. However, the WEP provision is likely to result in larger reductions for these teachers than others.

Health Insurance Coverage: As the costs of healthcare continue to soar, health insurance coverage increases in value to retirees especially those not yet eligible for Medicare. States differ in their approach to providing health insurance to their retired teachers (see Table 35). Teachers in at least 21 States (including California) can elect to continue coverage through their former employer should the employer make it available. Details of this coverage are generally subject to local collective bargaining agreements if present. Other States allow eligible retirees to purchase membership in either a health plan overseen by the retirement system (14 States) or a health plan overseen by another State agency (19 States).

TABLE 35. Providers of Health Insurance to Retired Teachers, 2005

Provider	Frequency	States
Former employer,	21	CA, CT ^a , DC, FL, LA, ME, MD, MA, MI, MN, MO, MT, NV ^b , NH, NY,
if available		OK, OR ^c , RI ^d , UT ^e , VA, WY
State health plan	19	AK, AR, GA, HI, IL, KS, KY ^f , MS ^g , NV ^b , NJ, NM, NC, ND, OH, SC, TN,
		WA, WV, WI
Retirement system	14	AL, AZ, CO, CT ^a , DE, IN, KY ^f , MS ^g , OR ^c , PA, RI ^d , TX, UT ^e , VT
Uncertain	4	ID, IA, NE, SD

^a In Connecticut, Medicare recipients receive additional health insurance coverage through the retirement system while retirees not on Medicare can receive coverage through their former employers. ^b In Nevada, retirees can elect coverage through either their former employer or through the State health plan. ^c In Oregon, retirees can elect coverage through their former employers or, if a retiree of the PERS plan, through the retirement system. ^d In Rhode Island, retirees can elect coverage through either their former employer or through the retirement system. ^e In Utah, retirees can elect coverage through either their former employer or through the retirement system. ^f In Kentucky, health insurance for retirees not on Medicare is provided through the State health plan while the retirement system provides additional coverage for retirees on Medicare. ^g In Mississippi, retirees can elect coverage through either the State health plan or, if on Medicare, through the retirement system. NOTE: Eligibility requirements may apply for retirees to receive health insurance coverage from these providers. SOURCE: See Table A-19 in Appendix 8.

Monthly premiums vary dramatically across States and within States across insurance plans as shown in Table A-20 in Appendix 8. Almost all States offer lower monthly premiums to retirees enrolled in Medicare with most requiring retirees to be enrolled in both Part A and Part B. In response to the recent implementation of Medicare Part D (prescription coverage), States are revamping their Medicare supplemental insurance plans to provide even lower premiums for retirees no longer needing prescription coverage. At least 23 States subsidize a portion of the monthly premiums. Premiums frequently vary with the retiree's years of service.

Effectiveness of these Policies. It is a generally held belief that retirement systems influence the termination and retirement decisions of teachers. Despite this belief, we are aware of only one study that explicitly attempts to link retirement benefits to teacher career decisions. Furgeson, Strauss, and Vogt (2006) exploit a change in Pennsylvania's retirement benefit formula to assess the effects of an increase in retirement benefits on the retirement decisions of eligible teachers. As reported above, Pennsylvania has a "35 years and out" eligibility requirement for full retirement benefits. In 1997-98 and 1998-99, this eligibility requirement was temporarily reduced to 30 years for those years only. They find a \$1,000 (or 0.4 percent) increase in the real present value of retirement benefits increases the probability of a female teacher retiring by between 0.02 and 0.08 percent. These results imply an elasticity of retirement of between 2.0 and 3.5. If a State wants to encourage long-serving teachers to retire, increases in retirement benefits will increase retirement rates among the target population.

IV. SUMMARY AND IMPLICATIONS FOR CALIFORNIA TEACHER POLICY

As is evident from discussion above, States' role in teacher labor markets is neither small nor simple. States have passed bundles of laws that reach into every aspect of the teacher workforce. California is not an exception. What can be gleaned from all the detail?

First, while States have implemented a slew of policies, they have systematically evaluated very few of them. If this approach does not change we will be in no better position to learn from experience in the future than we are today. Clearly some areas of teacher policy are easier to evaluate than others. Incentive programs and professional development may lend themselves more to experimental design than collective bargaining. Nonetheless, if the State is going to continue to intervene as heavily in the teacher labor market, it is worth assessing the effects of these interventions to a much greater extent than is currently the case.

Second, the current structure of salary schedules presents several problems. First, it tends to treat all schools in a district in the same way. This creates a situation in which the appeal of a school for teachers is based solely on working conditions. Because teachers tend to favor teaching in schools with high-scoring students, this disadvantages schools with lower-achieving students. Perhaps even more problematic, current salary structures treat all specializations in teaching equally, making it more difficult to attract teachers to fields such as math and science that have good alternative occupational opportunities or to fields such as special education or bilingual education that require either additional training or additional effort during employment.

Third, typical salary structures also do not include incentives based on teacher performance. However, the research is not clear as to whether such incentives are beneficial or not. Teachers are likely to respond to them but unless the incentives are carefully constructed they are likely to lead to unintended consequences such as cheating and test practice that will not improve students' long-run outcomes. Moreover, most policies to date have only been able to incentivize a small group of teachers just on the border of qualifying for rewards. It is difficult to design a system with broader effect and such systems may be expensive to monitor effectively.

Fourth, there is substantial evidence that while some professional development and more formal education can improve teacher effectiveness, generic credits do not. For example, teachers with masters' degrees are, on average, no more effective than those with out. However, teachers who participate in some sustained professional development that is linked closely to the work that they do in their classrooms, do, on average, become more effective. There is little evidence on the effects of pre-service education requirements. That which does exist is mixed, some finding positive effects and some no effects. On the other hand, there is strong evidence that pre-service requirements affect the pool of potential teachers. Early-entry (intern) routes into teaching with reduced pre-service coursework tend to attract a larger pool of candidates. In this light, we have a lot to learn about which requirements improve teaching and which deter good teachers from entering the classroom; the evidence so far suggests that policies that address these factors can have substantial impacts because they affect both the pool of teachers and the experiences that these teachers bring with them into the classroom.

Fifth, teacher tenure in California occurs earlier in teachers' careers than it does in most States. While there is no evidence, that we know of, concerning the effects of early tenure, there are indications that it is problematic for districts and schools in the State. Recent research indicates that it is quite difficult to judge who will be a good teacher prior to entry into the classroom. As an indication of this, there is substantially more variation between students entering teaching through the same pathway than between the average teacher in one pathway or another. Similarly, while there may be some relationship between a teacher's own test performance and the learning gains of

his or her students, this relationship is very weak, explaining only a very little bit of the variation in effectiveness across teachers. It is possible that new and innovative research will provide evidence that will help us to screen applicants more carefully, but, for now, it is difficult to know a priori who will be a good teacher. Thus, it is useful for schools and districts to be able to let go their worst teachers. California does have the advantage, which not all States do, of not having due process rights for untenured teachers. This does appear to make it relatively easy for districts to fire untenured teachers. However, two years before tenure may not be enough time to adequately assess teachers. Superintendents and principals in surveys as part of the *Getting Down to Facts* project cite tenure laws as making it difficult for them to fire under-performing teachers and that this hinders them in their effort to improve student outcomes. In order to keep the best teachers, districts must not only have flexibility to dismiss ineffective teachers but must also be able to identify those teachers. We currently know very little about the evaluation clauses in teacher contracts and how those affect teacher assessment and career trajectories.

In considering specific policy approaches it can be useful to think more broadly about the role of the State in the teacher workforce. Perhaps the outstanding issue in State teacher policy is how interventionist States should be in determining the allocation of resources related to teachers *within* districts and schools. One role of the State is to coordinate across districts, perhaps adjusting for differences in needs or providing information and resources that districts would not be able to attain on their own. For example, it may be difficult for small districts to each implement a leadership development program to serve their schools, but it would be worth the investment for a more aggregate entity – the county or state – the have such a program that could serve multiple districts.

The appropriate role for the State within districts is less clear and varies more across States. Districts, left on their own, often have done poorly at allocating teacher resources across schools. Schools with the lowest-scoring students and the highest proportions of non-white students and students in poverty often employ less experienced teachers and those with lesser qualifications. State and even Federal policies can help reduce these differences. California targets some incentives to attract teachers to difficult-to-staff schools. It is the only state, for example, that targets National Board incentives, though because these are targeted to the lower performing half of schools it may not be effective at getting teachers to the schools most in need. The recent SB 1133, on the other hand, targets the lowest twenty percent of schools. Even if district level resources were equated across the State, the past suggests that there would still be disparities across schools within districts. The State may help alleviate those differences either through incentive programs like the current ones that are directed at teachers or by greater incentives on districts to insure that evident differences in teacher resources disadvantaging the lowest-achieving students do not persist. There is some evidence from North Carolina that monetary incentives can extend teachers stay in schools; however, there is less evidence on whether these types of incentives can attract new teachers to these schools.

State policy does more than address the differences across districts and across schools within districts. California, for example, has mandated a number of professional development programs. Professional development has been shown to improve student outcomes if it is strong on content and well linked to work that teachers do in their classroom. Nonetheless it is not clear whether States are able to legislate such directed programs effectively. More general professional development does not appear to benefit teachers or students. California also has a minimum salary level, though this is not binding in most districts. The direct involvement of the State like this in within-district resource allocation could be beneficial if (1) the State has better information than school or district leaders

about what policies and practices would benefit students; (2) have a greater ability to regulate the implementation of policies and practices that would benefit students; or (3) have goals for students that are more in keeping with residents goals. There may be cases in which this is the case and cases in which this is not the case. Having the information to assess the extent to which a State role is warranted would put us in a much better position to design and implement effective policies to attract, develop and retain the most effective teachers.

References

- Babcock, L. & J. Engberg (1999). Bargaining Unit Composition and the Returns to Education and Tenure. *Industrial and Labor Relations*, *52*(2): 163-178.
- Ballou, D. 1996. Do public schools hire the best applicants? *Quarterly Journal of Economics* 111 (1):97-133.
- Ballou, D. & M. Podgursky (2002). Returns to Seniority among Public School Teachers. *The Journal of Human Resources*, *37*(4): 892-912.
- Ballou, D. & Podgursky, M. (2001). Personnel Policy in Charter Schools. Washington, DC: Thomas B. Fordham Foundation.
- Ballou, D & Podgursky, M (1993) "Teachers' Attitudes towards Merit Pay: Examining conventional wisdom," *Industrial and Labor Relations Review*, 47 (1), 0pp 50-61.
- Baugh, W.H. & Stone, J.A. (1982). Mobility and Wage Equilibrium in the Educator Labor Market. *Economics of Education Review*, 2(3): 253-274.
- Boal, W.M. (August 2005). "The Effect of Minimum Salaries on Employment of Teachers." Available at www.drake.edu/cbpa/econ/boal/teachers.pdf.
- Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2006). "The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools." Working Paper.
- Boyd, D., Grossman, P., Lankford, H., Loeb, S., and Wyckoff, J. (2006). How Changes in Entry Requirements Alter the Teacher Workforce and Affect Student Achievement. *Journal of Education Finance and Policy*, 1(2): 176-216.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the Short Careers of High-Achieving Teachers in Schools with Low-Performing Students. *American Economic Review*, 95(2): 166-171.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005a). The Draw of Home: How Teachers' Preferences for Proximity Disadvantage Urban Schools. *Journal of Policy Analysis and Management*, 24(1): 113-132.
- Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2003). "Analyzing Determinants of the Matching of Public School Teachers to Jobs: Estimating Compensating Differentials in Imperfect Labor Markets," National Bureau of Economic Research Working Paper 9878.
- California Commission on Teacher Credentialing (December 2003). *California Paraprofessional Teacher Training Program.* (Sacramento, CA: CCTC).

- California Commission on Teacher Credentialing (September 2001). Standards of Quality and Effectiveness for Professional Teacher Preparation Programs. (Sacramento, CA: CCTC)
- California Commission on Teacher Credentialing (2001). *Professional Growth Manual: For multiple subject, single subject, services, and specialist credentials.* (Sacramento, CA: CCTC)
- California Commission on Teacher Credentialing (July 1997). Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs. (Sacramento, CA: CCTC)
- California Commission on Teacher Credentialing (January 1997). *California Standards for the Teaching Profession*. (Sacramento, CA: CCTC).
- California State Teacher Retirement System (2005). *Member Handbook: Your Guide to CalSTRS Benefits*, 2005-2006. (Sacramento, CA: CalSTRS).
- The Center for the Future of Teaching and Learning (2006). *Teaching and California's Future:* California's Teaching Force 2006, Key Issues and Trends.
- Churchill, A., J. Berger, C. Brooks, A. Effrat, L. Griffin, M. Magouirk Colbert, K. McDermott, R. Sharick, & A. Sheehan (February 2003). *An Evaluation and Analysis of the 12-to-62 Plan for Recruiting and Retaining Teachers in Massachusetts*. (Amherst, MA.: Center for Education Policy, University of Massachusetts).
- Clotfelter, C.T., Ladd, H.F., and Vigdor, J.L. (2006). "How and Why Do Teacher Credentials Matter for Student Achievement," Paper Presented at the World Bank Conference on "The Contribution of Economics to the Challenges Faced by Education," Dijon, France, June 2006
- Clotfelter, C., E. Glennie, H. Ladd, and J. Vigdor (May 2006). "Would Higher Salaries Keep Teachers in High-Poverty Schools? Evidence from a Policy Intervention in North Carolina" (Durham, N.C.: Duke University).
- Corcoran, S.P., W.N. Evans and R.M. Schwab (2004). "Changing Labor-Market Opportunities For Women And The Quality Of Teachers, 1957-2000," *American Economic Review* v94(2,May), 230-235.
- CSR Research Consortium, (2000). *Class Size Reduction in California: The 1998-99 Evaluation Findings.* California Department of Education.
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. Education Policy Analysis Archives, 13(42).
- Decker, P.T., D.P. Mayer, and S. Glazerman, The Effects of Teach for America on Students: Findings from a National Evaluation, Mathematica Policy Research, June 9, 2004

- Dee, T. (2004). "Teachers, Race, and Student Achievement in a Randomized Experiment" *Review of Economics and Statistics*
- Dee, T.S. & B.J. Keys (2004). Does Merit Pay Reward Good Teachers? Evidence from a Randomized Experiment. *Journal of Policy Analysis and Management*, 23(3): 471-88.
- Dolton, P. and van der Klaauw, W. (1999). The Turnover of Teachers: A Competing Risk Explanation. *The Review of Economics and Statistics*, 81(3): 543-552.
- Eberts, R (forthcoming). "Teachers Unions and Student Performance: Help or Hindrance?" *The Future or Children*. Princeton-Brookings.
- Eberts, R., K. Hollenbeck, & J. Stone (2002). Teacher Performance Incentives and Student Outcomes. *The Journal of Human Resources*, *37*(4): 913-27.
- Eberts, R.W. & J.A. Stone (1987). Teacher Unions and the Productivity of Public Schools. *Industrial and Labor Relations*, 40(3): 354-363.
- Education Week (6 January 2005). Quality Counts 2005 No Small Change: Targeting Money Toward Student Performance, Vol. 24, Issue 17.
- Esch, C.E., C.M. Chang-Ross, R. Guha, D. Humphrey, P.M. Shields, J.D. Tiffany-Morales, M.E. Wechsler & K.R. Woodworth (2005). *The status of the teaching profession 2005*. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- Esch, C.E., C.M. Chang-Ross, R. Guha, J. Tiffany-Morales, & P.M. Shields (2004). *California's Teaching Force 2004: Key issues and trends*. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- Ferguson, R. F., & Ladd, H. F. (1996). How and Why Money Matters: An Analysis of Alabama Schools. In H. F. Ladd (Ed.), *Holding Schools Accountable: Performance-Based Reform in Education*. Washington, DC: Brookings Institution.
- Figlio, D.N. (2002). Can Public Schools Buy Better-Qualified Teachers? *Industrial and Labor Relations Review*, 55(4): 686-99.
- Fowler, R.C. (April 22, 2003). The Massachusetts Signing Bonus Program for New Teachers: A model of teacher preparation worth copying? *Education Policy Analysis Archives, 11*(13).
- Fuller, B., Loeb, S., Arshan, N., Chen, A. & Yi, S. (2006). How Principals Acquire and Deploy Resources—Motivating School Improvements. Part of Getting Down to Facts: A research project to inform solutions to California's education problems. IREPP: Stanford, CA.

- Furgeson, J., R.P. Strauss, and W.B. Vogt (2006). The Effects of Defined Benefit Pension Incentives and Working Conditions on Teacher Retirement Decisions. Education Finance and Policy, 1(3): 316-348.
- Goldhaber, D. & E. Anthony (2005). "Can Teacher Quality Be Effectively Assessed? National Board Certification as a Signal of Effective Teaching" (Washington, D.C.: The Urban Institute).
- Goldhaber, D. and Brewer. D.(2000). "Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement," Education Evaluation and Policy Analysis, 22 (2). Pp. 129-145.
- Guarino, C.M., Santibanez, L. and Daley, G.A. (2006). "Teacher Recruitment and Retention: A Review of the Recent Empirical Literature," Review of Educational Research 76(2) 173-208.
- Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (2004). "Why Public Schools Lose Teachers." *Journal of Human Resources*, 39(2), pp. 326–54.
- Harris, D. and Sass, T. (2006). "Teacher Training and Teacher Productivity," Working Paper
- Henke, R.R., Chen, X. and Geis, S. (2000). *Progress Through the Teacher Pipeline: 1992-93 College Graduates and Elementary/Secondary School Teaching as of 1997* (NCES 2000-152) Washington DC: U.S. Department of Education.
- Hill, H. (forthcoming). "Learning in the Teaching Workforce," *The Future of Children*. Princeton-Brookings.
- Hoxby, C.M. (1996). How Teachers' Unions Affect Education Production. *Quarterly Journal of Economics*, 111(3): 671-718.
- Humphrey, D.C., J.E. Koppich, & H.J. Hough (2005, March 3). Sharing the wealth: National Board Certified Teachers and the students who need them most. Educational *Policy Analysis Archives*, *13*(18).
- Ingersoll, R. (2003). Out-of-Field Teaching and the Limits of Teacher Policy. Working Paper.
- Jacob, B. and Lefgren, L. (2005). "Can Principals Identify Effective Teachers? A Comparison of Objective and Subjective Supervisor Ratings" Working Paper.
- Jacob, B.A. & Levitt, S.D. (2003). Rotten Apples: An Investigation of the Prevalence and Predictors of Teacher Cheating. *The Quarterly Journal of Economics*, 118(3): 843-877
- Jepsen, C. & Rivkin, S. (September 2002). "What is the Tradeoff Between Smaller Classes and Teacher Quality?" NBER Working Papers 9205, National Bureau of Economic Research.

- Kane, T.J., Rockoff, J.E., & Staiger, D.O. (2006). "What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City." Manuscript, March 2006.
- Kelley, C. (2000). Making Merit Pay Work: Why schoolwide bonuses and knowledge- and skill-based pay are good ways to compensate teachers. *School Spending: The Business of Education*.
- Kelley, C. & J. Protsik (1997). Risk and reward: Perspectives on the Implementation of Kentucky's school-based performance award program. *Educational Administration Quarterly*, *33*(4), 474-505.
- Kimball, S.M., H.G. Heneman III, and E.M. Kellor (2003). "Pensions for Teachers: Possible Changes and Implications" CPRE-UW Working Paper Series TC-03-09. Madison, WI: Consortium for Policy Research in Education.
- Kleiner, M.M. & D. Petree (1988). "Unionism and Licensing of Public School Teachers: Impacts on Wages and Output Quality." In R. Freeman and C. Ichniowski, eds. *When Public Workers Unionize*. Chicago, IL: University of Chicago Press: 305-322.
- Koppich, J. (2005). Addressing Teacher Quality Through Induction, Professional Compensation, and Evaluation: The Effects on Labor-Management Relations. *Educational Policy*, 19(1): 90-111
- Koppich, J.E. & R.C. Seder (28 September 2005). *Proposition 74 Analysis: Issues Relating to Teacher Tenure and Teacher Quality, Insights from Research and Best Practices.* (Los Angeles: USC California Policy Institute)
- Kurth, M. (1987). Teachers' Unions and Excellence in Education: An Analysis of the Decline in SAT Scores. *Journal of Labor Research*, 8(4): 351-367
- Laczko-Kerr, I., & Berliner, D.C.. (2002, September 6). The effectiveness of "Teach for America" and other under-certified teachers on student academic achievement: A case of harmful public policy," Education Policy Analysis Archives, 10(37).
- Ladd, H.F. (1999). The Dallas School Accountability and Incentive Program: An Evaluation of its Impacts on Student Outcomes. *Economics of Education Review*, *18*: 1-16.
- Lankford, H., Loeb, S., and Wyckoff, J. "Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis," Education Evaluation and Policy Analysis, 24(1) p. 37-62
- Lavy, V (forthcoming). "Using Performance-Based Pay to Improve the Quality of Teachers," *The Future of Children*. Princeton-Brookings
- Lavy, V. (2004). "Performance Pay and Teachers' Effort, Productivity and Grading Ethics" (Cambridge, MA: National Bureau of Economic Research).

- Levin, J., Mulhern, J. and Schunck, J. (2005). *Unintended Consequences: The Case for Reforming the Staffing Rules in Urban Teachers Union Contracts*. The New Teacher Project.
- Levin, J. & Quinn, M. (2003). "Missed Opportunities: How we keep high-quality teachers out of urban classrooms." The New Teacher Project: New York.
- Loeb, S. and Miller, L (2006). "A Federal Foray into Teacher Certification: Assessing the 'Highly Qualified Teacher Provision of NCLB," Working Paper.
- Loeb, S., Darling-Hammond, L. and Luczak, J. (2005) "How Teaching Conditions Predict Teacher Turnover in California Schools," *Peabody Journal of Education* 80(3).
- Loeb, S. and Reininger, M. (2004). *Public Policy and Teacher Labor Markets: What We Know and Why It Matters*. The Education Policy Center at Michigan State University.
- Maine State Department of Education (April 1970). 150 Years of Education in Maine, 1820-1970: Sesqui-centennial History of Maine's Educational System and the Growth and Development of the Maine State Department of Education
- McCutchen, D.; Abbott, R.D.; Greeen, L.B. (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. *Journal of Learning Disabilities*, 35, 69-86.
- Moe, T.M. (2006). Bottom-Up Structure: Collective Bargaining, Transfer Rights, and the Education of Disadvantaged Children. Working Paper.
- Moe, T.M. (2005). Teachers unions and school board politics. In Howell, W.G., ed. *Besieged:* School boards and the future of education politics. Washington, D.C.: Brookings Institution Press.
- Monk, D. H. (1994). Subject Area Preparation of Secondary Mathematics and Science Teachers and Student Achievement. *Economics of Education Review*, *13*(2). 125-145
- Monk, D. H., & King, J. A. (1994). "Multilevel teacher resource effects in pupil performance in secondary mathematics and science: The case of teacher subject matter preparation." In R. G. Ehrenberg (Ed.), *Choices and consequences: Contemporary policy issues in education*. Ithaca, NY: ILR Press: 29-58
- Murnane, R.J. and Olsen, R.J. (1990). The Effects of Salaries and Opportunity Costs on Length of Stay in Teaching: Evidence from North Carolina. *The Journal of Human Resources*, 25(1): 106-124.
- Murnane, R.J. and Olsen, R.J. (1989). The Effects of Salaries and Opportunity Costs on Duration in Teaching: Evidence from Michigan. *The Review of Economics and Statistics*, 71(2): 347-352.

- Raymond, M., Fletcher, S., & Luque, J. (2001, August). Teach For America: An evaluation of teacher differences and student outcomes in Houston, Texas. Stanford University. Center for Research on Education Outcomes at the Hoover Institute.
- Reed, D., Reuben, K., & Barbour, E. (2006). *Retention of New Teachers in California*. San Francisco: Public Policy Institute of California.
- Rockoff, J. (2004). "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data," American Economic Review 94 (2): 247-252.
- Saxe, G.B., Gearhart, M., & Nasir, N. (2001). Enhancing students' understanding of mathematics: A study of three contrasting approaches to professional support. *Journal of Mathematics Teacher Education*, 4, 55-79.
- Scafidi, B., Stinebrickner, T., & Sjoquist, D.L. (2003). "The Relationship Between School Characteristics and Teacher Mobility." Working paper, Georgia State University.
- South Carolina Education Oversight Committee (September 2004). *The South Carolina Teacher Loan Program: Annual Review*. Columbia, S.C
- State of California (July 1997). Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs: A description of professional induction for beginning teachers. (Sacramento, CA: State of California).
- Strunk, K. (2006). "Are Teachers' Union Contracts Really to Blame? A Closer Look at California Teachers' Union Contracts and Their Relationship with District Resource Distribution." Work in Progress.
- Vedder, R. (2003). Comparable Worth. Education Next, 3(3): 14-19.
- Walsh, K. and E. Snyder (December 2004). "Searching the Attic: How States are Responding to the Nation's Goal of Placing a Highly Qualified Teacher in Every Classroom" (Washington, DC: National Council on Teacher Quality).

APPENDIX 1: PRE-SERVICE TRAINING POLICIES

TABLE A-1. State Pre-service Requirements Pertaining to Subject Matter Coursework and Field Experiences

Experiences	Subjec	ct Matter	Coursework	Field Exp	erience and Stud	lent Teaching
State	(For mid	dle and hi	gh school teachers wise noted)	Is field experience required prior	Length of student teaching (full-	Are student teachers evaluated on the basis of a single
	Major	Minor	Minimum number of units	to student teaching?	time weeks or equivalent)	statewide set of requirements?
Alabama	Yes	No	Yes	Yes	Semester	Yes
Alaska	No	No	No	No	10 to 15	No
Arizona	No	No	No	No	8 Semester Hours ^a	Yes
Arkansas	No	No	Yes	Yes		Yes
California	No	No	Yes	Yes		Yes
Colorado	No	No	Yes	No	More than 15	
Connecticut	Yes a	No a	Yes	No	10 to 15	Yes
Delaware	Yes	No	Yes	No	Semester	No
District of Columbia	No ^a	No ^a	Yes ^a			
Florida	No ^a	No a	No ^a	Yes	10 to 15	Yes
Georgia	No	No	No	Yes	10 to 15	No
Hawaii						
Idaho	Yes	Yes	Yes	No		No
Illinois	Yes	Yes	No	Yes	Semester	Yes
Indiana	No	No	No	No	Less than 10 a	No
Iowa	No	Yes	Yes	Yes	10 to 15	
Kansas	Yes	No	No	Yes	10 to 15	No
Kentucky	Yes	No	Yes	Yes	10 to 15	No
Louisiana	Yes	Yes	Yes	Yes	Semester	Yes
Maine	No ^a	No a	No ^a	Yes a		
Maryland	Yes			Yes	More than 15	Yes
Massachusetts	No	No	No	Yes	Semester	Yes
Michigan	No	Yes	Yes	No	Less than 10	No
Minnesota	Yes	No	No	Yes	10 to 15	Yes
Mississippi	Yes a	No a	No ^a	No ^a	10 to 15 ^a	
Missouri	Yes	No	Yes	Yes	Less than 10	Yes
Montana	No	Yes	Yes	Yes	Semester	No
Nebraska	Yes		Yes	Yes	10 to 15	Yes
Nevada	Yes a,b	Yes a	Yes ^a		8 Semester Hours ^a	
New Hampshire	No ^a	No a	Yes ^a	Yes	Semester a	Yes
New Jersey	Yes a	No ^a	No ^a	Yes ^a	Semester a	
New Mexico	Yes	No	Yes	Yes	Semester	No
New York	Yes	No	Yes	Yes	Less than 10	No
North Carolina						
North Dakota	Yes a,c	No a	Yes a,c			
Ohio	Yes	No	No	Yes	Semester	No
Oklahoma	Yes	No	Yes	Yes	10 to 15	No
Oregon	No ^a	No a	No a	Yes	10 to 15	Yes

TABLE A-1. State Pre-service Requirements Pertaining to Subject Matter Coursework and Field

Experiences (cont.)

	Subject	ct Mattei	Coursework	Field Exp	erience and Stud	dent Teaching
State	(For mid	dle and hig	gh school teachers wise noted)	Is field experience required prior	Length of student teaching (full-	Are student teachers evaluated on the
	Major	Minor	Minimum number of units	to student teaching?	time weeks or equivalent)	basis of a single statewide set of requirements?
Pennsylvania	Yes	No	No	Yes	10 to 15	Yes
Rhode Island	No ^a	No a	Yes a	Yes	10 to 15	Yes
South Carolina	Yes	No	Yes	Yes	10 to 15	Yes
South Dakota	No ^a	No a	Yes ^a	Yes ^a	10 to 15 ^a	
Tennessee	Yes	Yes	Yes	Yes	10 to 15	Yes
Texas	No ^a	No a	Yes ^a	Yes ^a	10 to 15 ^a	
Utah				Yes	10 to 15	No
Vermont	Yes	No	Yes	Yes	10 to 15	Yes
Virginia	Yes a,b	No a	Yes a	Yes	Less than 10 a	No
Washington	No	No	No	Yes		Yes
West Virginia	No	No	No	Yes	10 to 15	Yes
Wisconsin	No	Yes	Yes	Yes	More than 15	No
Wyoming	Yes	Yes	No	Yes		No
TOTALS	26	10	28	37	N/A	22
No Data Available	3	5	4	5	10	12

a Indicates information culled from authors' review of State statutes, regulations, and websites. These are data points not included in NASDTEC's *Knowledgebase*. ^b High school teachers only

SOURCE: NASDTEC Knowledgebase, Table B7 "Specific State Subject Matter Requirements: Elementary, Middle Level/Junior High, Secondary", assessed 13 November 2006; NASDTEC *Knowledgebase*, Table B4 "Requirements for Clinical Experiences and Student Teaching Experience", assessed 13 November 2006; NASDTEC *Knowledgebase*, Table B5 "Evaluation of the Student Teacher", assessed 13 November 2006; and the following State sources: Arizona: http://www.ade.state.az.us/certification/requirements/TeachingCerts/; Connecticut: Regs., Conn. State Agencies §10-145d-446 and 10-145d-451, District of Columbia: CDCR §\$5-1600—5-1652; Florida: F.A.C. §6A-4.004; Indiana: 515 IAC 1-1-1 to 515 IAC 1-1-6; Maine: 20-A M.R.S. §13012 and CMR 05-071-114.2.3; Mississippi: CMSR 36-000-005; Nevada: N.A.C. 391.095, 391.111, 391.120, and 391.125—391.130; New Hampshire: N.H. Admin. Rules, Ed 610.05 and Ed 611.02; New Jersey: N.J.A.C. §§ 6A:9-10.1(d)2 and 6A:9-10.2(a); North Dakota: N.D. Admin. Code 67-11-03.1-02—67-11-03.1-04 and 67-11-03.2-02—67-11-03.2-08; Oregon: Or. Admin. R. 584-017-0130 and 584-017-0140; Rhode Island: www.ridoe.net/Certification_PD/certification/Certregs.htm; South Dakota: ARSD 24:15:06:01—24:15:06:41, 24:16:07:02 and 24:16:07:03; Texas: 19 TAC §228.30 and §230.191; and Virginia: 8 VAC 20-21-150, 20-21-160— 20-21-480 and 20-541-20.

^c North Dakota teachers of grades 7-8 in middle and junior high schools must satisfy minimum unit requirements while teachers of grades 7 and 8 in high school settings must hold a major in their subject. High school teachers must have a major in the subject taught. NOTE: "---" indicates that the State did not report any data to NASDTEC for this cell.

TABLE A-2. Means by which States Hold Teacher Preparation Programs Accountable for Teacher Quality, 2004-05

State	Publishes pass rates/ratings of institutions	Publishes report cards for institutions	Holds programs accountable for graduates' classroom performance	Identifies low- performing programs
Alabama	Yes	Yes	Yes	Yes
Alaska				
Arizona				
Arkansas	Yes			Yes
California	Yes			Yes
Colorado				Yes
Connecticut			Yes	Yes
Delaware				
District of Columbia				Yes
Florida			Yes	Yes
Georgia	Yes	Yes	105	Yes
Hawaii	100	100		Yes
Idaho				105
Illinois	Yes	Yes		Yes
Indiana	Yes	105	Yes	Yes
Iowa	108		108	Yes
Kansas	Yes	Yes		Yes
Kentucky	Yes	Yes	Yes	Yes
Louisiana	Yes	Yes	Yes	Yes
Maine Louisiana	ies	ies	ies	Yes
	37			
Maryland	Yes			Yes
Massachusetts	Yes			Yes
Michigan	Yes			***
Minnesota			**	Yes
Mississippi			Yes	Yes
Missouri	Yes		Yes	Yes
Montana				Yes
Nebraska		Yes		Yes
Nevada			Yes	Yes
New Hampshire	Yes			Yes
New Jersey				Yes
New Mexico				Yes
New York	Yes			Yes
North Carolina	Yes	Yes	Yes	Yes
North Dakota				Yes
Ohio	Yes	Yes	Yes	Yes
Oklahoma	Yes		Yes	Yes
Oregon				Yes
Pennsylvania				Yes
Rhode Island	Yes			Yes
South Carolina	Yes	Yes	Yes	Yes
South Dakota				Yes
Tennessee	Yes	Yes		Yes
Texas	Yes			Yes
Utah				
Vermont	Yes			Yes

TABLE A-2. Means by which States Hold Teacher Preparation Programs Accountable for Teacher Quality, 2004-05 (cont.)

State	Publishes pass rates/ratings of institutions	Publishes report cards for institutions	Holds programs accountable for graduates' classroom performance	Identifies low- performing programs
Virginia	Yes			Yes
Washington			Yes	Yes
West Virginia	Yes	Yes		Yes
Wisconsin				Yes
Wyoming				Yes
TOTALS	25	12	14	45

SOURCE: "Efforts to Improve Teacher Quality," Education Week, Vol. 24, Issue 17, Pages 92-95.

APPENDIX 2: LICENSURE AND CERTIFICATION POLICIES

State	Name	Autonomy a	Responsibilities Specifics
Alaska	Professional Teaching Practices Commission	Advisory	One of the Commission's duties is to review the regulations of the department as they relate to teacher certification and recommend necessary changes. The Commission's primary responsibility is enforcing the ethical and professional performance standards detailed in the Code of Ethics for the Education Profession.
Arkansas	Professional Education, Development, Licensure and Assessment Board	Advisory	The Board advises the State Board of Education with regards to the establishing standards for initial licensure of teachers in all subject fields and levels; establishing rules and regulations concerning program accreditation, including traditional and nontraditional routes to licensure; and reviewing, evaluating and recommending requirements of licensure renewal, including professional development.
California	California Commission on Teacher Credentialing	Autonomous	The Commission serves as a State standards board for educator preparation for the public schools of California, the licensing and credentialing of professional educators in the State, the enforcement of professional practices of educators, and the discipline of credential holders in the State of California.
Connecticut	Connecticut Advisory Council for Teacher Professional Standards	Advisory	The Council advises the State Board of Education, the Governor and the relevant joint standing committee of the General Assembly on issues concerning teacher preparation, teacher recruitment, teacher certification, teacher professional development, teacher assessment and evaluation and teacher professional discipline. The Council also reviews and comments upon all regulations and other standards concerning the approval of teacher preparation programs and teacher certification.
Delaware	Professional Standards Board	Autonomous	The Board is responsible for developing rules and regulations relating to educators' professional development, licensure requirements, certification requirements and paraprofessional qualifications and training.
Florida	Florida Education Standards Commission	Advisory	The Commission recommends standards to the State Board of Education on matters regarding the approval of preservice teacher education programs; certification and certification extension; improvement, and maintenance of competencies of educational personnel; measurement and evaluation of teaching competence; alternative ways to demonstrate qualifications for certification; critical State priorities for preservice and inservice teacher training; and evaluation of the progress of school community professional development systems.
Georgia	Georgia Professional Standards Commission	Autonomous	The Commission has the central responsibility for establishing a certification/licensure process that is streamlined, understandable, and flexible in order to remove barriers and to attract qualified individuals to the education profession.
Hawaii	Hawaii Teacher Standards Board	Autonomous	The Board has the responsibility for establishing the rules and regulations for initial teacher licensing and relicensing.

State	Name	Autonomy ^a	Responsibilities Specifics
Idaho	Professional Standards Commission	Advisory	The Commission may make recommendations to the State Board of Education regarding teacher preparation programs, including their evaluation and approval; teacher certification standards; and professional practices and competence of the teaching profession in the State.
Illinois	State Teacher Certification Board	Advisory	The Board advises the State Superintendent of Education about certification issues such as certificate suspension and revocation; certification criteria; and high quality teacher preparation programs and systems.
Indiana	Division of Professional Standards Advisory Board	Advisory	The Board advises the State Superintendent, the State Board of Education, the Department of Education, and the Division of Professional Standards on matters concerning teacher education, licensing, and professional development.
Iowa	Iowa Board of Educational Examiners	Autonomous	The Board has the authority to establish criteria for teaching licenses and endorsements, develop license renewal requirements, processing of new license and renewal applications, revocation or suspension of practitioner licenses, and reprimand or exonerate practitioner behavior.
Kansas	Professional Teaching and Administration Professional Standards Advisory Board	Advisory	The Board advises the State Board of Education on several matters including those related to the development of the rules and regulations for professional standards governing teacher and school administrator pretraining selection, teacher and school administrator preparation, admission to and continuance in the professions of teaching and school administration, including the requirements of continuing education for teachers and school administrators.
Kentucky	Education Professional Standards Board	Autonomous	The Board is charged with establishing standards of performance both for preparation programs and practitioners; accrediting educator preparation programs at colleges, universities, local school districts, and private contractors; selecting assessments for teachers and administrators; overseeing internship programs for new teachers and new principals; operating the Continuing Education Option for Rank change; administering Kentucky's incentive program for National Board for Professional Teaching Standards certification; and issuing, renewing, suspending and revoking Kentucky certificates for professional school personnel.
Louisiana	State Advisory Commission on Teacher Education and Certification	Advisory	The Commission makes recommendations to the State Board of Education on matters related to standards for the types and grades of certificates and State standards, national standards, or a combination thereof for the approval of pre-service and advanced certification programs after consultation with national and regional accreditation organizations.
Maryland	Professional Standards and Teacher Education Board	Semi- autonomous	The Board is responsible along with the State Board of Education for the consideration of rules and regulations for the certification of teachers and other professional personnel; requirements for preparation of teachers and other educational personnel; and the certification of social workers employed by a local school employer as professional personnel.

State	Name	Autonomy ^a	Responsibilities Specifics
Massachusetts	Educational Personnel Advisory Council	Advisory	The Council advises the Commissioner and the Board of Education on issues pertaining to all educational personnel with a current focus is on accountability and support for educator quality at every level, specifically in the areas of recruitment and retention, induction and mentoring, preparation program approval, and resources for educators.
Michigan	Michigan Professional Standards Commission for Teachers	Advisory	PSCT is charged with investigating and recommending standards of professional practice to improve the quality of the teaching profession; developing and recommending standards for the implementation of teacher internships, student teaching programs or other clinical teaching experiences for persons preparing to become teachers; reviewing and recommending changes related to the continuing education and recertification of teachers; and reviewing and recommending changes in policies related to the revocation of teaching certificates.
Minnesota	Minnesota Board of Teaching	Autonomous	Among the Board's duties are the development of a code of ethics, advising members of the profession, and adopting rules to license public school teachers and interns.
Mississippi	Commission on Teacher and Administrator Education, Certification and Licensure and Development	Advisory	The Commission makes recommendations to the State Board of Education regarding standards for the certification and licensure and continuing professional development of those who teach or perform tasks of an educational nature in the public schools of Mississippi.
Missouri	Missouri Advisory Council of Certification for Educators	Advisory	The Council makes recommendations to the State Board of Education on matters regarding the criteria and procedures whereby the quality and effectiveness of teacher and school administrator education programs within the State shall be evaluated; requirements for the certification of public school teachers and administrators; the standards for renewal of certificates for public school teachers and administrators using academic course work as well as other types of professional development; and the rules and regulations with respect to suspension and revocation of certificates of license to teach.
Montana	Certification Standards and Practices Advisory Council	Advisory	The Council makes recommendations to the Board of Public Education regarding certification issues, professional practices, and ethical conduct for Montana educators.
Nevada	Commission on Professional Standards in Education	Autonomous	The Commission's duties include adopting regulations concerning the qualifications for licensing; procedures for issuance and renewal of licenses; fields of specialization in teaching; endorsements; limitations; and, examinations for the initial licensing of teachers and other educational personnel.
New Hampshire	Professional Standards Board	Advisory	The Board advices the State Board of Education regarding professional growth, certification, and governance of the education profession.
New Mexico	Professional Practices and Standards Council	Advisory	The Council advises the secretary of education and the Department of Public Education on matters related to the approval of educator preparatory programs, licensure, professional development, and ethics of licensed school personnel.

State	Name	Autonomy a	Responsibilities Specifics
New York	State Professional Standards and Practices Board for Teaching	Advisory	The Board advises the Regents and the Commissioner on the components of a mentoring program for new teachers; criteria and training for conducting annual teacher performance reviews; certification and requirements to ensure that teachers are prepared to teach to the new student learning standards; models and criteria for professional development; a Code of Ethics for teachers; and ways to attract and retain certified teachers in high need schools.
North Carolina	North Carolina Professional Teaching Standards Commission	Advisory	The Commission is responsible for developing and recommending to the State Board of Education professional standards or revisions to professional standards for North Carolina teachers; areas of teacher certification that should be consolidated, redesigned, eliminated, or enhanced; current methods to assess teachers and teaching candidates; and a procedure for the assessment and recommendation of candidates for initial and continuing teacher certification.
North Dakota	Educational Standards and Practices Board	Autonomous	The Board is responsible for educator licensure, determining approval of teacher education programs for North Dakota's colleges and universities, professional staff development, and monitoring the profession through the educator's code of ethics and professional practices.
Ohio	Educator Standards Board	Advisory	The duties of the Board include: creating teacher and principal standards; creating standards for license renewal; collaborating with colleges and universities to align teacher preparation programs with these standards; monitoring compliance with teacher and principal standards.
Oklahoma	Oklahoma Commission for Teacher Preparation	Advisory	The powers and duties of the Commission include recommending to the Oklahoma State Board of Education rules for adoption in the areas of teacher licensure and certification, residency and professional development.
Oregon	Teacher Standards and Practices Commission	Autonomous	The Commission establishes rules for licensing, issues teaching licenses, and takes appropriate disciplinary action against teachers in violation of Oregon statutes or performance standards; adopts standards for teacher preparation programs offered by Oregon colleges and universities and evaluates programs to assure compliance with the standards; and sets the rules for Continuing Professional Development requirements for continuation of a teaching license.
Pennsylvania	Professional Standards and Practices Commission	Advisory	The Commission advises the State Board of Education on issues relating to certification, teacher preparation programs, disciplining, and teacher examinations.
Rhode Island	Certification Standards Board	Advisory	The Board advises the State Board of Education on standards for obtaining and maintaining a certificate, standards for revocation or suspension of a certificate and standards for reinStatement, adoption of rules and regulations to be consistent with law, and standards for teacher and administrator preparation programs in State and standards for evaluating these programs.

State	Name	Autonomy a	Responsibilities Specifics
South Dakota	South Dakota Advisory Council on Certification of Teachers	Advisory	The Council advises the State Board of Education on several matters including those related to the criteria and procedures for evaluating the quality and effectiveness of teacher education programs within the State; the requirements for the certification of teachers; and the standards for renewal of certificates for teachers using academic course work and other types of professional growth.
Tennessee	Advisory Council on Teacher Education and Certification	Advisory	The Council is responsible for providing recommendations regarding teacher education, licensure/certification, and professional development to the State Board of Education.
Texas	State Board for Educator Certification	Semi- autonomous	The Board governs the standards of the education profession; oversees all aspects of public school educator certification, continuing education, and standards of conduct. The State Board of Education can overturn any rule or regulation adopted by the Board.
Vermont	Vermont Standards Board for Professional Educators	Semi- autonomous	The Board is responsible for initial licensure and relicensure processes, alternative processes to educator licensure and program approval process for educator preparation programs. If any proposals adopted by the Board require an amendment to the State Board of Education Rules, it must be approved by the State Board of Education.
Virginia	Virginia Advisory Board on Teacher Education and Licensure	Advisory	The Board advises the State Board of Education on several matters including policies applicable to the qualifications, examination, licensure, and regulation of school personnel including revocation, suspension, denial, cancellation, reinStatement, and renewals of licensure, standards for approval of preparation programs, and reciprocal approval of preparation programs.
Washington	Washington Professional Educator Standards Board	Advisory, but autonomous in 2006	The Board currently advises the governor, State legislature, State board of education and superintendent of public instruction on policy issues related to educator preparation, certification, and ongoing professional growth. Beginning January 1, 2006, the Board have full rulemaking authority over these policy areas.
West Virginia	Commission on Professional Teaching Standards	Advisory	The Commission develops policies and recommends them to the Board of Education on matters including initial teacher preparation, licensure, continuing professional development.
Wisconsin	Professional Standards Council for Teachers	Advisory	The Council advises the State superintendent on matters including the standards for the licensure of teachers, including initial licensure and maintenance and renewal of licenses; standards for evaluating and approving teacher education programs, including continuing education programs; standards and procedures for revoking a teaching license; and alternative procedures for the preparation and licensure of teachers.

TABLE A-3. State Professional Standards Boards Responsible for Teacher Licensure Regulation Development, 2005 (cont.)

State	Name	Autonomy ^a	Responsibilities Specifics
Wyoming	Professional Teaching	Autonomous	Among the responsibilities of the Board are establishing rules and regulations for the
	Standards Board		certification of school administrators, teachers and other personnel to require either
			examination in specified subjects or the completion of courses in approved institutions, or
			both; issuing, reinstating, and renewing teaching, administrator, pupil personnel certificates,
			and other permits; and revoking or suspending certification by its own motion or upon the
			petition of any local board of trustees.

^a This autonomy rating pertains only to the boards' involvement in developing rules and regulations regarding the licensure and certification of teachers. In some States, the degree of autonomy possessed by the boards varies across their responsibilities.

NOTE: The District of Columbia and the following States do not have professional standards boards: Alabama, Arizona, Colorado, Maine, and South Carolina. The professional standards boards in the following States are not involved in the development of the rules and regulations for teacher licensure and certification: New Jersey (Professional Standards Board) and Utah (Professional Practices Advisory Commission).

SOURCE: Alaska: Alaska Stat. §14.20.380; Arkansas: A.R.S. §6-17-420; California: Cal. Educ. Code §§44210-44239; Connecticut: Conn. Gen. Stat. §10-144D; Delaware: 14 Del. C. §1205; Florida: Fla. Stat. §1012.79; Georgia: O.C.G.A. §20-2-200; Hawaii: HRS §302A-801; Idaho: Idaho Code §33-1252; Illinois: 105 ILCS 5/21-0.01; Indiana: Burns Ind. Code Ann. §20-1-1.4; Iowa: Iowa Code §272.2; Kansas: K.S.A. §72-8502; Kentucky: KRS §161.028; Louisiana: La.R.S. 17:33; Maryland: Md. Educ. Code Ann. §6-702; Massachusetts: Mass. Ann. Laws Ch. 15 §1G; Michigan: www.michigan.gov/documents/ITEM_L_62336_7.pdf; Minnesota: Minn. Stat. §122A.09; Mississippi: Miss. Code Ann. §37-3-2; Missouri: 168.018.1 R.S. Mo.; Montana: Mont. Code Anno. §20-4-133; Nebraska: R.R.S. Neb. §79-866; Nevada: Nev. Rev. Stat. Ann. §391.019; New Hampshire: RSA 186:60; New Jersey: N.J. Stat. §6A:9-15.3; New Mexico: 6.2.8.2—6.2.8.15 NMAC; New York: NY CLS Educ §316; North Carolina: N.C. Gen. Stat. §115C-295.2; North Dakota: N.D. Cent. Code §15.1-13-08; Ohio: ORC Ann. §3319.60—3319.63; Oklahoma: 70 Okl. St. §86-184 and 6-199; Oregon: ORS §342.350; Pennsylvania: 22 Pa. C.S. §233.103; Rhode Island: R.I. Gen. Laws §16-11.4-2; South Dakota: S.D. Codified Laws §13-43-25; Tennessee: Tenn. Code Ann. §49-5-110; Texas: Tex. Educ. Code §21.033; Utah: Utah Code Ann. §53A-6-301; Vermont: CVR 22-000-010 §\$5610--5611; Washington: ARCW §28A.410.210; West Virginia: W.Va. Code §18A-3B-1; Wisconsin: Wis. Stat. §15.377(8); Wyoming: Wyo. Stat. §21-2-802

TABLE A-4a. Assessment Requirements for Initial Teaching Certificate

			Assessment of	
State	Subject Matter	Basic Skills	Knowledge of Teaching	Teaching Performance
Alabama	Yes	Yes	Yes	Yes
Alaska	No	Yes ^a	No	No
Arizona	Yes	Yes	Yes	No
Arkansas	Yes	Yes	Yes	Yes
California	No ^a	Yes	No	Yes
Colorado	Yes	No	No	No
Connecticut	Yes	Yes	Yes	Yes
Delaware	Yes	Yes	No	No
District of Columbia	Yes	Yes	Yes ^a	
Florida	Yes	Yes	Yes	No
Georgia	Yes	Yes	No	No
Hawaii	Yes	Yes	Yes	
Idaho	Yes	No	Yes	Yes
Illinois	Yes	Yes	Yes	No
Indiana	Yes	Yes	No	Yes
Iowa	No	No ^a	No ^a	
Kansas	Yes	No	Yes	No
Kentucky	Yes	No	Yes	Yes
Louisiana	Yes	Yes	Yes	Yes
Maine	Yes ^a	Yes a	Yes ^a	
Maryland	Yes	Yes	Yes	Yes
Massachusetts	Yes	Yes	No	Yes
Michigan	Yes	Yes	No	Yes
Minnesota	Yes	Yes	Yes	No
Mississippi	Yes ^a	Yes a	Yes ^a	
Missouri	Yes	Yes	No	Yes
Montana	No	No	No	No
Nebraska	No	Yes	No	No
Nevada	Yes	Yes a	Yes ^a	
New Hampshire	Yes	Yes	No	No
New Jersey	Yes ^a	No ^a	Yes ^a	
New Mexico	Yes	Yes	Yes	Yes
New York	Yes	No	Yes	No
North Carolina	Yes a	No a	Yes ^a	NO
	No a,b	Yes ^a	No a,b	
North Dakota Ohio	Yes	No	Yes	Yes
Oklahoma	Yes ^a	Yes ^a	Yes a	
Oregon	Yes	Yes	 V	 V
Pennsylvania	Yes	Yes	Yes	Yes
Rhode Island	No	No	Yes	Yes
South Carolina	Yes	No No ^a	Yes	No
South Dakota	Yes a		Yes ^a	 NT -
Tennessee	Yes	Yes	Yes	No
Texas	Yes ^a	No ^a	Yes ^a	
Utah	Yes	No	No	Yes
Vermont	Yes	Yes	No	No
Virginia	Yes	Yes	Yes	No
Washington	Yes	Yes	No	Yes
West Virginia	Yes	Yes	Yes	Yes

TABLE A-4a. Assessment Requirements for Initial Teaching Certificate (cont.)

		Examinations				
State	Subject Matter Basic Skills		Knowledge of Teaching	Teaching Performance		
Wisconsin	Yes	Yes	No	No		
Wyoming	Yes ^a	No ^a	Yes ^a			
TOTALS	44	35	33	19		
No Data Available	0	0	0	14		

^a Indicates information culled from authors' review of State statutes, regulations, and websites. These are data points not included in NASDTEC's *Knowledgebase* or found to be erroneous.

^b Beginning July 1, 2006, applicants for an initial teacher license in North Dakota have been required to submit passing scores on the appropriate

NOTE: "---" indicates that the State did not report any data to NASDTEC for this cell.

SOURCE: NASDTEC *Knowledgebase* Table B1 "Board Requirements for the Initial Teaching Certificate (Yes or No for Each Requirement)", assessed 13 November 2006; and the following sources for these States: California: http://www.ctc.ca.gov/credentials/requirements.html; District of Columbia: CDCR 5-1001; Iowa: www.state.ia.us/boee; Maine: 20-A MRS §13032 and CMR 05-071-013.3; Mississippi: CMSR 36-000-005; Nevada: N.A.C. 391.036; New Jersey: N.J.A.C. 6A:9-8.1; North Carolina: www.ncpublicschools.org/licensure/pdfs/ISpraxis.pdf; North Dakota: www.nd.gov/espb/licensure; Oregon: Or. Admin. R. 584-017-0130 and 584-017-0140; Oklahoma: O.A.C. §712:10-7-1; South Dakota: ARSD 24:15:02:08; Texas: www.sbec.state.tx.us; and Wyoming: ptsb.state.wy.us/testing.asp.

^b Beginning July 1, 2006, applicants for an initial teacher license in North Dakota have been required to submit passing scores on the appropriate PRAXIS II test.

	Does your			Re	quired for	r the Second-Sta	age Certificati	on?		
State	State Offer a Second-Stage Certificate?	Internship	Specific Years of Experience	Specific # Semester Hours	State Test	State Performance Assessment	Local District Assessment	Fifth Year of Course Work	Master's Degree	Employmen
Alabama	Yes, Voluntary	No	No	No	No	No	No	Yes	Yes	No
Alaska	Yes, Required	N/A	N/A	N/A	Yes	Yes	No	No	No	No
Arizona	Yes, Required	N/A	Yes	N/A	Yes	Yes	No	No	No	Yes
Arkansas	Yes, Required	No	No	No	No	Yes	No	No	No	No
California ^a	Yes, Required	No	No	No	No	Yes ^b	No	Yes ^c	No	Yes
Colorado ^a	Yes, Required	No	Yes	No	No	No	Yes	No	No	No
Connecticut ^a	Yes, Required	No	Yes	Yes	No	Yes	No	No	No	No
Delaware	Yes, Required	No	Yes	No	No	Yes	No	No	No	Yes
Illinois	Yes, Required	Varies	Yes	Varies	Varies	No	No	No	Varies	Yes
Indiana	Yes, Required	Yes	Yes	No	No	Yes	No	No	No	Yes
Iowa	Yes, Required	No	Yes	No		Yes	Yes	No	No	No
Kansas	Yes, Required	No	No	No	No	Yes	No	No	No	Yes
Kentucky	Yes, Required	Yes	Yes	No	No	No	No	Yes	Yes	No
Maine ^a	Yes, Required	No	Yes	No	No	No	Yes	No	No	Yes
Maryland	Yes, Required		Yes	Yes					Yes	No
Massachusetts	Yes, Required	Varies	Yes	No	No	Varies	Yes	No	No	Yes
Michigan	Yes, Required	No	Yes	Yes	No	No	Yes	Yes	No	No
Mississippi ^a	Yes, Voluntary	No	No	No	No	No	No	No	Yes	No
Missouri	Yes, Required	N/A	Yes	N/A	N/A	N/A	Varies			
Montana	Yes, Voluntary	No	Yes	Yes	No	No	No	Varies	Yes	No
Nebraska	Yes, Voluntary	No	Yes	No	No	No	No	No	No	Yes
New Hampshire	Yes, Required	N/A	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Mexico	Yes, Required	Varies	Yes	N/A	N/A	Yes	Yes	N/A	N/A	Yes
New York	Yes, Required	No	Yes	No	No	No	No	No	Yes	No
North Carolina ^a	Yes, Required	No	Yes	No	No	No	No	No	No	No
North Dakota ^a	Yes, Voluntary	No	No	No	No	No	No	No	Yes	No
Ohio	Yes, Required	N/A	Yes	N/A	N/A	Yes	N/A	N/A	No	Yes
Oklahoma ^a	Yes, Required	No	No	No	No	Yes	No	No	No	No
Oregon	Yes, Required	No	Yes	Yes	No			Yes	Yes	
Pennsylvania	Yes, Required	Yes	Yes	Yes	No	Yes	Yes	No	No	No
Rhode Island	Yes, Required	N/A	Yes	Yes	No	No	Yes	No	No	Yes
South Carolina	Yes, Required	N/A	Yes	No	Yes	Yes	Yes	No	No	Yes
Tennessee	Yes, Required	No	Yes	No	No	No	Yes	No	No	No

TABLE A-4b. Assessment Requirements for Second Stage Teaching Certificate (cont.)

	Does your		Required for the Second-Stage Certification?							
State	State Offer a Second-Stage Certificate?	Internship	Specific Years of Experience	Specific # Semester Hours	State Test	State Performance Assessment	Local District Assessment	Fifth Year of Course Work	Master's Degree	Employment
Texas ^a	Yes, Voluntary	No	Yes	No	Yes	No	No	No	Yes	No
Utah	Yes, Voluntary	No	Yes	No	Yes	Yes	Yes	No	No	Yes
Vermont	Yes, Required	Varies	Yes	Varies	No	No	Yes	No	No	Yes
Virginia ^a	Yes, Voluntary	No	No	No	No	No	No	No	Yes	No
Washington	Yes, Required	No	No	Varies	No	No	No	No	No	Yes
West Virginia	Yes, Voluntary	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
Wisconsin	Yes, Required	No	Yes	Varies	No	No	Yes	No	Varies	No
TOTALS	40	8	30	12	6	17	15	7	12	17
No Data Available	0	1	0	0	2	2	2	2	1	2

^a Indicates information culled from authors' review of State statutes, regulations, and websites. These are data points not included in NASDTEC's Knowledgebase.

NOTE: According to NASDTEC, the following seven States do not offer a second-stage teacher certificate: Florida, Georgia, Idaho, Louisiana, Minnesota, Nevada, and Wyoming. The authors' research revealed four additional States: District of Columbia, Hawaii, New Jersey, and South Dakota. Also, "---" indicates that the State did not report any data to NASDTEC for this cell. SOURCE: NASDTEC *Knowledgebase*, Table D1 "State Requirements for Second-Stage Teacher Certification", assessed 13 November 2006; and the these sources for the following States: California: http://www.ctc.ca.gov/credentials/requirements.html; Colorado: 1 CCR 301-37 §\$2260.5-R-3.05 and 2260.5-R-13; Connecticut: Regs., Conn. State Agencies §10-145d-415; Maine: 20-A M.R.S. §13013 and CMR 05-071-115.5.2; Mississippi: CMSR 36-000-005; North Carolina: 16 N.C.A.C. 6C.0304; North Dakota: www.nd.gov/espb/licensure; Oklahoma: 70 Okl. St. §\$6-106.1, 6-182, 6-190, and 6-195 and O.A.C. §210:20-15-3; Texas: 19 T.A.C. §\$239.100—239.104; Virginia: 8 V.A.C. 20-21-50.

^b This is the performance assessment required at the completion of the Beginning Teacher Support and Assessment (BTSA) program.

^c Completing a fifth year of study at a CCTC-approved teacher preparation program is only available to those teachers who received their initial Preliminary Teaching Credential prior to 30 August 2004.

TABLE A-5. State Alternative Route to Certification Programs and Policies

		Meth	od of Assuring (Validity Span of	Is Certificate		
State	Alternative Route Program Name	Subject Area Content Test	Major in Certification Subject Area	Transcript Coursework Evaluation	Varies by Program	Certificate Earned through Alternative Route	Earned Renewable?
Alabama	Alternative	Yes				1	No
Alaska	No Official Program ^a						
Arizona	Emergency					1	Yes
Arkansas	Non-Traditional Licensure Program (NTLP)	Yes				2	No
California	Internship	Yes				2 a	Yes ^a
Colorado	Alternative program or Teacher in Residence (TIR)	Yes				Varies by Program	No
Connecticut	ARC I and ARC II	Yes				90 days ^a	No
Delaware	Alternative Routes to Certification	Yes				2	No
District of Columbia	Provisional ^a	Yes ^a				3 ^a	No ^a
Florida	Florida District Alternative Certification Program	Yes				3	No
Georgia	GA Teacher Alternative Preparation Program ^b	Yes				3	No
Hawaii	Emergency					1	No
Idaho	Teacher Trainee Letter of Approval				Yes	3	No
Illinois	Initial Alternative Teaching Certificate and Initial Teaching Certificate	Yes				4	No
Indiana	Emergency Permits	Yes				1	Yes
Iowa	Teacher Intern Licensure			Yes		1	No
Kansas	Restricted Teaching License		Yes			3	No
Kentucky	Names vary among seven optional routes				Yes	1 ^a	Yes ^a
Louisiana	Louisiana Alternative Certification Program	Yes				3	No
Maine	Conditional			Yes		1	Yes
Maryland	Residential Teacher Certification	Yes				1 a	Yes ^a
Massachusetts	Massachusetts Initiative for New Teachers (MINT)	Yes				1	No ^a
Michigan	Section 1233(B) Permit ^a		Yes a			1 a	Yes a

TABLE A-5. State Alternative Route to Certification Programs and Policies (cont.)

		Meth	od of Assuring	Content Master	y	Validity Span of	Is Certificate	
State	Alternative Route Program Name	Subject Area Content Test	Major in Certification Subject Area	Transcript Varies Coursework by Evaluation Program		Certificate Earned through Alternative Route	Earned Renewable?	
Minnesota	Licensure via Portfolio	Yes				5	Yes	
Mississippi	MAPQT or TMI or MAT or Interim One-Year	Yes				1, 3, or 5-years	No	
Missouri	Temporary Authorization Certificate	Yes				1 ^a	Yes ^a	
Montana	Northern Plains Transition to Teaching			Yes		3	No	
Nebraska	Transitional Teaching Certificate			Yes a		1 a	Yes a	
Nevada	Alternative	Yes				3	No	
New Hampshire	Alternate 3,4 or 5	Yes					Yes	
New Jersey	Provisional Teacher Program			Yes		2	Yes	
New Mexico	Alternative Licensure			Yes		3	Yes	
New York	Alternative Teacher Certification Program	Yes				3	No	
North Carolina	NC Teach (and others)		Yes					
North Dakota	Interim/Emergency		Yes			1		
Ohio	Conditional/Alternative Certification	Yes				2	No	
Oklahoma	Oklahoma Alternative Placement Program	Yes				3	Yes	
Oregon	Approved NCLB Alternative Route License	Yes				3	No	
Pennsylvania	Teacher Intern Certification Program		Yes			3	No	
Rhode Island	No Official Program							
South Carolina	Program of Alternative Certification for Educators (PACE)	Yes				3	No	
South Dakota	Various Programs	Yes				Varies by Program	No	
Tennessee	Alternative Licensure		Yes			1	Yes	
Texas	Alternative/Accelerated Programs	Yes				Varies by Program		
Utah	Alternative Routes to Licensure	Yes				3	No	
Vermont	Peer Review Program			Yes		3 ^a	Yes a	

TABLE A-5. State Alternative Route to Certification Programs and Policies (cont.)

		Meth	od of Assuring (Content Master	ry	Validity Span of	Is Certificate	
State	Alternative Route Program Name	Subject Area Content Test	Major in Certification Subject Area	Transcript Coursework Evaluation	Varies by Program	Certificate Earned through Alternative Route	Earned Renewable?	
Virginia	Career Switcher Alternative Route to Licensure Program	Yes				5 ^a	Yes a	
Washington	State partnership alternative route programs	Yes						
West Virginia	Alternative Certification	Yes				1	Yes	
Wisconsin	Experimental or Alternative Certification	Yes				Varies by Program	Varies by Program	
Wyoming	Alternative Certification			Yes		1	Yes	
TOTALS	49	31	6	8	2	N/A	20	
No Data Available	0	2	2	2	2	3	4	

^a Indicates information culled from authors' review of State statutes, regulations, and websites. These are data points not included in NASDTEC's Knowledgebase.

SOURCE: NASDTEC *Knowledgebase*, Table A5 "DRAFT ** Alternative Routes to Certification – State Requirements and Policies", assessed 14 November 2006; and these sources for the following States: Alaska: www.eed.state.ak.us/TeacherCertification/Certification.html; Connecticut: www.ctdhe.org/ARC/pdfs/2007/2007ARCCatalog.pdf; District of Columbia: www.k12.dc.us/dcsea/certification/licensing/initialteacher.html; Kentucky: www.kyepsb.net/certification/certaltroutes.asp; Maryland:

www.marylandpublicschools.org/MSDE/divisions/certification_branch/certification_inf/types/overview; Massachusetts: www.doemass.org/mint; Michigan:

www.michigan.gov/documents/facts2_73476_7.doc; Missouri: dese.mo.gov/forms/divteachqual/MO500-2327.pdf; Nebraska: Nebraska Admin. Code Title 92, Ch. 21 §§005.26—005.27; Rhode Island: www.ridoe.net/Certification_PD/Default.htm; Vermont: education.vermont.gov/new/html/maincert.html; and Virginia: www.pen.k12.va.us/VDOE/newvdoe/licroute.htm.

^b Georgia operates two other alternative route programs, both of which require the participants to demonstrate subject matter competency by passing an examination. NOTE: "---" indicates that the State did not submit data for that cell to NASDTEC.

STATE (Version)	Fully State Certified (with appropriate		er Competency a HOUSSE rubric if available, or one of the following)	Major
(version)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
Alabama (June 2003)	Eligible: Class B (baccalaureate) Class A (master's) Class AA (6 th year or education specialist) Alternative Baccalaureate Special Alternative Preliminary Ineligible: Emergency	 New or Not New: 12 semester hours of credit in each of four disciplines: English language arts, mathematics, science and social studies Class A or AA certificate in Early Childhood Education, Elementary Education, or an area of Special Education that includes elementary grades 5 years elementary teaching experience plus relevant National Board Certification Not New: Class A or AA certificate in an area closely related to elementary education and has 10 or more years of full-time elementary teaching experience 	 New or Not New: Major, major equivalent, or graduate degree in core subject area taught Class A or AA certificate endorsed in every subject she/he teaches 5 years teaching experience in discipline plus relevant National Board Certification There are also things for certification in ELA, general science, and general social studies Not New: Class A or AA certificate in an area closely related to elementary education and has 10 or more years of full-time teaching experience at the secondary level 	32 semester hours with 19 semester hours of upper division courses
Alaska	Eligible:	Not New: • Hold National Board Certification in Early Childhood Generalist	 New or Not New: Major, major equivalent, or graduate degree in core subject area taught Advanced certification in content area Not New Middle School Self-contained: Hold National Board Certification as an Early Adolescent Generalist Not New Middle or Secondary Core Academic Subject: Hold National Board Certification in the core subject area taught 	30 semester hours
Arizona (February 2005)	Eligible: Standard Provisional Intern Ineligible: Emergency	Not New: Hold National Board Certification in the core subject area taught	 New or Not New: Major, major equivalent or advanced degree in core subject area taught Not New: Hold National Board Certification in the core subject area taught (generalist certifications are not acceptable) 	24 credit hours

STATE	Fully State Certified		er Competency	Major
(Version)	(with appropriate		a HOUSSE rubric if available, or one of the following)	equivalent
	endorsement)	Elementary Teachers	Middle and High School Teachers	_
Arkansas (May 2005)	Eligible: b Standard Initial Non-Traditional License Program Provisional Ineligible: Emergency	Not applicable	 New or Not New: Major, major equivalent or advanced degree in core subject area taught Hold National Board Certification in the core subject area taught 	24 credit hours
California (March 2004)	Eligible: Level II: Professional Clear Credential Level I: Preliminary Credential Internship Credential Ineligible: Provisional Internship Permit Short-term Staff Permit Waivers Emergency	Not applicable	 New or Not New: Major, major equivalent or advanced degree in core subject area taught Completed a CCTC approved subject matter teacher preparation program for the core subject area taught Not New: Hold National Board Certification in core subject area taught 	32 semester units
Colorado (February 2005)	Eligible: Professional License Provisional License Alternative Teaching License Ineligible: Authorizations – Adjunct Instructor, Intern, Emergency, etc.	 New or Not New: Hold an elementary education endorsement 24 semester hours of credit in elementary education through college/university coursework, professional development activities, and relevant travel 	New or Not New:: Hold a secondary education endorsement in core subject area taught 24 semester hours of credit accumulated through college/university coursework, professional development activities, and relevant travel	24 semester hours or equivalent

STATE	Fully State Certified	CLB's Highly Qualified Teacher Definition,	er Competency	<u> </u>
(Version)	(with appropriate		a HOUSSE rubric if available, or one of the following)	Major
(Version)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
Connecticut	Eligible:	Not New:	New or Not New:	30 semester
(October 2003)	 Level I, II, III Certificates 90-day Temporary Certificate Durational Shortage Area Permit Temporary Minor Assignment Permit Limited Extended Authorization for Early Childhood Permit Ineligible: Non-renewable Interim Certificates Interim Certificates Long-term Substitute Permit 	HOUSSE: Receive at least a satisfactory rating on the subject matter knowledge assessment component of a State-approved district-developed evaluation system	 Major, major equivalent or advanced degree in the core subject area taught Hold advanced certification or credentials in the core subject area taught Not New: HOUSSE: Receive at least a satisfactory rating on the subject matter knowledge assessment component of a State-approved district-developed evaluation system 	hours
Delaware	Eligible: Standard Certificate Ineligible: Emergency Certificate	 New or Not New: If teach only one subject, major, major equivalent or advanced degree in the core subject area taught Hold National Board Certification in core subject area taught 	New or Not New: Major, major equivalent or advanced degree in the core subject area taught Hold National Board Certification in the core subject area taught	30 credit hours
District of Columbia (May 2003)	Eligible: OS Provisional AR Provisional Standard Professional Ineligible: Emergency Certificate	 Not New: 5 years of teaching in core subject area and a National Board Certification in core subject area or broad category appropriate to teaching position HOUSSE: under development 	 New or Not New: Major, major equivalent or advanced degree in the core subject area taught Hold a Standard or Professional License as a result of completing a State approved program in the core subject area taught Not New: 5 years of teaching in core subject area and a National Board Certification in core subject area taught 	33 semester hours with at least 18 upper division hours

STATE	Fully State Certified		er Competency	Major
(Version)	(with appropriate		a a HOUSSE rubric if available, or one of the following)	equivalent
	endorsement)	Elementary Teachers	Middle and High School Teachers	_
Florida ^c (September 2004)	Eligible: Professional Temporary Ineligible: Non-certified	New: Hold a valid Professional Certificate for appropriate grade level(s) assigned	 New or Not New: Hold a valid Temporary or Professional Certificate for appropriate subject(s) and grade level(s) assigned 	Varies by subject
Georgia (September 2005)	Eligible: Clear Renewable Performance-based Life Int'l Exchange Intern Non-renewable (provisional) Permits Ineligible: Waivers	New: Hold a major or major equivalent in early childhood education AND pass the State teacher certification examination	New: Hold a major, major equivalent, or graduate degree in the subject(s) they teach AND pass the State teacher certification examination	High school: 21 semester hours at upper division or graduate level Middle school: 15 semester hours
Hawaii	Eligible: Initial Basic Initial Professional Basic Professional Ineligible: Emergency Hire	 Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certification in the core subject area taught 	 Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certification in the core subject area taught 	Unable to determine
Idaho (August 2005)	Eligible: Interim Secondary Elementary Exceptional Child Early Childhood Early Childhood Special Education Blended Ineligible: Unable to determine	Not New: Hold an eligible elementary certificate with, if appropriate, an endorsement in the core subject area taught (requires a minimum of 20 semester hours)	 New or Not New: Hold a major, major equivalent or advanced degree in the core subject area taught Hold an advanced certificate (i.e., NBPTS or ABCTE) in the core subject area taught Not New: Hold an eligible certificate with an endorsement in the core subject area taught (requires a minimum of 20 semester hours) 	Elementary: 44 semester hours Secondary: 30 semester hours

STATE (Version)	Fully State Certified (with appropriate		r Competency a HOUSSE rubric if available, or one of the following)	Major
(version)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
Illinois (June 2003)	Eligible: Elementary (Types 3 and 4) Secondary (Type 9) Special K-12 (Type 10) Provisional (based on out-of-State certification) Short-Term Emergency in Special Education Ineligible: All waivers	 New: Hold a Type 3 certificate with an endorsement for self-contained general education and a National Board Middle Childhood Generalist Certificate (K-6) Hold a Type 4 certificate with an endorsement for self-contained general education and a National Board Early Childhood Generalist Certificate (K-3) Not New: Hold a major, major equivalent or advanced degree in the core subject area taught Hold a National Board Certificate in the core subject area taught HOUSSE: Meet minimum endorsement requirements for the core subject area (18 or 24 semester hours) and have five years of teaching in that subject 	 New: Hold a Type 9 certificate with a major, major equivalent, graduate degree or National Board Certificate in the core subject area taught Hold a Type 3 certificate with a graduate degree or National Board Certificate in the core subject area taught Not New: Hold a major, major equivalent or advanced degree in the core subject area taught Hold a National Board Certificate in the core subject area taught HOUSSE: Meet minimum endorsement requirements for the core subject area (18 or 24 semester hours) and have five years of teaching in that subject 	32 semester hours
Indiana (2004)	Eligible: Bulletin 192 Bulletin 400 Rule 46-47 Reciprocal Initial Practitioner Limited or Emergency d Ineligible: Limited or Emergency d	 New: Hold a major, major equivalent or advanced degree AND pass a rigorous State test in the core subject taught Not New: Hold a Bulletin 192 or 400 license and a Master's degree Hold a Rule 46-47 Elementary Education license or a Reciprocal License for Elementary Education 	 New: Hold a major, major equivalent or advanced degree AND pass a rigorous State test in the core subject taught Hold a Limited or Emergency Permit for less than 4 years in core subject area taught and are taking required coursework d Hold a National Board Certificate in the core subject area taught Not New: Hold a Bulletin 192 or 400 license in the core subject area taught and a Master's degree Hold a Rule 46-47 or a Reciprocal License for the core subject area taught Hold a National Board Certificate in the core subject area taught 	24 credit hours

STATE (Version)	Fully State Certified (with appropriate	Subject matter Competency (Must pass State-approved test, accumulate points via a HOUSSE rubric if available, or one of the following)		
	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
Iowa	Eligible: Initial	New: Hold a major, major equivalent or advanced	New: Hold a major, major equivalent or	24 semester hours
(July 2004)	StandardMaster EducatorIneligible:	degree AND pass a rigorous State test in the core subject taught Not New:	advanced degree AND pass a rigorous State test in the core subject taught Not New:	nours
	Class ASubstituteExchange	 Satisfactory rating by trained and State licensed evaluators on the Iowa Teaching Standards (#2 is subject matter knowledge) 	 Satisfactory rating by trained and State licensed evaluators on the Iowa Teaching Standards (#2 is subject matter knowledge) 	
Kansas (July 2005)	Eligible: Accomplished Professional Conditional Exchange Restricted Ineligible: Emergency Substitute Foreign Exchange	 New and Not New: Hold an endorsement in the core subject area taught and a major, major equivalent or advanced degree Not New: Hold a National Board Certificate in the core subject area taught 	 New and Not New: Hold an endorsement in the core subject area taught and a major, major equivalent or advanced degree Not New: Hold a National Board Certificate in the core subject area(s) taught 	30 credit hours
Kentucky (November 2003)	Eligible: Rank I, II, III Provisional Internship Provisional Temporary Probationary Ineligible: Emergency Conditional Temporary	 Not New: Successfully complete the Kentucky Teacher Induction Program at the elementary level Hold an advanced (i.e., Rank II or III) certificate in elementary education or the core subject area(s) taught Hold a National Board Certificate in early or middle childhood 	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area(s) taught Not New: Hold an advanced (i.e., Rank II or III) certificate in the core subject area(s) taught Hold a National Board Certificate in middle childhood, early adolescence, or adolescence and young adulthood 	Not defined, but EPSB identifies preparation in a standards- based format that is equivalent to a major

STATE (Version)	Fully State Certified (with appropriate endorsement)	Subject matter Competency (Must pass State-approved test, accumulate points via a HOUSSE rubric if available, or one of the following) Elementary Teachers Middle and High School Teachers		Major equivalent
Louisiana (September 2003)	Eligible: Level 1, 2, 3 Professional Type A, B, C Out-of-State Practitioner Ineligible: Temporary Authority to Teach Out of Field Authorization to Teach Temporary Employment Permit	 Not New: Hold a National Board Certificate in early or middle childhood or in the basic content area(s) taught (e.g. early language arts, early mathematics) Completed at least 12 semester hours of credit in each of four core disciplines (English/language arts, math, science, and social studies) 	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area(s) taught Not New: Hold a National Board Certificate in the core subject area(s) taught 	31 credit hours
Maine (April 2004)	Eligible: Provisional Professional Master Ineligible: Conditional Targeted Need Transitional Waiver	Not applicable	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught 	24 semester hours
Maryland (March 2005)	Eligible: Resident Teacher Standard Professional I & II Advanced Professional Ineligible: Conditional	Not New: Hold an Advanced Professional Certificate Hold a National Board Certificate in early or middle childhood generalist or the core subject area(s) taught	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold an Advanced Professional Certificate Hold a National Board Certificate in the core subject area taught 	30 semester credit hours with 50% of the coursework at the upper division level

STATE (Version)	Fully State Certified (with appropriate endorsement)	Subject matter Competency (Must pass State-approved test, accumulate points via a HOUSSE rubric if available, or one of the following)		Major
		Massachusetts (March 2003)	Eligible: Preliminary Initial Professional Ineligible: Temporary Waivers	Not applicable
Michigan (April 2003)	Eligible: Permanent Continuing 18 or 30-hour Provisional Professional Education Ineligible: Full-year permit Emergency permit	 Not New: Hold a major, major equivalent, or graduate degree in any subject area directly related to elementary education Hold National Board Certification or credentialing in any subject(s) at an appropriate developmental level HOUSSE: Have at least 3 years of elementary level teaching and completed a minimum of 18 semester credit hours in a planned standards-based SBE-approved endorsement program or a master's or higher degree in an area appropriate for elementary education HOUSSE: Have at least 3 years of teaching experience and, before the end of the 2005-06 school year, have completed an approved individual professional development plan consisting of at least 90 contact hours or 6 semester hours of coursework HOUSSE: Pass a State-approved performance assessment that may include classroom observation, videotaped lessons, and/or an individual portfolio 	 Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold National Board Certification or credentialing in the core subject area taught at an appropriate developmental level HOUSSE: Have at least 3 years of secondary level teaching and completed a minimum of 18 semester credit hours in a planned standards-based SBE-approved endorsement program or a master's or higher degree in an area appropriate for secondary education HOUSSE: Have at least 3 years of teaching experience and, before the end of the 2005-06 school year, have completed an approved individual professional development plan consisting of at least 90 contact hours or 6 semester hours of coursework HOUSSE: Pass a State-approved performance assessment that may include classroom observation, videotaped lessons, and/or an individual portfolio 	30 semester hours

STATE (Version)	Fully State Certified (with appropriate	Subject matter Competency (Must pass State-approved test, accumulate points via a HOUSSE rubric if available, or one of the following)			
(Version)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
Minnesota (August 2005)	Eligible: Professional Continuing Ineligible: Permissions	New or Not New: Hold a major, major equivalent, or graduate degree in the subject area taught Hold a major, major equivalent, or graduate degree in the subject area taught	New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught	Unable to determine	
Mississippi (May 2004)	Eligible: Approved Program/Teacher Education Route Alternate Route Ineligible: Local District Request	Not New: Hold at least a Class A Educator License (i.e., bachelor's degree) and is assigned to a grade covered by the license	 Not New: Hold at least a Class A Educator License (i.e., bachelor's degree) with an endorsement in the core subject area taught Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught If Middle School Teacher, obtaining continuing education units through the Mississippi Department of Middle School Professional Development Institute 	21 credit hours	
Missouri (~August 2003)	Eligible: Life Professional Class I & II Continuous Professional Provisional Ineligible: Temporary Substitute	Not New: HOUSSE: Have three consecutive years of teaching the level and content and three consecutive successful performance evaluations	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold advanced certificate in the core subject area taught Not New: HOUSSE: Have three consecutive years of teaching the level and content and three consecutive successful performance evaluations 	Varies by subject and grade level Most are 30 semester hours	
Montana	Eligible: Standard Professional Alternative Ineligible: Unable to determine	New or Not New: HOUSSE: Hold a Montana teacher's license and endorsement for the core subject area taught	New or Not New: HOUSSE: Hold a Montana teacher's license and endorsement for the core subject area taught	30 semester credits	

STATE (Version)	Fully State Certified (with appropriate	Subject matte (Must pass State-approved test, accumulate points via	er Competency a HOUSSE rubric if available, or one of the following)	Major	
(, 4151611)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
Nebraska (July 2003)	Eligible: Provisional Reentry Transitional Initial Standard Professional Ineligible: Substitute Provisional Commitment	 Not New: HOUSSE: Hold an Initial or Standard certificate with the appropriate endorsement for the grade level/subject taught (i.e., at least 30 credit hours of content) HOUSSE: Hold a National Board Certificate in the specific discipline or in a broad category appropriate to the specific discipline 	 Not New: HOUSSE: Hold an Initial or Standard certificate with the appropriate endorsement for the grade level/subject taught (i.e., at least 30 credit hours of content) HOUSSE: Hold a National Board Certificate in the specific discipline or in a broad category appropriate to the specific discipline 	30 credit hours	
Nevada (April 2005)	Eligible: Initial Professional Ineligible: Substitute	Not New: HOUSSE: Have three years of teaching experience in core subject area taught in appropriate grade span AND either: 1) hold a graduate degree, professional license, or National Board Certification; or 2) 150 contact hours of professional development	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Not New: Hold a National Board Certificate in the core subject area taught Hold a Nevada-issued professional license in the core subject area taught HOUSSE: see elementary 	Comprehensive major: 36 semester hours Single-subject major: 30 semester hours	
New Hampshire (October 2005)	Eligible: Intern Teacher Master Ineligible: Substitute	 New or Not New: Hold a graduate degree in the core subject area taught Hold a National Board Certificate or American Board Certificate as a generalist or in the core subject area taught Hold a NH-issued Master Teacher Certificate in the core subject area taught Not New: HOUSSE: K-6 plan to be released in December 2005 	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate (non-Generalist) or American Board Certificate in the core subject area taught Hold a NH-issued Master Teacher Certificate in the core subject area taught Not New: HOUSSE: Self assessment demonstrates competence HOUSSE: Making progress on Highly Qualified Teacher Plan HOUSSE: Completed Highly Qualified Teacher Plan 	30 credits	

STATE	Fully State Certified		r Competency	Major
(Version)	(with appropriate	(Must pass State-approved test, accumulate points via	equivalent	
	endorsement)	Elementary Teachers	Middle and High School Teachers	-
New Jersey (2005-06)	Eligible: Standard Certificate of Eligibility with Advanced Standing Certificate of Eligibility Ineligible: Emergency	Not applicable	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught 	30 credits with at least 12 credits at the upper division level
New Mexico (August 2005)	Eligible: Level I, II, III-A Ineligible: Waivers Emergency Temporary	 New or Not New: Hold a National Board Certificate in the core subject area taught New: Participating in an alternative route to licensure that provides high-quality professional development, a program of intensive supervision, a Internship License, and demonstrates satisfactory progress toward full alternative licensure Not New: HOUSSE: Have five complete school years of teaching experience, have successful annual evaluations for the prior two school years, demonstrate competence in the instructional strand of the Statewide teacher competencies and indicators for the level of licensure held to a local panel of two teachers, and either 1) complete 24 credit hours across the elementary education core subjects of language arts, social studies, mathematics, and science, with at least six credit hours in each area; or 2) complete at least 12 credit hours in the subject area being evaluated 	 New or Not New:: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught New: Participating in an alternative route to licensure that provides high-quality professional development, a program of intensive supervision, a Internship License, and demonstrates satisfactory progress toward full alternative licensure Not New: HOUSSE: Have five complete school years of teaching experience, have successful annual evaluations for the prior two school years, demonstrate competence in the instructional strand of the Statewide teacher competencies and indicators for the level of licensure held to a local panel of two teachers, and either 1) complete 18 credit hours in each core subject area taught; or 2) complete 12-24 credit hours (varies on number of core subject areas taught) 	24-36 semester hours, varies by subject

STATE (Version)	Fully State Certified (with appropriate		r Competency a HOUSSE rubric if available, or one of the following)	Major	
(Version)	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
New York (January 2004)	Eligible: Licenses issued by NYC CSD or Buffalo CSD Initial Permanent Professional Ineligible: Modified temporary Internship	Not New: • Hold a National Board Certificate in elementary education	 New or Not New:: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught Hold a permanent or professional certificate in the core subject area taught 	30 credit hours	
North Carolina (April 2004 – currently being revised)	Eligible: Initial/Standard Professional I Continuing/ Standard Professional II Ineligible: Emergency Provisional Temporary	Not New: HOUSSE: Meet all content standards (i.e., meets at least 80% of the indicators for each standard) and receive a satisfactory rating on the LEA validated performance evaluation	 New or Not New:: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught Hold a Master's Level or above license in the core subject area taught Housse: Meet all content standards (i.e., meets at least 80% of the indicators for each standard) and receive a satisfactory rating on the LEA validated performance evaluation 	24 semester hours	
North Dakota ^f (May 2004)	Eligible: Initial Regular Ineligible: Interim Re-entry Probationary Waiver	Not New: HOUSSE: Elementary teachers already licensed in North Dakota prior to July 1, 2006, are considered highly qualified on the basis of holding a major or an endorsement in elementary education or a major in early childhood education which qualifies them to teach grades 1-3.	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught A minor or minor equivalency in the core subject area taught with successful completion of a content test 	Composite major: 42 semester hours Single-subject major: 32 semester hours Middle School: 16 semester hours	

STATE	Fully State Certified			
(Version)	(with appropriate		a HOUSSE rubric if available, or one of the following)	Major equivalent
	endorsement)	Elementary Teachers	Middle and High School Teachers	oqui, mono
Ohio (Fall 2004)	Eligible: Provisional Professional Permanent Ineligible: Temporary Conditional Substitute	 New or Not New: Hold a Professional or Permanent Certificate in the core subject area taught Hold a National Board Certificate in the core subject area taught Complete 90 clock hours distributed over the following areas: grade appropriate academic subject matter knowledge, teaching skills and Ohio academic content standards 	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a Professional or Permanent Certificate in the core subject area taught Hold a National Board Certificate in the core subject area taught Complete 90 clock hours distributed over the following areas: grade appropriate academic subject matter knowledge, teaching skills and Ohio academic content standards 	30 semester hours/45 quarter hours
Oklahoma (June 2004)	Eligible: Alternative Provisional Standard Professional Ineligible: Adjunct Teacher Waiver Emergency	Not applicable	New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught	24 semester hours
Oregon (July 2003)	Eligible: Basic Standard Initial Continuing Five-year Alternative Route Ineligible: Limited Teaching Associate Substitute Transitional	 New: Hold a basic, initial, or alternative route license with the appropriate authorization Not New: Hold a basic, standard, initial, continuing or five-year elementary license with the appropriate authorization HOUSSE: Complete an approved elementary teacher education program or equivalent coursework HOUSSE: Hold a National Board Certificate in early childhood HOUSSE: Hold a Standard Elementary License HOUSSE: Hold a Master's degree 	 New or Not New: Hold a basic, initial, continuing or alternative route license with the appropriate endorsement Not New: HOUSSE: Have 3 years or more teaching experience in subject matter area and 24 quarter hours/16 semester hours in subject matter area 	30 semester hours/45 quarter hours

STATE (Version)	Fully State Certified (with appropriate	Subject matte (Must pass State-approved test, accumulate points via	Major	
. ,	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
Pennsylvania (September 2004)	Eligible: Level I or II Instructional Ineligible: Emergency	 New or Not New: Hold a major or major equivalent in the core subject area taught AND have passed a content area test 	 New or Not New: Hold a major or major equivalent in the core subject area taught AND have passed a content area test Hold a National Board Certificate in the core subject area taught 	Unable to determine
Rhode Island (December 2003)	Eligible: Provisional Professional Life Professional Ineligible: Emergency	Not applicable	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught NOTE: There is no testing option for secondary teachers. 	30 credits
South Carolina (March 2005)	Critical Mand anna subject area tought		 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Not New: Hold a National Board Certificate in the core subject area taught HOUSSE: Successful performance on the Content Area Evaluation component of the Statewide performance evaluation system – Assisting, Developing, and Evaluating Professional Teaching (ADEPT) 	30 semester hours with 21 at upper division or 24 semester hours at graduate level

STATE (Version)	Fully State Certified (with appropriate	Subject matter Competency (Must pass State-approved test, accumulate points via a HOUSSE rubric if available, or one of the following)			
	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
South Dakota (May 2003)	Eligible: 1 or 5 Year 5 Year Limited 2 Year Non-renewable Advanced Professional 1 Year Alternative 2 Year Non-renewable Limited 2 Year Limited Alternative Ineligible: Emergency	 New or Not New: Hold a valid certificate with appropriate authorization (requires at least a minor) AND pass a content test Not New: HOUSSE: Hold a valid certificate with appropriate authorization and have either: at least three years of experience, 2) a graduate degree, or 3) National Board Certification 	 New or Not New: Hold a valid certificate with appropriate authorization (requires at least a minor) AND pass a content test Not New: HOUSSE: Hold a valid certificate with appropriate authorization and have either: at least three years of experience, 2) a graduate degree, or 3) a National Board Certification 	South Dakota has chosen to equate a minor to subject matter competency	
Tennessee (August 2005)	Eligible: Apprentice Professional Out-of-State Alternative A, C, and E Ineligible: Permits Interim Waivers	Not New: HOUSSE: Have three years of experience and the teacher's effect on student achievement (identified through TVAAS) must be not detectably different from the mean or above the mean HOUSSE: At least a satisfactory rating on performance evaluation aligned with the Framework for Evaluation and Professional Growth	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Not New: Hold a National Board Certificate in the core subject area taught HOUSSE options: see elementary teachers 	24 semester hours	
Texas (October 2005)	Eligible: Standard Lifetime Temporary Probationary Ineligible: Waivers Permits	Not New: HOUSSE: Have at least one credible year of teaching experience and college coursework equivalent to a college major (not elementary education) in the subject taught	New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught	24 semester hours with 12 at upper division	

STATE (Version)	Fully State Certified (with appropriate		r Competency a HOUSSE rubric if available, or one of the following)	Major	
	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
Utah (March 2005)	Eligible: Temporary in an Alternative Route Basic Standard Ineligible: Unable to determine	Not New: HOUSSE: Hold a major in elementary and/or early childhood or a major/major equivalent (36 semester hours) in content applicable to assignment, were recommended for licensure by that institution, and have three years of teaching experience with successful evaluations	New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught	Composite major: 46 semester hours Single-subject major: 30 semester hours	
Vermont (September 2005)	Eligible: Level I or II Provisional Ineligible: Emergency	Not New: HOUSSE: Completed at least 3 credits of coursework in each science, social studies, math, and English language arts/reading	 New or Not New: Middle School: Hold a minor or minor equivalent (18 credits) in the core subject area taught High School: Hold a major, major equivalent or graduate degree in core subject area taught Not New: HOUSSE: Complete a minimum of 12 credits (middle school) or 15 credits (high school) in the core subject area taught 	30 credits	

STATE (Version)	Fully State Certified (with appropriate		r Competency a HOUSSE rubric if available, or one of the following)	Major	
,	endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent	
Virginia (April 2005)	Eligible: Initial Professional Provisional Ineligible: Waivers Emergency	 Not New: HOUSSE: Completion of an advanced degree HOUSSE: Completion of a nationally recognized certification program in the teaching area or a certificate of advanced graduate studies in the teaching area HOUSSE: completion of an institute(s) in the content areas of mathematics, science, language arts/reading/English, and social studies HOUSSE: Completion of three years of successful teaching experience and either (1) an academic major or equivalent in a subject area the teacher teaches; (2) an interdisciplinary major (or equivalent); or (3) at least 9 semester hours in each core discipline area of mathematics; science; lang. arts/reading/English; & social studies 	 Not New: Hold a major, major equivalent, or graduate degree in core subject area taught Completion of a nationally recognized certification program in the teaching area or a certificate of advanced graduate studies in the teaching area HOUSSE: completion of an institute(s) in the core subject area taught HOUSSE: Completion of three years of successful teaching experience and a minimum of 24 semester hours in the core subject area taught 	32—51 semester credits, varies by subject	
Washington (July 2004)	on Eligible: New or Not New:		 New or Not New: Hold an endorsement in the core subject area or a subject related to that taught Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught HOUSSE: If certified before 1987, have been evaluated as satisfactory in the current year's annual evaluations while teaching the core subject area HOUSSE: District must mutually develop with the teacher a written plan of assistance, provide assistance, and provide a reasonable amount of study and planning time 	30 Semester Hours	

STATE	Fully State Certified		er Competency a HOUSSE rubric if available, or one of the following)	Major
(Version)	(with appropriate endorsement)	Elementary Teachers	Middle and High School Teachers	equivalent
West Virginia (September 2005)	Eligible: Initial Professional Ineligible: Alternative Temporary Permit	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught Not New: HOUSSE: Received a rating of "meets standards" or higher on Section I of the Teacher Evaluation Form to document his/her subject matter competency in order to meet the definition of highly qualified teacher in that content area for that year 	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught Not New: HOUSSE: Received a rating of "meets standards" or higher on Section I of the Teacher Evaluation Form to document his/her subject matter competency in order to meet the definition of highly qualified teacher in that content area for that year 	21 semester hours
Wisconsin (March 2003)	Eligible: Initial Professional Master Emergency if part of alternative route program Ineligible: Emergency	Not New: HOUSSE: All licensed teachers must have completed an approved preparation program in Wisconsin or another State and program approval requirements meet HOUSSE	 New: Hold a major, major equivalent, or graduate degree in the core subject area taught Hold a National Board Certificate in the core subject area taught Not New: HOUSSE: All licensed teachers must have completed an approved preparation program in Wisconsin or another State and program approval requirements meet HOUSSE 	Unable to determine
Wyoming (October 2005)	Eligible: Initial Others but unable to determine Ineligible: Temporary Permit Transitional Exception or Waiver	Not New: HOUSSE: Hold an elementary and/or early childhood major, major equivalent, or graduate degree and have three years of teaching experience with successful evaluations	 New or Not New: Hold a major, major equivalent, or graduate degree in the core subject area taught Not New: HOUSSE: Have three years of teaching experience with successful evaluations 	Secondary: 24 semester hours Elementary: 30 semester hours

^a Teachers with the Preliminary Type Q certificate can be deemed "highly qualified" if they are receiving ongoing high quality professional development that will enable the teacher to meet Alaska's certification requirements within three years.

b In Arkansas, full State certification also includes all licenses issued for teachers who have completed all requirements except Arkansas History for Standard Licensure through reciprocity.

To be eligible for the Temporary Certificate, Florida requires teachers either meet the "subject specialization requirements" or "demonstrate mastery of subject area knowledge". To be eligible for the Professional Certificate, teachers must demonstrate mastery of subject area knowledge. The subject specialization requirements can be met with a 2.5 GPA for a requested subject and by either meeting

specific degree or course requirements, a passing score the appropriate subject area examination, holding a valid standard certificate comparable to Florida's from another State, or holding a valid certificate in the subject area issued by NBPTS or ABCTE. Mastery of subject area knowledge can be demonstrated by either a passing score on the appropriate subject area examination after July 1, 2002, completing of a master's degree and required content, holding a valid standard certificate comparable to Florida's from another State, or holding a valid certificate in the subject area issued by NBPTS or ABCTE.

- d Limited or Emergency Licenses are issued to teachers who are teaching out of field or individuals with an undergraduate degree. To qualify as "highly qualified", the holder must completing at least 6 credit hours of coursework annually (thus complete all required coursework within 3 years) toward full certification.
- ^e Kentucky issues probationary certificates to candidates who have a defined set of qualifications, but lack full State certification in the content area. However, candidates who complete full State certification in three years can be considered for meeting the alternative route to certification program requirements of NCLB.
- f North Dakota requires that its teachers complete a certain number of semester hours in content area preparation including methods in the subject area specialization in which they are teaching or they can demonstrate major equivalency in the subject area through one of the options listed here.

NOTES: (1) NCLB recognizes two groups of teachers according to years of teaching experience, "new" and "not new". "New" teachers are those hired on or after the first day of the 2002-03 school year. "Not new" teachers were hired prior to the first day of the 2002-03 school year. There is some variation across the States in the exact day that separates these two groups. (2) "HOUSSE" stands for Highly, Objective, Uniform State Standards of Evaluation. Only "not new" teachers are allowed to demonstrate subject matter competency via a State's HOUSSE. (3) The information in this table does not necessarily pertain to special education teachers. Many States have separate HQT guidance for special education teachers and that information is not presented here.

SOURCE: Information for this table was gleaned from numerous documents downloaded from official State government sites.

	3.5		Points allotted for				
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points		
Alabama (June 2003)	100	30 max. (2 pts. for past 10 yrs. & 1 pt. for other yrs.)	40 max. (1 point per semester hour)	35 max. (1 point per semester hour)	 Professional development related to content area = 36 points max. (3 per activity) Professional activities related to content area = 20 points max. (4 per activity) Recognition in content area = 4 points max. (2 per recognition) 		
Alaska	100	50 max. (5 points per year)	10 max. (Minor in content area)	 10 for each graduate degree 3 per semester hour with no maximum (education coursework acceptable if content-driven) 	 Hold endorsement in content area = 10 points Passing score on NTE Content Area Exam = 5 points Fluency in another language = 5 points Professional Development related to teaching assignment = 5 points per documented activity (no maximum) Service to teaching profession and content area = 5 points per documented service (no maximum) Awards including national grants, presentations, publications relevant to teaching = 5 points per activity/award (no maximum) 		
Arizona (February 2005)	100	50 max. (10 points per year)	4 per credit hour (no maximum)	50 max. (for an advanced degree – Elementary teachers only)	 Professional development and activities in the content area = 5 points per documented activity (no maximum) Service related to content area = 30 points max. (5 per year per documented service) Awards, presentations, publications related to content area = 30 points max. (5 per documented activity) 		

			<u> </u>		Points allotted for
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points
Arkansas ^a (May 2005)	100	50 max. (10 points per year)	3 per credit hour (no maximum)	N/A	 NTE Content Area Assessment or other non-Praxis non-licensure content test = 50 points Content-based professional development = 40 points max. (1 per hour up to 8 per year) Served in an administrative capacity in the content area = 30 points max. (10 per year) Documented committee service in LEA curriculum development in this content area in last five years = 25 points max. (5 per activity) Documented committee service in State or national curriculum development in this content area in the last five years = 30 points max. (10 per activity) Textbook adoption committee service in this content area over the last five year = 30 points max. (15 per committee) Papers published in refereed journals in this content area in last five years = 30 points max. (10 per paper) Presentations made at content-area or specialty-area association conferences in last five years = 30 points max. (10 per presentation) Conferences attended in this content area in the last five years = 15 points max. (5 per conference) Service as a Pathwise Mentor in this content area = 30 points max. (10 per year) Participation in Arkansas Leadership Academy Individual or Team Institute = 20 points per Academy (no maximum) Participation in ELLA curriculum training – year long = 20 points per year (no maximum) Participation in Effective Literacy, Literacy Lab, Reading First, etc. curriculum training – year long = 1 point per hour up to 20 points per year (no maximum)
California (March 2004)	100	50 max. (10 points per year)	60 max. (Range from 30 to 60 points) ^b	N/A	 Standards aligned professional development in assigned area within last six years = 5 points per each 20 hours (no maximum) Leadership and service to the profession in assigned area = 30 points per year (no maximum) Successful classroom observation = 20 pts per observation (no max.) Successful portfolio assessment = 100 points

	M2				Points allotted for
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points
Delaware	100	32 max. (4 points per year)	1 point per credit hour or equivalent (no maximum)	30 max. (1 per credit hour or equivalent)	 Supervised practicums in content area, if teacher has less than 5 years of experience = 20 points max. (4 per practicum) DOE and district approved professional development, item writing for the DSTP, and clusters related to content area completed after June 30, 1995 = 50 points max. (activities range from 1 to 18 points) Recognition for professional contribution related to the content area completed after June 30, 1995 = 15 points max. (recognitions range from 2 to 4 points)
Florida (September 2004)	100	50 max. (5 points per year)	60 max. (20 points per 3 semester hours)	N/A	 Classroom observation and performance evaluation in subject content area within past year (rating of satisfactory or higher) = 30 points Approved professional development in subject content area in last five years = 60 points max. (60 inservice points equals 20 points) School, district, State or national level activities or service related to the teaching of the subject area = 50 points max. (10 per activity) Student achievement learning gains in most recent 3 years for English/language arts and mathematics teachers, grades 4-10 = 50 points max. (15 for one year; 30 for two years; 50 for three years)
Georgia (September 2005)	100	50 max. c (5 or 10 points per year)	70 max. (Range 5 to 50 points)	N/A	 School, system-level, State, regional or national activities or service related to the core academic content area = 30 points max (5 per documented activity or service) Scholarship in the core academic content area = 30 points max. (5 or 30 per accomplishment) Teacher effectiveness in the core academic content area = 50 points max. (15 for one year; 30 for two years; 50 for three years)
Hawaii (May 2004)	100	45 max. (9 points per year)	45 minimum – required (Range 1 to 5 points)	N/A	 Activities related to the content area = 5 points per documented activity (no maximum) Service to the content area = 5 points per year per documented activity (no maximum) Awards, presentations, publications in the content area = 30 points max. (5 per year per documented activity)

	M:				Points allotted for
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points
Idaho (August 2005)	100	45 max. (9 points per year)	40 max. (if at least 12 semester credits)	25 max. (25 points for advanced degree related to core subject area)	 Passed the Idaho Educator Technology Assessment and/or Idaho Comprehensive Literacy course or assessment = 20 points Ongoing professional development in the last five years related to core subject area = 45 points max. (9 per year per 15 clock hours/1 semester credit) Work experience related to core subject area = 30 points max. (3 per year)
Illinois (June 2004)					t area (18 semester hours for Middle Grades and Reading or 24 for imulate 100 points according to the following rubric:
(Julie 2004)	100	60 max. (15 points per year)	10 points per semester hour beyond minimum req. (no maximum)		 Teaching experience regardless of subject = 25 points maximum (5 per year) Professional development activities directly focused on the core subject area = ranges between 5 and 15 points per activity (no maximum)
Indiana (2004)	100	50 max. (5 points per year)	100 max. (5 points per credit hour)	N/A	 Workshop or in service participation in content area, including attendance at professional conferences = 1 point per full day workshop up to 5 points per year (no overall maximum) Committee work to develop, validate, or assess standards in content area = 2 points per year per documented activity up to 6 points per year (no overall maximum) Awards, publications, or workshop presentations in content area = 2 points per year per documented activity up to 6 points per year (no overall maximum) Mentor for beginning teacher in the content area = 30 points max. per five year period (15 per year)
Kansas (July 2005)	100	45 max. (9 points per year)	45 minimum (3 points per credit hour)	N/A	 Activities related to the content area within last 6 years = 5 points per year per documented activity (no maximum) Service to the content area within last 6 years = 5 points per year per documented activity (no maximum) Awards, presentations, publications in content area = 30 points max. (5 per year per documented activity)

	1		<u> </u>		Points allotted for		
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points		
Kentucky (November 2003) Louisiana (September 2003)	90	45 max. (3 points per year) N/A	by completing conferencing.	points max. (5 per documented activity) • Achievements and awards specific to the core subject area in last te			
Maine (April 2004)	100	50 max. (10 points per year)	1 point per credit hour (no maximum)	5 points for student teaching	 Pass the National Teacher Exam in core subject area = 10 points Hold Master's Certificate in core subject area = 3 points Professional development activities related to core subject area = 1 to 3 points per documented activity (no maximum) Service to the content area and presentations = 5 points per documented service (no maximum) Awards, recognition and scholarship in the content area = 10 points per activity (no maximum) 		
Maryland (March 2005)	100	50 max. (4 points per year)	Elementary: 40 minimum Secondary: 30 minimum (1 point per credit hour)	See continuing professional development	 Continuing professional development including graduate education courses, education related workshops and teaching education related courses at an IHE or local school = 10 points max. (1 per credit earned or taught) Activities, services, awards, and presentations related to the core subject area taught = 10 points max. (1 per documented activity) 		
Massachusetts (March 2003)	120	N/A	Teachers choosing the HOUSSE option demonstrate subject matter competency through an approved Individual Professional Development Plan (IPDP) with a total of 120 professional development points with 96 points focused on the core academic subject taught. One clock hour equals one point. Teachers must align their IPDP with school and district improvement plans, complete eligible professional development programs and activities designed to support and increase student learning, and demonstrate proficiency through an end-of-course assessment or product. Teachers are considered highly qualified once they complete 50 percent of their IPDP and are making sufficient progress toward full completion.				

			<u> </u>	,	Points allotted for
STATE (Version)	Points () () () () () ()		Other criteria earning points		
Minnesota (August 2005)	100	50 max. (10 points per year)	50 max. (3 points per quarter credit; 5 points per semester credit)	N/A	 Documented growth in student academic achievement – evidence must be objective, valid, and reliable = 50 points max. (20 for 1 year; 35 for 1.5 years; 50 for 2 years) Awards and recognition for professional contribution to achievement in the core subject area within last 10 years = 50 points max. (5 to 15 per award) Pass the Praxis II Content Test = 50 points National Board Certification = 50 points Professional activities in the core subject area = 50 points max. (coursework: 3 per quarter credit or 5 per semester credit; 1 per 3 hours of professional development)
Mississippi (May 2004)	100	50 max. d (In subject: 1 or 2 points/yr up to 30 points; Any subject: 1 point/yr up to 20 points)	60 max. (2 points per semester hour; 24 points minimum)	15 max. (1 point per semester hour)	 Professional development related to content area = 30 points max. (1 per each continuing education unit or 10 hours of professional development) Professional activities related to content area = 10 points max. (2 per activity) Recognition in content area = 10 points max. (2 per each recognition)
New Jersey (2005-06)	10	3 max. (2 points if 8-15 years; 3 points if 16+ years)	10 max. (2 points per course – at least two credits; 4 points minimum)	N/A	 Professional activities within the last four years in the core subject area = 6 points max. (1 per documented activity) If elementary teacher, hold a National Board Certificate as an Elementary Generalist = 4 points Collaborative, interdisciplinary work on a sustained unit of study with a content area specialist (both teachers must be working with the same group of students) = 4 points (1 per documented year, past four years only)

17.5227777944			<u> </u>	ny objective cime	Points allotted for
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points
New York (January 2004)	100	50 max. (10 points per year; 15 per year after 1998- 1999)	30 max. (completion of a graduate degree or, k-6 only, 30 graduate credits)	See "Other criteria"	 Successful completion of a bachelor's degree program with a general education component or the Liberal Arts and Sciences Test = 30 points Successful completion of a State-approved program leading to a certificate or successful completion of a State transcript review or individual evaluation leading to a certificate or (K-6 only) possession of an extension to teach common branch classes on a 7–12 subject matter certificate = 30 points (7-12 only) Licensure in a recognized profession that is related to the core subject area taught = 70 points (7-12 only) Passing a federal or industry-standard exam in an occupational field related to the core subject area taught = 70 points Successful completion of professional development aligned with the Regents learning standards = 50 points max. (10 per every 5 contact hours) Supervision of student a student teacher in a State-approved program in elementary education/core subject area = 30 points max. Professional service in elementary education/core subject area = 50 points max. (10 per service) Formal review of subject knowledge and teaching skills = 50 points
North Dakota ^e (May 2004)	126/100/ 48 Composite/ single- subject/ middle school	38/30/14 max. (3 points per year)	126/100/48 max. (3 points per under-grad credit; 4 per graduate credit)	38/30/14 max. (2 points per each credit; 2 points per each 15 hour workshop)	 Curriculum development, including activities, related to core subject area taught = 25/20/10 points max. (2 per documented activity) Service to core subject area taught = 25/20/10 points max. (2 per each local/State service; 4 per each regional/national service) Advanced degree, publications, presentations, and awards in core subject area taught = 25/20/10 points max. (5 per each documented activity)
Ohio (Fall 2004)	100	24 max. (3 points per year)	27 max. (1 point per semester hour)	27 max. (1 point per semester hour)	 Professional development in the core subject area taught = 24 points max. (3 per documented activity) Professional activities in the core subject area taught = 25 points max. (5 per documented activity) Recognition in core subject area taught = 6 points max. (2 per documented recognition)

	M:				Points allotted for
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points
Oklahoma (June 2004)	100	49 max. (3 points per year – F'93- S'04; 2 points/yr – F'86-S'93; 1 point/yr – F'81-S'86)	100 max. (4 points per semester hour earned or taught)	N/A	 Service in the core subject area taught = 20 points max. (10 per service) Awards, presentations and publications in the core subject area taught = 20 points max. (10 per documented recognition) Legislated authorized academic institute or professional development = 30 points max. (30 per institute or 1 per clock hour) Achievement of students taught = 20 points max. (10 per documented evidence)
Pennsylvania (September 2004)	(grades 7-	9), alternative o	education progra	ms, and secondary sp	rs (i.e., core subject area teachers, middle or junior high school teachers ecial education or ESL teachers) must amass 12 points in Phase I in order remaining 18 points during Phase II. Scholarship and awards = 1 to 6 points per activity (no overall or per phase maximums, but several maximums for specific activities) (Phase I only) Tutoring = 3 points max. (1 per every 30 clock hours) (Phase II only) National Board Certificate in the core subject area
Rhode Island ^f (December 2003)	100	24 max. (2 points per year)	hour) 3 points per credit (no maximum)		 taught = 18 points Professional development activities within last five year related to the core subject area taught = 5 points per activity (no maximum) Service within last five years to the core subject area taught = 5 points per service (no maximum) Awards in the core subject area taught = 20 points max. (20 per each award)
Tennessee (August 2005)	100	52 max. (40 max. for K-12 teaching: 5 pts/yr w/in last 10; 12 max. for IHE teaching: 2 pts/yr w/in last 10)	40 max. (2 points per semester hour – includes both content and methods courses)		 Positive evaluations on either the Comprehensive Assessment or the Focused Assessment within last 10 years = 20 points max. (10 per evaluation) Career Ladder II teacher = 5 points Career Ladder III teacher = 10 points Honors, awards, and publications within last 10 years related to the core subject area taught = 10 points max. (2 per activity) Professional leadership activities within last 10 years = 30 points max. (1 or 2 points per activity) Staff and professional development activities within last 10 years related to the core subject area taught = 40 points max. (1 to 3 points per activity)

	3.51	Points allotted for						
STATE (Version)	Min. Points Needed	Experience (in content area unless noted)	Coursework in Content Area	Other Coursework	Other criteria earning points			
Texas (October 2005)	24	12 max. (1 point per year)	1 point per semester hour (no maximum)	N/A	 Professional development in the core subject area or related field that meets the standards for Continuing Professional Education credit = 1 point per 15 credits (no maximum) 			
Utah ^g (March 2005)	200	105 max. (35 points per year)	18 points per semester credit (no maximum)	N/A	 Approved professional development = 18 points per semester credit (no maximum) 			
Virginia (April 2005)	180	N/A	maximum) 180 max. (30 points per semester hour within the most recent five-year period)		 Professional conference within the most recent five-year period = 45 points max. (5 per day; 15 per presentation) Curriculum development within the most recent five-year period = 90 points max. (1 per clock hour) Publication of article within the most recent five-year period = 90 points max. (45 per article) Publication of book within the most recent five-year period = 90 points max. (90 per book) Mentorship/supervision within the most recent five-year period = 90 points max. (1 per clock hour) Educational project within the most recent five-year period = 90 points max. (1 per clock/contact hour) Professional development activity within the most recent five-year period = 180 points max. (1 per clock/contact hour) 			
Wyoming (October 2005)	100	50 max. (5 points per year)	5 points per credit hour (no maximum)	N/A	 Activities, services, awards, presentations, and publications related to the core subject area in last six years = 5 points per activity per year (no maximum) 			

^a Arkansas HOUSSE point system based on the single subject form. There are different HOUSSE requirements for multiple-subject teachers.

b California allots elementary teachers points for: 1) completing 18 units in each of four core area (reading/language arts, mathematics and science, history and social studies, and the arts) = 50 points; 2) completing a CCTC-approved Liberal Studies Wavier Program = 50 points; 3) National Board Certification in grade span = 60 points; or 4) completing an advanced degree in teaching, curriculum instruction, or assessment in core academic areas = 60 points. California allots middle and high school teachers points for: 1) completing a CCTC-Supplementary Authorization = 50 points; 2)

completing 15-21 units of core academic coursework = 30 points; 3) completing 22-30 units of core academic coursework = 50 points; or 4) completing an advanced degree in teaching, curriculum, or assessment in core academic area = 60 points

- ^c Georgia awards 10 points per year of teaching experience in the core academic content area at appropriate level and 5 points per year for teaching experience in the core academic content area at a different level.
- d Mississippi awards points for teaching experience both within the core subject area and regardless of subject. Within subject, two points are awarded for each of the most recent ten years and then one point for each year over ten up to 30 points maximum. Regardless of the subject taught, one point is awarded for each year up to 20 points maximum.
- North Dakota allows middle and high school teachers with at least three years of experience can use this "portfolio" to demonstrate subject matter competency. Additionally, middle school teachers with a minor or minor equivalent in the core subject area taught and, prior to 30 June 2006, high school teachers with a minor or minor equivalent in the core subject area taught are also allowed to use this "portfolio".
- f Rhode Island requires teachers using this HOUSSE option to have points in at least three categories. Additionally, elementary teachers must have at least 33 points in English language arts, 33 points in mathematics, 17 points in science, and 17 points in social studies.
- g Utah makes this HOUSSE option available only to "not new" secondary teachers.

NOTE: "Coursework in subject area taught" is required to be content, not pedagogical in focus. "Other coursework" may either be (1) content or pedagogical coursework outside the subject area taught or (2) coursework in the subject area taught but that is pedagogical rather than content focused.

SOURCE: Information for this table was gleaned from numerous documents downloaded from official State government sites.

APPENDIX 3: TENURE POLICIES

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Alabama	3 consecutive years at a school district plus reemployment	Incompetency, insubordination, neglect of duty, immorality, failure to perform duties in a satisfactory manner, justifiable decrease in the number of teaching positions or other good or just cause, but cancellation may not be made for political or personal reasons	Local board of education at teacher's request; then State tenure commission; then Alabama Court of Civil Appeals
Alaska	3 consecutive years at a school district plus reemployment	Incomptenency, immorality, substantial noncompliance with the school laws of the State, the regulations or bylaws of the department, the bylaws of the district, or the written rules of the superintendent	Local board of education at teacher's request; then Superior Court for judicial review
Arizona	3 consecutive years at a school district plus reemployment	Immoral conduct, unprofessional conduct, inadequacy of classroom performance, conduct in violation of the rules or policies of the governing board	Local board of education at teacher's request; then Superior Court
Arkansas	3 consecutive years at a school district plus reemployment	Reduction in force created by a districtwide reduction in certified staff, incompetent performance, conduct which materially interferes with the continued performance of the teacher's duties, repeated or material neglect of duty, or other just and reasonable cause	Local board of education at teacher's request; then Circuit Court
California	2 consecutive years at a school district plus reemployment	Immoral or unprofessional conduct; commission, aiding, or advocating the commission of acts of criminal syndicalism; dishonesty; unsatisfactory performance; evident unfitness for service; physical or mental condition unfitting him or her to instruct or associate with children; persistent violation of or refusal to obey school laws of the State or reasonable regulation prescribed for the government of the public schools by the State Board of Education or by the governing board of the school district employing; reduction in employees	Commission on Professional Competence at teacher's request; then Superior Court
Colorado	3 consecutive years at a school district plus reemployment	Physical or mental disability; incompetency; neglect of duty; immorality; unsatisfactory performance; insubordination; the conviction of a felony or the acceptance of a guilty plea, a plea of nolo contendere, or a deferred sentence of a felony; or other good and just cause	Impartial hearing officer and the chief administrative officer at teacher's request; then Court of Appeals
Connecticut	40 months of continuous employment with a school district	Inefficiency or incompetence; insubordination against reasonable rules of the board of education; moral misconduct; disability, as shown by competent medical evidence; elimination of the position to which the teacher was appointed or loss of a position to another teacher, if no other position exists to which such teacher may be appointed if qualified, provided such teacher, if qualified, shall be appointed to a position held by a teacher who has not attained tenure; other due and sufficient cause	Local board of education at teacher's request; then Superior Court

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Delaware	3 years in State of which 2 years were the current school district	Immorality, misconduct in office, incompetency, disloyalty, neglect of duty, willful and persistent insubordination, a reduction in the number of teachers required as a result of decreased enrollment or a decrease in education services	Local board of education (which may designate a hearing officer) at teacher's request; then Superior Court
District of Columbia	2 years	Inefficiency; grave misconduct in office; incompetence, including either inability or failure to perform satisfactorily the duties of the position of employment; willful nonperformance, or inexcusable neglect of duty; insubordination including refusal to submit to a mental or physical examination authorized by the rules of the Board of Education or any law or regulation of the District government; on-duty use of drugs not prescribed for the using individual, or obtained illegally; intoxication while on duty; fraud in securing employment or falsification of official records; dishonesty; willful disobedience; inexcusable absence without leave; lack of dependability; conviction of a felony; discourteous treatment of the public, supervisor, or other employees; political activity on school system grounds while on duty, except as permitted by the Code of Laws of the District of Columbia, the U.S. Constitution, or the D.C. Board of Education; misuse, mutilation or destruction of D.C. Board of Education property, funds, or public records; engaging in a strike; misuse of official position or unlawful coercion of an employee for personal gain or benefit; other failure of good behavior during duty hours which is of such a nature that it causes discredit to the employee's agency or employment; violation of the rules, regulations, or lawful orders of the Board of Education or any directive of the Superintendent of Schools, issued pursuant to the rules of the Board of Education; Any other cause authorized by the laws of the District of Columbia; other conduct during and outside of duty hours that would affect adversely the employee's or the agency's ability to perform effectively; conviction of a misdemeanor, when the conviction is based on conduct that would affect adversely the employee's or the agency's ability to perform effectively; harassment; sexual harassment; or retaliation for reporting harassment or sexual harassment	Adverse action hearing at teacher's request; the Superintendent of Schools or an appeals panel designated by the Superintendent; then District of Columbia Office of Employee Appeals; then Superior Court of the District of Columbia
Florida	3 years within a 5 year period within a district plus reemployment	Immorality, misconduct in office, incompetency, gross insubordination, willful neglect of duty, drunkenness, or conviction of a crime involving moral turpitude	Local board of education or an administrative law judge assigned by the Division of Administrative Hearings of the Department of Management Services at teacher's request

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Georgia ^a	3 consecutive years at a district plus reemployment	Incompetency; insubordination; willful neglect of duties; immorality; inciting, encouraging, or counseling students to violate any valid State law, municipal ordinance, or policy or rule of the local board of education; to reduce staff due to loss of students or cancellation of programs; failure to secure and maintain necessary educational training; or any other good and sufficient cause	Local board of education (which may elect to appoint a tribunal) at teacher's request; then State board of education
Hawaii	2 consecutive years plus reemployment	Inefficiency or immorality; willful violations of policies and rules of the department; or for other good and just cause; also decreases in the number of pupils or for other causes over which the department has no control	Board of education; then county Circuit Court
Idaho	3 years at a school district plus reemployment	Material violation of any lawful rules or regulations of the board of trustees or of the State board of education, or for any conduct which could constitute grounds for revocation of a teaching certificate	Mandated hearing before local board of education
Illinois	4 consecutive years in any district plus reemployment	Incompetency, cruelty, negligence, immorality or other sufficient cause, failing to complete a 1-year remediation plan with a "satisfactory" or better rating and whenever, in the opinion of the employing school board, the teacher is not qualified to teach, or whenever, in its opinion, the interests of the schools require it; to decrease the number of teachers employed by the board or to discontinue some particular type of teaching service	Impartial hearing officer at teacher's request; then judicial review by trial court
Indiana	Semi-permanent with 2 successive years in a district plus reemployment; Permanent with 5 successive years in a district plus reemployment	Immorality; insubordination, which means the refusal to obey the State school laws or reasonable rules prescribed for the government of the school corporation; neglect of duty; justifiable decrease in the number of teaching positions; a conviction for kidnapping, criminal confinement, rape, criminal deviate conduct, child molesting, child exploitation, vicarious sexual gratification, child solicitation, child seduction, sexual misconduct with a minor, incest, dealing in or manufacturing cocaine, a narcotic drug or methamphetamine, dealing in a schedule I-V controlled substance, dealing in a counterfeit substance, or dealing in marijuana, hash oil, or hashish; other good and just cause; Additional reason for permanent teachers: Incompetence; Additional reason for semi-permanent teachers: Substantial inability to perform teaching duties; when cancellation is in the best interest of the school district	Local board of education at teacher's request; then court of competent jurisdiction
Iowa	3 consecutive years in same district	Just cause	Local board of education at teacher's request; then a mutually agreed upon adjudicator; then district court
Kansas	3 consecutive years in same district plus reemployment	No reasons or justifications specified in statutes	Hearing officer at teacher's request; then district court

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Kentucky	4 consecutive years or 4 years within a 6-year period in same district plus reemployment	Insubordination, including but not limited to violation of the school laws of the State or administrative regulations adopted by the Kentucky Board of Education, the Education Professional Standards Board, or lawful rules and regulations established by the local board of education for the operation of schools, or refusal to recognize or obey the authority of the superintendent, principal, or any other supervisory personnel of the board in the performance of their duties; immoral character or conduct unbecoming a teacher; physical or mental disability; or inefficiency, incompetency, or neglect of duty, when a Statement identifying the problems or difficulties has been furnished the teacher or teachers involved; reduction in staff necessitated by decreased enrollment, suspension of schools or territorial changes affecting the district	Tribunal at teacher's request; then circuit court
Louisiana	3 consecutive years in same district plus reemployment	Willful neglect of duty, or incompetency, dishonesty, or immorality, or of being a member of or contributing to any group, organization, movement, or corporation that is by law or injunction prohibited from operating in the State of Louisiana, and then only if found guilty after a hearing by the school board of the parish or city, as the case may be, which hearing may be private or public, at the option of the teacher	Mandated hearing before local board of education; then court of competent jurisdiction
Maine	2 years in same district plus reemployment offer	Teacher proves unfit to teach or whose services the board deems unprofitable to the school; local conditions warrant the elimination of the teaching position for which the contract was made	Local board of education at teacher's request; then superior court
Maryland	2 years in same district	Immorality; misconduct in office, including knowingly failing to report suspected child abuse; insubordination; incompetency; or willful neglect of duty	Local board of education at teacher's request; then State Board of Education
Massachusetts	3 consecutive years in same district plus reemployment	Inefficiency, incompetency, incapacity, conduct unbecoming a teacher, insubordination or failure on the part of the teacher to satisfy teacher performance standards developed pursuant or other just cause; layoffs due to reductions in force or reorganization resulting from declining enrollment or other budgetary reasons	Teacher petitions the commissioner who requests arbitration by the American Arbitration Association; then judicial review
Michigan	4 years in same district	Reasonable and just cause	Local board of education at teacher's request; then State tenure commission; then court of appeals

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Minnesota	3 consecutive years in same district	Effective at end of school year: Inefficiency; neglect of duty, or persistent violation of school laws, rules, regulations, or directives; conduct unbecoming a teacher which materials impairs the teacher's educational effectiveness; other good and sufficient grounds rendering the teacher unfit to perform the teacher's duties Effective immediately: Immoral conduct; conduct unbecoming a teacher which requires the immediate removal of the teacher from classroom or other duties; failure without justifiable cause to teach without first securing the written release of the school board; gross inefficiency which the teacher has failed to correct after reasonable written notice; willful neglect of duty; or continuing physical or mental disability subsequent to 12 months leave of absence and inability to qualify for reinStatement; revocation of teachers license due to a conviction for child abuse or sexual abuse	Local board of education or an arbitrator at teacher's request and preference; judicial review
Mississippi	2 consecutive years in same district	Incompetence, neglect of duty, immoral conduct, intemperance, brutal treatment of a pupil or other good cause	Local board of education at teacher's request; then chancery court; then Mississippi Supreme Court
Missouri	5 successive years in same district plus reemployment	Physical or mental condition unfitting him to instruct or associate with children; immoral conduct; incompetency, inefficiency or insubordination in line of duty; willful or persistent violation of, or failure to obey, the school laws of the State or the published regulations of the board of education of the employing school district; excessive or unreasonable absence from performance of duties; conviction of a felony or a crime involving moral turpitude	Local board of education at teacher's request; then circuit court; then appellate court
Montana	3 consecutive years in same district plus reemployment	Good cause	Local board of education unless waived by teacher; if not covered by a collective bargaining agreement, then county superintendent and then district court; if covered by a collective bargaining agreement, then arbitrator

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Nebraska	3 successive years in same district	Incompetency, neglect of duty, unprofessional conduct, insubordination, immorality, physical or mental incapacity, or other conduct which interferes substantially with the continued performance of duties or a change in circumstances such as financial exigency or a diminution of demand for services by the school districts served by the educational service unit necessitating a reduction in the number of teachers or nurses to be employed by the board; revocation of teachers license by the State Board of Education	Local board of education at teacher's request; then district court
Nevada	2 years in same district plus offer of reemployment	Inefficiency; immorality; unprofessional conduct; insubordination; neglect of duty; physical or mental incapacity; a justifiable decrease in the number of position due to decreased enrollment or district reorganization; conviction of a felony or of a crime involving moral turpitude; inadequate performance; evident unfitness for service; failure to comply with such reasonable requirements as a board may prescribe; failure to show normal improvement and evidence of professional training and growth; advocating overthrow of the Government of the United States or of the State of Nevada by force, violence or other unlawful means, or the advocating or teaching of communism with the intent to indoctrinate pupils to subscribe to communistic philosophy; any cause which constitutes grounds for the revocation of a teacher's license; willful neglect or failure to observe and carry out the requirements of this Title; dishonesty; breaches in the security or confidentiality of the questions and answers of the achievement and proficiency examinations that are administered; intentional failure to observe and carry out the requirements of a plan to ensure the security of examinations; use of an aversive intervention on a pupil with a disability; use of physical or mental restraint on a pupil with a disability	Hearing officer at teacher's request
New Hampshire	3 consecutive years in the same district	Immoral or incompetent; one who shall not conform to regulations prescribed; conviction for homicide, child pornography, aggravated felonious sexual assault, felonious sexual assault, or kidnapping, in this State or under any statute prohibiting the same conduct in another State, territory or possession of the United States	Local board of education at teacher's request; then State Board of Education
New Jersey	3 consecutive years in the same district plus reemployment	Inefficiency, incapacity, unbecoming conduct, or other just cause	State commissioners of education and administrative law judge; then State board of education
New Mexico	3 consecutive years in same district	Just cause	Local board of education at teacher's request; then arbitrator or if fail to agree on an arbitrator, judicial court

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
New York	3 years in same district	Insubordination, immoral character, or conduct unbecoming a teacher; inefficiency, incompetency, physical or mental disability or neglect of duty; failure to maintain certification	Hearing officer or a three member panel; then State supreme court
North Carolina	4 consecutive years in same district plus reemployment offer	Inadequate performance; immorality; insubordination; neglect of duty; physical or mental incapacity; habitual or excessive use of alcohol or nonmedical use of a controlled substance; conviction of a felony or a crime involving moral turpitude; advocating the overthrow of the government of the United States or of the State of North Carolina by force, violence, or other unlawful means; failure to fulfill the duties and responsibilities imposed upon teachers or school administrators; failure to comply with such reasonable requirements as the board my prescribe; any cause which constitutes grounds for the revocation of the career teacher's teaching certificate or the career school administrator's administrator certificate; a justifiable decrease in the number of positions due to district reorganization, decreased enrollment, or decreased funding; failure to maintain his certificate in a current status; failure to repay money owed to the State; providing false information or knowingly omitting a material fact on an application for employment or in response to a preemployment inquiry	Review by a case manager or local board of education at teacher's request; then superior court
North Dakota	Not specified	Immoral conduct; insubordination; conviction of a felony; conduct unbecoming the position held by the individual; failure to perform contracted duties without justification; gross inefficiency that the individual has failed to correct after written notice; continuing physical or mental disability that renders the individual unfit or unable to perform the individual's duties	Mandated hearing before local board of education; then district court
Ohio	3 years in a 5-year period in same district plus reemployment	Gross inefficiency or immorality; for willful and persistent violations of reasonable regulations of the board of education; or for other good and just cause; assisting students in cheating on proficiency tests;	Local board of education at teacher's request; then court of common pleas
Oklahoma	3 consecutive years in same district	Willful neglect of duty; repeated negligence in performance of duty; mental or physical abuse to a child; incompetency; instructional ineffectiveness; unsatisfactory teaching performance; any reason involving moral turpitude; any sex offense subject to the Sex Offenders Registration Act in this State or to another State's or the federal sex offender registration provisions; any felony offense; criminal sexual activity; sexual misconduct	Local board of education at teacher's request; then trial de novo in district court

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Oregon	3 successive years in same district plus reemployment	Inefficiency; immorality; insubordination; neglect of duty, including duties specified by written rule; physical or mental incapacity; conviction of a felony or of a crime; inadequate performance; failure to comply with such reasonable requirements as the board may prescribe to show normal improvement and evidence of professional training and growth; any cause which constitutes grounds for the revocation of such contract teacher's teaching license	Hearing officer at teacher's request; then Fair Dismissals Appeals Board; then court of appeals on procedure; then appellate court; then supreme court
Pennsylvania	3 years in same district	Immorality; incompetency; unsatisfactory teaching performance based on two consecutive ratings of the employee's teaching performance that are to include classroom observations that are to include classroom observations, not less than 4 months apart, in which the employee's teaching performance is rated as unsatisfactory; intemperance; cruelty; persistent negligence in the performance of duties; willful neglect of duties; physical or mental disability as documented by competent medical evidence, which after reasonable accommodation of such disability as required by law substantially interferes with the employee's ability to perform the essential functions of his employment; advocation of or participating in un-American or subversive doctrines; conviction of a felony or acceptance of a guilty plea or nolo contendere therefore; persistent and willful violation of or failure to comply with school laws of this Commonwealth	Mandated hearing before the local board of education at teacher's request; then Superintendent of Public Instruction
Rhode Island	3 years in a 5-year period	Good and just cause	Local board of education at teacher's request; then Department of Elementary and Secondary Education; then superior court
South Carolina	2 years	Fail, or who may be incompetent, to give instruction in accordance with the directions of the superintendent, or who shall otherwise manifest an evident unfitness for teaching; provided, however, that notice and an opportunity shall be afforded for a hearing prior to any dismissal. Evident unfitness for teaching is manifested by conduct such as, but not limited to, the following: persistent neglect of duty, willful violation of rules and regulations of district board of trustees, drunkenness, conviction of a violation of the law of this State or the United States, gross immorality, dishonesty, illegal use, sale or possession of drugs or narcotics	Local board of education at teacher's request; then court of common pleas
South Dakota	3 years in same district plus reemployment	Just cause, including breach of contract, poor performance, incompetency, gross immorality, unprofessional conduct, insubordination, neglect of duty, or the violation of any policy or regulation of the school district	Local board of education at teacher's request; then State circuit court

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Tennessee	3 years in a 5-year period plus reemployment	Incompetence meaning being incapable, lacking adequate power, capacity or ability to carry out the duties and responsibilities of the position which may apply to physical, mental, educational, emotional or other personal conditions, lack of training or experience, evident unfitness for service, physical, mental or emotional condition making teacher unfit to instruct or associate with children, or inability to command respect from subordinates or to secure cooperation of those with whom the teacher must work; inefficiency meaning being below the standards of efficiency maintained by others currently employed by the board for similar work, or habitually tardy, inaccurate, or wanting in effective performance of duties; neglect of duty meaning gross or repeated failure to perform duties and responsibilities which reasonably can be expected of one in such capacity, or continued unexcused or unnecessary absence from duty; unprofessional conduct including immorality; conviction of a felony or a crime involving moral turpitude; dishonesty, unreliability, continued willful failure or refusal to pay one's just and honest debts; disregard of the code of ethics of the Tennessee Education Association in such manner as to make one obnoxious as a member of the profession; or improper use of narcotics or intoxicants; insubordination which may consist of: (A) refusal or continued failure to obey the school laws of Tennessee, or to comply with the rules and regulations of the board, or to carry out specific assignments made by the board, the director of schools or the principal, each acting within its own jurisdiction, when such rules, regulations and assignments are reasonable and not discriminatory; (B) failure to participate in an in-service training program as set up by the local board of education and approved by the State board of education; (C) treason, or any effort to sabotage or overthrow the government of the United States; or (D) refusal by the teacher to disclose to the board whether or not such teacher is, or has b	Local board of education at teacher's request; then chancery court; then appellate court
Texas	3 years in same district plus reemployment	which advocates the overthrow of the government Good cause being the failure to meet the accepted standards of conduct for the profession as generally recognized and applied in similarly situated school districts in this State; a financial exigency that requires a reduction in personnel	Local board of education at teacher's request; then State commissioner of education
Utah	3 consecutive years in same district	Causes include unsatisfactory performance and reduction in staff because of declining student enrollments in the district, the discontinuance or substantial reduction of a particular service or program, the shortage of anticipated revenue after the budget has been adopted, or school consolidation	Local board of education at teacher's request; then courts

State	Tenure Requirements	Reasons for Termination or Dismissal	Appeal Process
Vermont	2 years	Just and sufficient cause including incompetence, conduct unbecoming a teacher, failure to attend to duties or failure to carry out reasonable orders and directions of the superintendent and school board	Local board of education at teacher's request; then superior court
Virginia	3 years in same district	Incompetency, immorality, noncompliance with school laws and regulations, disability as shown by competent medical evidence when in compliance with federal law, conviction of a felony or a crime of moral turpitude or other good and just cause	Local board of education or a fact-finding panel at teacher's request; then circuit court
Washington	2 years in same district	Sufficient cause	Hearing officer at teacher's request; then superior court; then appellate court
West Virginia	3 years in same district plus reemployment	Immorality, incompetency, cruelty, insubordination, intemperance, willful neglect of duty, unsatisfactory performance, the conviction of a felony or a guilty plea or a plea of nolo contendere to a felony charge	Local board of education at teacher's request; then hearing examiner hired by the education and State employees grievance board; then circuit court
Wisconsin	Based on collective bargaining agreements	Determined through collective bargaining agreements	Local board of education at teacher's request after notice of consideration of contract nonrenewal; then appeals process based on collective bargaining agreement
Wyoming	3 consecutive years in same district plus reemployment	Incompetency, neglect of duty, immorality, insubordination, unsatisfactory performance or any other good or just cause	Independent hiring officer at teacher's request; then district court

"In 2000, Georgia eliminated due process rights for teachers hired after July 1, 2000. However, in 2003, these rights were restored.

SOURCE: Alabama: Code of Ala. \$\$16-24-1—16-24-13; Alaska: Alaska Stat. \$\$14.20.095—14.20.215; Arizona: A.R.S. \$\$15-536—15.551; Arkansas: Ark. Stat. Ann. \$\$6-17-1501—6-17-1510; California: Cal Educ. Code \$\$44929.20—44988; Colorado: C.R.S. \$22-63-201—22-63-206; Connecticut: Conn. Gen. Stat. \$\$10-151; Delaware: 14 Del. C. \$\$1401—1420; District of Columbia: DC Rules Title 5 \$\$1307 and 1400—1409; Florida: Fla. Stat. Ann. \$\$1012.33; Georgia: O.C.G.A. \$\$20-2-211 and 20-2-940—21.2-947; Hawaii: HRS \$\$89-6—89-11 and 302A-607—302A-609; Idaho: Idaho Code \$\$33-513 and 33-515; Illinois: 605 ILCS 5-10-22.4 and 5/24-11—5/24-16; Indiana: Burns Ind. Code Ann. \$20-28-61—22-28-7-15 and 20-28-71; Iowa: Iowa Code \$\$279-13—279-19 and 279-27; Kansas: K.S.A. \$\$72-5411 and 72-537—72-5447; Kentucky: KRS \$\$161.720—161.810; Louisiana: La.R.S. \$\$17:441-443; Maine: 20A M.R.S. \$\$13201-13202; Maryland: Md. Educ Code Ann. \$\$6-201 and 6-202; Massachusetts: Mass. Ann. Laws Ch. 71 \$\$41-42; Michigan: MCL \$\$38.71—38.121; Minnesota: Minn. Stat. \$\$122.40; Mississippi: Miss. Code Ann. \$\$37-7-25, 37-9-59, and 37-9-101—37-9-113; Missouri: 168.103—168.130 R.S. Mo.; Montana: Mont. Code Anno. \$\$20-4-207; Nebraska: R.R.S. Neb. \$\$79-1239; Nevada: Nev. Rev. Stat. Ann. \$\$391-311—391.3197; New Hampshire: RSA \$\$189:13—189:14-d; New Jersey: N.J. Stat. \$\$18A:6-10—18A:6-29 and 18A:28-5; New Mexico: N.M. Stat. Ann. \$\$20-10A-21-22-10A-29; New York: NY CLS Educ \$\$3014 and 3020—3020-a; North Carolina: N.C. Gen. Stat. \$\$115C-325; North Dakota: N.D. Cent. Code \$\$\$15-29-08, 15-36-15—15-36-17, and 15.1-15-01—15.1-15-12; Ohio: ORC Ann. \$\$3319.08—3319.151; Oklahoma: 70 Okl. St. \$\$6-101—6-101-30; Oregon: ORS \$\$342.805—342.934; Pennsylvania: 24 Pa.C.S. \$\$11-112-1-11-1133; Rhode Island: R.I. Gen. Laws \$\$16-13-1-16-13-8; South Carolina: S.C. Code Ann. \$\$59-22-150—59-25-530 and 59-26-40; South Dakota: S.D. Codified Laws \$\$13-43-6.1—13-43-6.9; Tennes

APPENDIX 4: PROFESSIONAL DEVELOPMENT POLICIES

TABLE A-9. Requirements, Approval, and Funding for Professional Development for Teachers

		Time Period		oves Componen		How is Professional Development Funded?		
State	Professional Development	Within Which		evelopment Red	r r		1 *	
2 0000	Requirements for License Renewal	Reqs. Must	Colleges and	Local School	State	State	Individual	District
		Be Satisfied	Universities	District	Agency	Monies	Monies	Monies
Alabama	5 semester credit hours or 50 clock	5 years						
	hours							
Alaska	3 semester credit hours ^a	5 years ^a	N/A	N/A	N/A	N/A	N/A	N/A
Arizona	12 semester credit hours or 180 clock	6 years		Yes	Yes		Yes	Yes
	hours							
Arkansas	60 clock hours	Annually	No	Yes	Yes	Yes	No	No
California	150 clock hours (or 10 semester	5 years	No ^a	Yes a	Yes a	Yes a		
	credit hours)	•						
Colorado	6 semester credit hours or 90 contact	5 years						
	hours	•						
Connecticut	6 semester credit hours or 90 clock	5 years						
	hours or 9 CEUs							
Delaware	6 semester credit hours or 90 clock	5 years		Yes	Yes	Yes	Yes	Yes
	hours							
District of Columbia	6 semester credit hours or 90 clock	5 years ^a						
	hours ^a							
Florida	6 semester credit hours or 120 in-	5 years		Yes	Yes	Yes		
	service points							
Georgia	6 semester credit hours or 10	5 years	No	Yes	Yes	Yes	Yes	Yes
C	professional learning units							
Hawaii	60 points ^a	5 years ^a	No ^a	No ^a	Yes a			
Idaho	6 semester credit hours ^a	5 years ^a	No ^a	Yes	Yes	No	No	Yes
Illinois	8 semester credit hours or 24 CEUs	5 or 10 years ^a			Yes		Yes	
Indiana	6 semester credit hours or 90	5 years						
	professional growth experience	•						
	points							
Iowa	6 semester credit hours	5 years	Yes	No	Yes			

TABLE A-9. Requirements, Approval, and Funding for Professional Development for Teachers (cont.)

State	Professional Development	Time Period Within Which			nponents of the ent Requirement?		How is Professional Development Funded?		
	Requirements for License Renewal	Reqs. Must Be Satisfied	Colleges and Universities	Local School District	State Agency	State Monies	Individual Monies	District Monies	
Kansas	Holds no advanced degree: BA: 8 semester hours or 80 clock hours and 4 semester credit hours ^a Holds an advanced degree: 6 semester credit hours or 120 clock hours ^a	- 5 years	No	Yes	Yes	Yes	Yes	Yes	
Kentucky	First 5 years: 15 semester credit hours ^a Second 5 years: complete a Master's Degree or a 5 th year program ^a Subsequent 5 years: 6 semester credit hours or 3 years of teaching experience ^a	5 years ^a	No	Yes	No ^b	Yes	No	Yes	
Louisiana	10 semester credit hours or 150 clock hours	5 years							
Maine	6 semester credit hours or 4 CEUs ^a	5 years ^a							
Maryland	First 5 years: 6 semester credit hours Second 5 years: master's degree, 36 semester credit hours or National Board Certificate and 12 graduate semester credit hours Renewal of Advanced Professional Certification: 6 semester credit hours	5 years	Yes	Yes	Yes	Yes	Yes	Yes	
Massachusetts	10 semester credit hours or 150 points	5 years	No	Yes	Yes	No	Yes	Yes	
Michigan	5 days ^c	Annually		Yes	No	Yes			
Minnesota	125 clock hours (or 5.2 semester credit hours)	5 years		Yes					
Mississippi	Class A: 10 CEUs or 3 semester credit hours and 5 CEUs or 6 semester credit hours Class AA, AAA, or AAAA: 5 CEUs or 3 semester credit hours	5 years	Yes ^a		No ^a				

TABLE A-9. Requirements, Approval, and Funding for Professional Development for Teachers (cont.)

State	Professional Development	Time Period Within Which		oves Componen Pevelopment Rec		How is Professional Development Funded?		
State	Requirements for License Renewal	Reqs. Must Be Satisfied	Colleges and Universities	Local School District	State Agency	State Monies	Individual Monies	District Monies
Missouri	1 semester credit hour or 15 contact hours	Annually		Yes	Yes	Yes	Yes	Yes
Montana	4 semester credit hours or 60 renewal units	5 years	No	No	Yes	No	Yes	Yes
Nebraska	6 semester credit hours or other school board-approved activities	6 years	No	Yes	No	Yes	Yes	Yes
Nevada	6 semester credit hours	5, 6, 8, or 10 years						
New Hampshire	5 semester credit hours or 75 clock hours	3 years	No	Yes				
New Jersey	100 contact hours (or 2.2 semester credit hours) ^a	5 years ^a		Yes ^a		Yes a		Yes a
New Mexico	Varies by teacher and license level ^a	3 or 9 years a	No	Yes	Yes	Yes	Yes	Yes
New York	175 clock hours (or 11.7 semester credit hours)	5 years		Yes	Yes	Yes		Yes
North Carolina	10 semester credit hours or 15 renewal credits ^a	5 years ^a	No ^a	Yes a	No ^a			
North Dakota	4 semester credit hours ^a	5 years ^a						
Ohio	6 semester credit hours or 180 contact hours or 18 CEUs	5 years	Yes	Yes	No	Yes	Yes	Yes
Oklahoma								
Oregon	Standard or Continuing License: 125 clock hours (or 4.2 semester credit hours) Basic License: 75 clock hours (or 2.5	5 years 3 years		Yes			Yes	Yes
	semester credit hours)	Journ						
Pennsylvania	6 semester credit hours or 180 clock hours	5 years	No	Yes	Yes	Yes	Yes	Yes
Rhode Island	150 clock hours (or 10 semester credit hours)	5 years		Yes	Yes	Yes	Yes	Yes
South Carolina	6 semester credit hours or 120 renewal credits	5 years	No	Yes	Yes	Yes	Yes	Yes
South Dakota	6 semester credit hours ^a	5 years ^a	No ^a	Yes a	Yes a			

TABLE A-9. Requirements, Approval, and Funding for Professional Development for Teachers (cont.)

State	Professional Development	Time Period Within Which		oves Componen Development Rec		How is Professional Development Funded?		
State	Requirements for License Renewal	Reqs. Must Be Satisfied	Colleges and Universities	Local School District	State Agency	State Monies	Individual Monies	District Monies
Tennessee	3 semester credit hours or 45 points 6 semester credit hours or 90 points	5 years 10 years			Yes		Yes	
Texas	Standard Classroom Teacher Certificate: 150 clock hours (or 10 semester credit hours) Standard Master Teacher Certificate: 200 clock hours (or 13.3 semester credit hours) Standard Master Teacher Certificate: 200 clock hours (or 13.3 semester credit hours)	- 5 years ^a	No ^a	Yes ^a	No ^a			
Utah	Level 2 and 3: 100 clock hours (or 5.6 semester credit hours) assumes taught at least 3 of last 5 years ^a	5 years ^a	Yes	Yes	Yes	Yes	Yes	Yes
Vermont	Level 1 License: 3 semester credit hours Level 2 License: 9 semester credit hours	3 years 7 years	No	Yes	Yes	Yes	Yes	Yes
Virginia	6 semester credit hours or 180 renewal activity points	5 years	No	Yes	Yes			
Washington	10 semester credit hours or 150 clock hours	5 years	No	Yes	Yes	Yes	Yes	Yes
West Virginia	6 semester credit hours ^a	5 years ^a	N/A	Yes				
Wisconsin	6 semester credit hours or a PD Plan	5 years	Yes	Yes	Yes	No		Yes
Wyoming	5 semester credit hours or 75 clock hours	5 years			Yes	Yes	Yes	Yes
TOTALS	N/A	N/A	5	29	27	22	21	24
No Data Available	1	1	23	14	14	24	26	25

^a Indicates information culled from authors' review of State statutes, regulations, and websites. These are data points not included in NASDTEC's Knowledgebase.

SOURCE: NASDTEC Knowledgebase, Table E1 "Professional Development: General Descriptions", assessed 13 November 2006; NASDTEC Knowledgebase, Table E2 "Professional Development: Approval and Funding", assessed 13 November 2006; NASDTEC Knowledgebase, Table A1 "Teaching Certificates: Titles and Descriptions"; and these sources for the following States: Alaska: 4 Alaska Admin. Code 12.405; District of Columbia: www.k12.dc.us/dcsea/certification/licensing/renewal.html; Hawaii: WCHR 8-54 and www.htsb.org; Idaho:

www.sde.idaho.gov/certification/certmanual.asp; Illinois: 23 Ill. Adm. Code 25.805; Kentucky: http://www.kyepsb.net/certification/certstandardroutes.asp#renewal; Kansas: K.A.R. §91-1-205(b); Maine: 20-A M.R.S. §13016 and CMR 05-071-115.5.2.D; Mississippi: CMSR 36-000-005; Missouri: 5 CSR 80-800.360; Nevada: N.A.C. 391.065 and 391.060; New Jersey:

http://www.nj.gov/njded/genfo/overview/faq_profdev.htm; North Carolina: 16 N.C.A.C. 6C.0307; North Dakota: www.nd.gov/epsb/licensure/; South Dakota; ARSD 24:02:02:06 and 24:15:03:06; Texas: 19 TAC §232.851; and West Virginia: wvde.state.wv.us/certification/mainfaqs.html and wvde.state.wv.us/certification/forms/Form4.pdf

^b For administrators only.

^c Teachers in their first 3 years of teaching also received 15 additional days.

NOTE: "---" indicates that the State reported no data for this cell to NASDTEC.

State	Description
	Length: 1 to 3 years
	Mentor criteria: A licensed master teacher within the same building with a minimum of three years successful teaching experience who is
	trained in the State-adopted mentoring model
	Mentor responsibilities: Mentors provide focused feedback with regard to instructional skills, classroom management, and professional
	behaviors and growth and perform a minimum of three formal classroom observations per school year.
Arkansas	Support provided to beginning teacher and mentors: Programs must provide a minimum of 2 hours every two weeks of released time (on
	average) during the contract day for the mentor and novice teacher to work together; assist the novice and mentor to schedule focused
	observations and professional development activities; and provide activities for mentors and novice teachers, which engage them in
	collaborative dialogue, problem solving, and professional development.
	Completion requirements: Beginning teachers must successfully complete the State-mandated performance assessment.
	Link to licensure: Upon completion, teachers are awarded a standard license.
	Length: 2 years
	Mentor criteria: Support providers/assessors must (a) have an awareness of beginning teacher development; (b) be willing to participate in
	support provider/assessor training; (c) be willing to engage in formative assessment processes; (d) be willing to discuss assessment
	information and share instructional ideas and materials with beginning teachers; (e) have effective interpersonal skills and are willing to
	work collaboratively with a beginning teacher; (f) have demonstrated a commitment to their own professional growth and learning; and
	(g) be excellent professional role models. They must be complete State developed training.
	Mentor responsibilities: Execute the California Formative Assessment and Support System for Teachers (CFASST) whereby the support
	provider/assessor assesses the performance of each beginning teacher with one or more complex measures at the onset of the program and
	at multiple points during the induction program to document progress over a period of time. Each assessment is based on the California
	Standards for the Teaching Profession (CSTP). The assessment information is used to determine the scope, focus and content of

professional development activities that are the basis of the beginning teacher's Individual Induction Plan (IIP).

Support provided to beginning teacher and mentors: Beginning teachers and their support providers/assessors are given time and

opportunities to work together on a regular, ongoing basis by means of release time, reduced teaching load, and/or joint planning periods. Support activities are guided by support providers/assessors, are appropriate to beginning teachers' individual strengths and needs, are reflected in the IIP, and are provided in a manner that facilitates beginning teacher growth and development. Assessment information is used to periodically check the beginning teacher's progress toward IIP goals, and to make adjustments in support activities, as appropriate.

Completion requirements: At a minimum, beginning teachers must (a) show documentation of teaching performance assessment outcomes, when available, (b) have an annual IIP, (c) have demonstrated application of the *CSTP* and State-adopted curriculum materials, (d) present evidence of participation in professional development activities, (e) have demonstrated knowledge of using technology to support student learning; equity, diversity, and access to the core curriculum; creating a supportive and healthy environment for student learning; teaching

TABLE A-10. States' Minimum Requirements for Beginning Teacher Induction and Mentoring Programs, 2005

English language learners; and teaching special population.

California

Link to licensure: Teachers must complete a Beginning Teacher Support and Assessment Program in order to be eligible for a Level II Professional Clear Credential.

State	Description
	Length: District determined, but no longer than three years
	Mentor criteria: The mentor agrees to serve as a mentor; is an experienced professional who models the State's standards for professional
	educators with demonstrated excellence in practice; the mentor works well with adults, is sensitive to the viewpoints of others; the mentor
	is an active and open learner; the mentor is competent in interpersonal and public relations skills.
	Mentor responsibilities: Specifics are left to districts but mentors should serve as a teacher, coach, advocate, support, guide, and nurturer of
	new teachers. Mentors should guide the inductee in the development of an induction portfolio. The purpose of the portfolio is to encourage
Colorado	self-reflection and self-evaluation of educational practice by the inductee, and to document improved performance related to the State's
	standards for professional educators.
	Support provided to beginning teacher and mentors: Professional support for inductees must include: information related to school and
	district policies and procedures; local district goals and local content standards; educator roles and responsibilities; information about the
	school community; substantive feedback to the inductee about performance; provisions for the extension of the induction program if deemed necessary by the district. Districts are encouraged to provide release time for both mentors and teachers.
	Completion requirements: Beginning teachers must complete a formative assessment.
	Link to licensure: Upon completion of an approved induction program, teachers are eligible for a Professional Teacher License.
-	Length: 1 year with at most a one year extension
	Mentor criteria: Mentors and assessors may be full or part-time teachers in the same or a different building than the beginning teacher who has
	completed training provided by the Connecticut State Department of Education. The assessor must have teaching experience in the same
	general subject as the beginning teacher.
	Mentor responsibilities: Mentors must meet weekly with the beginning teacher during the school year and record such activities; observe the
	beginning teacher and provide classroom demonstrations for the beginning teacher on at least eight occasions during the school year,
	except for mentors of alternate route beginning teachers who shall perform such activities on at least ten occasions during the school year;
Connecticut	provide support for the development of the beginning teacher's skills, as defined by the Connecticut Teaching Competencies, including
	planning of instruction, classroom management, instruction and assessment of student learning; and, assist the beginning teacher in
	preparing for the assessment process.
	Support provided to beginning teacher and mentors: Beginning teachers must be provided with release time to observe and be observed by
	the mentors. Completion requirements: Perinning teachers must suggestfully complete a portfolio assessment that is based upon but not limited to date
	Completion requirements: Beginning teachers must successfully complete a portfolio assessment that is based upon, but not limited to, data obtained from observations conducted by assessors using an assessment instrument.
	Link to licensure: Upon successful completion, the teacher is eligible for the Provisional Educator Certificate.
	1 2 mm to necessario e pon successirai completion, the teacher is engine for the 110 misonal Educator Continent.

State	Description
Delaware	Length: 3 years
	Mentor criteria: A mentor teacher must have participated in the training for mentors specified by the Department, have satisfactory DPAS evaluations, and may not be on a DPAS Improvement Plan.
	Mentor responsibilities: Lead mentor teachers must work a minimum of 45 documented hours per year in Lead Mentor Activities that may include, but are not limited to, a combination of in-school and after-school time, per year in the program in a leadership position, planning mentor training, providing two-day mentor training to aspiring mentors, assisting mentors with specific issues, and other responsibilities as directed by the site coordinator. Educator mentors must facilitate 30 documented contact hours, which may include a combination of in-
	school and after-school time, with their protégées annually which are designed to help the new teacher acquire additional skills and
	knowledge appropriate to their specific positions; and submit contact log documentation to site coordinator.
	Support provided to beginning teacher and mentors: Mentors are paid an extra responsibility salary supplement annually, upon documentation of satisfactory fulfillment of duties and responsibilities.
	Completion requirements: Beginning teachers must complete all the requirements of the New Educator Mentoring Program including annual performance evaluations.
	Link to licensure: Upon successful completion, the teacher is eligible for a Continuing License.
	Length: 1 year at a minimum if Initial Certificate issued prior to September 1, 2007; 2 years if Initial Certificate issued after September 1, 2007
	Mentor criteria: District determined, but State requires they be appropriately trained and demonstrate the best practices in teaching his or her
	respective field of practice
	Mentor responsibilities: District determined
	Support provided to beginning teacher and mentors: Specifics determined by the district, but the new teacher must be provided with support
	in relation to the Illinois Professional Teaching Standards, the content-area standards applicable to the new teacher's area of certification,
Illinois	and any applicable local school improvement and professional development plans. Beginning teachers must also be provided with
	professional development specifically designed to ensure the growth of the new teacher's knowledge and skills. School receives \$1,200
	per mentor teacher per year which may be used to provide the mentor teacher compensation, training, and release time.
	Completion requirements: Beginning teachers must complete a formative assessment that is based on the Illinois Professional Teaching
	Standards and is designed to provide feedback to the new teacher and opportunities for reflection on his or her performance. The findings
	from this formative assessment can not be used in the teacher's annual performance evaluation.
	Link to licensure: Teachers must complete a program of induction and mentoring in order to receive a Standard Teaching Certificate.
	Length: 2 semesters with a 2 semester extension if deemed necessary by the school principal
Indiana	Mentor criteria: Where possible, each mentor should: (1) have at least five (5) years teaching experience; (2) teach at a grade level similar to
	that of the beginning teacher; (3) teach a similar subject to that of the beginning teacher; and (4) teach in the same building as the
	beginning teacher.
	Mentor responsibilities: The mentor assists the beginning teachers in the performance of their duties and identifies teaching skills and
	practices necessary for excellence in teaching.
	Support provided to beginning teacher and mentors: District determined
	Completion requirements: Beginning teacher must receive a satisfactory rating on a performance evaluation conducted by the principal.
	Link to licensure: Upon completion, teachers are eligible for a Proficient Practitioner license.

State	Description
Iowa	 Length: 2 years with a possible one year extension if teacher fails the comprehensive evaluation Mentor criteria: Mentors must complete training that includes, at a minimum, skills of classroom demonstration and coaching, and district expectations for beginning teacher competence on Iowa teaching standards. Mentor responsibilities: District determined
	Support provided to beginning teacher and mentors: Districts must provide for release time for mentors and beginning teachers to plan, provide demonstration of classroom practices, observe teaching, and provide feedback. The mentor receives a \$500 stipend per semester Completion requirements: The beginning teacher is comprehensively evaluated to determine if the teacher meets expectations. Link to licensure: Upon successful completion, the teacher is eligible for a standard license.
Kansas	 Length: 1 year Mentor criteria: Mentors must be certificated teachers who have completed at least three consecutive school years of employment in the school district, have been selected by the board of education of the school district on the basis of having demonstrated exemplary teaching ability as indicated by criteria established by the State board of education, and have participated in and successfully completed a training program for mentor teachers provided for by the board of education of the school district in accordance with guidelines prescribed by the State board of education. Mentor responsibilities: The primary function of a mentor teacher shall be to provide probationary teachers (no more than two at a time) with professional support and assistance. Support provided to beginning teacher and mentors: Districts must provide continuous assistance activities, including structured contact time between the mentor teacher and the probationary teacher as well as unstructured opportunities. District may apply to the State for grant money to provide mentor teachers with a stipend not exceeding \$1,000. Completion requirements: District determined Link to licensure: None
Kentucky ^a	 Length: 1 year Mentor criteria: The beginning teacher is assigned to a 3-member committee consisting of a resource teacher, the school principal of the school where the internship is served, and a teacher educator appointed by a State-approved teacher training institution. Committee members must have successfully completed training in the supervision and assessment of beginning teachers' performance. The resource teacher shall have completed at least 4 years of successful teaching experience and show evidence of continuing professional development by having achieved a master's degree or its equivalent or the accumulation of 2,000 hours of continuing professional activities. Mentor responsibilities: The committee shall meet with the beginning teacher a minimum of three times per year for evaluation and recommendation with all committee members present. In addition, each member of the committee shall observe the beginning teacher in the classroom a minimum of three times per year. The resource teacher shall spend a minimum of seventy hours working with the beginning teacher. Twenty of these hours shall be in the classroom setting, and fifty of these hours shall be in consultation other than class time or attending assessment meetings. Support provided to beginning teacher and mentors: The resource teacher receives a stipend of \$1,400 per year. Completion requirements: The beginning teacher must receive a majority vote from their committee. In arriving at its professional judgment, the committee shall take into consideration the progress of the teacher intern throughout the school year and, particularly, the level of performance that has been achieved near the end of the internship. Link to licensure: Upon successful completion, the teacher is eligible for a professional teaching certificate.

State	Description
State Louisiana	Length: 3 semesters with 1 semester extension Mentor criteria: For assignment as a mentor, the teacher must have a permanent teaching certificate and a minimum of three years of teachin experience, a minimum of one complete year of experience in the school system, and training as both an assessor and a mentor. Mentor responsibilities: As a coach, the mentor teacher must (a) coach the new teacher in analysis of the instructional process and in determining how well students are learning; (b) coach the new teacher in expanding effective teaching strategies; (c) conduct advisory informal conferences and observations with feedback; and (d) conduct advisory observations with feedback. As a model, the mentor teacher must (a) demonstrate effective planning, instruction, and adjustment of instruction based on content knowledge; (b) guide management of professional responsibilities; and (c) provide encouragement and support As a professional development specialist, the mentor teacher must (a) assist the new teacher in analyzing and resolving problems; (b) direct the new teacher to needed assistance and resources; (c) confer with the new teacher and principal to formulate a formal Professional Growth Plan (PGP) for the new teacher and to revise it as needed; (d) assist the new teacher in the analysis of student performance data and student records to plan instruction consister with student needs and the school improvement plan; and (e) assist the new teacher in exploring a variety of methods to obtain
	representative samples of student work. Support provided to beginning teacher and mentors: Districts must provide whatever released time from classroom or other duties as necessary for mentors, mentor support team members, assessors, and new teachers to be trained and to perform their respective duties ar activities. Concluding assessment: During the third semester, the beginning teacher assessed in accordance with the Louisiana Components of Effectiv Teaching by an assessment team of two trained assessors (the principal and an external assessor). If the beginning teacher does not pass this assessment, they may be reassessed in their fourth semester. Link to licensure: Upon successful completion, the teacher is eligible to receive a regular teaching certificate.
Maryland	Length: 2 years Mentor criteria: A mentor teacher must hold an advanced professional certificate; demonstrate knowledge of or training in adult learning theory and peer coaching techniques; demonstrate a knowledge base and skills to address the performance evaluation criteria and outcomes to be met by each mentee; and possess a positive reference from a current or recent building principal or supervisor that addresses the instruction, management, human relations, and communication skills of the mentor applicant. Mentor responsibilities: Mentors must hold regular meetings with mentees to provide ongoing support and feedback on classroom performance to enable mentees to address their performance evaluation criteria and outcomes. They must also identify and coordinate the appropriate resources to address the performance needs of mentees. Support provided to beginning teacher and mentors: District determined Concluding assessment: Specifics determined by districts, but at a minimum, the beginning teacher must earn an overall year-end evaluation rating of satisfactory or better in the last year of probation. Link to licensure: Teachers must successfully complete an mentoring program in order to gain tenure.

State	Description
	Length: 1 year Mentor criteria: An educator who has at least three full years of experience under an Initial or Professional license and who has been trained to
	assist a beginning educator in the same professional role with his or her professional responsibilities and general school/district procedures.
Massachusetts	Mentor responsibilities: District determined Support provided to beginning teacher and mentors: Districts must provide release time for the mentor and beginning teacher to engage in
	regular classroom observations and other mentoring activities and assistance to the beginning teacher in developing materials that will be used to assess performance for the Professional license.
	Concluding assessment: The beginning teacher must successfully complete a performance evaluation conducted by a supervisor.
	Link to licensure: Upon successful completion, the teacher is eligible to receive a Professional license.
	Length: 3 years
	Mentor criteria: The mentor must be a master teacher, a college professor, or a retired master teacher.
	Mentor responsibilities: District determined
	Support provided to beginning teacher and mentors: The teacher must receive intensive professional development induction into teaching,
Michigan	based on a professional development plan. The intensive professional development induction into teaching shall consist of at least 15 days
	of professional development, the experiencing of effective practices in university-linked professional development schools, and regional
	seminars conducted by master teachers and other mentors. Concluding assessment: District determined
	Link to licensure: None
	Length: 2 years at a minimum
	Mentor criteria: District determined
	Mentor responsibilities: District determined
	Support provided to beginning teacher and mentors: The district must provide a plan of professional development for the first two years of
	teaching that includes assistance from the district's professional development committee. This committee works with beginning teachers
Missouri	and experienced teachers in identifying instructional concerns and remedies; serves as a confidential consultant upon a teacher's request;
Missouri	assesses faculty needs and develop in-service opportunities for school staff; and presents to the proper authority faculty suggestions, ideas
	and recommendations pertaining to classroom instruction within the school district. The professional development plan may include
	guidance from a district-designated faculty member employed at a grade level comparable to the instructional grade level of the beginning
	teacher, and such other forms of assistance which the district may choose to offer.
	Concluding assessment: District determined Link to licensure: Teachers must have completed a mentoring program to be eligible for the Career Continuous Professional License.
	Link to heceisure. Teachers must have completed a memoring program to be engine for the Career Community Professional License.

State	Description
	Length: 1 year
	Mentor criteria: The mentor must be a certified teacher with at least three years of experience who is actively teaching in the district or a
New Jersey	retired teacher or administrator, is experienced and certified in the subject area in which the novice teacher is teaching, where possible,
	and agrees to complete a comprehensive mentor training program.
	Mentor responsibilities: Mentor teachers are required to give confidential support and guidance to novice teachers in accordance with the
	Professional Standards for Teachers.
	Support provided to beginning teacher and mentors: State funds can be used for one or more of the following: stipends for mentor teachers,
	the costs associated with release time, substitutes for mentor teachers and novice teachers, and professional development and training activities related to the mentoring program.
	Completion requirements: An appropriately certified building principal or administrator observes and evaluates the beginning teacher three
	times during the first year of mentoring for purposes of certification – one at the end of 10 weeks, two at the end of 20 weeks, and three at
	the end of 30 weeks.
	Link to licensure: Teacher must have completed an induction/mentoring program to be eligible for the standard instructional certificate.
	Length: 1 year with up to 2 one-year extensions
	Mentor criteria: District determined
	Mentor responsibilities: District determined
New Mexico	Support provided to beginning teacher and mentors: District programs must use an ongoing, formative evaluation of beginning teachers'
	performance and provide compensation for mentors. Completion requirements: Beginning teachers must successfully complete an annual summative assessment of competence.
	Link to licensure: Upon successful completion, teachers are eligible for continuing licensure and a level 2 licensure at the end of three years of
	teaching experience.
	Length: 2 years with a one-year extension
	Mentor criteria: Mentor teachers must have at least three years of successful teaching and hold a continuing license.
	Mentor responsibilities: Mentors must assist the beginning teachers in developing an Individual Growth Plan that includes goals, strategies,
	and assessment of the beginning teacher's progress in improving professional skills, to assist the beginning teacher in meeting license
North Carolina	requirements, and should be focused on the INTASC Standards. Throughout the year, formative assessment conferences should be held to
	reflect on the progress of the beginning teacher in meeting the goals established for professional growth.
	Support provided to beginning teacher and mentors: Mentors receive pay for 2 years.
	Completion requirements: At the end of the second year, an initially licensed teacher will submit the performance-based product for review.
	Two Product Assessors, working independently, will assess the product and make the licensure recommendation. Candidates will have
	three opportunities to successfully complete the assessment.
	Link to licensure: Upon successful completion, teachers are recommended for continuing licensure.

TABLE A-10. States' Minimum R	Requirements for Beginning	Teacher Induction and Mentoring P	rograms. 2005 (co	ont.)

State	Description
	Length: 1 year
	Mentor criteria: Mentor should meet five of the six following criteria: (a) have a minimum of three years' successful teaching experience, (b) teach in the same grade level of the Entry Year Teacher (EYT), (c) teach in the same content area as the EYT, (d) teach in the same building as the EYT, (e) meet the definition of Highly Qualified Teacher, and (f) reflect characteristics and demonstrate behavior appropriate of mentors, such as commitment to professional growth, collaboration, self-efficacy, resourcefulness, flexibility,
Ohia	dependability, and creativity.
Ohio	Mentor responsibilities: Mentors must meet on regularly and ongoing basis with EYT and the Entry Year Coordinator, observe the EYT in the classroom and provides feedback, and keep a log of meetings with and observations of the EYT.
	Support provided to beginning teacher and mentors: Mentors are provided with training opportunities such as Pathwise and Ohio First which are aligned with performance-based assessment.
	Completion requirements: Entry Year Teachers must pass a performance-based assessment during the lifetime of their initial 2-year license.
	Link to licensure: Upon successful completion, teachers advance to a professional license.
	Length: 1 year with a possible 1 year extension
	Mentor criteria: A mentor teacher must have a minimum of two years of classroom teaching experience, hold a standard certificate, and be employed in a school district to serve as a teacher.
	Mentor responsibilities: Mentor teachers, and other member of the beginning teacher's Residency Committee, must (a) work with the resident
	teacher to assist in all matters concerning classroom management and professional development for that teacher; (b) provide for
011.1	meaningful parental, guardian or custodian input as one criterion in evaluating the resident teacher's performance; (c) upon completion of
Oklahoma	one school year of residency, make recommendations to the Board and the preparing institution of higher education as to whether the resident teacher should be issued a certificate or whether such resident teacher shall be required to serve as a resident teacher for one
	additional school year; and (d) when the committee recommends certification, recommend a professional development program for the resident teacher, designed to strengthen the resident teacher's teaching skills in any area identified by the committee.
	Support provided to beginning teacher and mentors: Districts can provide a stipend of no more than \$500 to mentor teachers.
	Completion requirements: Beginning teachers must be recommended for certification by the appointed residency committee
	Link to licensure: Upon successful completion, teachers are recommended for a standard certificate. Length: At least 1 year, but may be longer is desired by the district
	Mentor criteria: Criteria for recommended the State are: (a) similar certification and assignment, (b) outstanding work performance, (c)
	models continuous learning and reflection, (d) knowledge of district/school policies, procedures, and resources, (e) ability to work with
	students and other adults, (f) willingness to accept addition responsibility, (g) mentor training or previous experience, and (h) compatible schedules so the mentor and inductee can meet regularly.
Pennsylvania	Mentor responsibilities: Responsibilities may include: (a) facilitate a good start to the year, (b) meet with the inductee regularly, (c) model
1 Chiisyivama	good instructional practices, (d) observe the inductee, (e) offer suggestions for improvement, (f) offer suggestions for improvement, (g) provide professional and personal support, (h) maintain a confidential relationship with the inductee, and (i) serve as a liaison.
	Support provided to beginning teacher and mentors: District induction plans can provide rewards such as release time, stipends, extra
	compensation, and tuition waivers.
	Completion requirements: District determined Link to licensure: Upon successful completion, teachers are eligible for Level II certification.
	Zami to necessario. Opon successirii completion, teachers are engione for Dever in certaincation.

State	Description
Rhode Island	 Length: 2 years at a minimum Mentor criteria: Criteria specified in district mentoring program plans must include ability to work with adults, commitment to participate in all activities outlined in the program, commitment to the school community, teaching experience of a minimum of five years, knowledge of and commitment to standards-based instruction in the classroom, professional growth, and teaching experience in the district. Mentor responsibilities: Responsibilities must include regularly scheduled networking sessions with the mentee, conferencing with and observation of the mentee, provision of support in the mentee's Individual Professional Development Plan, and participation in shared professional development activities. Support provided to beginning teacher and mentors: District mentoring programs must provide funding for training for mentors, materials, meeting expenses, ongoing professional development for mentors and mentees, release time for mentors and mentees to engage in conferencing and observation, stipends for mentors, and stipends for coordinators. Completion requirements: District determined Link to licensure: None
South Carolina ^b	 Length: 1 year Mentor criteria: Mentors must hold a valid South Carolina professional teaching certificate, have a minimum of one year's successful teaching experience in South Carolina at the continuing-contract level, have expressed interest in becoming a mentor, be recommended by a building-level administrator, be recommended by a teacher in the district, have demonstrated proficiency in using computer technology, be a current practitioner or have been employed in a South Carolina public school system within the past five years, and successfully complete all required mentor training and activities. Mentor responsibilities: District determined Support provided to beginning teacher and mentors: District induction plans must provide release time for each induction teacher to observe his or her mentor and other experienced teachers; release time for each mentor to observe and provide formative feedback to his or her induction-teacher advisee; and regular opportunities (based on need, but at least once per month) for each induction teacher to meet with his or her mentor in sessions devoted to reflection on teaching; specific areas where improvement is needed; school-related procedures, assignments, or issues; collaborative projects; and/or planning for other professional development activities. Districts may also provide incentives to mentor teachers such as additional pay, release time, and additional assistance in the classroom. Completion requirements: District determined Link to licensure: Upon successful completion, teachers are employed under an annual-contract

TABLE A-10. States' Minimum Red	guirements for Beginning	Teacher Induction and Mentoring	a Programs, 2005 (cont.)

State	Description
	Length: 3 years
	Mentor criteria: The mentor teacher shall teach in the same school, and where feasible, in the same subject area as the beginning (i.e., Level 1)
	teacher, hold a Utah Professional Educator's Level 2 or 3 license, and have completed a mentor training program including continuing
	professional development.
	Mentor responsibilities: The mentor teacher shall guide Level 1 teachers to meet the procedural demands of the school and school district;
	provide moral and emotional support; arrange for opportunities for the Level 1 teacher to observe teachers who use various models of
Utah	teaching; share personal knowledge and expertise about new materials, planning strategies, curriculum development and teaching methods; assist the Level 1 teacher with classroom management and discipline; support Level 1 teachers on an ongoing basis; help Level 1
	teachers understand the implications of student diversity for teaching and learning; engage the Level 1 teacher in self-assessment and
	reflection; and assist with development of Level 1 teacher's portfolio
	Support provided to beginning teacher and mentors: District determined
	Completion requirements: Level 1 teachers must pass the Praxis II exam in their educational preparation and assignment, successfully satisfy
	district evaluations for three years, and complete a portfolio review.
	Link to licensure: Teacher must complete the Entry Year Enhancements in order to advance to a Level 2 License.
	Length: 1 year
	Mentor criteria: Mentor teachers must (a) be classroom teachers who have achieved continuing contract status and who work in the same
	building as the teachers they are assisting or be instructional personnel who are assigned solely as mentors; (b) be assigned a limited
	number of teachers at any time; instructional personnel who are not assigned solely as mentors should not be assigned to more than four
	teachers at any time; and (c) guide teachers in the program through demonstrations, observations, and consultations to promote instructional excellence.
	Mentor responsibilities: Responsibilities must include conducting a formative assessment of the beginning teacher's performance;
Virginia	collaborating with the beginning teacher in the development and implementation of an individualized professional development plan;
	providing support activities that facilitate the beginning teacher's growth and development; and observing, coaching, and giving
	constructive feedback, including strategies for self-reflection.
	Support provided to beginning teacher and mentors: District programs must provide adequate release time for mentor teachers during the
	contract day.
	Completion requirements: District determined
	Link to licensure: None

TABLE A-10. States' Minimum Requirements for Beginning Teacher Induction and Mentoring Programs, 2005 (cont.)

State	Description
	Length: 1 year
	Mentor criteria: The mentor teacher is an experienced classroom teacher at the school who teaches the same or similar subject and grade level
	as the beginning teacher.
	Mentor responsibilities: Mentor teachers must (a) observe the classroom teaching skills of the beginning teacher for at least one hour per week
	during the first half of the school year and may be reduced at the discretion of the mentor to one hour every two weeks during the second
	half of the school year; (b) hold weekly meetings with the beginning teacher to discuss the performance of the beginning teacher and any
	needed improvements (these meetings may be reduced at the discretion of the mentor to biweekly meetings during the second half of the
West Virginia	school year); and (c) attend monthly meetings of the professional support team to discuss the performance of the beginning teacher.
west viigiiia	Support provided to beginning teacher and mentors: District programs must schedule joint planning periods for the mentor and beginning
	teacher throughout the year. Beginning teachers and mentors must be provided with in-service professional development programs
	provided through the professional development project of the center for professional development which will be held in the first half of the
	school year. Programs must also provide the necessary release time from regular duties for the mentor teacher, as agreed to by the
	principal and the mentor teacher, and a stipend of at least \$600 for the mentor teacher.
	Completion requirements: The school principal conducts a final evaluation of the beginning teacher's performance using a form developed by
	the State board of education.
	Link to licensure: Upon successful completion, the school principal recommends the teacher be given full professional status.
	Length: For less than 5 years (district determined)
	Mentor criteria: District determined
	Mentor responsibilities: District determined
Wisconsin	Support provided to beginning teacher and mentors: District determined
	Completion requirements: District determined
	Link to licensure: In order to advance to the professional educator level, the initial educator must show documentation of the completion of a
	professional development plan. Comments on classroom performance from the mentor teacher is an acceptable form of documentation.

^a Kentucky is currently piloting (through June 2006) a new two-year teacher internship program as a possible replacement for the one-year program described here.

NOTE: The following States do not require all beginning teachers to complete an induction and mentoring program: Alabama, Alaska, Arizona, District of Columbia, Florida, Georgia, Hawaii, Idaho, Maine, Montana, Newada, New Hampshire, North Dakota, Tennessee, Texas, Vermont, and Wyoming. While not requiring all beginning teachers to complete an induction and mentoring program, the following States provide funds and/or technical assistance to districts choosing to operate such a program: Mississippi, Minnesota, Nebraska, New York, Oregon, South Dakota, and Washington. SOURCE: Arkansas: Ark. Stat. §6-15-2504 and 005 019 CARR 015; California: Cal. Educ Code §844279, 44491—44496 and CCTC (July 1997); Colorado: C.R.S. §22-60.5-204; Connecticut: Conn. Gen. Stat. §10-220a and Regs., Conn. State Agencies §§10-220a-1—10-220a-19; Idaho: Idaho Code §33-512; Illinois: 105 ILCS 5/21-2, 105 ILCS 5/21A-5—5/21A-35; Indiana: Burns Ind. Code Ann. §20-28-4-6 and 515 IAC 1-5-1—1-5-7; Iowa: Iowa Code §\$272.28, 284.1—284.13 and 281 IAC 83.3(284); Kansas: K.S.A. §§7-1412—72-1415 and K.A.R. §§91-41-1—91-41-4; Kentucky: KRS §§161.030 and 161.1222; Louisiana: La.R.S. §§17:3891—17:3896; Maryland: COMAR 13A.07.01.01—13A.07.01.05; Massachusetts: 603 CMR 7.01—7.14; Michigan: MCL §380.1526; Minnesota: Minn. Stat. Ann. §\$122A.70 and 122A.413; Mississippi: Miss. Code Ann. §\$37-9-201—37-9-213; Missouri: 168.021 and 168.400 R.S.Mo.; Nebraska: R.R.S. Neb. §79-761 and Nebraska Admin. Code Title 92, Ch. 26; New Jersey: N.J. Stat. §18A:6-76.1 and N.J.A.C. §\$6A:9-8.4—6A:9-8.6; New Mexico: N.M. Stat. Ann. §22-10A-9 and 6.60.10.1—6.60.10.11 NMAC; New York: NY CLS Educ §3303; Oklahoma: 70 Okl. St. §86-106.1, 6-182, and 6-195; Oregon: ORS §\$329.790—329.820; Pennsylvania: 22 Pa. C.S. §49.16; Rhode Island: R.I. Gen. Laws §\$16-7.1-2 and 16-7.1-10; South Carolina: S.C. Code Ann. §\$59-26-30—59-26-40 and 59-26-100 and S.C. Code Regs. §43-205.1; South Dakota: S.D. Codified Laws §13-43-55.1 and ARSD §\$24:41; Tennessee: Tenn. Comp. R. & Regs. R. 0520-2-3-.11; Texas

^b The minimum standards described here for South Carolina are based on the implementation guidelines the Department of Education recommended on June 7, 2005 be adopted by the State Board of Education.

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Alaska	District developed following State guidelines	At least 2 observations per year	At least one evaluation each year or at least one every two years with continued satisfactory performance	No State guidance	Tenure teachers – district shall provide such a teacher with a plan of improvement (based on the district's professional performance standards) which is developed in consultation with the teacher; plan must last between 90 and 180 workdays "unless the minimum time is shortened by agreement between the evaluating administrator and the teacher"; teacher must be observed at least twice during the course of the plan; failure to improve may result in contract termination	Must be employed by the district as a licensed administrator or be a site administrator under a licensed administrator
Arizona	District developed following State guidelines	At least twice each year	At least once each year	No State guidance	After transmittal of an assessment a board designee shall confer with the teacher to make specific recommendations as to areas of improvement in the teacher's performance. The board designee shall provide assistance and opportunities for the certificated teacher to improve his performance and follow up with the teacher after a reasonable period of time for the purpose of ascertaining that the teacher is demonstrating adequate classroom performance	No State guidelines
Arkansas	District developed	At least annually	At least annually	No State guidance	No State guidelines	No State guidelines
California	District developed following State guidelines	At least annually	At least once every other year; or at least once every five year if highly qualified with 10 years experience with district and previous rating was exceeds standards	Yes, required	Evaluation must include recommendations for improvement in the unsatisfactory areas. A meeting must be held to discuss the recommendations between the employing authority and the employee. The employer must assist the employee in improving their performance. The employee must be evaluated at least annually until their evaluation is satisfactory	No State guidelines

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Colorado	District developed following State guidelines	At least two documented observations and one written evaluation annually	At least one observation and one written evaluation annually	Yes, required	Evaluation report must contain a written improvement plan. Teacher must be given a reasonable amount of time to remedy deficiencies. If next evaluation is also unsatisfactory, either more recommendations for improvement can be made or the evaluator can recommend dismissal.	Licensed principals and administrators
Connecticut	District developed following State guidelines	No State guidance	No State guidance	No State guidance	Teachers is placed in the intensive supervision phase and is provided with sufficient opportunities and time to improve performance with assistance from peers and administrators and/or participating in special training designed to assist the teacher in meeting standards. Districts may opt to refer a teacher to an outside agency for assistance in improving their teaching.	District and school administrators
Delaware	Statewide system – DPAS II	At least once annually or once every other year with satisfactory performance	At least once annually or once every other year with satisfactory performance	Yes, required	The district and teacher must develop collaboratively an improvement plan with the district having the final authority to develop and assign the plan. The teacher must be provided a reasonable amount of time for the teacher to complete the improvement plan.	Must be certified
District of Columbia	System-wide	Unable to determine	Evaluated at least each semester and rated annually	No guidance	Employees can appeal their below-average or unsatisfactory ratings to the Superintendent who will then appoint an Impartial Review Board	Supervisor
Florida	District developed following State guidelines	At least once annually	At least once annually	Yes, required	Employee is placed on a 90-day performance probation during which the employee must improve his/her performance. The employee must be evaluated periodically, apprised of progress and must be provided with assistance and inservice training opportunities. At the end of the 90 days, employee could be terminated, given more time to improve or restored to non-probationary status.	Individuals with responsibility for supervising the employee

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Georgia	Statewide system – Georgia Teacher Evaluation Program	At least once annually	At least once annually	Yes, required	Certificated professional personnel who have deficiencies and other needs shall have professional development plans designed to mitigate such deficiencies and other needs as may have been identified during the evaluation process. Progress relative to completing the annual professional development plan shall be assessed during the annual evaluation process.	Superintendents identify appropriately trained evaluators
Hawaii	Statewide system – two systems	Annually as specified by the Program of Assessing Teaching in Hawaii	Annually, only if performance deficiencies according to the Experimental Teacher Evaluation Program	Uncertain	Uncertain	Administrators
Illinois	District developed following State guidelines	At least once every year	At least once every two years	No State guidance	For each teacher receiving an unsatisfactory rating, the district must develop and execute a remediation plan designed to assist the teacher in correcting the identified deficiencies. Teachers must be given 90 schooldays to improve performance. During this time, the teacher must be evaluated and rated once every 30 schooldays to monitor progress.	Trained district administrators
Indiana	District developed with State approval	Annual evaluation by Dec. 31; additional evaluation by Mar. 1 at teacher's request	No State guidance	No, prohibited	Districts are requiring to prepare a developmental plan for each certificated employee addressing that employee's job related strengths and weaknesses and methods of improving those strengths and eliminating those weaknesses.	Appropriate and trained supervisor

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Iowa	District developed following State guidelines	Comprehensive evaluation via teacher induction program	At least once every three years	No State guidance	The evaluator shall, at the direction of the teacher's supervisor, recommend to the district that the teacher participate in an intensive assistance program. All school districts must offer an intensive assistance program.	Licensed administrators who have completed training
Kansas	District developed following State guidelines	At least once each semester in first two years; at least once a year in third and fourth years	At least once every three years	Yes, required	No State guidance	Administrative staff
Kentucky	District developed following State guidelines	Annual evaluations with multiple observations	At least once every three years	No State guidance	Teachers must be provided with assistance for professional growth. Each district's system must specify the processes to be used when corrective actions are necessary in relation to the teacher's performance.	Employee's immediate supervisor; must be trained and approved by the State Board of Education
Louisiana	District developed following State guidelines	Formally evaluated annually	Formally evaluated at least once every three years; informally every year not formally evaluated	Yes, required	Teachers are placed in an intensive assistance program and are formally reevaluated. Teachers must be informed of: the specific steps that should be taken to improve; the assistance, support and resources that are provided by the local district; the expected timeline, not to exceed two years, for improving performance; and the consequences for failing to improve.	Principals, assistant principals or equivalent level supervisors who have been trained
Massachusetts	District developed following State guidelines	At least annually	At least once every two years	Yes, permissible	The evaluation report must specify what the individual needs to do to meet the performance standards. A reasonable amount of time shall be provided to permit the individual to implement the recommendations for improvement of performance and to meet the performance standards	Must be trained in principles of supervision and evaluation and have expertise in the subject matter and/or areas evaluating

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Michigan	District developed following State guidelines	At least once annually	At least once every three years	No State guidance	No State guidance	No State guidance
Minnesota	District developed following State guidelines	At least three times annually	No State guidance	No State guidance	No State guidance	No State guidance
Missouri	District developed	Sufficient frequen- demonstrated stan- competency and a	dards of	No State guidance	No State guidance	No State guidance
Nebraska	District developed with State approval probationary teachers only	At least once each semester	No State guidance	No State guidance	The evaluator shall provide the teacher at the time of the observation with a list of deficiencies, a list of suggestions for improvement and assistance in overcoming the deficiencies, and followup evaluations and assistance when deficiencies remain.	No State guidance
Nevada	District developed following State guidelines	Three times each year no later than Dec. 1, Feb. 1, and Apr. 1	At least once annually	No State guidance	Evaluations must include recommendations for improvement. A reasonable effort must be made to assist the teacher to correct any deficiencies noted in the evaluation.	Administrator
New Mexico	Statewide system – with district augment- ation	At least once annually	At least once annually	Yes, required	The principal may require the teacher to undergo peer intervention, including mentoring, for a period s/he deems necessary. If the teacher is unable to demonstrate satisfactory performance and competency by the end of the period, the peer interveners may recommend termination of the teacher or that the suspension of the teacher's license.	Principal

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
North Carolina	District developed following State guidelines	Four observations each year plus one summative appraisal	At least once annually	No State guidance	For teachers in low-performing schools, the teacher receives an action plan designed to improve performance or the superintendent recommends that the teacher be dismissed or demoted. If the teacher is given an action plan, and fails to improve performance, the superintendent must recommend that the teacher be dismissed or demoted.	Individual to whom the teacher reports
North Dakota	District developed following State guidelines	Twice annually by Dec. 15 th and Mar. 15 th	At least once annually by Mar. 15 th	No State guidance	No State guidance	No State guidance
Ohio	District developed following State guidelines	At least twice annually by Jan. 15 th and Apr. 1 st – required for teachers the local board may not want to rehire	"On a regular basis"	No State guidance	The evaluation report must includes specific recommendations regarding any improvements needed in the performance of the teacher being evaluated and regarding the means by which the teacher may obtain assistance in making such improvements.	Superintendent, assistant superintendent, principal, vocational director or a supervisor in any educational area
Oklahoma	District developed following State guidelines	At least twice annually by Nov. 15 th and Feb. 10 th	At least once annually	Yes, required	No State guidance	Certified administrative personnel
Oregon	District developed following State guidelines	At least twice annually	No State guidance	No State guidance	The evaluation must contain a written program of assistance for improvement to remedy any deficiency. The utilization of peer assistance is recommended whenever practicable and reasonable to aid teachers to better meet the needs of students. Peer assistance shall be voluntary and subject to the terms of any applicable collective bargaining agreement.	No State guidance

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
South Carolina	Statewide system – ADEPT – with some district adaptation	Induction- contract – must receive guidance and assistance all year; annual- contract – must annually either formally evaluated or be provided diagnostic assistance	Continuing- contract – must be evaluated on a "continuous basis"	No State guidance	No State guidance	Experienced peers and administrators who have successfully completed an evaluator training program
South Dakota	District developed following State guidelines	No State guidance	No State guidance	No State guidance	Evaluation must be accompanied by a plan of assistance.	No State guidance
Tennessee	District developed with State approval and following "Framework for Evaluation and Professional Growth"	Annually	At least twice during the ten- year period of the Professional License	Yes, required if available	The evaluation report must include a written program of assistance for improvement.	Properly trained career level III teachers or career level III principals, assistant principals, or supervisors or professionally qualified evaluators

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
Texas	Statewide system – Professional Development and Appraisal System – or district developed following State guidelines	each year although appraised less free teacher agrees in v most recent apprai- least proficient an- any areas of defici	writing and their isal rated them at d did not identify tency. However, st still be evaluated	Yes, required	The appraiser and/or the teacher's supervisor shall, in consultation with the teacher, develop an intervention plan that includes the following: domain(s) that designate a teacher as a teacher in need of assistance; (2) directives or recommendations for professional improvement activities; (3) evidence that is used to determine successful completion of professional improvement activities; (4) directives for changes in teacher behavior; (5) evidence that is used to determine if teacher behavior has changed; and (6) specific time line for successful completion.	Teacher's supervisor or a person approved by the board of trustees; cannot be a teacher at the same school unless impractical to have someone else or if fellow teacher is department chair
Utah	District developed following State guidelines	At least twice annually	No State guidance	No State guidance	The teacher must be provided with a written document clearly identifying the deficiencies, the available resources for improvement, and a recommended course of action for improvement. The district shall provide reasonable assistance for improvement.	Principal, or principal's designee, or teacher's immediate supervisor
Virginia	District developed following State guidelines	Annually	No State guidance	Yes, required	Evaluations shall include areas of individual strengths and weaknesses and recommendations for appropriate professional activities	No State guidance
Washington	District developed following State guidelines	Full evaluation annually	Full evaluation annually; or after four years of satisfactory evaluations, full evaluation at least once every three years	No State guidance	Teacher provided with a reasonable program for improvement and be given a probationary period of 60 days to improve in his or her areas of deficiency. During this period, the evaluator meets with the teacher at least twice to supervise and make a written evaluation of the progress. If the teacher fails to improve during the 60 days, they are removed from their classroom duties immediately and place in an alternative position	Principal or principal's designee

State	Plan type	Frequency— Probationary	Frequency— Non- Probationary	Is student test performance a component?	Actions following Unsatisfactory Review	Evaluator
West Virginia	Statewide system	At least twice annually	At least once annually in 4 th and 5 th years; if no unsatisfactory ratings and more than 5 years of experience, no more than once every three years	No State guidance	An improvement plan shall be developed by the supervisor and teacher when the teacher's performance is deemed unsatisfactory. It must specify the corrective action to remediate the deficiencies, contain the time frame for monitoring and deadlines for meeting criteria, but in no case shall an improvement plan be for more than one semester in length, and describe the resources and assistance available to assist in correcting the deficiency(ies).	Teacher's immediate supervisor
Wyoming	District developed with State approval and following State guidelines	At least twice annually	At least once annually	No State guidance	No State guidance	No State guidance

NOTE: The following States have no statutory or regulatory guidelines for ongoing teacher evaluations: Alabama, Idaho, Maine, Maryland, Mississippi, Montana, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin. Some of these States require districts to evaluate their staff but provide no guidance in the design of the evaluation systems. SOURCE: "Efforts to Improve Teacher Quality," *Education Week*, Vol. 24, Issue 17, Pages 92-95 and Alaska: Alaska Stat. \$14.20.149; Arizona: A.R.S. \$\$15-537 and 15-538; Arkansas: Ark. Stat. Ann. \$\$6-17-1504; California: Cal Educ Code \$\$33039 and 44660—44665; Colorado: C.R.S. \$\$22-9-101—22-9-109; Connecticut: Conn. Gen. Stat. \$\$10-151c; Delaware: 14 Del C. \$\$170—1275; District of Columbia: D.C. Code \$1-613.51 and D.C. Rules Title 5, \$\$1306 and 1307; Florida: Fla. Stat. \$\$1012.33-1012.34; Georgia: O.C.G.A. \$20-2-210; Hawaii: HRS \$302A-638; Illinois: 105 ILCS 5/24A-1—5/24-8; Indiana: Burns Ind. Code Ann. \$\$20-28-11-1—20-28-11-8; Iowa: Iowa Code \$\$284.1—284.13; Kansas: K.S.A. \$\$72-9006; Kentucky: KRS \$156.557 and 704 KAR 3:345; Louisiana: La. R.S. 17:3901—17:3905; Maine: 20-A M.R.S. \$\$1055 and 13802; Maryland: Md. Education Code Ann. \$\$4-311 and 4-407; Massachusetts: Mass. Ann. Laws. Ch. 69 \$1B and Ch. 71 \$38 and 603 CMR 35.01—35.07; Michigan: MCL \$\$38.83a and 38.93; Minnesota: Minn. Stat. \$122A.40; Missouri: 168.128 R.S.Mo.; Nebraska: R.R.S. Neb. \$\$79-318 and 79-828; Nevada: Nev. Rev. Stat. Ann. \$391.3125; New Jersey: N.J.A.C. 6A:9-8.6; New Mexico: N.M. Stat. Ann. \$\$22-10A-7—22-10A-19 and 6.69.4.1—6.69.4.12 N.M.A.C.; North Carolina: N.C. Gen. Stat. \$\$\$115C-335—115C-335 and 16 N.C.A.C. 6C.0501; North Dakota: N.D. Cent. Code \$15.1-15-01; Ohio: ORC Ann. \$\$3319.111 and 3319.112; Oklahoma: 70 Okl. St. \$\$6-101.10 and 6-101.11 and O.A.C. \$210:20-3-4; Oregon: ORS \$342.850; South Carolina: S.C. Code Ann. \$\$59-19-97 and 59-26-40; South Dakota: ARSD 24:08:05:09; Tennessee: Tenn. Code Ann. \$\$53A-9-104 and 53A-10-101—53A-10-111; Vermont: 16 V.S.A. \$165; Virgi

APPENDIX 5: RECRUITMENT, RETENTION, AND ASSIGNMENT INCENTIVES POLICIES

TABLE A-12. State Incentives Policies Related to Teacher Certification by the National Board for Professional Teaching Standards, 2005

State	Type	Requirements	Amount	Targeted
Alabama	 Annual Bonus 	None	• \$5,000 per year for the life of the certification	No
Arkansas	 Fee ^a Release Time Starting Bonus Annual Bonus 	Teach in a public school for at least two years or repay State	 100% of the assessment fee Provides funding for a substitute teacher for maximum of 3 days \$5,000 starting bonus \$5,000 yearly bonus for life of the certificate 	No
California	Annual Bonus	Teach at least 4 years in a "high- priority school"	• \$5,000 per year for each of four years	Yes, "high- priority schools"
Colorado	■ Fee ^a	None	• \$1,000 per candidate toward the assessment fee	No
Delaware	■ Fee ^a ■ Annual Bonus	Must comply with repayment schedule or repay with interest	 Interest-free loans for assessment fee 12% of the State base salary for the life of the certification 	No
District of Columbia	 Fee ^a Release Time Award 	Must teach in DC public school for two years	 \$1,000 toward the assessment fee Provides funding for 3 days of release time \$5,000 one-time award upon receipt of certificate 	No
Florida	 Fee ^a Stipend Annual Bonus 	Teach in a public school for one year or repay State	 90% of the assessment fee \$150 portfolio-preparation stipend 10% of prior fiscal year's Statewide average teacher salary for the life of the certificate Additional 10% of prior fiscal year's Statewide average teacher salary if agree to mentor other teachers 	No
Georgia	■ Fee ^a ■ Annual Bonus	Teach in public school for one year or repay State	 Covers a portion of the assessment fee 10% annual salary bonus for life of the certificate 	No
Hawaii	 Fee ^a Starting Bonus Annual Bonus 	None	 Reimburse the assessment fee if successful \$1,500 starting bonus \$5,000 per year for life of certification 	No
Idaho	 Annual Bonus 	None	■ \$2,000 per year for up to five years	No
Illinois	 Fee ^a Annual Bonus 	None	 Up to \$2,000 in fee support \$3,000 per year for life of the certification Additional \$1,000 if agree to mentor other teachers Additional \$3,000 if agree to mentor other teachers in schools on "academic early warning status" or with 50% or more student eligible for free or reduced lunch 	Partially

TABLE A-12. State Incentives Policies Related to Teacher Certification by the National Board for Professional Teaching Standards, 2005 (cont.)

State	Type	Requirements	Amount	Targeted
Iowa	Fee ^a Annual Bonus	None	 Subsidizes half the assessment fee and reimburses the other half if candidate successful If received prior to May 2000, \$5,000 per year for 10 years If received after January 1999, \$2,500 per year for life of certification 	No
Kansas	Annual Bonus	None	• \$1,000 per year for up to 10 years	No
Kentucky			No	
Louisiana	 Fee ^a Annual Bonus 	None	\$850 subsidy toward assessment fee\$5,000 per year for life of certification	No
Maine	■ Fee ^a	None	 Supplements federal fee assistance program 	No
Maryland	Fee ^aAnnual Bonus	If fail to complete program, must repay fee	 If selected by State, covers two-thirds of the assessment fee Up to \$2,000 per year in matching funds of local salary supplement for life of certification 	No
Massachusetts	Fee ^a Annual Bonus	Must mentor apprentice teachers	 Reimburse portion or full assessment fee Up to \$5,000 annual bonus if mentoring apprentice teachers 	No
Michigan	■ Fee ^a	None	• \$1,000 subsidy toward assessment fee	No
Mississippi	 Fee ^a Annual Bonus 	None	Reimburse 50% of the certification fee\$6,000 per year for life of certification	No
Missouri	Fee ^aRelease Time	None	 Covers 25% of the certification fee Reimbursement to school districts for 2 release days 	No
Montana	 Award 	None	• \$3,000 when earn certification	No
Nevada	Fee ^aAnnual Bonus	None	 Reimburse costs incurred up to \$2,000 5% annual salary bonus for life of certification 	No
New Jersey	• Fee ^a	None	 Supplements federal fee assistance program 	No
New York	StipendRelease TimeAnnual Bonus	Must complete and teach in NY public school for 1 year or repay stipend	 Up to \$2,500 per teacher to defray costs; includes money to cover a substitute teacher for a maximum of 3 days \$10,000 annual bonus for up to three years if serve as a Master Teacher in a low-performing school 	Partially

TABLE A-12. State Incentives Policies Related to Teacher Certification by the National Board for

Professional Teaching Standards, 2005 (cont.)

State	Type	Requirements	Amount	Targeted
North Carolina	Fee a Release Time Annual Bonus	Must complete and teach in NC public school for 1 year or repay	 Covers assessment fee Provides funding for a maximum of 3 days of release time 12% annual salary bonus for life of the certificate 	No
North Dakota	• Fee ^a • Award	Must participate in district mentoring program or repay fee	Covers 50% of the assessment fee \$1,500 at the end of the fourth year after certification if served as a full-time teacher and participated in district mentoring programs	No
Ohio	Fee ^a Annual Bonus	None	 \$2,000 toward certification fee If received certification prior to 2005, \$2,500 per year for life of certification \$1,000 per year for life of certification otherwise 	No
Oklahoma	 Fee ^a Stipend Release Time Annual Bonus 	None	 Covers application fee \$500 per teacher to defray costs 2 days of release time \$5,000 per year for life of certification 	No
Rhode Island	■ Fee ^a	None	■ \$1,000 toward certification fee	No
South Carolina	Fee ^a Annual Bonus	Must submit portfolio or repay entire fee; must earn certification to have fee loan forgiven	 Provides loan for certification fee; half of principal and interest forgiven after portfolio submitted; second half of principal and interest forgiven when certification earned \$7,500 annual bonus for the life of certification 	No
South Dakota	Fee ^a Annual Bonus	None	 Reimburse assessment fee once certification earned \$2,000 per year for 5 years 	No
Vermont	■ Fee ^a	None	• \$850 toward certification fee	No
Virginia	 Fee ^a Award Annual Bonus 	None	 \$1,000 toward certification fee \$5,000 initial award when certification earned \$2,500 per year for life of certification 	No
Washington	Annual Bonus	None	■ \$3,500 per year	No
West Virginia	 Fee ^a Stipend Annual Bonus 	None	 Reimburse half assessment fee when enroll in program and second half once certification earned \$600 stipend to cover incurred expenses \$1,000 per year for up to 10 years 	No
Wisconsin	Fee ^a Annual Bonus	None	 Reimburse assessment fee once certification earned \$2,500 per year for up to 9 years 	No
Wyoming	■ Fee ^a	None	 Reimburse assessment fee if agree to mentor at least one teacher through the certification process 	No

^a The NBPTS Assessment Fee was \$2,300 in 2005.

NOTE: Funds available through the federally-funded National Board Certification Fee Subsidy Program and the NBPTS-administered National Board Scholarship Program are not included in the incentives above.

SOURCE: NBPTS website (www.nbpts.org/about/State.cfm); District of Columbia Public Schools website

(www.k12.dc.us/dcps/logan/pdfs/nbpts-brochure1.pdf and www.k12.dc.us/dcps/logan/pdfs/11-

2004% 20principals% 20support% 20Statement.pdf); Washington Senate Bill 6090 (2005) and www.k12.wa.us/safs/INS/BUL/B089-05.pdf; and the following State statutes: Alabama: Code of Ala. §16-22-13, Arkansas: ACA §6-17-413, California Cal. Ed. Code §44395, Colorado: CRS §22-60.5-112.5, Delaware: 14 Del. C. 1305(m), Florida: Fla. Stat. 1012.72, Georgia: O.C.G.A 20-2-212.2, Hawaii: HRS 302A-706, Idaho: Idaho Code §33-1004E.1, Illinois: 105 ILCS 5/21-27, Iowa: Iowa Code §256.44.1, Kansas: K.S.A. §72-1398(a), Kentucky: KRS §157.395 and 161.133(1), Louisiana: La.R.S. §17:421.6, Maryland: Md. Education Code §6-112.(d) and §6-306(b)(2), Massachusetts: ALM GL Ch. 15A, §19C, Mississippi: Miss. Code Ann. §37-19-7(2)(a), Montana: Mont. Code Anno. \$20-4-134(1), Nevada: Nev. Rev. Stat. Ann. §391.160, New York: NY CLS Educ. §3004-a, North Carolina: N.C. Gen. Stat. §115C-296.2, Ohio: ORC Ann. 3319.55(B), Oklahoma: 6 Okla. St. §204.2, South Carolina: S.C. Code Ann. §59-26-85, South Dakota: S.D. Codified Laws §13-42-26, Tennessee: Tenn. Code Ann. §49-5-5609, Virginia: Va. Code Ann. §22.1-299.2, West Virginia: W.Va. Code §18A-4-2a, Wisconsin: Wis. Stat. §115.42, and Wyoming: Wyo. Stat. §21-7-501

TABLE A-13A. Breadth of State Recruitment, Retention, and Assignment Incentive Systems, 2005

State	Incentives awarded during initial teacher preparation	Incentives awarded after completion of initial teacher preparation	Incentives awarded during additional training	Incentives received after completion of additional or advanced training, certification or credentialing	Incentives received after retired or eligible for retirement
Alabama			Yes	Yes	Yes
Alaska	Yes	Yes			Yes
Arizona					
Arkansas	Yes	Yes	Yes	Yes	Yes
California	Yes	Yes		Yes	Yes
Colorado		Yes	Yes		
Connecticut	Yes	Yes			Yes
Delaware	Yes		Yes	Yes	
District of Columbia		Yes	Yes	Yes	
Florida	Yes	Yes	Yes	Yes	Yes
Georgia	Yes		Yes	Yes	Yes
Hawaii	Yes	Yes		Yes	
Idaho	Yes			Yes	
Illinois	Yes	Yes	Yes	Yes	
Indiana	Yes				
Iowa	Yes	Yes	Yes	Yes	
Kansas	Yes			Yes	
Kentucky	Yes		Yes	Yes	Yes
Louisiana	Yes	Yes	Yes	Yes	Yes
Maine	Yes		Yes		
Maryland	Yes	Yes	Yes	Yes	Yes
Massachusetts	Yes	Yes	Yes	Yes	Yes
Michigan	Yes		Yes		Yes
Minnesota	Yes				
Mississippi	Yes	Yes	Yes	Yes	
Missouri	Yes		Yes		
Montana				Yes	
Nebraska	Yes				
Nevada			Yes	Yes	
New Hampshire					
New Jersey			Yes		
New Mexico	Yes				
New York	Yes	Yes	Yes	Yes	
North Carolina	Yes		Yes	Yes	Yes
North Dakota		Yes	Yes	Yes	Yes
Ohio			Yes	Yes	
Oklahoma	Yes		Yes	Yes	
Oregon	Yes				
Pennsylvania		Yes			
Rhode Island	Yes		Yes		
South Carolina	Yes		Yes	Yes	Yes
South Dakota				Yes	
Tennessee	Yes				
Texas	Yes	Yes			Yes
Utah	Yes		Yes		

TABLE A-13A. Breadth of State Recruitment, Retention, and Assignment Incentive Systems, 2005

(cont.)

State	Incentives awarded during initial teacher preparation	Incentives awarded after completion of initial teacher preparation	Incentives awarded during additional training	Incentives received after completion of additional or advanced training, certification or credentialing	Incentives received after retired or eligible for retirement	
Vermont	Yes		Yes			
Virginia	Yes		Yes	Yes		
Washington	Yes		Yes	Yes		
West Virginia	Yes		Yes	Yes		
Wisconsin	Yes			Yes		
Wyoming	Yes		Yes			
TOTALS	39	18	32	30	16	

SOURCE: Sources of NBPTS incentives (see Table 11) and the following State statutes and websites: Alabama: Code of Ala. §§16-6A-15 and 16-25-153; Alaska: Alaska Stat. §\$14.20.135, 14.25.043 and 14.43.600—14.43.700 and 18.56.109; Arkansas: Ark, Stat. Ann. §\$6-17-811, 6-26-101—6-26-303, 6-81-607—6-81-610, 6-81-1301, and 6-81-1504—6-81-1506 and www.atrs.State.ar.us; California: Cal Ed Code §§44392, 44393, 69612 and www.calstrs.com; Colorado: CRS §23-3.9-102; Connecticut: C.G.S. §§8-265pp, 10-183v, 10a-163, 10a-168a, and 10a-170e; Delaware: 14 Del. C. §§1106 and 1108 and www.doe.State.de.us/high-ed/teacher.corps.04.05.htm; District of Columbia: CDCR §§14-3600—14-3607; Florida: Fla. Stat. §§1009.57—1009.60; Georgia: O.C.G.A. §§20-3-519.7, 20-3-519.8, 20-3-519.12, and 47-3-127.1; Hawaii: HRS §304-20.6 and rrsc.k12.hi.us/jobs/incent.htm; Idaho: Idaho Code §33-3722; Illinois: 110 ILCS 48, 110 ILCS 947/50, 110 ILCS 947/52, 110 ILCS 947/65.15—947/65.56; Indiana: Burns Ind. Code Ann. §20-12-21.7-5; Iowa: Iowa Code §§261.48 and 261.111; Kansas: K.S.A. §72-8246; Kentucky: KRS §§161.605, 164.757 and 164.769; Louisiana: La.R.S. §§17:427.1—17:427.4, 17:3042.2, 17:3042.7, and 17:3042.42—17:3042.44 and www.trsl.org; Maine: 20-A M.R.S. 12504—12507; Maryland: Md. Housing Code Ann. §4-203, Md. Education Code §§18-703, 18-1102.350, and 18-2202—18-2210, and Md. State Personnel and Pensions Code §23-407; Massachusetts: ALM GL Ch. 15A, §§16, 19A, and 19D and www.mass.gov/mtrs; Michigan: MCL §§38.1361 and 388.1051; Minnesota: Minn. Stat. Ann. §122A.63; Mississippi: Miss. Code Ann. §§37-106-35, 37-143-11, 37-159-3, 37-159-9, 37-159-11, and 37-159-13; Missouri: 160.276—160.283 R.S.Mo., 161.415—161.424 R.S.Mo., and 168.550—168.600 R.S.Mo.; Nebraska: R.R.S. Neb. \$79-8,132—79-8,139; New Mexico: N.M. Stat. Ann. \$\$21-22E-1—21-22E-10: New York: NY CLS Educ. §3612; North Carolina: Session Law 2005-144 and N.C. Gen. Stat. §§115C-363.23A, 115C-468—115C-471, and 116-209.35; North Dakota: N.D. Cent. Code §§15-10-38 and 15-39.1-19.2; Oklahoma: 70 Okla. St. §698.1 and 698.3; Oregon: ORS §§329-757—329-780; Pennsylvania: 24 P.S. §§26-2601-I—26-2604-I, and 24 P.S. §§5191-5195; Rhode Island: R.I. Gen. Laws §§16-37-1—16-37-9; South Carolina: S.C. Code Ann. §59-26-20 and www.retirement.sc.gov; Tennessee: Tenn. Code Ann. §\$49-4-212, 49-4-705, and 49-4-706; Texas: Tex. Gov't Code \$2306.562, Tex. Educ. Code \$\$21.601—21.611 and 56.352—56-359, and www.trs.State.tx.us; Utah: Utah Code Ann. \$\$53A-1a-601— 53A-1a-602, 53A-6-701—53A-6-702, and 53B-10-101—53B-10-102; Vermont: 16 V.S.A. §§2861—2869; Virginia: Va. Code Ann. §22.1-290.01; Washington: ARCW §\$28A.660.050, 28B.15.760—28B-15.766, and 28B-102.010—28B-102.080; West Virginia: W.Va. Code §\$18C-4-1—18C-4-5; Wisconsin: Wis. Stat. Ann. §§39.40 and 39.398; and Wyoming: Wyo. Stat. §21-7-601.

TABLE A-13B. Job Assignment Targeting of State Sponsored Recruitment, Retention, and Assignment Incentives Programs, 2005

State State	Tuition/Fee Support	Loan Assumption	Salary	Housing	Retirement Benefits
Alabama	S		U		U
Alaska	Н		S	U	U
Arkansas	S, H, S/H, U	H, S/H	H, U	Н	U
California	U	S, H	H, S/H	S/H	U
Colorado	U	S			
Connecticut	S, H, U			Н	S
Delaware	S, U		U		
District of Columbia	U		U	U	
Florida	S, S/H, U	S, H	U		U
Georgia	S, U		U		U
Hawaii	S, H, U		H, U		
Idaho	U		U		
Illinois	S, H, S/H, U	S, H	U		
Indiana	S, U				
Iowa	S, U	U	U		
Kansas	S, H		U		
Kentucky	S, H, U		U		H, U
Louisiana	S, S/H, H, U		S, S/H, U	Н	U
Maine	S, U				
Maryland	S, H, U		U	Н	S, H
Massachusetts	U	U	U		U
Michigan	S, U				S
Minnesota	Н				
Mississippi	S, H, U		U	Н	
Missouri	S, S/H, U				
Montana			U		
Nebraska	Н				
Nevada	U		U		
New Jersey	U				
New Mexico	S, H				
New York	S, H, U		S, H, U	Н	U
North Carolina	H, U		U		S
North Dakota	U	S	U		
Ohio	U		U		
Oklahoma	S, U		U		
Oregon	S, H, U				
Pennsylvania		Н			
Rhode Island	U				
South Carolina	S, S/H, H, U		U		U
South Dakota	U		U		
Tennessee	H, U				
Texas	S, H	S, H		U	U
Utah	S, H, U				
Vermont	S, U				
Virginia	S, H, U		U		
Washington	S, H, U		U		
West Virginia	S, H, U		U		
Wisconsin	S, H, U		U		

TABLE A-13B. Job Assignment Targeting of State Sponsored Recruitment, Retention, and Assignment Incentives Programs. 2005 (cont.)

State	Tuition/Fee Support	Loan Assumption	Salary	Housing	Retirement Benefits
Wyoming	S, U				
TOTALS	47	10	33	10	16

Key: S=Critical Shortage Subject, H=Hard-to-Staff School, S/H=Critical Shortage Subject in a Hard-to-Staff School, U=Unrestricted, all schools and subjects eligible

NOTE: The following States have no recruitment, retention, or assignment incentives: Arizona and New Hampshire. Several States operate incentive programs that are available to teachers in any subject/school but where priority is given to specific subjects/schools. These programs are rated as U unless there is a separate repayment schedule or award amount, in which they would be rated as U and S and/or H depending on the program's targeting. Additionally, there are several States with programs that target specific types of teachers (i.e., minority or academically gifted). These programs are rated as U if there are no restrictions placed on where these teachers teach. If there are restrictions on subjects and/or schools, the program is rated accordingly.

SOURCE: Sources of NBPTS incentives (see Table 11) and the following State statutes and websites: Alabama: Code of Ala. §§16-6A-15 and 16-25-153; Alaska: Alaska Stat. §§14.20.135, 14.25.043 and 14.43.600—14.43.700 and 18.56.109; Arkansas: Ark. Stat. Ann. §§6-17-811, 6-26-101—6-26-303, 6-81-607—6-81-610, 6-81-1301, and 6-81-1504—6-81-1506 and www.atrs.State.ar.us; California: Cal Ed Code §§44392, 44393, 69612 and www.calstrs.com; Colorado: CRS §23-3.9-102; Connecticut: C.G.S. §§8-265pp, 10-183v, 10a-163, 10a-168a, and 10a-170e; Delaware: 14 Del. C. \$\$1106 and 1108 and www.doe.State.de.us/high-ed/teacher.corps.04.05.htm; District of Columbia; CDCR \$\$14-3600—14-3607; Florida: Fla. Stat. §§1009.57—1009.60; Georgia: O.C.G.A. §§20-3-519.7, 20-3-519.8, 20-3-519.12, and 47-3-127.1; Hawaii: HRS §304-20.6 and rrsc.k12.hi.us/jobs/incent.htm; Idaho: Idaho Code \$33-3722; Illinois: 110 ILCS 48, 110 ILCS 947/50, 110 ILCS 947/52, 110 ILCS 947/65.15—947/65.56; Indiana: Burns Ind. Code Ann. §20-12-21.7-5; Iowa: Iowa Code §§261.48 and 261.111; Kansas: K.S.A. §72-8246; Kentucky: KRS §§161.605, 164.757 and 164.769; Louisiana: La.R.S. §§17:427.1—17:427.4, 17:3042.2, 17:3042.7, and 17:3042.42—17:3042.44 and www.trsl.org; Maine: 20-A M.R.S. 12504—12507; Maryland: Md. Housing Code Ann. §4-203, Md. Education Code §§18-703, 18-1102.350, and 18-2202—18-2210, and Md. State Personnel and Pensions Code §23-407; Massachusetts: ALM GL Ch. 15A, §§16, 19A, and 19D and www.mass.gov/mtrs; Michigan: MCL §§38.1361 and 388.1051; Minnesota: Minn. Stat. Ann. §122A.63; Mississippi: Miss. Code Ann. §§37-106-35, 37-143-11, 37-159-3, 37-159-9, 37-159-11, and 37-159-13; Missouri: 160.276—160.283 R.S.Mo., 161.415—161.424 R.S.Mo., and 168.550—168.600 R.S.Mo.; Nebraska: R.R.S. Neb. §79-8,132—79-8,139; New Mexico: N.M. Stat. Ann. §§21-22E-1—21-22E-10; New York: NY CLS Educ. §3612; North Carolina: Session Law 2005-144 and N.C. Gen. Stat. §§115C-363.23A, 115C-468—115C-471, and 116-209.35; North Dakota: N.D. Cent. Code §§15-10-38 and 15-39.1-19.2; Oklahoma: 70 Okla. St. §698.1 and 698.3; Oregon: ORS §§329-757—329-780; Pennsylvania: 24 P.S. §§26-2601-I—26-2604-I, and 24 P.S. §§5191-5195; Rhode Island: R.I. Gen. Laws §§16-37-1—16-37-9; South Carolina: S.C. Code Ann. §59-26-20 and www.retirement.sc.gov; Tennessee: Tenn. Code Ann. §\$49-4-212, 49-4-705, and 49-4-706; Texas: Tex. Gov't Code §2306.562, Tex. Educ. Code §§21.601—21.611 and 56.352—56-359, and www.trs.State.tx.us; Utah: Utah Code Ann. §§53A-1a-601-53A-1a-602, 53A-6-701—53A-6-702, and 53B-10-101—53B-10-102; Vermont: 16 V.S.A. §§2861—2869; Virginia: Va. Code Ann. §22.1-290.01; Washington: ARCW §§28A.660.050, 28B.15.760—28B-15.766, and 28B-102.010—28B-102.080; West Virginia: W.Va. Code §§18C-4-1—18C-4-5; Wisconsin: Wis. Stat. Ann. §§39.40 and 39.398; and Wyoming: Wyo. Stat. §21-7-601.

APPENDIX 6: SALARY STRUCTURE POLICIES

TABLE A-14. Descriptions of Mandated Statewide Minimum Teacher Salaries, 2005

State	Description	Date statute implemented and Date of most recent schedule a	Are local add-ons restricted?	Binding for any district in State?
Alabama	 4 contract lengths specified: 182, 202, 222, 242 days 4 education levels specified: bachelor's, master's, 6th year, and doctorate 8 experience steps specified: 0 to 2, 3 to 5, 6 to 8, 9 to 11, 12 to 14, 15 to 17, 18 to 20, 21 and above 	1995-96; 2005-06	Yes	Yes
Arkansas	 Minimum 180-day contract 2 education levels specified: bachelor's and master's degree 16 steps specified: 0-14, 15 years or more of teaching experience Law requires districts to provide at least a \$400 increments for experience 	1989-90; 2005-06	No	No
California	One minimum salary for all full-time teachers	1999-2000; 2001-02	No	Unable to determine
Delaware	 10-month, 190 day contract: 180 pupil instruction days, 2 days for startup and closing, 8 days for professional development 9 education levels specified: no degree, bachelor's, bachelor's plus 15, bachelor's plus 30, master's, master's plus 15, master's plus 30, master's plus 45, and doctorate 17 steps specified: 0-15, 16 years or more of teaching experience 	1949-50; Established annually	No	No Intended to be 70% of recommended average total competitive salary
Georgia	 10-month, 190-day contract 10 levels of certification specified: high school diploma or GED (vocational education only), associate's (voc. ed. only), bachelor's with provisional certificate, bachelor's with professional certificate, master's w/prov. cert., master's w/prof. cert., education specialist, and doctorate 13 steps specified: 0 to 2, 3-8, 9 to 10, 11 to 12, 13 to 14, 15 to 16, 17 to 18, 19 years or more of teaching experience 	1981-82; Established annually	No	Unable to determine
Hawaii ^b	 190-day contract, including 10 non-instructional days 7 classes based on education specified: less than a bachelor's, bachelor's plus 30/master's, bachelor's plus 45/master's plus 15, bachelor's plus 60/master's plus 30, bachelor's plus 75/master's plus 45, Ph.D./Ed.D. At least 14 experience steps 	Uncertain; Established annually	No	Yes
Idaho	One minimum salary for all full-time teachers	1994-95; 1994-95	No	Unable to determine

TABLE A-14. Descriptions of Mandated Statewide Minimum Teacher Salaries, 2005 (cont.)

State	Description	Date statute implemented and Date of most recent schedule a	Are local add-ons restricted?	Binding for any district in State?
Illinois	 176-day contract 3 education levels specified: less than a bachelor's, bachelor's, master's 3 experience steps specified: 0 to 5, 6 to 8, 9 to 13, 14 years or more 	1980-81; 1980-81	No	No
Indiana	 9-month contract (for a 180-day school year) 3 education levels specified: less than four years/144 weeks of professional training, 4 years/144 weeks of professional training, 5 years/180 weeks of professional Experience steps vary by education level: less than 4 years/144 weeks = 0 to 10 years or more 4 years/144 weeks = 0-10, 11 to 15, 16 to 20, 20 years or more 5 years/180 weeks = 0-18, 19, 20, 21 to 22, 23 to 24, 25 to 26, 27 to 30, 31 years or more 	Uncertain; 1992-93	No	No
Iowa	One minimum salary for all full-time teachers	1987-88; 1998-99	No	Unable to determine
Kentucky	 185-day contract 5 certification ranks specified: Rank 1—hold regular certificate and earned a master's degree and at least 30 semester hours of graduate work Rank 2—hold regular certificate and earned a master's degree Rank 3—hold a regular certificate and a bachelor's degree Rank 4—hold an emergency certificate and completed 96 to 128 semester hours of training Rank 5—hold an emergency certificate and completed 64 to 95 semester hours of training 5 experience steps: 0 to 3, 4 to 9, 10 to 14, 15 to 19, 20 years or more of teaching experience 	1976-77; Established biennially as part of the biennial budget	No	Unable to determine
Louisiana	 180-day contract 7 education levels specified: two years of college, three years of college, bachelor's, master's, master's plus 30, education specialist, Ph.D. or Ed.D. 18 experience steps: 0-12, 13 to 15, 16 to 17, 18 to 21, 21 to 24, 25 years or more of teaching experience 	1987-88; 1990-91	No	No
Maine	One minimum salary for all full-time teachers	1987-88; 1987-88	No	No

TABLE A-14. Descriptions of Mandated Statewide Minimum Teacher Salaries, 2005 (cont.)

State	Description	Date statute implemented and Date of most recent schedule ^a	Are local add-ons restricted?	Binding for any district in State?
Mississippi	 Contract length is not legislated but requires a 180-day school year 4 license/education levels specified: A/bachelor's, AA/master's, AAA/education specialist, AAAA/doctorate 26 experience steps: 0-25, 25 years or more of teaching experience c 	1942-43; Established annually	Yes	Yes
Missouri	 One minimum salary for all full-time teachers 	1986-87; 1996-97	No	Unable to determine
New Jersey	 One minimum salary for all full-time teachers 	1967-68; 1985-86	No	No
New Mexico	9.5-month contract3 license levels	2003-04; 2005-06	No	Unable to determine
North Carolina	 10-month contract 8 education levels specified: bachelor's, bachelor's w/NBPTS certificate, master's, master's w/NBPTS, Advanced (6th Year), Advanced w/NBPTS, doctorate, and doctorate w/NBPTS 31 experience steps: 0-30, 31 years or more of teaching experience 	1955-56; Established annually	No	Yes
North Dakota	One minimum salary for all full-time teachers	2001-02; 2005-06	No	Unable to determine
Ohio	 182-day contract 4 education levels specified: less than a bachelor's, bachelor's, master's, and more than a master's 12 experience steps: 0-10, 11 years or more of teaching experience 	1967-68; 2001-02	No	No
Oklahoma	 Minimum 180-day contract 3 education levels specified: bachelor's, master's, and doctorate 26 experience steps: 0-24, 25 years or more of teaching experience Separate schedules for three groups of career/technology teachers (agriculture, ec., and other), special education teachers, and alternative education teachers 	Uncertain; 2005-06	No	Yes
Pennsylvania	 One minimum salary for all full-time teachers 	1988-89	No	No
South Carolina	 190-day contract 4 education levels specified: bachelor's, bachelor's plus 18, master's, master's plus 30, and doctorate 23 experience steps: 0-21, 22 years or more of teaching experience 	1977-78; Established annually	No	Yes

TABLE A-14. Descriptions of Mandated Statewide Minimum Teacher Salaries, 2005 (cont.)

State	Description	Date statute implemented and Date of most recent schedule a	Are local add-ons restricted?	Binding for any district in State?
Tennessee	 200-day contract 9 education levels specified: 0-3 years of college, bachelor's, master's plus 30, education specialist and doctorate 21 experience steps: 0-19, 20 years or more of teaching experience 	1977-78; Established annually	Yes	Unable to determine
Texas	 Minimum 10-month, 187-day contract Based solely on experience 21 experience steps: 0-19, 20 years or more of teaching experience 	1995-96; Established annually	No	Yes
Washington	 182-day contract 10 education levels specified: bachelor's, bachelor's plus 15, bachelor's plus 30, bachelor's plus 45, bachelor's plus 90, bachelor's plus 135, master's, master's plus 45, master's plus 90 or PhD 17 experience steps: 0-15, 16 years or more of teaching experience 34 out of 296 districts have unique higher salary schedules established by the State 	Uncertain; Established annually ^d	Yes heavily restricted ^e	Yes
West Virginia	 Minimum 9-month contract 11 education levels specified: 4th class, 3rd class, 2nd class, bachelor's, bachelor's plus 15, master's plus 15, master's plus 30, master's plus 45, Doctorate 21 experience steps: 0-19, 20 years or more of teaching experience 	1863-64; 2005-06	No	Yes ^f

^aThe implementation date is the date the current statute containing the authorization for a Statewide minimum salary schedule was added to the State code; ^b Hawaii only has one school district; ^c Experience steps for A/bachelor's are 0-24, 24 years or more of teaching experience; ^d Washington districts can pay teachers less than the State minimum salary schedule; however, all the monies received from the State for teacher salaries must be spent on salaries. Therefore, local districts can negotiate with their local unions to shift monies around the schedule as long as "the actual average salary paid to certificated instructional staff shall not exceed the district's average certificated instructional staff salary used for the State basic education allocations for that school year." (WRC §28A.400.200);

Washington districts can pay local supplements known as TRI (Time, Responsibility, and Incentive); however, the State limits how much communities can raise locally for these supplements and regulates the process for raising local tax dollars; ^f Binding when include the State provided salary equity supplements intended to equalize salaries across the 55 county boards of education. SOURCE: States' department of education websites, district salary schedules posted on the Internet, and the following State statutes: Alabama: Code of Ala. §16-13-231, 16-22-12, 16-22-13.3; Arkansas: Ark. Stat. Ann. §\$6-17-2401—6-17-2404; California: Cal Ed Code §45023.1; Delaware: 14 Del. C. §1305; Georgia: O.C.G.A. §20-2-212; Hawaii: HRS §302A-624; Idaho: Idaho Code §33-1004A; Illinois: 105 ILCS 5/24-8; Indiana: Burns Ind. Code Ann. §20-6.1-5-1; Iowa: I.C.A. §294A.5; Kentucky: KRS §157.390; Louisiana: La.R.S. 17:421.3; Maine: 20-A M.R.S. §13404; Mississippi: Miss. Code Ann. §37-19-7; Missouri: R.S.Mo. §163.172; New Jersey: NJSA §18A:29-5; New Mexico: N.M. Stat. Ann. §§ 22-10A-7—22-10A-11; North Carolina: N.C. Gen. Stat. §115C-12; North Dakota: N.D. Cent. Code §15.1-27-39; Ohio: ORC Ann. §3317.13; Oklahama: 70 Okla. St. §§18-114—18-114.12; Pennsylvania: 24 Pa. C.S. §11-1142; South Carolina: S.C. Code Ann. §59-20-50; Tennessee: Tenn. Code Ann. §49-3-306; Texas: Tex. Educ. Code §\$21.402-21.403; Washington: ARCW §28A.400.200; and West Virginia: W.Va. Code §§18A-4-2, 18A-4-2A, and 18A-4-4.

TABLE A-15. State Performance-based Pay Policies, 2005

State	Career-Ladder	Performance Pay
Arizona	Yes	
Florida	Yes	Yes
Indiana	Yes	
Kentucky		Yes
Missouri	Yes	
Nevada	Yes	
North Carolina		Yes
Utah	Yes	
TOTALS	6	3

SOURCE: Arizona: A.R.S. §§15-918.01—15-918.04; Florida: Fla. Stat. §1008.36, 1012.22, and 1012.231; Indiana: Burns Ind. Code Ann. §20-22-23; Kentucky: KRS §158.840; Missouri: §168.500 R.S.Mo.; Nevada: 2005 Nev. AB 580; North Carolina: N.C. Gen. Stat. §§115C-105.20—115C-105.42; Utah: Utah Code Ann. §53A-9-103

APPENDIX 7: TEACHER ASSOCIATION POLICIES

TABLE A-16. State Collective Bargaining Policies, 2005

State	Policy Type	Scope of Representation	Salary Schedule	Strikes
Alabama	Right to Work		Binding State Minimum Salary Schedule	Permitted
Alaska	Collective Bargaining	Wages and conditions of employment	District Determined	Permitted
Arizona	Right to Work ^a		District Determined	Unable to determine
Arkansas	Right to Work		Non-binding State Minimum Salary Schedule	Unable to determine
California	Collective Bargaining	Wages, hours and conditions of employment	One minimum for all teachers	Permitted
Colorado	Collective Bargaining	Terms and conditions of employment	District Determined	Permitted
Connecticut	Collective Bargaining	Wages and conditions of employment	District Determined	Prohibited
Delaware	Collective Bargaining	Wages, benefits, and conditions of employment	Non-binding State Minimum Salary Schedule	Prohibited
District of Columbia	Collective Bargaining	Salary, health benefits, overtime pay, education pay, hours, and any other compensation matters and terms and conditions of employment, except the employee evaluation process and instruments for evaluation	Territory-wide Salary Schedule	Prohibited
Florida	Collective Bargaining and Right to Work	Wages, hours and conditions of employment, excluding pensions	District Determined	Prohibited with penalties for striking
Georgia	Right to Work and Teachers Prohibited from Collective Bargaining		State Minimum Salary Schedule	Prohibited
Hawaii	Collective Bargaining	Wages, hours and conditions of employment, excluding retirement, health fund and salary ranges	Binding Statewide Salary Schedule	Permitted
Idaho	Collective Bargaining and Right to Work	Wages and conditions of employment	One minimum for all teachers	Prohibited
Illinois	Collective Bargaining	Wages, hours and conditions of employment b	Non-binding State Minimum Salary Schedule	Permitted
Indiana	Collective Bargaining but Right to Work with regard to school employees	Salaries, wages, hours, salary and wage related fringe benefits (e.g., accident, sickness, health, dental, etc.), grievance procedures ^c	Non-binding State Minimum Salary Schedule	Prohibited with penalties for striking

TABLE A-16. State Collective Bargaining Policies, 2005 (cont.)

State	Policy Type	Scope of Representation	Salary Schedule	Strikes
Iowa	Collective Bargaining and Right to Work	Wages, hours, vacation time, insurance, holidays, leave, overtime, seniority, and health and safety issues	One minimum for all teachers	Prohibited with penalties for striking
Kansas	Collective Bargaining and Right to Work	Wages, hours and conditions of employment	District Determined	Prohibited
Kentucky	Teachers not included in collective bargaining laws		State Minimum Salary Schedule	Prohibited with penalties for striking
Louisiana	Right to Work		Non-binding State Minimum Salary Schedule	Unable to determine
Maine	Collective Bargaining	Wages, hours, grievance arbitration, working conditions and education policy	One minimum for all teachers	Prohibited
Maryland	Collective Bargaining	Wages, hours and working conditions	District Determined	Prohibited with penalties for striking
Massachusetts	Collective Bargaining	Wages, hours, performance standards, and conditions of employment	District Determined	Prohibited with penalties for striking
Michigan	Collective Bargaining	Wages, hours and conditions of employment	District Determined	Prohibited with penalties for striking
Minnesota	Collective Bargaining	Hours, fringe benefits, grievances procedures and conditions of employment, excluding retirement benefits	District Determined	Permitted
Mississippi	Right to Work		Binding Minimum State Salary Schedule	Prohibited with penalties for striking
Missouri	Prohibited from Collective Bargaining ^d		One minimum for all teachers	Prohibited
Montana	Collective Bargaining	Wages, hours, fringe benefits, and conditions of employment	District Determined	
Nebraska	Collective Bargaining and Right to Work	Terms of employment and labor- management relations	District Determined	Prohibited
Nevada	Collective Bargaining and Right to Work	Wages, hours, sick leave, vacation time, insurance benefits, teacher preparation time, and materials and supplies for classrooms	District Determined	Prohibited with penalties for striking
New Hampshire	Collective Bargaining	Wages, hours, and conditions of employment	District Determined	Prohibited
New Jersey	Collective Bargaining	Conditions of employment and grievances procedures	One minimum for all teachers	Prohibited

TABLE A-16. State Collective Bargaining Policies, 2005 (cont.)

State	Policy Type	Scope of Representation	Salary Schedule	Strikes
New Mexico	Collective Bargaining	Wages, hours, the impact of professional and instructional decisions made by the employer, and all other terms and conditions of employment	State Minimum Salary Schedule	Prohibited with penalties for striking
New York	Collective Bargaining	Wages, hours, conditions of employment, and grievance procedures	District Determined	Prohibited with penalties for striking
North Carolina	Right to Work and Teachers Prohibited from Collective Bargaining		Binding State Minimum Salary Schedule	Prohibited
North Dakota	Collective Bargaining and Right to Work	Wages, hours, conditions of employment and labor-management relations	One minimum for all teachers	Prohibited with penalties for striking
Ohio	Collective Bargaining	Wages, hours, conditions of employment and the modification of any collective bargaining provision	Non-binding State Minimum Salary Schedule	Permitted
Oklahoma	Collective Bargaining and Right to Work	Wages, hours and work conditions	Binding State Minimum Salary Schedule	Prohibited with penalties for striking
Oregon	Collective Bargaining	Wages, hours, sick leave, vacation time, and grievance procedures	District Determined	Permitted
Pennsylvania	Collective Bargaining	Wages, hours, and conditions of employment	One minimum for all teachers	Permitted
Rhode Island	Collective Bargaining	Wages, hours, and working conditions	District Determined	Permitted
South Carolina	Right to Work		Binding State Minimum Salary Schedule	Unable to determine
South Dakota	Collective Bargaining and Right to Work	Wages, rates of pay, hours and conditions of employment	District Determined	Prohibited with penalties for striking
Tennessee	Collective Bargaining and Right to Work	Wages, working conditions, insurance benefits, grievance procedure, student discipline, and payroll deductions	State Minimum Salary Schedule	Prohibited
Texas	Right to Work and Teachers Prohibited from Collective Bargaining		Binding State Minimum Salary Schedule	Prohibited with penalties for striking
Utah	Right to Work		District Determined	Unable to determine
Vermont	Collective Bargaining	Wages, benefits, hours, working conditions, reduction-in-force procedures, and grievance procedures	District Determined	Permitted

TABLE A-16. State Collective Bargaining Policies, 2005 (cont.)

State	Policy Type	Scope of Representation	Salary Schedule	Strikes
Virginia	Right to Work and Teachers Prohibited from Collective Bargaining		District Determined	Prohibited with penalties for striking
Washington	Collective Bargaining	Wages, hours, and conditions of employment	Binding Statewide Salary Schedule	Prohibited
West Virginia	No Collective Bargaining Law for public sector employees ^e		Binding State Minimum Salary Schedule	Unable to determine
Wisconsin	Collective Bargaining	Wages, hours, and conditions of employment	District Determined	Permitted
Wyoming	Right to Work		District Determined	Unable to determine

^a Arizona has a collective bargaining law for agricultural workers only.

b Chicago Public Schools teachers are prohibited from bargaining over class size, staffing, academic calendars, and layoffs (105 ILCS 5/34-3.5).

A school employer may but is not required to bargain collectively, negotiate, or enter into a written contract regarding the following matters: working conditions (other than those specified above); curriculum development and revision; textbook selection; teaching methods; hiring, promotion, demotion, transfer assignment, and retention of certified employees; student discipline; expulsion or supervision of students; pupil/teacher ratio; and class size or budget appropriations (Burns Ind. Code Ann. § 20-29-6-7).

^a Missouri's Constitution (Art. 1, Sec. 29) grants employees "the right to organize and to bargain collectively through representatives of their own choosing". However, a 1947 Missouri Supreme Court decision interpreted the clause as not applying to public employees.

e West Virginia has a collective bargaining law for private sector employees only (W.Va. Code § 21-1A-1 to 21-1A-8). NOTE: Not all States' statutes clearly specify whether or not teachers are permitted to strike leaving the decision to the courts. SOURCE: www.ecs.org/clearinghouse/37/48/3748.htm and the following State statutes: Alabama: Code of Ala. §§25-7-3 and 25-7-30—25-7-35; Alaska: Alaska Stat. §§23.40.070—23.40.260; Arizona: A.R.S. §23-1301—23-1307; Arkansas: Ark. Stat. Ann. §§11-3-301—11-3-304; California: Cal Gov Code \$\$3540—3549.3; Colorado; C.R.S. \$\$8-3-101—8-3-123; Connecticut; Conn. Gen. Stat. \$\$10-153a—10-153n; Delaware: 14 Del. C. 4001—4019; District of Columbia: DC Code §§1-617.01—1.617.18; Florida: Fla. Stat. §§447.01—447.609; Georgia: O.C.G.A. §\$20-2-989.10 and 34-6-20—34-6-28 and 45-19-2; Hawaii: HRS §\$89-1—89-23; Idaho: Idaho Code §\$33-1271—33-1276 and §\$44-2001—44-2009; Illinois: 115 ILCS 5/1—5/20 and 105 ILCS 5/34-3.5; Indiana: Burns Ind. Code Ann. §§20-29-1-1—20-29-9-5; Iowa: Iowa Code §\$20.1—20.31 and §\$731.1—731.8; Kansas: K.S.A. §\$44-831 and 72-5410—72-5437; Kentucky: KRS § 67A.6902—67A.6907, 67C.402-67C.412, 70.262, and 345.020—345.090; Louisiana: La.R.S. §§23:981—23:987; Maine: 26 M.R.S. §§961—974; Maryland: Md. Education Code Ann. \$86-401—6-411 and 6-501—6-514; Massachusetts: ALM GL Ch. 150E \$\$1—15; Michigan: MCL \$\$423,201—423,216; Minnesota; Minn. Stat. §§179A.01—179A.25; Mississippi: Miss. Code Ann. §§37-9-75 and 71-1-47; Missouri: 105.510 and 105.530 R.S. Mo.; Montana: Mont. Code Anno. §§39-31-101—39-31-409; Nebraska: R.R.S. Neb. §§48-217—48-219 and §§81-1369—81-1390; Nevada: Nev. Rev. Stat. Ann. §§288.010—288.280 and 613.230—613.300; New Hampshire: RSA §§273-A.1—273-A.17; New Jersey: N.J. Stat. §§34:13A-1—34:13A-13; New Mexico: N.M. Stat. Ann. \$\$10-7E-1-10-7E-26: New York: NY CLS Civ. Serv. \$\$200-214: North Carolina: N.C. Gen. Stat. \$\$95-78-95-84; North Dakota: N.D. Cent. Code §§15-38.1-01—15-38.1-14 and 34-01-14; Ohio: ORC Ann. §§4117.01—4117.24; Oklahoma: 70 Okla. St. \$\$509.1—509.10 and Okla. Const. art. XXIII, \$1A; Oregon: ORS \$\$243.650—243.782; Pennsylvania: 43 Pa. C.S. \$1101.101—1101.2301; Rhode Island: R.I. Gen. Laws §§28-9.3-1—28-9.3-16; South Carolina: S.C. Code Ann. §§41-7-10—41-7-90; South Dakota: S.D. Codified Laws §§3-18-1-3-18-17 and 60-8-3-60-8-8; Tennessee: Tenn. Code Ann. §§49-5-601-49-5-613; Texas: Tex. Gov't Code § 617.003 and Tex. Lab. Code §§101.003—101.124; Utah: Utah Code Ann. §§34-34-2—34-34-17; Vermont: 16 V.S.A. §§1981—2010; Virginia: Va. Code Ann. §§40.1-58—40.1-69; Washington: ARCW §§41.59.010—41.59.950; West Virginia: W.Va. Code § 21-1A-1 to 21-1A-8; Wisconsin: Wis. Stat. §§111.64—111.71; and Wyoming: Wyo. Stat. §§27-2-108—27-2115.

APPENDIX 8: TEACHER RETIREMENT POLICIES

TABLE A-17. Overview of Teacher Retirement Systems, 2005

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Alabama	Teachers' Retirement System of Alabama	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Teachers and staff plus select others	Member: 5.0% Employer: 9.36% (effective 1 Oct. 2006) ^b	Yes
Alaska	Alaska Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	State employees, employees of school districts and regional educational attendance areas plus select others	Member: 8.65% Employer: 26.0% (fiscal year 2007) ^b	No
Arizona	Arizona State Retirement System	Defined Benefit	Service and Disability Retirement, Beneficiary Benefits	Not all have elected to participate ^c	Employees of public and schools, colleges and universities, cities and towns, counties, and others which have elected to participate	Member: 7.4% (effective 1 July 2005) ^b Employer: 7.4% (effective 1 July 2005) ^b	Yes
Arkansas	Arkansas Teacher Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Teachers and non-teachers who are not covered by other retirement	Non-Contributory Member ^d : 0.0% Contributory Member ^d : 6.0% Employer: 14.0% ^{b, e}	Yes
California	California State Teacher Retirement System	Defined Benefit with optional Defined Contribution plan	Service and Disability Retirement, Survivor Benefits	All participate	All school employees	Member: 8.0% Employer: 8.25% State: 2.017% plus another 2.5% to the Supplemental Benefit Maintenance Account	No
Colorado	Public Employees' Retirement Association	Defined Benefit with optional Defined Contribution plan	Service and Disability Retirement, Survivor Benefits	All participate except Denver	Employees of school districts except Denver, employees of the State government, many university and college employees, judges, many employees of cities and towns, State troopers, and others	Member: 8.0% Employer: 10.15%	No
Connecticut	Teachers' Retirement Board	Defined Benefit with optional Defined Contribution plan	Service and Disability Retirement, Survivor Benefits	All participate	All certified personnel of Connecticut public schools who are employed under oral or written agreement	Member: 7.25% Employer/State: 12.50% (as of 30 June 2004) ^b	No
Delaware	State Employees' Pension Plan	Defined Benefit	Service and Disability Retirement, Survivor and Death Benefits	All participate	All full-time or regular part-time employees of the State, including employees of other affiliated entities	Member: 3.0% of earnings in excess of \$6,000 Employer: ~4.9% b	Yes
District of Columbia	District of Columbia Teachers' Retirement Plan	Defined Benefit with optional Defined Contribution plan	Service and Disability Retirement, Survivor Benefits	All participate	All teachers of DCPS are members of the DC Teachers' Retirement Plan	Member: 7.0% if hired before 16 Nov. 1996 or 8.0% if hired on or after 16 Nov. 1996 Employer: \$9,200 in 2005 (\$0.00 in 2004) b	Unable to determine

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Florida	Florida Retirement System	Defined Benefit with several optional Defined Contribution plans	Service and Disability Retirement, Survivor Benefits	All participate	Employees of State and county government agencies, district school boards, community colleges and universities and many cities and independent special districts	Teachers: 0.0% ^f Employer: 7.39%	Yes
Georgia	Teacher Retirement System of Georgia	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Includes public school and university system educators, administrators, supervisors, clerks, teacher aides and paraprofessionals	Member: 5.0% Employer: 9.24%	Yes
Hawaii	State of Hawaii Employees' Retirement System	Defined Benefit ^g	Service and Disability Retirement, Survivor Benefits	All participate	Full-time, part-time (50% FTE or more), permanent or temporary (more than 3 months) employees of the State or County whose employment began after 30 June 1984	Non-Contributory Member: 0.0% Contributory Member: 7.8% Employer: 13.75% ^b	Yes
Idaho	Public Employee Retirement System of Idaho	Defined Benefit with optional Defined Contribution Plan	Service and Disability Retirement, Death Benefits, Gain Sharing	All participate	Employees of cities, counties, fire districts, highway districts, hospitals, junior colleges, library districts, schools, State and commissions, water districts, and some others	Member: 6.23% Employer: 10.39%	Yes
Illinois	Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate except Chicago	All full-time, part-time, and substitute Illinois public school personnel employed outside the city of Chicago in positions requiring certification. Also persons employed in certain State agencies related to education.	Member: 9.4% Employer: 0.58% (for 2005-06) State: through appropriations such that 90% of the liability for benefits is covered	No
Indiana	Indiana State Teachers' Retirement Fund	Hybrid Defined Benefit/Defined Contribution Plan	Service and Disability Retirement, Death Benefits	All participate	All regularly employed and legally qualified teachers who service in the public schools of Indiana (including several colleges)	Member: 3.0% Employer: 7.0% ^b	Yes
Iowa	Iowa Public Employees' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Most Iowa public employees	Member: 3.7% Employer: 5.75%	Yes
Kansas	Kansas Public Employees Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Employees of the State of Kansas, all school districts, all counties, most municipalities, and other local government authorities and districts	Member: 4.0% Employer: 6.07% ^b	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Kentucky	Kentucky Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Employees of public elementary and secondary schools, regional educational cooperatives, State colleges and universities and other eligible State agencies who are required to either have a certification or have graduation from a 4-year college or university.	Non-university Member: 9.855% Non-university Employer: 13.105%	No (but university members do)
Louisiana	Teachers' Retirement System of Louisiana	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Full-time employees of parish and city school boards, except for bus drivers, janitors, and maintenance personnel, and unclassified public college, university, community college, and technical college personnel	Member: 8.0% Employer: 15.50% (15.90% for 2005-06) ^b	No
Maine	Maine State Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	State employees, public school teachers, judges, legislators, and employees of roughly 267 municipalities and other public entities	Teacher: 7.65% Employer/State: 17.87% (24.12% for fiscal year 2006) ^b	No
Maryland	Maryland State Retirement and Pension System	Three Defined Benefit plans: (1) Retirement (closed to new members 1 Jan. 1980), (2) Contributory Pension (with optional Defined Contribution plan), and (3) Non-Contributory Pension (with optional Defined Contribution plan)	Service and Disability Retirement, Survivor Benefits	All participate	State and municipal employees, educators, law enforcement personnel, judges, and legislators	Member (Retirement): between 0.0% and 7.0% depending on plan Member (Contributory Pension): 2.0% of earnable compensation Member (Non-contributory Pension): 5.0% of earnable compensation in excess of the social security taxable wage base Employer: 9.35% b	Retirement System: No Pension System: Yes
Massachusetts	Massachusetts Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate except the City of Boston	Employed as a teacher or administrator in a Massachusetts public school outside the City of Boston or in any charter school in Massachusetts	Member (if enrolled prior to 2 July 2001): between 5.0 and 9.0% Member (if enrolled after 1 July 2001): 11.0% Employer: Unable to determine	No

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Michigan	Michigan Public School Employees Retirement System	Two Defined Benefit plans: (1) Basic Plan (enrolled before 1 Jan 1990) and (2) Member Investment Plan (MIP) (enrolled after 1 Jan 1990)	Service and Disability Retirement, Death Benefits	All participate	Employees of K-12 public schools, intermediate school districts, district libraries, some public school academics, tax-supported community colleges, and some employees of some State universities	Member of Basic Plan: 0.0% Member of MIP and enrolled before 1 Jan. 1990 or converted from Basic Plan by 1 Jan. 1993: 3.9% Member of MIP and enrolled on 1 Jan. 1990 or later: (1) 3.0% of first \$5,000 of compensation up to \$150 total, (2) \$150 plus 3.6% of compensation between \$5,000 and \$15,000 up to \$510 total, and (3) \$510 plus 4.3% of compensation over \$15,000 Employer: 15.41%	Yes
Minnesota	Minnesota Teachers Retirement Association	Two Defined Benefit plans: (1) Basic Plan (older members) and (2) Coordinated Plan (coordinated with Social Security – most and all new members)	Service and Disability Retirement, Survivor Benefits	All participate except for Duluth, Minneapolis, and St. Paul h	Minnesota college faculty, public school teachers, and administrators	Coordinated Plan — Member: 5.0% Employer: 5.0% Basic Plan — Member: 9.0% Employer: 9.0%	No for Basic Plan Members Yes for Coordinated Plan Members
Mississippi	Public Employees' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Employees of the State, public school districts, municipalities, counties, community colleges, State universities and such other public entities as libraries and water districts	Member: 7.25% Employers: 10.75% (effective 1 July 2005) ^b	Yes
Missouri	Public School and Education Employee Retirement Systems	Two Defined Benefit plans: (1) Public School Retirement System (PSRS) (certified employees) and (2) Public Education Employee Retirement System (PEERS) (non- certified employees)	Service and Disability Retirement, Death Benefits	All participate except Kansas City and St. Louis	Employees and teachers employed at public schools except the St. Louis city and Kansas City school districts, public junior college districts, participating Statewide non-profit educational associations, and the PSRS/PEERS Board of Trustees	PSRS — Member: 11.5% b Employer: 11.5% b PEERS — Member: 5.5% b Employer: 5.5% b	No
Montana	Montana Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Most persons employed for at least 210 hours during the school year at any public school, State agency or special education cooperative in addition to some others	Members: 7.15% Employer: 7.47% ^b	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Nebraska	Nebraska School Employees' Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate except for Omaha Public Schools	All permanent public school employees and some substitute teachers	Member: 7.25% i Employer: match member contributions at 101.0% State: 0.7% plus additional amount if recommended by actuary	Yes
Nevada	Nevada Public Employees' Retirement System	Two Defined Benefit plans: (1) Employer Pay Contribution Plan (teachers and employees of large local government employers) and (2) Employee/ Employer Contribution Plan (employees of the State and small local government employers)	Service and Disability Retirement, Survivor Benefits	All participate in Employer pay Contribution Plan	All employees of a Nevada public employer who work half time or more according to their employer's full-time work schedule	Member (Employer Pay Contribution Plan): 0.0% Employer (Employer Pay Contribution Plan): 19.75% (effective 1 July 2005) b	No
New Hampshire	New Hampshire Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Four types: (1) employee members (employees of the State; a political subdivision of the State such as a school district, county, town or other municipality, (2) teachers members, (3) police officer members, and (4) firefighter members	Teacher members: 5.0% Employer: 3.7% (effective 1 July 2005-30 June 2007) ^b State: 2.0% (effective 1 July 2005-30 June 2007) ^b	Yes
New Jersey	New Jersey Teachers' Pension and Annuity Fund	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Employees in positions requiring certification as members of a regular teaching or professional staff of a public school system as well as some employees of the NJ Department of Education	Member: 5.0% Employer: 4.96% (effective 1 July 2004) ^b State: 7.64% (effective 1 July 2004) ^b	Yes
New Mexico	New Mexico Educational Retirement Board	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Employed for more than 25% of a FTE by public schools, universities, junior colleges, technical and vocational institutions, NM special schools, Youth Diagnostic Center, Regional Cooperatives, NM Activities Association, and State agencies providing an educational program	Member: 7.6% (7.675% effective 1 July 2005) Employer: 8.65% (increasing by 0.75% each year between 1 July 2005 and 1 July 2011 when it will be 13.9%)	Yes
New York	New York State Teachers Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate except New York City	Employed full-time as a teacher, teaching assistant, guidance counselor or educational administrator by a public school district (other than NYC) or BOCES or eligible charter school ^j	Member (Tiers 1 and 2) 0.0% Member (Tiers 3 and 4): 3.0% Employer: 5.63% (for SY 2005-06) b	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
North Carolina	Teachers' and State Employees' Retirement System	Defined Benefit	Service and Disability Retirement, Survivor and Death Benefits	All participate	Permanent full-time teacher or employee of a State-sponsored board of education or community college, permanent employee of the State working at least 30 hours per week for nine months per year, and permanent employee of a participating charter school working at least 30 hours per week for nine months per year	Member: 6.0% State: 6.82% (FY 2005-06) b	Yes
North Dakota	North Dakota Teachers' Fund for Retirement	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Licensed by the State and employed by a public school or State institution in teaching, supervisory, administrative, or extracurricular services as well as superintendents, assistant superintendents, business managers, principals, assistant principals, and special teachers and some others	Member: 7.75% Employer: 7.75%	Yes
Ohio	State Teachers Retirement System of Ohio	Three separate plans: (1) Defined Benefit, (2) Defined Contribution, (3) Combined Defined Benefit and Defined Contribution k	Service and Disability Retirement, Survivor Benefits	All participate	K-12 educators at public schools and full-time college and university professors in a public institution of higher education	Members: 10.0% Employers: 14.0% ¹	No
Oklahoma	Oklahoma Teachers' Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	All regular employees of public schools operated for and by the State of Oklahoma	Member: 7.0% Employer: 7.05% State: 4.0% (of tax revenues)	Yes
Oregon	Oregon Public Employees Retirement System	Two Hybrid Defined Benefit and Defined Contribution Plans: (1) Chapter 238 Plan (enrolled before 29 Aug. 2003) and (2) Oregon Public Service Retirement Plan (enrolled after 28 Aug. 2003)	Service and Disability Retirement, Death Benefits	All participate	All public employees whose employer has chosen to participate.	Member: 6.0% Employer (Ch. 238): varies across school districts ^b Employer (OPSRP): 8.04% ^b	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Pennsylvania	Pennsylvania Public School Employees Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Full-time public school employees and part-time public school employees who render at least 80 days or 500 hours of service yearly	Class T-C Member: 5.25% if enrolled prior to 22 July 1983 and 6.25% otherwise ^m Class T-D Members: 6.5% if enrolled prior to 22 July 1983 and 7.50% otherwise ^m Employer: 4.23% for SY 2004-05 (4.69% for SY 2005-06) ^b	Yes
Rhode Island	Employees' Retirement System of Rhode Island	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	State employees, municipal employees, and any employee of a public school who requires certification by the Board of Regents	Teacher: 9.50% Employer: 11.62% ^b State: 8.02% ^b	Yes
South Carolina	South Carolina Retirement System	Defined Benefit with optional Defined Contribution Plan	Service and Disability Retirement, Death Benefits	All participate	Permanent, full-time and permanent, part-time employees of State agencies and public school districts	Member: 6.25% Employer: 7.55%	Yes
South Dakota	South Dakota Retirement System	Defined Benefit with optional Defined Contribution Plan	Service and Disability Retirement, Survivor Benefits	All participate	Teachers, administrative and classified employees of SD public school districts; legislative, executive and judicial branch employees of the State; faculty, administrative and classified employees of the SD Board of Regents; municipal employees, and; county employees	Member (Class A): 6.0% Employer (Class A): 6.0%	Yes
Tennessee	Tennessee Consolidated Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	State employees, higher education employees, teachers, and employees of political subdivisions that have elected to participate in the plan	Teacher: 5.0% Employer: 5.5% (SY 2004- 05) ^b	Yes
Texas	Teacher Retirement System of Texas	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Individuals with regular employment in a public, State-supported educational institution for one half or more of the standard workload, and with compensation paid at a rate comparable to the rate of compensation for other persons employed in similar positions	Member: 6.4% State: 6.0%	No
Utah	Utah Retirement System	Defined Benefit with optional Defined Contribution Plan	Service and Disability Retirement, Death Benefits	All participate	Employees working for public employers who have elected to participate including State agencies, school employees, teachers, and elected and appointed officials	Non-contributory— Teacher: 0.0% Employer: 13.38% Contributory— Teacher: 6.0% Employer: 8.89%	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Vermont	Vermont State Teachers Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Any licensed teacher, principal, supervisor, superintendent or any professional licensed by the State who is regularly employed for the full normal working time at a Statesupported public school or certain nonsectarian independent schools	Member (Group A – became member prior to 1 July 1981): 5.5% (up to 25 years) Member (Group C – became a member after 30 June 1981): 3.54% Employer: 5.16%	Yes
Virginia	Virginia Retirement System	Defined Benefit	Service and Disability Retirement, Survivor Benefits	All participate	Full-time salaried employees of the Commonwealth; participating cities, counties, towns or political subdivision; and instructional, clerical and administrative employees of school divisions	Member: 5.0% Employer: 8.1% ^b	Yes
Washington	Washington Teachers' Retirement System	Plan 1 (enrolled before 1 Oct. 1977): Defined Benefit Plan 2 (enrolled after 30 Sept. 1977): Defined Benefit Plan 3 (enrolled after 30 June 1996): Hybrid Defined Benefit/Defined Contribution	Service and Disability Retirement, Survivor Benefits	All participate	Persons qualified to teach and are employed by a public school as an instructor, administrator or supervisor	Plan 1 — Member: 6.0% Employer: 1.37% for SY 2004-05 (2.92 for SY 2005- 06) b Plan 2 — Member: 0.87% for SY 2004- 05 (2.48% for SY 2005-06) b Employer: 1.37% for SY 2004-05 (2.92% for SY 2005-06) b Plan 3 — Member: range from 5.0% to 15.0% a Employer: 1.37% for SY 2004-05 (2.92% for SY 2005-06) b	Yes
West Virginia	West Virginia Consolidated Retirement Board	Defined Benefit if enrolled prior to 1 July 1991 or after 30 June 2005 Defined Contribution if enrolled after 30 June 1991and before 30 June 2005 °	Service and Disability Retirement, Death Benefits	All participate	Defined Benefit: Teachers and school personnel who enrolled prior to 1 July 1991 or after 30 June 2005 Defined Contribution: Full-time employees of county public school systems, the State Department of Education, and the School for the Deaf and Blind hired between 30 June 1991 and 30 June 2005 1	Defined Benefit — Teacher: 6.0% Employer: 15.0% for those hired before 1 July 2005 or 7.5% for those hired after 30 June 2005 Defined Contribution — Teacher: 4.5% Employer: 7.5%	Yes

State	Plan Name	Type of Retirement Plan	Benefits Provided	District Participation	Membership	Mandatory Contribution Rates (% of compensation)	Participate in Social Security ^a
Wisconsin	Wisconsin Retirement System	Defined Benefit	Service and Disability Retirement, Death Benefits, Separation Benefits	All participate except City of Milwaukee and Milwaukee County	Employees of the State, counties, technical college system and/or districts, cooperative education service agencies (all cover teachers, most cover all non-teachers), public school districts (all cover teachers, most cover all non-teachers), and any other public employer that elects to participate except for the City of Milwaukee and Milwaukee County	Teacher: 5.6% for 2004 (5.8% in 2005) Employer: 4.2% for 2004 (4.4% in 2005)	Yes
Wyoming	Wyoming Public Employee Pension System	Defined Benefit	Service and Disability Retirement, Death Benefits	All participate	Full-time or regular-time employee of the State, a school district, or institution of higher learning	Member: 5.57% Employer: 5.68%	Yes

^a This column indicates whether or not the teachers' salaries are eligible for the social security tax. Medicare taxes are not considered here.

^b Indicates that contribution rates are established through an annual or other regular actuarial valuation to insure that the system can meet its short-term projected liabilities. Otherwise, contribute rates are established through statute.

^c As of 2004, employer membership included 443 (of approximately 598) Arizona public school districts and charter schools.

^d Prior to 1 July 1999, all members were non-contributory. All new members effective 1 July 1999 were enrolled as contributory members. All active members as of 1 July 1999 were required to irrevocably elect to remain a non-contributory member or begin making contributions. Also effective 1 July 1999, all active members whose status switched from non-teacher to teacher were required to make contributions. By 1 July 2006, all active non-contributory members were required to again irrevocably elect to remain non-contributory members or begin making contributions.

^e Arkansas statutes cap the employer contribution rate at 14%.

f Members of Florida's Retirement System are divided into six classes: Regular Class, Special Risk Class, Special Risk Administrative Support Class, Elected Officers' Class, and Senior Management Service Class. All employees of district school boards are classified as Regular Class except for school board members (belong to the Elected Officers' Class) and appointed school board superintendents (belong to the Senior Management Service Class). Contribution rates and service requirements vary across the classes. Those for the Regular Class are provided above.

^g Hawaii is in the process of implementing a Hybrid Plan (i.e., defined benefit and defined contribution).

^h The Minneapolis Teachers Retirement Fund Association was merged into TRA effective 30 June 2006.

¹ Nebraska temporarily increased their member contribution rates to 7.98% effective 1 Sept. 2005. It will decrease to 7.83% effective 1 Sept. 2006 and return to 7.25% on 1 Sept. 2007. The employer match remains at 101%.

^j Members of the New York State Teachers Retirement System are grouped into four tiers based on initial enrollment: Tier 1 became members before 1 July 1973, Tier 2 became members between 1 July 1973 and 26 July 1976. Tier 3 became members between 27 July 1976 and 31 August 1983, and Tier 4 became members after 31 August 1983.

^k Ohio teachers have 180 days from their first day of paid service to select one of the three retirement plans.

¹ All Ohio employers contribute 14% of the member's salary. However, the employer contribution for members of the Defined Contribution Plan is divided as follows: 10.5% goes to the member's account and 3.5% is applied toward the system's unfunded liability. For members of either the Defined Benefit Plan or the Combined Plan, the entire employer contribution is applied toward the costs of retiree benefits.

^m All members enrolled in Pennsylvania's plan after 1 July 2001 are automatically Class T-D members. Between 17 May 2001 and 31 December 2001, all Class T-C members were required to elect to remain in Class T-C or change to Class T-D which provides a higher member contribution rate and retirement benefits.

ⁿ Members of Washington's Plan 3 are able to select one of the following six options for contribution rates: (1) Option A—5.0% at all ages; (2) Option B—5.0% until age 35, 6.0% from age 35 until 45, and 7.5% at age 45 and above; (3) Option C—6.0% until age 35, 7.5% from age 35 until 45, and 8.5% at age 45 and above; (4) Option D—7.0% at all ages; (5) Option E—10.0% at all ages; or (6) Option F—15.0% at all ages. Members can only change option if they change employers.

[°] Prior to 1 July 2005, all new employees were enrolled in the Teacher Retirement System which is modeled after the older Defined Benefit plan. In and about 2005, the West Virginia Legislature passed the Teachers' Retirement Equity Act delineating a process by which the defined contribution plan would be merged with the Teacher Retirement System on 1 July 2006 (i.e., the defined contribution plan would be converted to a defined benefit plan). This merger was scheduled to occur; however, a pending lawsuit in the Circuit Court of Kanawha County (Civil Action No. 06-C-687) has postponed this merger.

SOURCE: All websites accessed spring and summer 2006 — Alabama: www.rsa.State.al.us; Alaska: www.State.ak.us/drb; Arizona: www.azasrs.gov/web/index.do; Arkansas: www.atrs.State.ar.us; California: www.calstrs.com; Colorado: www.copera.org; Connecticut: www.ct.gov/trb; Delaware: www.delawarepensions.com; District of Columbia: dcrb.dc.gov; Florida: www.frs.State.fl.us; Georgia: www.trsga.com; Hawaii: www4.hawaii.gov/ers/; Idaho: www.persi.State.id.us; Illinois: trs.illinois.gov; Indiana: www.in.gov/trf; Iowa: www.ipers.org; Kansas: www.kpers.org; Kentucky: ktrs.ky.gov; Louisiana: www.trsl.org; Mainie: www.msrs.org; Maryland: www.sra.State.md.us; Massachusetts: www.mass.gov/mtrs; Michigan: www.michigan.gov/orsschools; Minnesota: www.tra.State.mn.us; Mississippi: www.pers.State.ms.us; Missouri: www.psrs-peers.org; Montana: www.trs.doa.State.mt.us; Nebraska: www.npers.ne.gov; Nevada: www.npers.org; New Hampshire: www.State.nh.us/retirement; New Jersey: www.State.nj.us/treasury/pensions; New Mexico: www.era.State.nm.us; New York: www.nystrs.org; North Carolina: www.nctreasurer.com/DSTHome; North Dakota: www.State.nd.us/rio/TFFR; Ohio: www.strs.oh.org; Oklahoma: www.ok.gov/TRS; Oregon: Oregon.gov/PERS; Pennsylvania: www.psers.State.pa.us; Rhode Island: www.ersi.org; South Carolina: www.retirement.sc.gov; South Dakota: www.sdrs.sd.gov; Tennessee: treasury.State.tn.us/tcrs/; Texas: www.trs.State.tx.us; Utah: www.urs.org; Vermont: www.tre.State.vt.us; Virginia: www.varetire.org; Washington: www.drs.wa.gov; West Virginia: www.wvretirement.State.wy.us

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation
Alabama	10 years of service	(1) 25 years of creditable service or (2) 10 years of creditable service and the attainment of age 60	Benefit Factor (2.0125%) × Years and Months of Service × Average Final Salary	Average of highest three years out of last 10 years	
Alaska	8 years of service (but other special cases could require 5, 12, or 15 years)	(1) 20 years of creditable service or (2) 8 years of creditable service and the attainment of age 60 b	(2% × First 20 Years × Average Base Salary) + (2.5% × All Years Over 20 × ABS)	Average of highest three years	
Arizona	5 years of service or 20% vesting per year starting by the end of the third year	(1) Sum of age and years of creditable service at least 80, (2) 10 years of creditable service and the attainment of age 62, or (3) the attainment of age 65	Graded Multiplier × Total Credited Service × Average Compensation	If enrolled after 31 Dec. 1983: average of highest three consecutive 12-month periods within last 120 months If enrolled before 1 Jan 1984: average of highest five 12- month periods in last 120 months	Graded Multiplier, based on years of service at retirement, is 2.1% if les than 20 years of service, 2.15% if 20 to 24.99 years, 2.20% if 25-29.99 years, and 2.3% if 30+ years.
Arkansas	5 years of service	(1) 28 years of creditable service or (2) 5 years of creditable service and the attainment of age 60	[2.15% × Years of Contributory Service × Final Average Salary] + [1.39% × non-contributory credited service × FAS] + \$900 supplemental adjustment	Average of highest three years	
California	5 years of service	(1) 30 years of creditable service and the attainment age 50 or (2) 5 years of creditable service and attainment of age 60	Age Factor × Service credit × Final Compensation	At least 25 years of service: highest year Less than 25 years of service: average of highest three years during any period of 36 consecutive months	Age Factor ranges from 1.1% at age 50 and 0 months to 2.4% at age 63+. It equals 2.0% at age 60 and 0 months.
Colorado	5 years of service	(1) 30 years of creditable service if hired before 1 July 2005 and 35 years of creditable service if hired on or after 1 July 2005, (2) if 25 or fewer of creditable service, sum of age and years of creditable service at least 80, or (3) 5 years of creditable service and the attainment of age 65	HAS Percentages × Highest Average Salary	Average of the highest annual salaries on which PERA contributions were made associated with three periods of 12 consecutive months	HAS Percentages are based on age and years of service and differ for members hired before 1 July 2005 and after 30 June 2005. Both range from 10% to 87.5%.
Connecticut	10 years of service	(1) 35 years of creditable service of which at least 25 years were in Connecticut or (2) 20 years of creditable service in Connecticut and the attainment of age 60	Retirement Percentage × Career FTE × Average Salary Base	Average of highest three years	Retirement Percentage is based on age and years of service. Ranges from 28% for age 55 and 20 years of service to 75% for ages 55-60 and 37.5 years of service. If retire at age 60 or more with less than 21 years of service, they range from 10% for ten years of service to 40% with 20 years of service.

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation
Delaware	5 years of service	(1) 30 years of creditable service, (2) 15 years of creditable service and the attainment of age 60, or (3) 5 years of creditable service and the attainment of age 62	[2% × Years of Service Prior to 1 Jan. 1997 (to the nearest 1/12 of a year) × Final Average Compensation] + [1.85% × Years of Service After 31 Dec. 1996 (to the nearest 1/12 of a year) × F.A.C.]	Average of highest three 12- month periods	
District of Columbia	5 years of service	(1) 30 years of creditable service if hired on or after 16 Nov. 1996, (2) 30 years of creditable service and the attainment of age 55 if hired before 16 Nov. 1996, (3) 20 years of creditable service and the attainment of age 60, or (4) 5 years of creditable service and the attainment of age 62	If hired before 16 Nov. 1996: [1.5% × Years of Service (1 through 5) × Average Salary] + [1.75% × Years of Service (6 through 10) × Average Salary] + [2.0% × Years of Service Over 10 × Average Salary] If hired after 15 Nov. 1996: 2% × Years of Service × Average Salary	Average of highest three consecutive 12-month periods	This is the Voluntary Retirement Benefit calculation.
Florida	6 years of service	(1) 30 years of creditable service or (2) 6 years of creditable service and the attainment of age 62	Percentage Value × Years of Creditable Service × Average Final Compensation	Average of highest five fiscal years	Percentage Value ranges from 1.60% at age 62 or 30 years of service to 1.68% at age 65 or 33 years of service.
Georgia	10 years of service	(1) 30 years of creditable service or (2) 10 years of creditable service and attainment of age 60	2% × Years of Creditable Service × Average Annual Salary	Average of highest two consecutive years	Years of Creditable Service can not to exceed 40 years.
Hawaii	Non-Contributory Members: 10 years of service Contributory Members: 5 years of service	Non-Contributory members: (1) 30 years of creditable service and the attainment of age 55 or (2) 10 years of creditable service and the attainment of age 62 Contributory members: 5 years of creditable service and the attainment of age 55	Non-contributory members: 1.25% × Years of Service × Average Final Compensation Contributory members: 2% × AFC × Years of Service	Average of highest three years	
Idaho	60 months of service	At least 60 months of creditable service including 6 months of membership service and the attainment of age 65	Multiplier × Months of Credited Service × Average Monthly Salary	Monthly average at highest point during a period of months based on last contribution: 60 months if before 1 Oct. 1992, 54 months if between 1 Oct. 1992 and 30 Sep. 1993, 48 months if between 1 Oct. 1993 and 30 Sep. 1994, and 42 months if 1 Oct. 1994 or after.	The Multiplier is based on the date of the last contribution: 1.667% if before 1 Oct. 1992, 1.750% if between 1 Oct. 1992 and 30 Sep. 1993, 1.833% if between 1 Oct. 1993 and 30 Sep. 1994, 1.917% if between 1 Oct. 1994 and 30 Jun. 2000, and 2.0% if 1 Jul. 2000 or after.
Illinois	5 years of service	(1) 35 years of creditable service and the attainment of age 55, (2) 10 years of creditable service and the attainment of age 60, or (3) 5 years of creditable service and the attainment of age 62	Benefit based on the highest of two formulas: (1) Actuarial calculation based on interest and mortality rate (2) (1.67% × First 10 Years) + (1.9% × Second 10 Years) + (2.1% × Third 10 Years) + (2.3% × Years Over 30)] × Average Salary	Average of highest four consecutive years within last 10 years	The Actuarial Calculation option was eliminated for new members as of 1 July 2005. The maximum value of the second calculation is 75% of the average salary.

State	Vesting	Service Requirements for	Calculation of Maximum	Definition of Salary Used	Notes on Benefits
	vesting	Normal Retirement	Annual Retirement Benefits a	in Benefit Calculation	Calculation
Indiana	Defined Benefit portion: 10 years of service Defined Contribution portion: immediately	(1) 30 years of creditable service and the attainment of age 55, (2) 15 years of creditable service and the attainment of age 60, or (3) 10 years of creditable service and the attainment of age 65	Defined Benefit portion: 1.1% × Years of Service × Average Salary Defined Contribution portion: based on value of member's account	Average of highest five years	
Iowa	4 years of service since 1 July 1973 or the attainment of age 55 °	(1) Sum of age and years of creditable service at least 88, (2) 20 years of creditable service and the attainment of 62 years, or (3) attainment of age 65 years	Formula Multiplier × (Years of Service/30) × Average Salary	Average of highest three years	The Formula Multiplier is 2% per year of service up to maximum of 60% (or 30 years).
Kansas	10 years of service	(1) Sum of age and years of creditable service at least 85, (2) 10 years of creditable service and the attainment of age 62, (3) One year of creditable service and the attainment of age 65	Statutory Multiplier (currently 1.75%) × Years of Service × Final Average Salary	If enrolled before 1 July 1993, average of highest 3 year/12 quarters or 4 year/16 quarters (whichever is higher) If enrolled after 30 June 1993, average of highest 3 years/12 quarters	
Kentucky	5 years of service	(1) 27 years of creditable service or (2) 5 years of creditable service and the attainment of age 60	[(2% × Years Service Prior to 30 June 1983) + (2.5% × Years of Service After 1 July 1983)] × Salary Credit	Either (1) average of highest five years or (2) if at least age 55 and have 27 years of Kentucky service, average of highest three years	
Louisiana	5 years of service	If joined before 1 July 1999, (1) 20 years of creditable service or (2) 5 years of creditable service and the attainment of age 60 If joined on or after 1 July 1999, (1) 30 years of creditable service, (2) 25 years of creditable service and the attainment of age 55, or (3) 20 years of creditable service and the attainment of age 65	Benefit Factor × Years of Service Credit × Final Average Compensation	Average of highest three consecutive years	The Benefit Factor is either 2%, 2.5%, or 3% depending on when enrolled in the plan and age and years of service at retirement.
Maine	5 or 10 years based on when terminated employment	(1) 25 years of creditable service, (2) if terminate employment before 1 Oct. 1999, 10 years of creditable service and attainment of normal retirement age, (3) if terminate employment after 30 Sept. 1999, 5 years of creditable service and attainment of normal retirement age, or (4) one year of creditable service immediately prior to attainment of normal retirement age ^d	Accrual Rate (2%) × Years of Service Credit × Average Final Compensation	Average of highest three years	

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation	
Maryland	Retirement System: (1) 30 years of creditable service or (2) attainment of age 60 Pension System: (1) 30 years of creditable service, (2) 5 years of creditable service and the attainment of age 62, (3) 4 years of creditable service and the attainment of age 63, (4) 3 years of creditable service and the attainment of age 64, or (5) 2 years of creditable service and the attainment of age 65		Retirement members: 1/55 × Total Years of Creditable Service × Average Final Compensation Non-Contributory Pension members: (0.8% × Total Years of Credit × AFC up to the Social Security Integration Level) + (1.5% × Total Years of Credit × AFC above the SSIL) Contributory Pension members: (1.2% × Years of Credit to 6/30/98 × AFC) + (1.8% × Years of Credit after 6/30/98 × AFC)	Retirement members: average of highest three years Pension members: average of highest three consecutive years	In the formula for contributory members, the 1.2% component could be replace by the following older formula if it yields higher value: [(0.8% × AFC up to the Social Security Integration Level) + (1.5% × AFC above the Social Security Integration Level)] × years of credit up to 6/30/98.	
Massachusetts	10 years of service	Non-RetirementPlus members: (1) 20 years of creditable service or (2) 10 years of creditable service and the attainment of age 55 RetirementPlus members (i.e., hired after 1 July 2001): 30 years of creditable service with at least 20 years of teaching service in MTRS or Boston Retirement System contributed at the RetirementPlus rate of 11% for 5 years	[(Age Factor × Years of Creditable Service) + RetirementPlus Percent (if applicable)] × Salary Average	Average of highest three consecutive years	The Age Factor ranges from 0.1% at age 41 and increases by 0.1 percentage points each year until it reaches 2.5% at age 65+. The RetirementPlus Percent ranges from 12% at 30 years of service and increases 2 percentage points per year to 32% at 40 years of service.	
Michigan	10 years of service	Basic Members: (1) 30 years of creditable service with 15 years earned through MPSERS and the attainment of age 55 or (2) 10 years of creditable service and the attainment of age 60 MIP Members: (1) 30 years of creditable service with 15 years earned through MPSERS and, if purchased universal buy-in service credit, the attainment of age 46, (2) 10 years of creditable service and the attainment of age 60, or (3) 5 years of creditable service and the attainment of age 60 if at least 0.1 years of service credit have been earned in each of the five school fiscal years immediately before retirement effective date	Pension Factor (1.5%) × Years of Service × Final Average Compensation	If MIP member, average of highest three consecutive years If basic plan member, average of highest five consecutive years		

State	Vesting	Service Requirements for	Calculation of Maximum	Definition of Salary Used	Notes on Benefits
State	vesting	Normal Retirement	Annual Retirement Benefits ^a	in Benefit Calculation	Calculation
Minnesota 3 years of service		Same for both Basic and Coordinated Plan members. If first employed prior to 1 July 1989, (1) sum of age and years of creditable service at least 90, (2) 30 years of creditable service and the attainment of age 62, or (3) less than 30 years of creditable service and the attainment of age 65 If first employed after 30 June 1989: normal retirement age as specified by the Social Security Administration	Same for both Basic and Coordinated Plan members. Tier I: [(1.2% × 1st Ten years up to 6/30/06) + (1.4% × 1st Ten Years After 6/30/06) + (1.7% × Years 11 and Beyond up to 6/30/06) + (1.9% × Years 11 and Beyond After 6/30/06)] × Average Salary Tier II: [(1.7% × Years up to 6/30/06)] × Average Salary Average Salary	Average of highest five consecutive years	Benefits for members first employed prior 1 July 1989 are the higher of the two formulas. Benefits for members first employed after 30 June 1989 are based on Tier II only.
Mississippi	4 years of service	(1) 25 years of creditable service or (2) 4 years of creditable service and the attainment of age 60	[(2% × First 25 years) + (2.5% × Years Beyond 25)] × Average Compensation	Average of highest four years	
Missouri	5 years of service	(1) 30 years of creditable service, (2) sum of age and years of creditable service at least 80, or (3) five years of creditable service and the attainment of age 60	Formula Factor × Years of Credit × Final Average Salary	Average of highest three consecutive years	Formula Factor is either 2.5% if retiree has less than 31 years of service and 2.55% if has 31 or more years.
Montana	5 years of service	(1) 25 years of creditable service, (2) has part-time service in 25 years of creditable service, or (3) 5 years of creditable service and the attainment of age 60	1.6667% × Years of Service × Average Final Compensation	Average of highest three consecutive years	
Nebraska	5 years of service	(1) Sum of years of creditable service and age at least 85 and the attainment of age 55 or (2) one half year of creditable service and the attainment of age 65	Formula Factor (currently 2%) × Years of Creditable Service × Final Average Compensation	Average of highest three 12- month periods	
Nevada	5 years of service	(1) 30 years of creditable service, (2) 10 years of creditable service and the attainment of age 60, or (3) 5 years of creditable service and the attainment of age 65	[(2.5% × Years of Service Credit Earned Before 1 July 2001) + (2.67% × Years of Service Credit Earned After 1 July 2001) × Average Compensation	Average of highest three consecutive 12-month periods	
New Hampshire	10 years of service	Attainment of age 60 and an active member	When retiree is between 60 and 64 years of age: 1/60 × Years of Creditable Service × Average Final Compensation When retiree is 65 years of age or older: 1/66 × Years of Creditable Service × Average Final Compensation	Average of highest three years	All members, regardless of their age at retirement, experience a reduction in benefits at age 65.
New Jersey	10 years of service	(1) 25 years of creditable service and the attainment of age 55 or (2) attainment of age 60	1/55 × Years of service × Final Average Salary	Average of highest three years	

State	Vesting	Service Requirements for	Calculation of Maximum	Definition of Salary Used	Notes on Benefits
	Ü	Normal Retirement	Annual Retirement Benefits ^a	in Benefit Calculation	Calculation
New Mexico	5 years of service	(1) 25 years of creditable service, (2) sum of age and years of creditable service at least 75, or (3) 5 years of creditable service and the attainment of age 65	2.35% × Service Credit × Final Average Salary	Average of highest period of 20 consecutive quarters	
New York			Tier 1: Pension Factor (based on years of service) × Final Average Salary Tiers 2, 3, & 4: Pension Factor (varies across tiers; based on years of service) × Age Factor (varies across tiers; kicks in only if retire earlier than 62 years with less than 30 years) × Final Average Salary	Average of highest three years	Pension Factors for Tiers 1 and 2 are based on when service credit earned and range between 1.0% and 2.0% per year. Pension Factors for Tiers 3 and 4 are based on the amount of service credit and range between 1.5% and 2.0%. The Age Factor ranges from 73% at age 55 and 100% at age 62.
North Carolina	5 years of service	(1) 30 years of creditable service, (2) 25 years of creditable service and the attainment of age 60, or (3) 5 years of creditable service and the attainment of age 65	1.82% × Creditable Service × Final Average Salary	Average of highest four consecutive years	
North Dakota	3 years of service	(1) Sum of age and years of creditable service at least 85 or (2) 3 years of creditable service and the attainment of age 65	Benefit Multiplier (currently 2.0%) × Service Credit × Final Average Salary	Average of highest three years	
Ohio	Defined Benefit plan: 5 years of service Defined Contribution plan: vested in their contribs. immediately and in employer contribs. after 1 year Combined: vested in each portion as above	Defined Benefit: (1) 30 years of creditable service or (2) the attainment of age 65 Defined Contribution Plan: the attainment of age 50 Combined Plan: (1) access to Defined Benefit retirement at attainment of age 60 and five years of creditable service and (2) access to the Defined Contribution retirement at the attainment of age 50	Defined Benefit plan: [2.2% × Years of Service (up to 30) × Final Average Salary] + [(if year 31 served) 2.5% × FAS] + [(if year 32 served) 2.6% × FAS] + and so on until 100 % of FAS is reached after 42 years Defined Contribution plan: based on value of member's account at retirement Combined plan: Defined Benefit portion—1% × Years of Service × FAS; Defined Contribution portion—depends on value of member's account	Average of highest three years	
Oklahoma	5 years of service	(1) Sum of age and years of creditable service at least 80 (if became member before 1 July 1992) or 90 (if became member after 30 June 1992) or (2) 5 years of creditable service and the attainment of age 62	2% × Years of Service × Final Average Salary	If retired by Rule of 80, average of highest three years If retired by Rule of 90, average of highest five consecutive years	

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation	
Oregon	Defined Benefit portion of plans: (1) Chapter 238 plan: 5 years of service or age 50 while working; (2) OPSRP: at least 600 hours in each of 5 years or attainment of normal retirement age Defined Contribution portion of plans: immediately in their contributions	Chapter 238 members: (1) 30 years of creditable service or (2) the attainment of age 58 for Tier 1 members or age 60 for Tier 2 members OPSRP: (1) 30 years of creditable service and the attainment of age 58 or (2) the attainment of age 65	Defined Benefit portion of plans: Ch. 238 – Age Factor (1.67% or 2.0%) × Years of Creditable Service × Final Average Salary; OPSRP – 1.5% × Years of Service × Final Average Salary Defined Contribution portion of plans: based on account value at retirement	Average of highest three consecutive years		
Pennsylvania	5 years of service	(1) 35 years of creditable service, (2) 30 years of creditable service and the attainment of age 60, or (3) 1 year of creditable service and the attainment of age 62	Class T-C members: 2% × Years of Credited Service × Final Average Salary Class T-D members: [2.5% × Years of Credited School and Purchased Intervening Military Service × FAS] + [2% × Years of Credited Non-School Service × FAS]	Average of highest three years		
Rhode Island	10 years of service	(1) 28 years of creditable service or (2) 10 years of creditable service and the attainment of age 60°	[(1.7% × Years 1-10) + (1.9% × Years 11-20) + (3% × Years 21-34) + (2% × Year 35)] × Average Salary	Average of highest three consecutive years		
South Carolina	5 years of service	(1) 28 years of creditable service including 5 years of earned service or (2) 5 years of earned service and the attainment of age 65	Class Service Percentage (1.45% for class I and 1.82% for class II) × Years of Service × Average Salary	Average of highest three years		
South Dakota	3 years of service	3 years of contributory service and the attainment of age 65	The greater of two formulas: (1) [1.625% × Credited Service before 1 July 2002 × Final Average Compensation] + [1.55% × Credited Service after 1 July 2002 × FAC] (2) [2.325% × Credited Service before 1 July 2002 × FAC] + [2.0% × Credited Service after 1 July 2002 × FAC] - [80% of Primary Social Security]	Average of highest three consecutive 4-quarter periods in the last 40 quarters of membership		

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation
Tennessee	4 years of service if enrolled before 1 July 1979 5 years of service if enrolled after 30 June 1979	(1) 30 years of creditable service or (2) 5 years of creditable service and the attainment of age 60	([Benefit Rate (1.5%) × Years of Creditable Service × Average Final Compensation] + [Benefit Rate (0.25%) × Years of Creditable Service × AFC in excess of Social Security Integration Limit]) × 5% Benefit Improvement (BIP)	Average of highest five consecutive years	
Texas	5 years of service	5 years of creditable service and either (1) sum of age and creditable service at least 80 or (2) attainment of age 65	2.3% × Total Years of Service × Final Average Salary	Average of highest five years	FAS based on highest three years if by 31 Aug. 2005: (1) attained age 50, (2) had at least 25 years of service, or (3) sum of age and years of service at least 70
Utah	4 years of service	(1) 30 years of creditable service or (2) 4 years of creditable service and the attainment of age 65	Non-Contributory Member: 2% × Years of Service × Average Salary Contributory: [(1.25% × Years of Service before 1 July 1975) + (2% × Years of Service after 1 July 1975)] × Average Salary	If non-contributory, average of highest three years If contributory, average of highest five years	
Vermont	5 years of service	(1) 30 years of creditable service or (2) attainment of age 60 (Group A members) or age 62 (Group C members)	Group A Member: 1.67% × Years of Group A Service × Average Final Compensation Group C Member: [1.25% × Years of Group B Service × AFC] + [1.67% × Years of Group C Service × AFC]	Average of highest three consecutive years	
Virginia	5 years of service	(1) 30 years of creditable service and the attainment of age 50, (2) 5 years of creditable service and the attainment of age 50	1.7% × Years of Service × Final Annual Salary	Average of highest three consecutive 12-month periods	
Washington	Plan 1 and 2: 5 years of service Plan 3: 5 or 10 years of service	Plan 1: (1) 30 years of creditable service, (2) 25 years of creditable service and the attainment of age 55, or (3) 5 years of creditable service and the attainment of age 60 Plan 2: 5 years of creditable service and the attainment of age 65 Plan 3: Attainment of age 65 and (1) 10 years of creditable service, (2) 5 years of creditable service including 12 service credit months earned after attaining age 44, or (3) 5 years of creditable service earned in Plan 2 prior to 1 July 1996	Plan 1: 2% × Service Credit Years (30 max.) × Average Final Compensation Plan 2: 2% × Service Credit Years × AFC Plan 3: from Defined Benefit portion – 1% × Service Credit Years × AFC; from Defined Contribution portion – based on value of member's account at retirement	Plan 1: Average of highest two consecutive years Plans 2 & 3: Average of highest five consecutive 12-month periods	

State	Vesting	Service Requirements for Normal Retirement	Calculation of Maximum Annual Retirement Benefits ^a	Definition of Salary Used in Benefit Calculation	Notes on Benefits Calculation
· · ·		Defined Benefit: while still in covered employment, (1) 35 years of creditable service, (2) 30 years of creditable service and the attainment of age 55, or (3) 5 years of creditable service and the attainment of age 60 Defined Contribution: 12 years of creditable service and the attainment of age 55	Defined Benefit plan: 2% × Years of Service × Final Average Salary Defined Contribution plan: based on value of member's account at retirement	Average of highest five years out of last 15 years	
Wisconsin	fully after 12 years of service		Based on the highest value of two formulas (1) ([1.765% × Years of Service Pre-2000] + [1.6% × Years of Service Post-1999]) × Final Average Earnings (2) Age Money Purchase Factor × Money Purchase Balance (sum of member and employer contributions made on salary)	Average of highest three years	
Wyoming	48 months of service	(1) Sum of age and years of creditable service at least 85 or (2) 48 months of creditable service and the attainment of age 60	[(2.125% × First 15 Years) + (2.25% × Years Over 15] × Average Salary	Average of highest three continuous 12-month periods	

^a Monthly benefit formulas were converted to annual benefit formulas.

SOURCE: All websites accessed spring and summer 2006 — Alabama: www.rsa.State.al.us; Alaska: www.State.ak.us/drb; Arizona: www.azasrs.gov/web/index.do; Arkansas: www.atrs.State.ar.us; California: www.calstrs.com; Colorado: www.copera.org; Connecticut: www.ct.gov/trb; Delaware: www.delawarepensions.com; District of Columbia: dcrb.dc.gov; Florida: www.frs.State.fl.us; Georgia: www.trsga.com; Hawaii: www4.hawaii.gov/ers/; Idaho: www.persi.State.id.us; Illinois: trs.illinois.gov; Indiana: www.in.gov/trf; Iowa: www.ipers.org; Kansas: www.kpers.org; Kentucky: ktrs.ky.gov; Louisiana: www.trsl.org; Maine: www.msrs.org; Maryland: www.sra.State.md.us; Massachusetts: www.mass.gov/mtrs; Michigan: www.michigan.gov/orsschools; Minnesota: www.tra.State.mn.us; Mississippi: www.pers.State.ms.us; Missouri: www.psrs-peers.org; Montana: www.trs.doa.State.mt.us; Nebraska: www.npers.ne.gov; Nevada: www.nvpers.org; New Hampshire:

^b Alaska requires 25 years of service for members who were not teachers for 20 years but rather claim other types of service such as outside teaching service, Alaska Bureau of Indian Affairs service or military service. However, the last five years for these individuals must be TRS membership service.

^c Beginning 1 July 2005, Iowa teachers become vested only after four years of service.

d Maine defines normal retirement age as follows: (1) Age 60 if before 1 July 1993 the teacher (a) had 10 years of creditable service or (b) attained age 60 and had one year of creditable service prior to reaching age 60 or (2) Age 62.

^e These service requirements apply to teachers. Different service requirements apply to non-teacher members of the Rhode Island system.

www.State.nh.us/retirement; New Jersey: www.State.nj.us/treasury/pensions; New Mexico: www.era.State.nm.us; New York: www.nystrs.org; North Carolina: www.nctreasurer.com/DSTHome; North Dakota: www.State.nd.us/rio/TFFR; Ohio: www.strsoh.org; Oklahoma: www.ok.gov/TRS; Oregon: Oregon.gov/PERS; Pennsylvania: www.psers.State.pa.us; Rhode Island: www.ersri.org; South Carolina: www.retirement.sc.gov; South Dakota: www.sdrs.sd.gov; Tennessee: treasury.State.tn.us/tcrs/; Texas: www.trs.State.tx.us; Utah: www.urs.org; Vermont: www.tre.State.vt.us; Virginia: www.varetire.org; Washington: www.drs.wa.gov; West Virginia: www.wvretirement.com; Wisconsin: etf.wi.gov; Wyoming: retirement.State.wy.us

TABLE A-19: Estimated Salary Replacement Rates for Teachers First Employed for 2005-06 and Retiring at Age 65, 2005

State	Contributed to Social	20 Years	25 Vacanta	30 Years	35 Years	Average
State	Security	(%)	Years (%)	(%)	(%)	Rank ^a
Alabama	Yes	40.3	50.3	60.4	70.4	15
Alaska	No	40.0	52.5	65.0	77.5	16
Arizona	Yes	43.0	55.0	69.0	80.5	11
Arkansas (Contributory)	Yes	43.0	53.8	64.5	75.3	14
Arkansas (Non-Contributory)	Yes	27.8	34.8	41.7	48.7	49
California	No	48.0	60.0	72.0	84.0	8
Colorado	No	50.0	62.5	75.0	87.5	5
Connecticut	No	40.0	50.0	60.0	70.0	19
Delaware	Yes	37.0	46.3	55.5	64.8	34
District of Columbia	??	40.0	50.0	60.0	70.0	19
Florida	Yes	33.6	42.0	50.4	58.8	34
Georgia	Yes	40.0	50.0	60.0	70.0	19
Hawaii (Contributory)	Yes	40.0	50.0	60.0	70.0	19
Hawaii (Non-Contributory)	Yes	25.0	31.3	37.5	43.8	50
Idaho	Yes	40.0	50.0	60.0	70.0	19
Illinois	No	35.7	46.2	56.7	68.2	35
Indiana (defined benefit component only)	Yes	22.0	27.5	33.0	38.5	51
Iowa	Yes	40.0	50.0	60.0	60.0	32
Kansas	Yes	35.0	43.8	52.5	61.3	40
Kentucky	No	50.0	62.5	75.0	87.5	5
Louisiana	No	60.0	75.0	90.0	105.0	1
Maine	No	40.0	50.0	60.0	70.0	19
Maryland (Contributory Pension)	Yes	36.0	45.0	54.0	63.0	39
Massachusetts	No	50.0	62.5	87.0	109.5	3
Michigan	Yes	30.0	37.5	45.0	52.5	47
Minnesota	Yes	37.8	47.3	56.8	66.3	33
Mississippi	Yes	40.0	50.0	62.5	75.0	18
Missouri	No	50.0	62.5	75.0	89.3	4
Montana	Yes	33.3	41.7	50.0	58.3	44
Nebraska	Yes	40.0	50.0	60.0	70.0	19
Nevada	No	53.4	66.8	80.1	93.5	2
New Hampshire	Yes	36.4	45.5	54.6	63.7	36
New Jersey	Yes	40.0	50.0	60.0	70.0	19
New Mexico	Yes	47.0	58.8	70.5	82.3	9
New York	Yes	40.0	50.0	60.0	67.5	31
North Carolina	Yes	36.4	45.5	54.6	63.7	36
North Dakota	Yes	40.0	50.0	60.0	70.0	19
Ohio (Defined Benefit)	No	44.0	55.0	66.0	79.5	11
Ohio (Combined – defined benefit component only)	No	20.0	25.0	30.0	35.0	52
Oklahoma	Yes	40.0	50.0	60.0	70.0	19
Oregon	Yes	30.0	37.5	45.0	52.5	47
Pennsylvania b	Yes	50.0	62.5	75.0	87.5	5
Rhode Island	Yes	36.0	51.0	66.0	80.0	17
South Carolina ^c	Yes	36.4	45.5	54.6	63.7	36

TABLE A-19: Estimated Salary Replacement Rates for Teachers First Employed for 2005-06 and

Retiring	at Age	65, 2005	(cont.)

State	Contributed to Social Security	20 Years (%)	25 Years (%)	30 Years (%)	35 Years (%)	Average Rank ^a
South Dakota	Yes	31.0	38.8	46.5	54.3	46
Texas	No	46.0	57.5	69.0	80.5	10
Utah	Yes	40.0	50.0	60.0	70.0	19
Vermont	Yes	33.4	41.8	50.1	58.5	43
Virginia	Yes	34.0	42.5	51.0	59.5	41
Washington (defined benefit component only)	Yes	20.0	25.0	30.0	35.0	52
West Virginia (Defined Benefit)	Yes	40.0	50.0	60.0	70.0	19
Wisconsin	Yes	32.0	40.0	48.0	56.0	45
Wyoming	Yes	43.1	54.4	65.6	76.9	13
Average Replacement Rates						
All defined benefit plans		38.8	48.7	59.0	69.0	
All defined benefit only plans d		39.9	50.1	60.6	70.9	

ASSUMPTIONS: Calculations assume the following: (1) teacher first employed for the 2005-06 school year, (2) teacher retires at age 65 but could have stopped teacher prior to age 65, and (3) current benefit calculation formulas remain constant over time.

NOTE: Table includes estimated replacement rates for all retirement plans that were open to teachers first employed in 2005-06 with the exception of the Maryland Non-Contributory and Tennessee plans which depend on how a teacher's final salary interacts with the Social Security Integration Limit and Ohio's defined contribution plan.

SOURCE: Authors' calculations based on data in Table A-18 in Appendix 8.

a Average rank was calculated as follows: (1) rank States within years of service categories, (2) average across rankings within years of service categories, and (3) rank States on average rankings calculated in step 2.

^b Pennsylvania's calculations assume that all creditable service is school and purchased intervening military service.

^c South Carolina's calculations assume all creditable service is as Class II.

d These averages exclude the hybrid plans in Indiana, Ohio's Combined plan, and Washington's Plan 3. The replacement rate estimated for these plans are only partial replacement rates as all three plans have a sizeable defined contribution component for which replacement rates can not be

TABLE A-20: Health Insurance Availability and Premiums for Retired Teachers, 2005

		Monthly Health Insurance Premiums						
State	Health Insurance Availability ^a	Effective Date	Notes on Premiums	Retiree only (without Medicare)	Retiree & Spouse (both without Medicare)	Retiree only (with Medicare A & B)	Retiree & Spouse (both with Medicare A & B)	
Alabama	Through retirement system (Public Education Employees' Health Insurance Plan)	1 October 2006		\$90.00	\$222.00	\$1.14	\$92.14	
Alaska	Through State health plan (AlaskaCare Retiree Medical Plan)	1 January 2006	Provided at no cost to retiree except if hired after 30 June 1996, are under age 60 and are not receiving a disability benefit	\$0.00 for most \$590.00 for exceptions	\$0.00 for most \$1,179.00 for exceptions	\$0.00	\$0.00	
Arizona	Through retirement system (ASRS Retiree Health Insurance program)	1 January 2006	Vary across plans and county of residence; Premiums listed do not include subsidy ^b	\$403.79 to \$846.40	\$807.58 to \$1,692.80	\$137.48 to \$316.35	\$274.96 to \$632.70	
Arkansas	Through State health plan	1 January 2006	Vary across plans (without Medicare) and include a subsidy ^c	\$372.96 to \$586.63	\$824.48 to \$1,251.82	\$49.15	\$176.87	
California	Through former employer							
Colorado	Through retirement system (PERACare)	2006	Vary across plans and are based on years of service and region of State; Premiums listed do not include subsidy ^d	\$242.00 to \$1,761.00	\$495.00 to \$3,597.00	\$127.00 to \$273.00	\$254.00 to \$528.00	
Connecticut	Through former employer if not on Medicare; Through the retirement system if on Medicare	1 January 2006	Retirees not eligible for Medicare receive a monthly premium subsidy of \$110.00 for retiree only and \$220.00 for retiree and spouse			\$83.00	\$166.00	
Delaware	Through retirement system	1 July 2005	Vary across plans if not Medicare eligible; Premiums assume State pays 100% of employer share ^e	\$0.00 to \$48.60	\$0.00 to \$102.92	\$0.00	\$0.00	
District of Columbia	Through former employer							
Florida	Through former employer		Heath insurance subsidy = \$5 per year up to a max of \$150					
Georgia	Through State health plan (State Health Benefit Plan)	1 January 2006	Include employer contribution	\$56.92 to \$264.00	\$368.65 to \$824.55	Unable to determine	Unable to determine	
Hawaii	Through State health plan (Hawaii Employer-Union Health Benefits Trust Fund)	1 July 2006	Vary across plans	\$315.42 or \$348.20	\$882.28 or \$1,044.56	\$164.40 or \$201.08 (requires only Medicare Part B)	\$493.12 or \$657.96 (requires only Medicare Part B)	
Idaho	Appears not to be available through retirement system or State health plan							
Illinois	Through State health plan (Teachers' Retirement Insurance Plan) ^f	1 July 2006	Vary across plan and whether or not a managed care provider is available in their county of residence	Ages 23- 64: \$159.06 to \$564.11	Age 23-64: \$866.81 to \$1128.21	\$62.86 to \$163.66	\$228.65 to \$327.33	

TABLE A-20: Health Insurance Availability and Premiums for Retired Teachers, 2005 (cont.)

		Ance Availability and Premiums for Retired Teachers, 2005 (cont.) Monthly Health Insurance Premiums						
State	Health Insurance Availability ^a	Effective Date	Notes on Premiums	Retiree only (without Medicare)	Retiree & Spouse (both without Medicare)	Retiree only (with Medicare A & B)	Retiree & Spouse (both with Medicare A & B)	
Indiana	Through retirement system	1 May 2006	Premiums are per person based on age: (1) age 65-69 = \$148.97; (2) age 70-74 = \$162.27; and (3) 75+ = \$175.47	N/A	N/A	See Notes	See Notes	
Iowa	Appears not to be available through retirement system or State health plan							
Kansas	Through State health plan	2006	Vary across plans	\$355.72 to \$415.81	\$690.10 to \$810.28	\$68.50 to \$373.50	\$136.50 to \$746.50	
Kentucky	Through either State health plan or through retirement system	2005	Vary across plans; Premiums do not include smoker penalty (\$15 or \$30) or subsidies that vary with years of service h	\$366.72 to \$384.92	\$626.25 to \$765.39	\$288.00	\$576.00	
Louisiana	Through former employer							
Maine	Through former employer							
Maryland	Through former employer							
Massachusetts	Through former employer							
Michigan	Through retirement system	1 January 2006	Premiums listed include full subsidy i	\$88.50	\$141.05	\$0.00	\$27.12	
Minnesota	Through former employer	2000	subsitely					
Mississippi	Through State health program or through retirement system ^j	1 July 2006	Vary across plan for members without Medicare	\$370.00 or \$389.00	\$736.00 or \$804.00	\$117.00 or \$152.00	\$234.00 or \$304.00	
Missouri	Through former employer							
Montana	Through former employer							
Nebraska	Appears not to be available through retirement system or State health plan							
Nevada	Through former employer or State health plan (Public Employees' Benefit Program)	1 July 2005	Vary across plans; Premiums are for the State health plan and do not include monthly premium subsidies k	\$87.28 to \$512.44	\$146.77 to \$1,161.78	\$87.28 to \$512.44	\$146.77 to \$1,117.23	
New Hampshire	Through former employer		State provides a medical subsidy ¹					
New Jersey	Through State health plan (NJ State Health Benefits Program)	1 January 2006	Vary across plans	\$400.98 to \$722.15	\$882.05 to \$1,572.86	\$327.71 to \$411.36	\$655.44 to \$822.75	
New Mexico	Through State health plan (New Mexico Retiree Healthcare Authority)	1 January 2006	Vary across plans and across years of experience (5 years to 20+ years)	5 years: \$408.07 to \$485.41; 20+ years: \$92.90 to \$137.58	5 years: \$800.13 to \$952.37; 20+ years: \$310.88 to \$397.20	5 years: \$10.97 to \$289.73; 20 years: \$5.66 to \$150.41	5 years: \$10.97 to \$562.01; 20 years: \$5.66 to \$302.63	
New York	Through former employer			<i>\$101.00</i>	ΨΟΣ20	**************************************	φυσ 2. σσ	

TABLE A-20: Health Insurance Availability and Premiums for Retired Teachers, 2005 (cont.)

		Monthly Health Insurance Premiums						
State	Health Insurance Availability ^a	Effective Date	Notes on Premiums	Retiree only (without Medicare)	Retiree & Spouse (both without Medicare)	Retiree only (with Medicare A & B)	Retiree & Spouse (both with Medicare A & B)	
North Carolina	Through State health plan (State's Comprehensive Major Medical Plan)	1 October 2005	Premiums listed all include monthly premium subsidy ^m	\$0.00	\$480.14	\$0.00	\$364.92	
North Dakota	Through State health plan (The Dakota Retiree Plan)	2006	If as an active member they were a member of the Dakota Plan, they can continue on COBRA for 18 months or until Medicare eligible, whichever occurs first	if enrolled prior to 1 July 2005: \$284.64; if enrolled after \$287.27	if enrolled prior to 1 July 2005: \$702.01; if enrolled after \$691.74	if enrolled prior to 1 July 2005: \$169.40; if enrolled after \$174.72	if enrolled prior to 1 July 2005: \$329.24; if enrolled after \$337.98	
Ohio	Through State health plan (Ohio Health Care Program) ⁿ	2006	Vary across plan and with years of service (less than 15 years to 30+ years); premiums include monthly premium subsidies that vary with years of service	<15 years: \$353.00 to \$619.00; 30+ years: \$40.00 to \$175.00	<15 years: \$648.00 to \$1,140.00; 30+ years: \$380.00 to \$696.00	<15 years: \$118.00 to \$267.00; 30+ years: \$40.00 to \$93.00	<15 years: \$241.00 to \$544.00; 30+ years: \$163.00 to \$370.00	
Oklahoma	Through former employer		TRS provides a monthly subsidy between \$100 and \$105 for retiree premiums					
Oregon	Through former employer or through retirement system (PERS Health Insurance Program) °	2005	Vary across plans; Premiums listed apply to the PERS Health Insurance Program; Medicare premiums listed include a monthly premium subsidy of \$60	\$400.03 to \$580.26	\$798.06 to \$1163.99	\$92.68 to \$116.49	\$243.36 to \$286.67	
Pennsylvania	Through retirement system (Health Options Program)	2006	Vary across plan and across region within State; Premiums listed include \$100 monthly premium subsidy	\$189.47 to \$814.19	\$544.92 to \$1,917.48	\$19.00 to \$244.50	\$38.00 to \$969.60	
Rhode Island	Through former employer or through retirement system	1 July 2005	Premiums apply to plan provided by the retirement system ^p	\$391.68	\$1,098.01	\$99.00 or \$158.06	N/A	
South Carolina	Through State health plan (SC Employee Insurance Program)	2006	Vary across plans and if the member's premiums are employer-funded (EF) or non- employer-funded (NEF)	EF: \$9.28 to \$127.00 NEF: \$241.12 to \$358.82	EF: \$72.56 to \$365.72 NEF: \$525.58 to \$818.74	EF: \$76.46 to \$127.00 NEF: \$307.30 to \$358.82	EF: \$201.50 to \$365.72 NEF: \$654.52 to \$818.74	
South Dakota	Appears not to be available through retirement system or State health plan							
Tennessee	Through State health plan (non- Medicare: Tennessee Local Education Teacher Retiree Health Insurance Plan; Medicare: The Tennessee Plan)	1 January 2006 (non Medicare eligible plans); 1 August 2006 (Medicare plans)	Premiums for non-Medicare plans vary across plans and years of service; Premiums for Medicare plan vary across years of service; Premiums listed are prior to any employer contribution	Less than 20 years: \$269.69 to \$307.43; 20-29 yrs: \$233.73 to \$266.44; 30+ years: \$197.77 to \$225.45	Less than 20 years: \$673.10 to \$767.27; 20-29 yrs: \$583.36 to \$664.96; 30+ years: \$493.61 to \$562.66	Less than 15 years: \$105.00; 15-19 years: \$80.00; 20- 29 years: \$67.50; 30+ years: \$55.00	Less than 15 years: \$210.00; 15-19 years: \$185.00; 20-29 years: \$172.50; 30+ years: \$160.00	

TABLE A-20: Health Insurance Availability and Premiums for Retired Teachers, 2005 (cont.)

		Monthly Health Insurance Premiums					
State	Health Insurance Availability ^a	Effective Date	Notes on Premiums	Retiree only (without Medicare)	Retiree & Spouse (both without Medicare)	Retiree only (with Medicare A & B)	Retiree & Spouse (both with Medicare A & B)
Texas	Through retirement system (TRS-Care)	September 2005	Vary across three tiers of coverage; Care 2 and 3 tiers vary also across years of service	Care 1: \$0.00; Care 2: <20 years = \$210.00, 20-29 years = \$200.00, 30+ years = \$190.00; Care 3: <20 years = \$310.00, 20-29 years = \$295.00, 30+ years = \$280	Care 1: \$140.00; Care 2: <20 years = \$450.00, 20-29 years = \$430.00, 30+ years = \$410.00; Care 3: <20 years = \$665.00, 20-29 years = \$635.00, 30+ years = \$605.00	Care 1: \$0.00; Care 2: <20 years = \$80.00, 20-29 years = \$70.00, 30+ years = \$60.00; Care 3: <20 years = \$110.00, 20-29 years = \$100.00, 30+ years	Care 1: \$20.00; Care 2: <20 years = \$190.00, 20-29 years = \$175.00, 30+ years = \$160.00; Care 3: <20 years = \$275.00, 20-29 years = \$255.00, 30+ years = \$255.00,
Utah	Through former employer or through retirement system if Medicare eligible (Public Employees Health Program)	1 January 2006	Vary across plan			\$95.00 or \$295.00	\$190.00 or \$590.00
Vermont	Through retirement system	1 July 2005	Vary across three plans; Premiums listed include a monthly premium subsidy of \$374.88 (non-Medicare) or \$301.83 (Medicare)	\$86.78, \$86.78, \$139.89	\$505.57, \$505.57, \$613.08	\$0.00, \$69.87, \$148.08	\$138.89, \$419.21, \$575.63
Virginia	Through former employer		Retired teachers with at least 15 years of service receive a monthly premium subsidy of \$2.50 per year of service (30 years maximum)				
Washington	Through State health plan (Public Employees Benefits Board)	1 July 2006	Vary across plans	\$369.51 to \$493.87	\$731.38 to \$980.10	\$137.41 to \$308.45	\$427.73 to \$715.85
West Virginia	Through State health plan (Public Employees Insurance Agency)	1 January 2006	Vary across years of service; Premiums do not include a \$15 monthly premium subsidy for non-smokers	<5 years: \$859.00; 25+ years: \$210.00	<5 years: \$2,071.00; 25+ years: \$419.00	<5 years: \$425.00; 25+ years: \$78.00	<5 years: \$886.00; 25+ years: \$136.00
Wisconsin	Through State health plan (State of Wisconsin Group Health Insurance Plan)	2006	Vary across plans and region of State	\$359.60 to \$1083.30	\$895.60 to \$2705.20	\$288.10 to \$490.10	\$645.40 to \$1419.30
Wyoming	Through former employer tirements may apply.						

^a Eligibility requirements may apply.

b Retirees of ASRS are eligible for monthly premium subsidies that vary with their years of service (from 5.0-5.9 years to 10.0+ years). The subsidies range as follows: retiree only (not Medicare eligible): \$75.00 to \$150.00, retiree and spouse (neither Medicare eligible): \$130.00 to \$260.00, retiree only (with Medicare A & B): \$50.00 to \$100.00, retiree and spouse (both with Medicare A & B): \$85.00 to \$170.00.

^c Arkansas public school retirees receive a monthly premium subsidy of \$80.29 without Medicare and \$78.57 with Medicare.

^d Colorado retirees without Medicare receive a monthly premium subsidy that varies with years of service from \$11.50 with one year to \$230.00 with 20+ years. Colorado retirees with Medicare receive a monthly premium subsidy that also varies with years of service from \$5.75 with one year and \$115.00 with 20+ years.

^e Delaware pays 100% of the employer share of monthly premiums for retirees first employed before 1 July 1991 and all retirees on disability retirement. For retirees first employed after 30 June 1991, the State pays a portion of the employer share depending on years of service as follows: less than 10 years=0.0%, 10 but less than 15 years=50.0%, 15 but less than 20 years=75.0%, and 20+ years=100%.

^f The Teachers' Retirement Insurance Program is administered by the Dept of Central Management Services.

- i Michigan provides a monthly subsidy for health care premiums to eligible retires based on date of retirement and years of service. If the member retired prior to 1 November 1980, they are eligible for the full subsidy. If the member retired after 31 October 1980 with less than 21 years of service, they are ineligible for the subsidy. If the member retired after 31 October 1980 with more than 20 years of service, they are eligible for a 10% of the subsidy for every year of service over 20 years. The full monthly subsidies are as follows: retiree only (without Medicare)=\$556.68, retiree and spouse (neither with Medicare)=\$1,029.65, retiree only (with Medicare A & B)=\$299.84, and retiree and spouse (both with Medicare A & B)=\$543.89.
- ^j Mississippi retirees (regardless of their Medicare status) can elect to receive health benefits through the State health program (State and School Employees' Health Insurance Plan). Once they enroll in Medicare, they may also elect to receive health benefits through the retirement system (PERS Medicare Supplemental Plan).
- k Nevada teachers who retired prior to 1 January 1994 receive a monthly premium subsidy of \$321.27. The subsidy for those who retired after 31 December 1993 varies by years of service from \$80.32 (5 years of service) to \$441.75 (20+ years of service).
- ¹ New Hampshire provides a monthly premium subsidy for retirees as follows: retiree only (without Medicare)=\$321.98, retiree and spouse (neither with Medicare)=\$643.96, retiree only (with Medicare A & B)=\$203.06, and retiree and spouse (both with Medicare A & B)=\$406.11.

 ^m North Carolina retirees receive the following monthly premium subsidies: retiree without Medicare=\$321.14 and retiree with Medicare A & B=\$244.48
- ⁿ Health insurance benefits are only available to retirees from the Defined Benefit or Combined plan. Health benefits are not provided to retirees of the Defined Contribution plan.
- Oregon's PERS Health Insurance Program is only available to retirees of the Chapter 238 Plan. The retirement system does not provide health benefits to ORSRP retirees.
- P Rhode Island retirees pay all of the ERSRI pre-Medicare premiums but once Medicare kicks in they pay a potion based on their years of service: 50% if 10-15 years of service, 30% if 16-19 years of service, 10% if 20-27 years of service, and 0% if 28+ years of service. SOURCE: All websites accessed spring and summer 2006 — Alabama: www.rsa.State.al.us; Alaska: www.State.ak.us/drb; Arizona: www.azasrs.gov/web/index.do; Arkansas: www.atrs.State.ar.us and arbenefits.org; California: www.calstrs.com; Colorado: www.copera.org; Connecticut: www.ct.gov/trb; Delaware: www.delawarepensions.com; District of Columbia: dcrb.dc.gov; Florida: www.frs.State.fl.us; Georgia: www.trsga.com and dch.georgia.gov; Hawaii: www4.hawaii.gov/ers/ and www.eutf.hawaii.gov/; Idaho: www.persi.State.id.us; Illinois: trs.illinois.gov; Indiana: www.in.gov/trf; Iowa: www.ipers.org; Kansas: www.kpers.org and da.State.ks.us/ps/benefits.htm; Kentucky: ktrs.ky.gov; Louisiana: www.trsl.org; Maine: www.msrs.org; Maryland: www.sra.State.md.us; Massachusetts: www.mass.gov/mtrs; Michigan: www.michigan.gov/orsschools; Minnesota: www.tra.State.mn.us; Mississippi: www.pers.State.ms.us and knowyourbenefits.dfa.State.ms.us/; Missouri: www.psrs-peers.org; Montana: www.trs.doa.State.mt.us; Nebraska: www.npers.ne.gov; Nevada: www.nypers.org and pebp.State.nv.us/; New Hampshire: www.State.nh.us/retirement; New Jersey: www.State.nj.us/treasury/pensions; New Mexico: www.era.State.nm.us; New York: www.nystrs.org; North Carolina: www.nctreasurer.com/DSTHome and www.Statehealthplan.State.nc.us/; North Dakota: www.State.nd.us/rio/TFFR; Ohio: www.strsoh.org; Oklahoma: www.ok.gov/TRS; Oregon: Oregon.gov/PERS; Pennsylvania: www.psers.State.pa.us and www.hopbenefits.com; Rhode Island: www.ersri.org; South Carolina: www.retirement.sc.gov and www.eip.sc.gov/; South Dakota: www.sdrs.sd.gov; Tennessee: treasury.State.tn.us/tcrs/ and www.State.tn.us/finance/ins/ins.html; Texas: www.trs.State.tx.us; Utah: www.urs.org and www.pehp.org: Vermont: www.tre.State.vt.us: Virginia: www.varetire.org: Washington: www.drs.wa.gov and www.pebb.hca.wa.gov/; West Virginia: www.wvretirement.com and www.westvirginia.com/peia/; Wisconsin: etf.wi.gov; Wyoming: retirement.State.wv.us

^g Kentucky retiree health benefits for those not Medicare eligible are provided by the State health plan (State Group Health Plan). Health benefits for retirees participating in Medicare are provided through the KTRS self-insured Medicare Eligible Health Plan.

h Kentucky retirees under 65 years of age are eligible for monthly premium subsidizes based on their years of service: 10-14.99 years=\$122.24, 15-19.99 years=\$244.48, and 20+ years=\$366.72.

¹ We conducted keyword searches in each policy area during the summer and fall of 2005 with the exception of retirement policies which were collected in the spring and summer of 2006. In response to reviewer feedback, additional data on pre-service, licensure and certification, and professional development policies were collected in the fall of 2006.

² Education Week (6 January 2005), Quality Counts 2005 – No Small Change: Targeting Money Toward Student Performance, Vol. 24, Issue 17.

³ We conducted keyword searches in each policy area during the summer and fall of 2005 with the exception of retirement policies which were collected in the spring and summer of 2006. In response to reviewer feedback, additional data on pre-service, licensure and certification, and professional development policies were collected in the fall of 2006.

⁴ Education Week (6 January 2005). Quality Counts 2005 – No Small Change: Targeting Money Toward Student Performance, Vol. 24, Issue 17.

⁵ Glossing over the legal distinction between the District of Columbia and the fifty States is done merely for convenience. We do not mean to overlook the District of Columbia's position as the only U.S. territory where U.S. citizens pay federal taxes yet are denied representation in the U.S. Congress.

⁶ Much of this section comes from Loeb, S. and M. Reininger (2004). Public Policy and Teacher Labor Markets: What We Know and Why It Matters. The Education Policy Center at Michigan State University.

⁷ Henke, R.R., Chen, X. and Geis, S. (2000). Progress Through the Teacher Pipeline: 1992-93 College Graduates and Elementary/Secondary School Teaching as of 1997 (NCES 2000-152) Washington DC: U.S. Department of Education. National Center for Education Statistics (NCES, 1993 Baccalaureate and Beyond Longitudinal Student (B&B: 1993/97) Data Analysis System.)

⁸ Corcoran, Sean P., William N. Evans and Robert M. Schwab (2004). "Changing Labor-Market Opportunities For Women And The Quality Of Teachers, 1957-2000," American Economic Review v94(2,May), 230-235.

⁹ Dee, T. (2004). "Teachers, Race, and Student Achievement in a Randomized Experiment" Review of Economics and Statistics

¹⁰ Loeb, S & Reininger, M. (2004).

¹¹ Rockoff, J. (2004). "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data," American Economic Review 94 (2): 247-252.

¹² Goldhaber, D. and Brewer. D.(2000). "Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement," Education Evaluation and Policy Analysis, 22 (2). Pp. 129-145.

¹³ Monk, D. H. (1994). Subject Area Preparation of Secondary Mathematics and Science Teachers and Student Achievement. Economics of Education Review, 13(2). 125-145

¹⁴ Corcoran, Evans and Schwab (2002)

¹⁵ See, for example, Ferguson, R. F., & Ladd, H. F. (1996), How and Why Money Matters; An Analysis of Alabama Schools. In H. F. Ladd (Ed.), Holding Schools Accountable: Performance-Based Reform in Education. Washington, DC: Brookings Institution.

¹⁶ Loeb & Reininger. (2004).

¹⁷ Ingersoll, R. (2003). Out-of-Field Teaching and the Limits of Teacher Policy. Working Paper.

¹⁸ Baugh, W.H. & Stone, J.A. (1982). Mobility and Wage Equilibrium in the Educator Labor Market. *Economics of Education Review*, 2(3): 253-274. ¹⁹ Loeb & Reininger. (2004)

²⁰ (1) Scafidi, B., Stinebrickner, T., & Sjoquist, D.L. (2003). "The Relationship Between School Characteristics and Teacher Mobility." Working paper, Georgia State University. (2) Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (2004). "Why Public Schools Lose Teachers." Journal of Human Resources, 39(2), pp. 326-54. (3) Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the Short Careers of High-Achieving Teachers in Schools with Low-Performing Students. American Economic Review, 95(2): 166-171.

²¹ Loeb, S., Darling-Hammond, L. and Luczak, J. (2005) "How Teaching Conditions Predict Teacher Turnover in California Schools," *Peabody Journal of Education* 80(3). ²² Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005a). The Draw of Home: How Teachers' Preferences for

Proximity Disadvantage Urban Schools. Journal of Policy Analysis and Management, 24(1): 113-132.

²³ Boyd, D., Grossman, P., Lankford, H., Loeb, S., and Wyckoff, J. (2006). How Changes in Entry Requirements Alter the Teacher Workforce and Affect Student Achievement. Journal of Education Finance and Policy, 1(2): 176-216.

²⁴ Levin, J. & Quinn, M. (2003). "Missed Opportunities: How we keep high-quality teachers out of urban classrooms." The New Teacher Project: New York.

²⁵ See: Ballou, D. 1996. Do public schools hire the best applicants? *Quarterly Journal of Economics 111* (1):97-133. and Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2003). "Analyzing Determinants of the Matching of Public School Teachers to Jobs: Estimating Compensating Differentials in Imperfect Labor Markets," National Bureau of Economic Research Working Paper 9878.

²⁶ Lankford, H., Loeb, S., and Wyckoff, J. "Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis," Education Evaluation and Policy Analysis, 24(1) p. 37-62

²⁷ Esch, C.E., C.M. Chang-Ross, R. Guha, D. Humphrey, P.M. Shields, J.D. Tiffany-Morales, M.E. Wechsler & K.R. Woodworth (2005). *The status of the teaching profession 2005*. Santa Cruz, CA: The Center for the Future of Teaching and Learning.

²⁸ Esch, C.E., C.M. Chang-Ross, R. Guha, J. Tiffany-Morales, & P.M. Shields (2004). *California's Teaching Force* 2004: *Key issues and trends*. Santa Cruz, CA: The Center for the Future of Teaching and Learning.

²⁹ CSR Research Consortium, (2000). *Class Size Reduction in California: The 1998-99 Evaluation Findings*. California Department of Education.

³⁰ Esch, et. al. (2004) defines underprepared teachers as those with an intern certificates (an alternative route certificate) and those with emergency permits and waivers.

³¹ The Center for the Future of Teaching and Learning (2006). *Teaching and California's Future: California's Teaching Force* 2006, *Key Issues and Trends*.

³² Ibid

³³ Esch, et. al., 2005, p. 31

³⁴ For a complete list, go to the following website: www.ctc.ca.gov/educator-prep/approved-programs.html.

³⁵ State of California (July 1997). Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs: A description of professional induction for beginning teachers. (Sacramento, CA: State of California) and California Commission on Teacher Credentialing (September 2001). Standards of Quality and Effectiveness for Professional Teacher Preparation Programs. (Sacramento, CA: CCTC). California Commission on Teacher Credentialing (2001). Professional Growth Manual: For multiple subject, single subject, services, and specialist credentials. (Sacramento, CA: CCTC).

³⁶ Current subject-matter standards can be assessed at this website: www.ctc.ca.gov/educator-prep/STDS-subject-matter.html#SSMP-HANDBOOKS.

³⁷ Eberts, R.W. & J.A. Stone (1987). Teacher Unions and the Productivity of Public Schools. *Industrial and Labor Relations*, 40(3): 354-363. Monk, D. H., & King, J. A. (1994). "Multilevel teacher resource effects in pupil performance in secondary mathematics and science: The case of teacher subject matter preparation." In R. G. Ehrenberg (Ed.), *Choices and consequences: Contemporary policy issues in education*. Ithaca, NY: ILR Press: 29-58

³⁸ Harris, D. and Sass, T. (2006). "Teacher Training and Teacher Productivity," Working Paper

³⁹ Wilson, S., Floden, R. and Ferrini-Mundy, J. (2002). "Teacher Preparation Research: An Insider's View from the Outside." *Journal of Teacher Education*, *53*(3): 190-204. Clift, R., and Brady, P. (2005). "Research on methods courses and field experiences." In *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah NJ: Erlbaum: 309-425.

⁴⁰ Harris, D. & Sass, T.R. (March 2006). "The Effects of Teacher Training on Teacher Value-Added." Working Paper, Florida State University: Tallahassee, FL.

⁴¹ See Rockoff, J. (2004) for example

⁴² Maine State Department of Education (April 1970). *150 Years of Education in Maine, 1820-1970: Sesqui-*centennial History of Maine's Educational System and the Growth and Development of the Maine State Department of Education. Retrieved 1 August 2006 from www.maine.gov/education/150Yrs/150Years.htm.

⁴³ NCLB defines core academic subjects as the following areas: English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography. See for more detail: Loeb, S. and Miller, L (2006). "A Federal Foray into Teacher Certification: Assessing the 'Highly Qualified Teacher Provision of NCLB," Working Paper.

⁴⁴ Other types of credentials include Education Specialist, Pupil Personnel Services, and Administrative Services. Additionally, single-subject and multiple-subject credentials can have a Bilingual, Cross-cultural, Language, and Academic Development emphasis (BCLAD).

⁴⁵ Both requirements are fulfilled be completing approved coursework. Candidates can also satisfy the U.S. Constitution requirement by passing an examination.

⁴⁶ There are two types of single-subject credentials for science teachers. The first is a credential as a generalist with a concentration in a specific branch of science (i.e., biological sciences, chemistry, geosciences, and physics) and are certified to teach either classes in Integrated Science or their concentration. The second is a credential in a specific branch of science. These teachers are certified to teach classes only within their specialized branch.

⁴⁷ All coursework completed for the Professional Clear Credential must have been completed after receiving a Preliminary Teaching Credential. This coursework must include health education; laws, methods, and requirements for providing educational opportunities to special populations in regular classrooms; use of computer technology in educational settings; and teaching English language learners.

⁴⁸ Political pressure forced the CCTC to phase out the Emergency Permit following the implementation of California's class size reduction program. The implementation caused a significant increase in the demand for teachers. Many of these new teachers entered the classroom on Emergency Permits giving rise to the impression that the permits authorized untrained, low-quality individuals to become teachers.

⁴⁹ For a multiple-subject permit: a degree major in liberal studies or 40 semester units including 10 semester units of coursework in each of at least four subject areas or at least 10 semester units of coursework in each of three of subject areas and an additional 10 semester units in a combination of two other subject areas. For a single-subject permit: a degree major in subject or at least 18 semester units or 9 upper division semester units. For an education specialist permit: complete the requirements for the single- or multiple-subject permits or verify a minimum of three years of successful full-time classroom experience or the equivalent of part-time experience, working with special education students or verify a minimum of nine semester units of course work in special education or in a combination of special education and regular education.

⁵⁰ Teaching and California's Future

⁵¹ CCTC has determined for each State whether or not the State's teaching credential standards are equivalent to California's with respect to the following requirements: Developing English Language Skills, U.S. Constitution, special education, and computer education; and in the following subject areas: art, English, French, math, music, physical education, Spanish, science: biological sciences, science: chemistry, science: geoscience, science: physics, social science, English learner, early childhood, and middle level.

⁵² The details of California's implementation of the highly qualified teacher provision of NCLB are based on the March 2004 *NCLB Teacher Requirements Resource Guide* published by the CDE. Updates were scheduled to be released in June 2006. California's HQT guidance applies to all teachers of core academic subjects including special education teachers that provide instruction in these subjects in a regular classroom, a resource room, or another setting.

⁵³ As part of these CCTC-approved programs, teachers complete the coursework required to demonstrate subject matter competency as permitted by NCLB.

⁵⁴ Elementary teachers holding a generalist National Board certification do receive points in California's HOUSSE rubric.

⁵⁵ California allots elementary teachers points for: 1) completing 18 units in each of four core area (reading/language arts, mathematics and science, history and social studies, and the arts) = 50 points; 2) completing a CCTC-approved Liberal Studies Wavier Program = 50 points; 3) National Board Certification in grade span (i.e., a generalist) = 60 points; or 4) completing an advanced degree in teaching, curriculum instruction, or assessment in core academic areas = 60 points. California allots middle and high school teachers points for: 1) completing a CCTC-Supplementary Authorization = 50 points; 2) completing 15-21 units of core academic coursework = 30 points; 3) completing 22-30 units of core academic coursework = 50 points; or 4) completing an advanced degree in teaching, curriculum, or assessment in core academic area = 60 points

⁵⁶ California Commission on Teacher Credentialing (January 1997). *California Standards for the Teaching Profession*. (Sacramento, CA: CCTC).

⁵⁷ California Department of Education (31 January 2005). California's Consolidated State Performance Report: Part I. (Sacramento, CA: CDE). Page 37

⁵⁸ The Center for the Future of Teaching and Learning (2006).

⁵⁹ Two other States, New Jersey and Utah, have professional standards boards; however, these boards are not involved in the development of the rules and regulations for teacher licensure and certification.

⁶⁰ It should be noted that the definition of alternative-route program used by NCAC in their analysis appears to differ from that used by Education Week in that NCAC's definition apparently encompasses programs that EdWeek's definition does not.

⁶¹ NCLB recognizes two groups of teachers, "new" and "not new". "New" teachers are those hired on or after the first day of the 2002-03 school year. "Not new" teachers, or veteran teachers, were hired prior to the start of the

2002-03 school year. States differ in the precise date separating "new" and "not new" teachers. In California, "new" teachers are those hired on or after 1 July 2002 while "not new" were hired prior to this date.

- ⁶² Walsh, K. and E. Snyder (December 2004). "Searching the Attic: How States are Responding to the Nation's Goal of Placing a Highly Qualified Teacher in Every Classroom" (Washington, DC: National Council on Teacher Quality).
- ⁶³ Clotfelter, C.T., Ladd, H.F., and Vigdor, J.L. (2006). "How and Why Do Teacher Credentials Matter for Student Achievement," Paper Presented at the World Bank Conference on "The Contribution of Economics to the Challenges Faced by Education," Dijon, France, June 2006. And Jepsen, C. & Rivkin, S. (September 2002). "What is the Tradeoff Between Smaller Classes and Teacher Quality?" NBER Working Papers 9205, National Bureau of Economic Research.
- ⁶⁴ Guarino, C.M., Santibanez, L. and Daley, G.A. (2006). "Teacher Recruitment and Retention: A Review of the Recent Empirical Literature," Review of Educational Research 76(2) 173-208.
- 65 (1) Raymond, M., Fletcher, S., & Luque, J. (2001, August). Teach For America: An evaluation of teacher differences and student outcomes in Houston, Texas. Stanford University. Center for Research on Education Outcomes at the Hoover Institute. (2) Laczko-Kerr, I., & Berliner, D.C.. (2002, September 6). The effectiveness of "Teach for America" and other under-certified teachers on student academic achievement: A case of harmful public policy," Education Policy Analysis Archives, 10(37). Retrieved 15 September 2006 from http://epaa.asu.edu/epaa/v10n37/. (3) Decker, Paul T., Daniel P. Mayer, and Steven Glazerman, The Effects of Teach for America on Students: Findings from a National Evaluation, Mathematica Policy Research, June 9, 2004; (4) Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. Education Policy Analysis Archives, 13(42). Retrieved 15 January 2006 from http://epaa.asu.edu/epaa/v13n42/">http://epaa.asu.edu/epaa/v13n42/. (5) Boyd, Grossman, Lankford, Loeb, and Wyckoff (2006). And (6) Kane, T.J., Rockoff, J.E., & Staiger, D.O. (2006). "What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City." Manuscript, March 2006. Available at gseweb.harvard.edu/news/features/kane/nycfellowsmarch2006.pdf.
- ⁶⁶ Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2006). "The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools." Working Paper.
- ⁶⁷ Koppich, J.E. & R.C. Seder (28 September 2005). *Proposition 74 Analysis: Issues Relating to Teacher Tenure* and Teacher Quality, Insights from Research and Best Practices. (Los Angeles: USC California Policy Institute). ⁶⁸ For a brief review of the arguments, see the official guide to Proposition 74 in the official voter information guide
- to the November 2005 special election at www.ss.ca.gov/elections/vig_2005.htm.
- ⁶⁹ According to Koppich and Seder (2005), the phrase "unsatisfactory performance" replaced the term "incompetence" because it was believed to be an easier standard to meet.
- ⁷⁰ Jacob, B. and Lefgren, L. (2005). "Can Principals Identify Effective Teachers? A Comparison of Objective and Subjective Supervisor Ratings" Working Paper.
- ⁷¹ Fuller, B., Loeb, S., Arshan, N., Chen, A. & Yi, S. (2006). How Principals Acquire and Deploy Resources—Motivating School Improvements. Part of Getting Down to Facts: A research project to inform solutions to California's education problems. IREPP: Stanford, CA.
- ⁷² Koppich, J. (2005). Addressing Teacher Quality Through Induction, Professional Compensation, and Evaluation: The Effects on Labor-Management Relations. *Educational Policy*, *19*(1): 90-111.
- ⁷³ The standards have four domains: (1) preparation, planning, and organization; (2) classroom environment; (3) classroom instruction; and (4) professional responsibilities.

⁷⁴ CCTC (2001), p. 4.

- ⁷⁵ The seven categories are: (1) college or university coursework; (2) conferences, workshops, institutes, academies, symposia, teacher center programs, or staff development programs; (3) systematic programs of observations and analysis of teaching or performance of a peer-alike job; (4) service in a leadership role in an educational institution; (5) service in a leadership role in a professional organization; (6) conduct educational research and innovation; and (7) miscellaneous CCTC-approved activities.
- ⁷⁶ Esch, C.E., C.M. Chang-Ross, R. Guha, D. Humphrey, P.M. Shields, J.D. Tiffany-Morales, M.E. Wechsler & K.R. Woodworth (2005).
- ⁷⁷ Esch, C.E., C.M. Chang-Ross, R. Guha, J. Tiffany-Morales, & P.M. Shields (2004).
- ⁷⁸ California Commission on Teacher Credentialing (July 1997). *Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs*. (Sacramento, CA: CCTC)

⁷⁹ California Commission on Teacher Credentialing (January 1997).

⁸⁰ Many of the statutes in these States waive these requirements in the case where no such individuals are available.

- ⁸¹ Saxe, G.B., Gearhart, M., & Nasir, N. (2001). Enhancing students' understanding of mathematics: A study of three contrasting approaches to professional support. *Journal of Mathematics Teacher Education*, *4*, 55-79.
- ⁸² McCutchen, D.; Abbott, R.D.; Greeen, L.B. (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. *Journal of Learning Disabilities*, 35, 69-86.
- ⁸³ Reed, D., Reuben, K., & Barbour, E. (2006). *Retention of New Teachers in California*. San Francisco: Public Policy Institute of California.
- ⁸⁴ Hill, H. (forthcoming). "Learning in the Teaching Workforce," *The Future of Children*. Princeton-Brookings.
- ⁸⁵ Esch, et. al., 2004.
- ⁸⁶ California Commission on Teacher Credentialing (December 2003). *California Paraprofessional Teacher Training Program*. (Sacramento, CA: CCTC).
- ⁸⁷ The Center for the Future of Teaching and Learning (2006), Page 50.
- ⁸⁸ The NBPTS Incentives Program was also curtailed as a result of the 2003-04 budget cuts. The non-targeted \$10,000 signing bonus was eliminated in the 2003-04 budget.
- ⁸⁹ Two States, Illinois and New York, partially target their NBTPS incentives. While both help defray the assessment fee for all teachers, Illinois provides a larger salary bonuses to teachers who mentor fellow teachers in schools on academic early warning status or schools with 50 percent or more students eligible for free or reduced lunch. New York only finances salary bonuses to NBCTs in low-performing schools.
- ⁹⁰ Humphrey, D.C., J.E. Koppich, & H.J. Hough (2005, March 3). Sharing the wealth: National Board Certified Teachers and the students who need them most. *Educational Policy Analysis Archives*, *13*(18). Retrieved 15 January 2005 from epaa.asu.edu/v13n18/.
- ⁹¹ CCTC, 2003. And South Carolina Education Oversight Committee (September 2004). *The South Carolina Teacher Loan Program: Annual Review*. Columbia, S.C.
- ⁹² Churchill, A., J. Berger, C. Brooks, A. Effrat, L. Griffin, M. Magouirk Colbert, K. McDermott, R. Sharick, & A. Sheehan (February 2003). *An Evaluation and Analysis of the 12-to-62 Plan for Recruiting and Retaining Teachers in Massachusetts*. (Amherst, MA.: Center for Education Policy, University of Massachusetts). And Fowler, R.C. (April 22, 2003). The Massachusetts Signing Bonus Program for New Teachers: A model of teacher preparation worth copying? *Education Policy Analysis Archives*, *11*(13). Retrieved 15 January 2006 from http://epaa.asu.edu/epaa/v11n13/.
- ⁹³ Clotfelter, C., E. Glennie, H. Ladd, and J. Vigdor (May 2006). "Would Higher Salaries Keep Teachers in High-Poverty Schools? Evidence from a Policy Intervention in North Carolina" (Durham, N.C.: Duke University).
- ⁹⁴ Twenty percent of the loan plus interest is forgiven for every year of eligible teaching. Recipients are required to repay the State any unforgiven portion of the loan.
- ⁹⁵ SCEOC, 2004.
- 96 Fowler, 2003
- ⁹⁷ Clotfelter, et. al., 2006
- ⁹⁸ SCEOC, 2004. Further refinement of the identification strategy has succeeded in narrowing the target population such that 48 percent of schools qualified in 2004-05.
- 99 Clotfelter, et. al. 2006
- ¹⁰⁰ Goldhaber, D. & E. Anthony (2005). "Can Teacher Quality Be Effectively Assessed? National Board Certification as a Signal of Effective Teaching" (Washington, D.C.: The Urban Institute).
- ¹⁰¹ Kelley, C. & J. Protsik (1997). Risk and reward: Perspectives on the Implementation of Kentucky's school-based performance award program. *Educational Administration Quarterly*, *33*(4), 474-505.

 ¹⁰² Strunk, K. (2006). "Are Teachers' Union Contracts Really to Blame? A Closer Look at California Teachers'
- ¹⁰² Strunk, K. (2006). "Are Teachers' Union Contracts Really to Blame? A Closer Look at California Teachers Union Contracts and Their Relationship with District Resource Distribution." Work in Progress.
- ¹⁰³ Boal, W.M. (August 2005). "The Effect of Minimum Salaries on Employment of Teachers." Available at www.drake.edu/cbpa/econ/boal/teachers.pdf.
- ¹⁰⁴ Baugh, W.H. & Stone, J.A., (1982). Dolton, P. and van der Klaauw, W. (1999). The Turnover of Teachers: A Competing Risk Explanation. *The Review of Economics and Statistics*, 81(3): 543-552. Murnane, R.J. and Olsen, R.J. (1989). The Effects of Salaries and Opportunity Costs on Duration in Teaching: Evidence from Michigan. *The Review of Economics and Statistics*, 71(2): 347-352. Murnane, R.J. and Olsen, R.J. (1990). The Effects of Salaries and Opportunity Costs on Length of Stay in Teaching: Evidence from North Carolina. *The Journal of Human Resources*, 25(1): 106-124.
- ¹⁰⁵ Figlio, D.N. (2002). Can Public Schools Buy Better-Qualified Teachers? *Industrial and Labor Relations Review*, 55(4): 686-99.

- ¹⁰⁶ Dee, T.S. & B.J. Keys (2004). Does Merit Pay Reward Good Teachers? Evidence from a Randomized Experiment. Journal of Policy Analysis and Management, 23(3): 471-88. Lavy, V. (2004). "Performance Pay and Teachers' Effort, Productivity and Grading Ethics" (Cambridge, MA: National Bureau of Economic Research). Ladd, H.F. (1999). The Dallas School Accountability and Incentive Program: An Evaluation of its Impacts on Student Outcomes. *Economics of Education Review*, *18*: 1-16. Eberts, R., K. Hollenbeck, & J. Stone (2002). Teacher Performance Incentives and Student Outcomes. *The Journal of Human Resources*, *37*(4): 913-27.
- ¹⁰⁷ Ballou, D & Podgursky, M (1993) "Teachers' Attitudes towards Merit Pay: Examining conventional wisdom," *Industrial and Labor Relations Review*, 47 (1), 0pp 50-61.
- ¹⁰⁸ Kelley, C. (2000). Making Merit Pay Work: Why schoolwide bonuses and knowledge- and skill-based pay are good ways to compensate teachers. *School Spending: The Business of Education*. Retrieved 1 September 2006 from www.asbj.com/schoolspending/kelley.html.
- ¹⁰⁹ Jacob, B.A. & Levitt, S.D. (2003). Rotten Apples: An Investigation of the Prevalence and Predictors of Teacher Cheating. *The Quarterly Journal of Economics, 118*(3): 843-877. Lavy, V (forthcoming). "Using Performance-Based Pay to Improve the Quality of Teachers," *The Future of Children*. Princeton-Brookings
- ¹¹⁰ Ballou, D. & Podgursky, M. (2001). Personnel Policy in Charter Schools. Washington, DC: Thomas B. Fordham Foundation.
- ¹¹¹ Levin, J., Mulhern, J. and Schunck, J. (2005). *Unintended Consequences: The Case for Reforming the Staffing Rules in Urban Teachers Union Contracts.* The New Teacher Project.
- ¹¹² For example, see: Hoxby, C.M. (1996). How Teachers' Unions Affect Education Production. *Quarterly Journal of Economics*, 111(3): 671-718.
- ¹¹³ Baugh and Stone (1982) and Kleiner, M.M. & D. Petree (1988). "Unionism and Licensing of Public School Teachers: Impacts on Wages and Output Quality." In R. Freeman and C. Ichniowski, eds. *When Public Workers Unionize*. Chicago, IL: University of Chicago Press: 305-322.
- 114 Kleiner and Petree, 1988
- Babcock, L. & J. Engberg (1999). Bargaining Unit Composition and the Returns to Education and Tenure. *Industrial and Labor Relations*, *52*(2): 163-178. Ballou, D. & M. Podgursky (2002). Returns to Seniority among Public School Teachers. *The Journal of Human Resources*, *37*(4): 892-912.
- ¹¹⁶ Eberts & Stone (1987) and Kleiner & Petree (1988) find positive effects while Hoxby (1996) and the following find negative effects: Kurth, M. (1987). Teachers' Unions and Excellence in Education: An Analysis of the Decline in SAT Scores. *Journal of Labor Research*, 8(4): 351-367.
- ¹¹⁷ Moe, T.M. (2005). Teachers unions and school board politics. In Howell, W.G., ed. *Besieged: School boards and the future of education politics*. Washington, D.C.: Brookings Institution Press.
- ¹¹⁸ Eberts, R (forthcoming). "Teachers Unions and Student Performance: Help or Hindrance?" *The Future or Children*. Princeton-Brookings.
- ¹¹⁹ Moe, T.M. (2006). Bottom-Up Structure: Collective Bargaining, Transfer Rights, and the Education of Disadvantaged Children. Working Paper.
- ¹²⁰ Vedder, R. (2003). Comparable Worth. Education Next, 3(3): 14-19.
- ¹²¹ Public Laws of Maine, 1913, Chapter 75, cited in Maine State Department of Education (April 1970).
- ¹²² Furgeson, J., R.P. Strauss, and W.B. Vogt (2006). The Effects of Defined Benefit Pension Incentives and Working Conditions on Teacher Retirement Decisions. Education Finance and Policy, 1(3): 316-348.
- ¹²³ Kimball, S.M., H.G. Heneman III, and E.M. Kellor (2003). "Pensions for Teachers: Possible Changes and Implications" CPRE-UW Working Paper Series TC-03-09. Madison, WI: Consortium for Policy Research in Education.
- 124 California State Teacher Retirement System (2005). *Member Handbook: Your Guide to CalSTRS Benefits*, 2005-2006. (Sacramento, CA: CalSTRS).
 125 The Governor appoints a retired CalSTRS member, three public representatives, and a school board
- The Governor appoints a retired CalSTRS member, three public representatives, and a school board representative. The four ex-officio members are the Director of Finance, State Controller, State Superintendent of Public Instruction and State Treasurer.
- ¹²⁶ An individual's DBSP account receives funds from three sources however only one applies to all members. Through 2010, a quarter of the member's contribution to the Defined Benefit Program is automatically deposited in their DBSP account.
- ¹²⁷ Creditable service includes teaching, vocational or guidance counseling, services related to school curriculum and a variety of administrative duties.
- ¹²⁸ If teachers elect to retire after turning 55 but before turning 60, they can elect to participate in the Early Retirement Limited Term Program. Their initial retirement benefits are adjusted. They receive one-half the service

retirement benefit they would receive if they were age 60 (see Chart 6). This level is continued for the same number of years after the retiree turns 60 as the number of years they received the benefit prior to age 60. After this period, they receive the full service retirement benefit monthly.

West Virginia is currently engaged in a lawsuit by which the plaintiffs hope to prevent the State from merging the defined contribution plan (TDC) into the defined benefit plan (TRS). The merger was approved by 61.4 percent of the TDC members who cast ballots. 56.1 percent of TDC members cast ballots.

¹³⁰ The following districts are excluded from their State retirement systems: Denver (Colorado); Chicago (Illinois); Boston (Massachusetts); Duluth, Minneapolis, and St. Paul (Minnesota); Kansas City and St. Louis (Missouri); Omaha (Nebraska); New York City (New York); and Milwaukee (Wisconsin).

¹³¹ Medicare taxes are deducted from teacher salaries.

¹³² See Table A-18 in Appendix 8 for the few exceptions.

¹³³ The comparable elasticity for male teachers are between 1.9 and 2.5.