

Blueprint for Change in Maine

2010
State Teacher
Policy Yearbook



National Council on Teacher Quality

Acknowledgments

STATES

State education agencies remain our most important partners in this effort, and their extensive experience has helped to ensure the factual accuracy of the final product. Although this year's *Blueprint for Change* did not require the extensive review typically required of states, we still wanted to make sure that states' perspectives were represented. As such, each state received a draft of the policy updates we identified this year. We would like to thank all of the states for graciously reviewing and responding to our drafts.

FUNDERS

The primary funders for the 2010 *Yearbook* were:

- Bill and Melinda Gates Foundation
- Carnegie Corporation of New York
- Gleason Family Foundation
- The George Gund Foundation
- The Joyce Foundation

The National Council on Teacher Quality does not accept any direct funding from the federal government.

STAFF

Sandi Jacobs, *Project Director*
Sarah Brody, *Project Assistant*
Kelli M. Rosen, *Lead Researcher*
Trisha M. Madden, *Pension Researcher*

NCTQ BOARD OF DIRECTORS

Stacey Boyd ■ Chester E. Finn, Jr. ■ Ira Fishman ■ Marti Watson Garlett ■ Henry L. Johnson
Donald N. Langenberg ■ Clara M. Lovett ■ Barbara O'Brien ■ Carol G. Peck ■ John Winn
Kate Walsh, President

Thank you to Bryan Gunning and the team at CPS Inc. for their design of the 2010 *Blueprint for Change*. Thanks also to Colleen Hale and Jeff Hale of EFA Solutions for the original *Yearbook* design and ongoing technical support.

About the Yearbook

The 2010 *Blueprint for Change* is the National Council on Teacher Quality's fourth annual review of state laws, rules and regulations that govern the teaching profession. This year's *Yearbook* takes a different approach than our past editions, as it is designed as a companion to the 2009 *State Teacher Policy Yearbook*, NCTQ's most recent comprehensive report on state teacher policies.

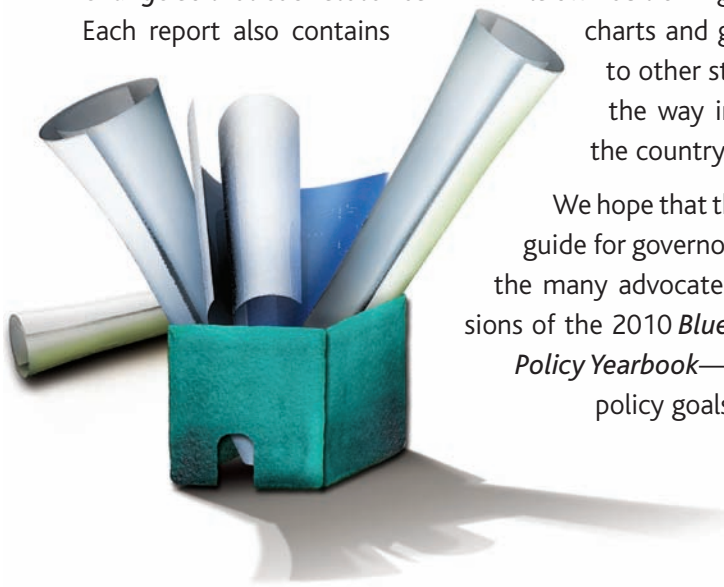
The comprehensive *Yearbook*, a 52-volume state-by-state analysis produced biennially, examines the alignment of states' teacher policies with goals to improve teacher quality. The 2009 report, which addressed key policy areas such as teacher preparation, evaluation, alternative certification and compensation, found that states had much work to do to ensure that every child has an effective teacher. Next year we will once again conduct a comprehensive goal-by-goal analysis of all aspects of states' teacher policies.

In 2010, an interim year, we set out to help states prioritize among the many areas of teacher policy in need of reform. With so much to be done, state policymakers may be nonplussed about where to begin. The 2010 *Yearbook* offers each state an individualized blueprint, identifying state policies most in need of attention. Although based on our 2009 analyses, this edition also updates states' progress in the last year, a year that saw many states make significant policy changes, largely spurred by the Race to the Top competition. Rather than grade states, the 2010 *Blueprint for Change* stands as a supplement to the 2009 comprehensive report, updating states' positive and negative progress on *Yearbook* goals and specifying actions that could lead to stronger policies for particular topics such as teacher evaluation, tenure rules and dismissal policies.

As is our practice, in addition to a national summary report, we have customized this year's *Blueprint for Change* so that each state has its own edition highlighting its progress toward specific *Yearbook* goals. Each report also contains

charts and graphs showing how the state performed compared to other states. In addition, we point to states that are leading the way in areas requiring the most critical attention across the country.

We hope that this year's *Blueprint for Change* serves as an important guide for governors, state school chiefs, school boards, legislatures and the many advocates seeking reform. Individual state and national versions of the 2010 *Blueprint for Change*, as well as the 2009 *State Teacher Policy Yearbook*—including rationales and supporting research for our policy goals—are available at www.nctq.org/stpy.



Blueprint for Change in Maine

The 2009 *State Teacher Policy Yearbook* provided a comprehensive review of states' policies that impact the teaching profession. As a companion to last year's comprehensive state-by-state analysis, the 2010 edition provides each state with an individualized "Blueprint for Change," building off last year's *Yearbook* goals and recommendations.

State teacher policy addresses a great many areas, including teacher preparation, certification, evaluation and compensation. With so many moving parts, it may be difficult for states to find a starting point on the road to reform. To this end, the following brief provides a state-specific roadmap, organized in three main sections.

- Section 1 identifies policy concerns that need **critical attention**, the areas of highest priority for state policymakers.
- Section 2 outlines "**low-hanging fruit**," policy changes that can be implemented in relatively short order.
- Section 3 offers a short discussion of some **longer-term systemic issues** that states need to make sure stay on the radar.

Current Status of Maine's Teacher Policy

In the 2009 *State Teacher Policy Yearbook*, Maine had the following grades:



Overall Grade

Area 1: <i>Delivering Well Prepared Teachers</i>	F
Area 2: <i>Expanding the Teaching Pool</i>	F
Area 3: <i>Identifying Effective Teachers</i>	F
Area 4: <i>Retaining Effective Teachers</i>	C-
Area 5: <i>Exiting Ineffective Teachers</i>	F

2010 Policy Update:

In the last year, many states made significant changes to their teacher policies, spurred in many cases by the Race to the Top competition. Based on a review of state legislation, rules and regulations, NCTQ has identified the following recent policy changes in Maine:

Teacher Evaluation:

Maine has removed its data firewall and now allows student test results to be used in teacher evaluations. However, if school districts want to include student assessments as part of teacher evaluations, they must use one of the models developed at the state level. *L.D. 1799*

■ **Maine Response to Policy Update:**

States were asked to review NCTQ's identified updates and also to comment on policy changes that have occurred in the last year, other pending changes or teacher quality in the state more generally.

- Maine confirmed that the identified update represents a complete and accurate list of recent policy changes.

Section 1: Critical Attention Areas

This section identifies the highest priority areas as states work to advance teacher quality. These are the policy issues that should be at the top of the list for state policymakers. Maine should turn its immediate attention to the following eleven issues.



Critical Attention: Maine policies that need to better connect to teacher effectiveness

1. ENSURE THAT TEACHER EVALUATIONS ASSESS EFFECTIVENESS IN THE CLASSROOM:

The fundamental purpose of teachers' formal evaluations should be to determine whether the teachers are effective in the classroom. To achieve this purpose, evaluations must be based primarily on teachers' impact on students. While it is certainly appropriate to include subjective factors, such as classroom observations, Maine should adopt a policy that requires objective evidence of student learning—including but not limited to standardized test scores—to be the preponderant criterion of teacher evaluations.

Evaluation is a critical attention area in

42 states.

States on the right track include Colorado, Louisiana and Rhode Island.

In order to ensure that teachers' strengths are optimized and weaknesses addressed, it is critical that teachers are evaluated with sufficient frequency. Maine should require that all nonprobationary teachers be evaluated annually regardless of their previous performance and that all new teachers be evaluated at least twice a year. Further, the state should also require that the first evaluation for probationary teachers occur during the first half of the school year, so that new teachers are provided with feedback and support early on.

In addition, to ensure that the evaluation instrument accurately differentiates among levels of teacher performance, Maine should require districts to utilize multiple rating categories, such as highly effective,

effective, needs improvement and ineffective. A binary system that merely categorizes teachers as satisfactory or unsatisfactory is inadequate.

2. CONNECT TENURE DECISIONS TO TEACHER EFFECTIVENESS:

The point at which a teacher's probationary period ends, commonly referred to as tenure, should be a significant milestone. Although the awarding of tenure is a local decision, state policy should reflect the fact that tenure should only be awarded to teachers who have consistently demonstrated their effectiveness. Maine should require a clear process, such as a hearing, for districts to use when considering whether a teacher advances from probationary to permanent status. Such a process would ensure that the local district reviews the teacher's performance before making a determination. Maine should also ensure that evidence of effectiveness is the preponderant criterion for making tenure decisions. In addition, the current policy of granting tenure after just two years does not allow for the accumulation of sufficient data on teacher performance to support meaningful decisions. Extending the probationary period—ideally to five years—would prevent effective teachers from being unfairly denied tenure based on too little data and ineffective teachers from being granted tenure prematurely.

Tenure is a critical attention area in

46 states.

States on the right track include Colorado, Delaware and Rhode Island.

Figure 1

Is classroom effectiveness considered in teacher evaluations and tenure decisions?

	Evaluations include student achievement data	Evidence of student learning is the preponderant criterion in teacher evaluations	Evidence of student learning is the preponderant criterion in tenure decisions
Alabama	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alaska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arizona	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arkansas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
California	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Connecticut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delaware	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
District of Columbia ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Florida	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Georgia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hawaii	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Idaho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illinois	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indiana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iowa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kansas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kentucky	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Louisiana	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAINE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maryland ²	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Massachusetts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Michigan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minnesota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mississippi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Missouri	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Montana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nebraska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nevada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Hampshire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Jersey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Mexico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New York	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North Carolina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North Dakota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ohio	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oklahoma	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pennsylvania	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rhode Island	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
South Carolina	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
South Dakota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tennessee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Texas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Utah	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vermont	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virginia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
West Virginia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wisconsin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wyoming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	16	10	4

3. PREVENT INEFFECTIVE TEACHERS FROM REMAINING IN THE CLASSROOM INDEFINITELY:

Maine should explicitly make teacher ineffectiveness grounds for dismissal so that districts do not feel they lack the legal basis for terminating consistently poor performers, and it should steer clear of euphemistic terms that are ambiguous at best and may be interpreted as concerning dereliction of duty rather than ineffectiveness.

Nonprobationary teachers who are dismissed for any grounds, including ineffectiveness, are entitled to due process. However, cases that drag on for years drain resources from school districts and create a disincentive for districts

to attempt to terminate poor performers. Therefore, the state must ensure that the opportunity to appeal occurs only once and only at the district level and involves only adjudicators with educational expertise.

Dismissal is a critical attention area in **46 states.** States on the right track include Oklahoma and Rhode Island.

1 The District of Columbia has no state-level policy, but District of Columbia Public Schools requires that student academic achievement count for 50% of evaluation score.

2 Legislation articulates that student growth must account for a significant portion of evaluations, with no single criterion counting for more than 35% of the total performance evaluation. However, the State Board is on track to finalize regulations that limit any single component of student growth, such as standardized test scores, to 35%, but add other measures of student progress for a total of 50%.



Critical Attention: Maine policies that fail to ensure teachers are well prepared

4. ENSURE THAT ELEMENTARY TEACHERS KNOW THE SCIENCE OF READING:

Preparation to teach reading is a critical attention area in

43 states.

States on the right track include Connecticut, Massachusetts and Virginia.

Scientific research has shown that there are five essential components of effective reading instruction: explicit and systematic instruction in phonemic awareness, phonics, fluency, vocabulary and comprehension. This science of reading has led to breakthroughs that

can dramatically reduce the number of children destined to become functionally illiterate or barely literate adults. Whether through standards or coursework requirements, states must ensure that their preparation programs graduate only teacher candidates who know how to teach children to read. Not only should Maine require that its teacher preparation programs prepare their teacher candidates in the science of reading, but the state should also require an assessment prior to certification that tests whether teachers indeed possess the requisite knowledge in scientifically based reading instruction. Ideally this would be a stand-alone test (such as the excellent assessments required by Massachusetts, Connecticut and Virginia), but if it were combined with general pedagogy or elementary content, the state should require a separate subscore for the science of reading.

5. ENSURE THAT ELEMENTARY TEACHERS KNOW ELEMENTARY CONTENT MATH:

Aspiring elementary teachers must begin to acquire a deep conceptual knowledge of the mathematics they will teach, moving well beyond mere procedural understanding. Leading mathematicians and math educators have found that elementary teachers are not well served by mathematics courses designed for a general audience and that methods courses do not provide sufficient content preparation. Maine should specifically articulate that preparation programs deliver mathematics content geared

to the explicit needs of elementary teachers, including coursework in foundations, algebra and geometry, with some statistics. The state should also adopt a rigorous mathematics assessment, such as the one

required by Massachusetts. At the very least, Maine should consider requiring a mathematics subscore on its general content knowledge test, not only to ensure that teacher candidates have minimum mathematics knowledge but also to allow them to test out of coursework requirements.

Preparation to teach mathematics is a critical attention area in

49 states.

A state on the right track is Massachusetts.

6. ENSURE ADEQUATE SUBJECT-MATTER PREPARATION FOR MIDDLE SCHOOL TEACHERS:

Middle school grades are critical years of schooling, yet too many states fail to distinguish the knowledge and skills needed by middle school teachers from those needed by elementary teachers. Whether teaching a

single subject in a departmentalized setting or teaching multiple subjects in a self-contained setting, middle school teachers must be able to teach significantly more advanced content than elementary teachers do. To ensure adequate content preparation of its middle school teachers, Maine is urged

to no longer permit middle school teachers to teach on a K-8 generalist license and instead adopt for all teachers middle-grades licensure policies that are distinguishable from elementary teacher certification. Such policies should ensure that middle school teachers know the content they will teach by requiring that they pass a subject-matter test in every core area they intend to teach prior to licensure.

Middle school licensure is a critical attention area in

22 states.

States on the right track include Georgia, Kentucky and Louisiana.

7. ENSURE THAT TEACHER PREPARATION PROGRAMS ARE ACCOUNTABLE FOR THE QUALITY OF THE TEACHERS THEY PRODUCE:

States should consider factors related to program performance in the approval of teacher preparation programs. Although the quality of both the subject-matter preparation and professional sequence is crucial, there are also additional measures that can provide the state and the public with meaningful, readily understandable indicators of how well programs are doing when it comes to preparing teachers to be successful in the classroom. Maine should make objective outcomes that go beyond licensure pass rates, such as graduates' evaluation results, retention rates and students' academic achievement gains, a central component of its teacher preparation program approval process, and it should establish precise standards for program performance that are more useful for accountability purposes. Maine should also post an annual report card on its website that not only details the data it collects but also identifies programs that fail to meet these criteria.

Teacher preparation program accountability is a critical attention area in

30 states.

States on the right track include Colorado and Louisiana.

Figure 2

Do states ensure that teachers are well prepared?

	Ensures elementary teachers know the science of reading	Ensures elementary teachers know elementary content: math	Differentiates preparation between elementary and middle school teachers
Alabama	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alaska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arizona	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arkansas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
California	<input type="checkbox"/> ¹	<input type="checkbox"/>	<input type="checkbox"/>
Colorado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connecticut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Delaware	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
District of Columbia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Florida	<input type="checkbox"/> ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Georgia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hawaii	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Idaho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illinois	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indiana	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Iowa	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kansas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kentucky	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Louisiana	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MAINE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maryland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Massachusetts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Michigan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minnesota	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mississippi	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Missouri	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Montana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nebraska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nevada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Hampshire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Jersey	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New Mexico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New York	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
North Carolina	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
North Dakota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ohio	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oklahoma	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pennsylvania	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rhode Island	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Carolina	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
South Dakota	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tennessee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Texas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Utah	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vermont	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Virginia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
West Virginia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wisconsin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wyoming	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	6	2	29

1 Although California has a standalone test of reading pedagogy, the ability of this test to screen out candidates who do not know the science of reading has been questioned.

2 Florida's licensure test for elementary teachers includes a strong focus on the science of reading but does not report a separate subscore for this content.



Critical Attention: Maine policies that license teachers who may lack subject-matter knowledge

8. CLOSE LICENSURE LOOPHOLES TO ENSURE THAT TEACHERS KNOW THE CONTENT THEY TEACH:

All students are entitled to teachers who know the subject matter they are teaching. Permitting individuals who have not yet passed state licensing tests to teach neglects the needs of students, instead extending personal consideration to adults who may not be able to meet minimal state standards. Licensing tests are

an important minimum benchmark in the profession, and states that allow teachers to postpone passing these tests are abandoning one of the basic responsibilities of licensure.

Maine should ensure that all teachers pass all required subject-matter

licensure tests before they enter the classroom so that students will not be at risk of having teachers who lack sufficient or appropriate content-area knowledge. The state offers a one-year, conditional certificate to otherwise qualified teachers who have not met certain requirements, including passing state licensing tests; this certificate can be renewed twice, and a passing score on all required tests is required only during the third and final review period. Maine also offers a special Targeted Needs Certificate, a one-year credential that may also be renewed twice, to individuals who are teaching in a

designated shortage area. If conditional or provisional licenses are deemed necessary, then the state should only issue them under limited and exceptional circumstances and for no longer than a period of one year.

9. ENSURE THAT ELEMENTARY CONTENT TESTS ADEQUATELY ASSESS CONTENT KNOWLEDGE IN EACH SUBJECT AREA:

Although Maine requires that all new elementary teachers must pass a Praxis II general subject-matter test, this assessment does not report teacher performance in each subject area, meaning that it is possible to pass the test and still fail some subject areas. The state should require separate passing scores for each area because without them it is impossible to measure knowledge of individual subjects, especially given the state's current low passing score for the elementary content test.

According to published test data, Maine has set its passing score for this test so far below the mean, the average score of all test takers, that it is questionable whether this assessment is indeed providing any assurance of content knowledge.

Licensure loopholes are a critical attention area in

34 states.

States on the right track include Mississippi, Nevada and New Jersey.

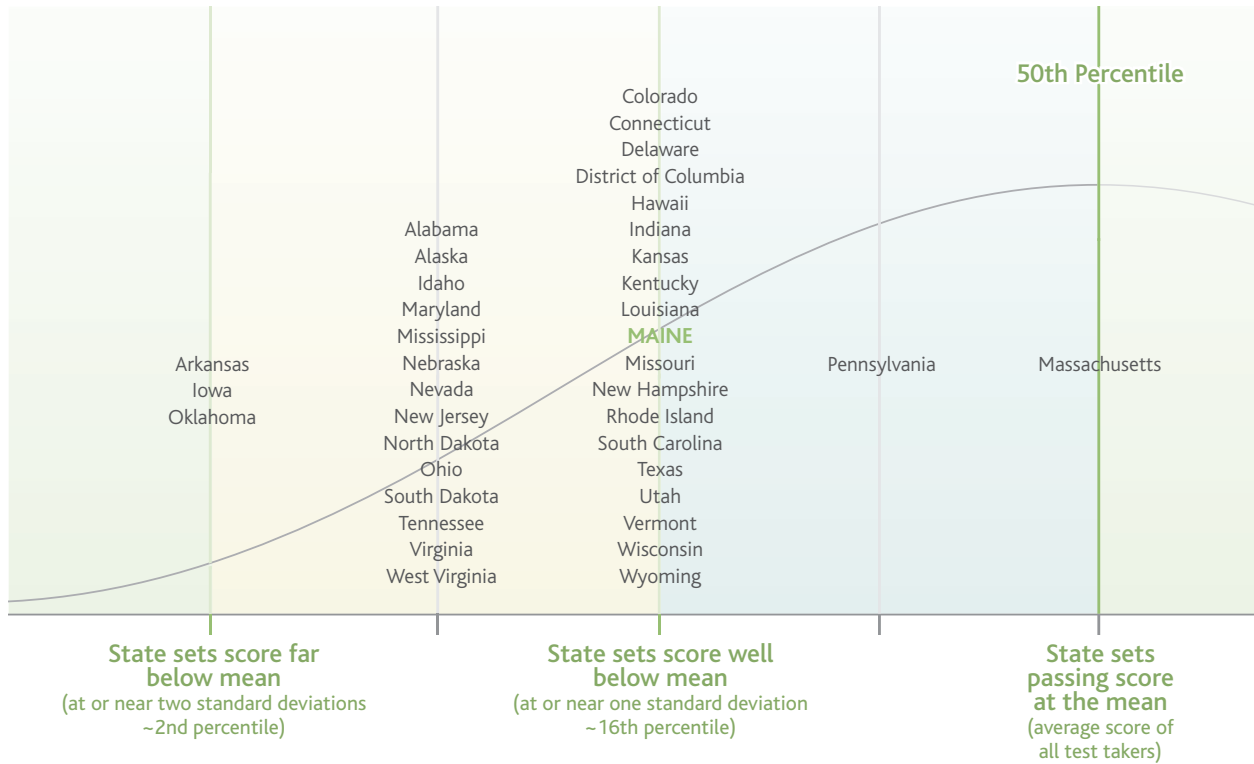
Elementary licensure tests are a critical attention area in

50 states.

A state on the right track is Massachusetts.

Figure 3

Where do states set the passing score on elementary content licensure tests?¹



¹ Data not available for Arizona, California, Florida, Georgia, Illinois, Michigan, Minnesota, New Mexico, New York, North Carolina, Oregon, and Washington. Montana does not require a content test. Colorado cut score is for Praxis II, not PLACE.



Critical Attention: Maine policies that limit the teacher pipeline

10. PROVIDE FLEXIBILITY TO ALTERNATE ROUTE TEACHERS IN DEMONSTRATING CONTENT KNOWLEDGE:

Alternative certification can create a new pipeline of potential teachers for those with valuable knowledge and skills who did not prepare to teach as undergraduates. The concept behind the alternate route into teaching is that the nontraditional candidate is able to concentrate on acquiring professional knowledge and skills because he or she has strong subject-area knowledge. This must be demonstrated in advance of entering the classroom. Maine's current policy, which requires

candidates to meet coursework requirements in their subject area, rules out talented individuals with deep knowledge that may have been gained through related study or work experience. Such candidates will likely be disinclined to fulfill the coursework requirements and should be permitted to demonstrate their content knowledge by passing a rigorous test. The state should require that all candidates demonstrate their subject-matter knowledge through a content test without also requiring a major or equivalent coursework.

Alternate route admissions is a critical attention area in

38 states.

States on the right track include Michigan and Oklahoma.

11. BROADEN ALTERNATE ROUTE USAGE AND PROVIDERS:

Maine should allow alternate route teachers to teach across all grades, subjects and geographic areas. The state should also encourage a diversity of providers, allowing school districts and nonprofit organizations, in addition to institutions of higher education, to operate programs. At present, the alternate route in Maine is intended for use only as a last resort. Teachers may only work in positions designated as having a shortage of fully certified applicants. Further, the state only allows institutions of higher education to provide alternative certification programs. These limitations prevent Maine's alternate route from providing a true alternative pathway into the teaching profession.

Alternate route diversity is a critical attention area in

28 states.

States on the right track include Illinois, New York and Washington.

Figure 4

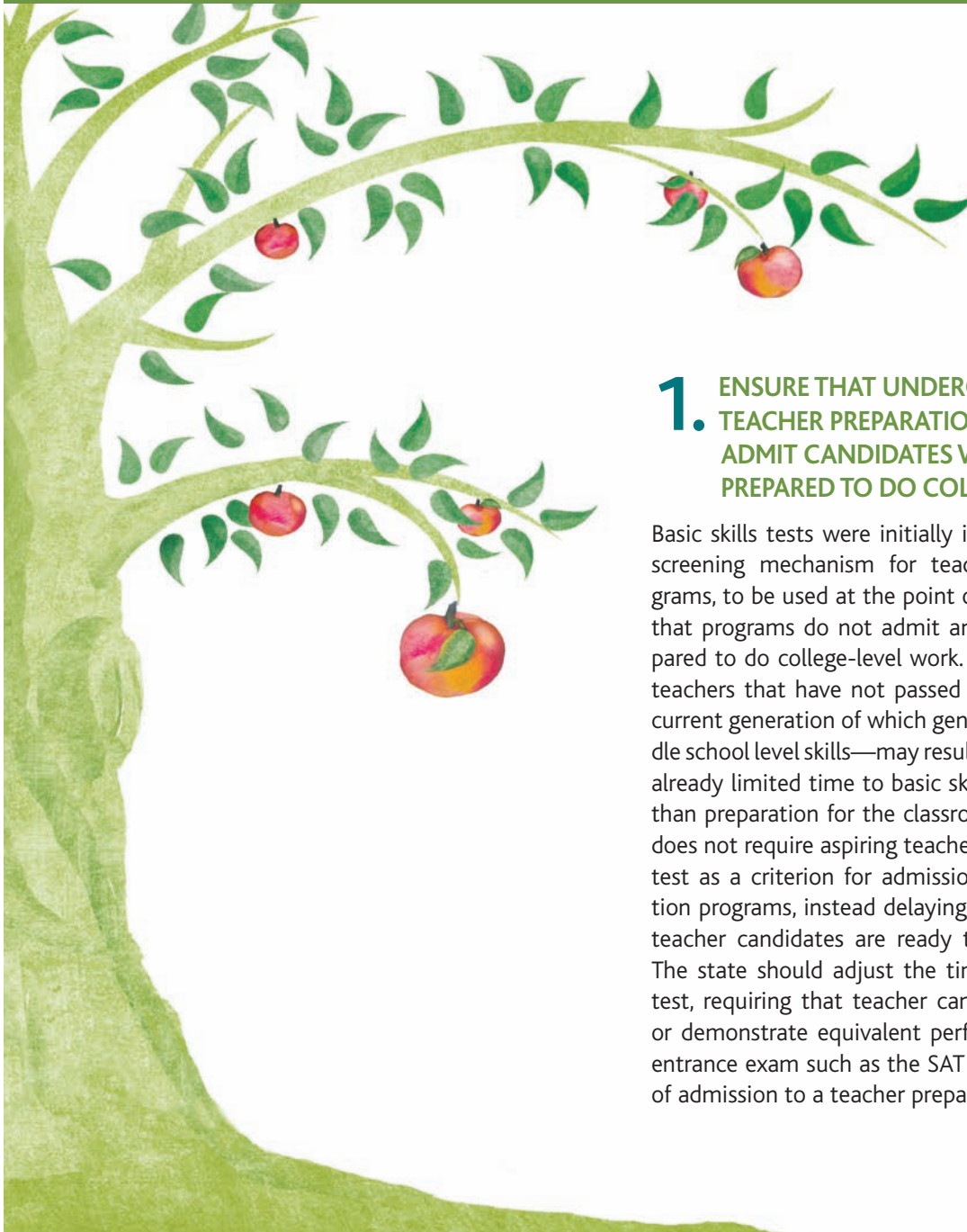
Do states permit alternate route providers other than colleges and universities?

	Allows district run programs	Allows non-profit providers	Allows colleges and universities only
Alabama	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alaska ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arizona	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arkansas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
California	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Colorado	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Connecticut	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Delaware	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
District of Columbia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Florida	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Georgia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hawaii	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Idaho	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Illinois	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indiana	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Iowa	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kansas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kentucky	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Louisiana	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAINE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Maryland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Massachusetts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Michigan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Minnesota	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mississippi	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Missouri	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ²
Montana	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nebraska	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nevada	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New Hampshire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Jersey	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New Mexico	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New York	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
North Carolina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North Dakota ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ohio	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oklahoma	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pennsylvania	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ²
Rhode Island	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
South Carolina	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ²
South Dakota	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tennessee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Texas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Utah	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vermont	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Virginia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Washington	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
West Virginia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wisconsin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wyoming	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	19	23	21

- 1 Alaska's alternate route is operated by the state department of education.
- 2 ABCTE is also an approved provider.
- 3 North Dakota does not have an alternate route to certification.

Section 2: Low-Hanging Fruit

This section highlights areas where a small adjustment would result in significantly stronger policy. Unlike the more complex topics identified in Section 1, the issues listed in this section represent low-hanging fruit, policies that can be addressed in relatively short order.



1. ENSURE THAT UNDERGRADUATE TEACHER PREPARATION PROGRAMS ADMIT CANDIDATES WHO ARE PREPARED TO DO COLLEGE-LEVEL WORK:

Basic skills tests were initially intended as a minimal screening mechanism for teacher preparation programs, to be used at the point of admission to ensure that programs do not admit anyone who is not prepared to do college-level work. Admitting prospective teachers that have not passed basic skills tests—the current generation of which generally assess only middle school level skills—may result in programs devoting already limited time to basic skills remediation rather than preparation for the classroom. At present, Maine does not require aspiring teachers to pass a basic skills test as a criterion for admission to teacher preparation programs, instead delaying the requirement until teacher candidates are ready to apply for licensure. The state should adjust the timing of its basic skills test, requiring that teacher candidates pass the test, or demonstrate equivalent performance on a college entrance exam such as the SAT or ACT, as a condition of admission to a teacher preparation program.

2. ENSURE THAT SPECIAL EDUCATION TEACHERS ARE ADEQUATELY PREPARED TO TEACH SUBJECT MATTER:

To allow special education students the opportunity to reach their academic potential, special education teachers should be well trained in subject matter. As a first step toward ensuring requisite content knowledge, Maine should require that elementary special education candidates pass the same Praxis II subject-area test as other elementary teachers.

3. INFORM THE PUBLIC ABOUT TEACHER PREPARATION PROGRAM QUALITY:

Even though Maine does not collect more meaningful data to measure the performance of teacher preparation programs, it should at least publish on the state's website the licensure test pass rate data for each program that are reported to the federal government as required under Title II.

4. ENSURE THAT OUT-OF-STATE TEACHERS MEET THE STATE'S TESTING REQUIREMENTS:

Maine should uphold its standards for all teachers and insist that out-of-state teachers meet its own licensure test requirements. While it is important not to create unnecessary obstacles for teachers seeking reciprocal licensure in a new state, testing requirements can provide an important safeguard. Particularly given the variance of the passing scores required on licensure tests, states must not assume that a teacher that passed another state's test would meet its passing score as well. Maine should not provide any waivers of its teacher tests unless an applicant can provide evidence of a passing score under its own standards.

5. REPORT SCHOOL-LEVEL DATA TO SUPPORT THE EQUITABLE DISTRIBUTION OF TEACHERS:

Maine currently publicly reports the percentage of highly qualified teachers at the school level. While the state also collects data about teacher experience, it does not publically report it. In order to promote the equitable distribution of teacher talent among schools within districts, these data should also be reported at the individual school level.

6. ENSURE THAT STRUGGLING TEACHERS RECEIVE SUPPORT:

Maine should adopt a policy whereby all teachers that receive a single unsatisfactory evaluation are placed on a structured improvement plan, regardless of whether or not they have tenure. These plans should focus on performance areas that directly connect to student learning and should list noted deficiencies, define specific action steps necessary to address these deficiencies and describe how and when progress will be measured. Consequences for continued poor performance should also be articulated.

Section 3: Systemic Issues

This section discusses some of the longer-term systemic issues related to teacher quality that states also need to address. While these may not be “front-burner” issues in many states, they are important to an overall reform agenda.

1. Performance Management

The critical relationship between teacher quality and student achievement has been well established, and ensuring that all students have teachers with the knowledge and skills to support their academic success has become a national priority. Yet the policy framework that governs the teaching profession in most states is almost entirely disconnected from teacher effectiveness. Although states largely control how teachers are evaluated, licensed and compensated, teacher effectiveness in terms of student learning has not been a central component in these policies.

Fortunately, this is starting to change. Fifteen states have made progress in their requirements for teacher evaluation in the last year alone.¹ As evaluation ratings become more meaningful, states should plan to connect teacher evaluation to an overall system of performance management. The current siloed approach, with virtually no connection between meaningful evidence of teacher performance and the awarding of tenure and professional licensure, needs a fundamental overhaul. These elements must not be thought of as isolated and

discrete, but as part of a comprehensive performance system. This system should also include compensation strategies as well as new teacher support and ongoing professional development, creating a coordinated and aligned set of teacher policies.

Meaningful evaluation is at the center of a performance management system, and, as discussed in the Critical Attention section of this report, Maine has considerable work to do to ensure that evaluations measure teacher effectiveness. But as the state moves forward, it should keep in mind the larger goal of creating a performance management system.

A successful performance management system—one that gives educators the tools they need to be effective, supports their development, rewards their accomplishments and holds them accountable for results—is essential to the fundamental goal of all education reform: eliminating achievement gaps and ensuring that all students achieve to their highest potential.

¹ Includes changes to state policies regulating the frequency of evaluations for probationary and nonprobationary teachers as well as requirements that teacher evaluations consider classroom effectiveness.

2. Pension Reform

State pension systems are in need of a fundamental overhaul. In an era when retirement benefits have been shrinking across industries and professions, teachers' generous pensions remain fixed. In fact, nearly all states, including Maine, continue to provide teachers with a defined benefit pension system, an expensive and inflexible model that neither reflects the realities of the modern workforce nor provides equitable benefits to all teachers.

\$258,357

Amount Maine pays for each teacher that retires at an early age with unreduced benefits until that teacher reaches age 65⁴

The current model greatly disadvantages teachers who move from one state to another, career switchers who enter teaching and those who teach for fewer than 20 years. For these reasons alone, reform is needed. But the dubious financial health of states' pension systems makes this an area in

need of urgent attention. Some systems carry high levels of unfunded liabilities, with no strategy to pay these liabilities down in a reasonable period, as defined by standard accounting practices. According to Maine's 2008 actuarial report, its system was only 74 percent funded, significantly below recommended benchmarks, and that was before the recent market downturn.¹ When funding cannot keep up with promised benefits, a new approach is clearly needed. And changes must be made immediately to alter the long-term outlook for the state, as it is exceedingly difficult to reduce promised benefits once a teacher is a member of the system—regardless of whether the state can afford them.

Systemic reform should lead to the development of a financially sustainable, equitable pension system that includes the following:

- The option of a fully portable pension system as teachers' primary pension plan, either through a defined contribution plan or a defined benefit plan that is formatted similar to a cash balance plan²

- Reasonable district and teacher contribution rates
- Vesting for teachers no later than the third year of employment
- Purchase of time in a defined benefit plan for unlimited previous teaching experience at the time of employment, as well as for all official leaves of absence, such as maternity and paternity leave
- The option in a defined benefit plan of a lump-sum rollover to a personal retirement account upon employment termination, which includes teacher contributions and all accrued interest at a fair interest rate
- Funds contributed by the employer included in withdrawals due to employment termination
- A neutral formula for determining pension benefits, regardless of years worked (eliminating any multiplier that increases with years of service or longevity bonuses)³
- Eligibility for retirement benefits based solely on age, not years of service, in order to avoid disincentives for effective teachers to continue working until conventional retirement age.

1 Public Fund Survey, <http://www.publicfundsurvey.org/www/publicfundsurvey/actuarialfundinglevels.asp>.

2 A cash balance pension plan is a benefit plan in which participants, and their employers if they choose, periodically contribute a predetermined rate to employees' individual pension accounts. These contributions grow at a guaranteed rate. Upon retirement or withdrawal, the participant may receive the full account balance in one lump sum, so long as the benefits are fully vested. (Based on Economic Research Institute, <http://www.eridlc.com/resources/index.cfm?fuseaction=resource.glossary>)

3 The formula may include years of service (i.e., years of service x final average salary x benefit multiplier), but other aspects of the benefit calculation, such as the multiplier, should not be dependent on years of service.

4 Calculations are based on a teacher who starts teaching at age 22, earns a starting salary of \$35,000 that increases 3 percent per year, and retires at the age when he or she is first eligible for unreduced benefits. Calculations use the state's benefit formula for new hires, exclude cost of living increases, and base the final average salary on the highest three years. Age 65 is the youngest eligibility age for unreduced Social Security benefits.

3. Certification of Special Education Teachers

States' requirements for the preparation of special education teachers are one of the most neglected and dysfunctional areas of teacher policy. The low expectations for what special education teachers should know stand in stark contradiction to state and federal expectations that special education students should meet the same high standards as other students.

Maine, like most states, sets an exceedingly low bar for the content knowledge that special education teachers must have. The state does not require that elementary special education teachers take any subject-matter coursework or demonstrate content knowledge on a subject-matter test. Further, although secondary spe-

cial education teachers must be highly qualified in every subject they will teach, the state does not require that teacher preparation programs graduate teachers who are highly qualified in any core academic areas.

Maine is commended for distinguishing between elementary and secondary special education licenses and for not allowing a generic K-12 special education license, ubiquitous in many states. However, ensuring that all special education teachers are well prepared and know all the subject matter they will be expected to teach requires significant changes to the state's certification process.

Figure 5

Do states distinguish between elementary and secondary special education teachers?

	Offers only a K-12 certification	Offers K-12 and grade-specific certification[s]	Does not offer a K-12 certification
Alabama	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alaska	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Arizona	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arkansas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
California	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connecticut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delaware	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
District of Columbia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Florida	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Georgia	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hawaii	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Idaho	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illinois	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indiana	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Iowa	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kansas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Kentucky	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Louisiana	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAINE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Maryland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Massachusetts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Michigan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minnesota	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mississippi	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Missouri	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Montana	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nebraska	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nevada	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Hampshire	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
New Jersey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Mexico	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New York	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North Carolina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North Dakota	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ohio	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oklahoma	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pennsylvania ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rhode Island	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
South Carolina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Dakota	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tennessee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Texas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utah	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vermont	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Virginia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Washington	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
West Virginia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wisconsin	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wyoming	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	22	17	12

1 New policy goes into effect January 1, 2013.



National Council on Teacher Quality

1420 New York Avenue, NW • Washington, DC 20005

Tel: 202-393-0020 Fax: 202-393-0095 Web: www.nctq.org

NCTQ is available to work with individual states to improve teacher policies.

For more information, please contact:

Sandi Jacobs
Vice President
sjacobs@nctq.org
202-393-0020