Strong American Schools, a project of Rockefeller Philanthropy Advisors, is a nonpartisan campaign supported by The Eli and Edythe Broad Foundation and the Bill & Melinda Gates Foundation promoting sound education policies for all Americans. SAS does not support or oppose any candidate for public office and does not take positions on legislation.
## Table of Contents

1. **Introduction**  
   3

2. **American Education Standards**  
   5
   A. The Case for Action  
   6
   B. Policy Options  
   10
   C. FAQs and Myths vs. Realities  
   18
   D. Models and Local Examples  
   23
   E. Research Summary  
   25
   F. Additional Resources  
   29

3. **Effective Teachers in Every Classroom**  
   30
   G. The Case for Action  
   31
   H. Policy Options  
   35
   I. FAQs and Myths vs. Realities  
   46
   J. Models and Local Examples  
   51
   K. Research Summary  
   57
   L. Additional Resources  
   62

4. **Expanded Time and Support for Learning**  
   64
   M. The Case for Action  
   65
   N. Policy Options  
   68
   O. FAQs and Myths vs. Realities  
   71
   P. Models and Local Examples  
   75
   Q. Research Summary  
   79
   R. Additional Resources  
   82

5. **Endnotes**  
   83
Introduction

More than ever, the prospects of a nation and its children depend on the strength of its schools. Unfortunately, America’s schools are not keeping pace with the demands of today’s world. Our schools are failing to prepare all students for college, for careers, and for life. They are failing to prepare our nation to compete in today’s high-tech global economy.

More than 1.2 million students drop out of school every year. That’s more than 6,000 students every school day and one student every 26 seconds.

Nearly one in three college freshmen must take remedial math or English courses to catch up on skills they should have learned in high school. In community colleges—which enroll half of all undergraduates in America—the remediation rate exceeds 40 percent. In the California State University system, it’s greater than half.

We’re not even doing a good job preparing students for so-called “blue collar” jobs. Jonathan Mitchell, who runs the electrical apprenticeship program at the International Brotherhood of Electrical Workers Local 490 in Concord, New Hampshire, says that last year about half of the applicants failed a required entry test in math and reading.

The American Dream is at risk. So is our nation’s economic competitiveness. America’s high school students rank in the bottom third of developed countries in math skills, problem-solving ability, and graduation rates. A recent report by the Organization for Economic Cooperation and Development concluded that weak education is one of the biggest challenges facing the U.S. economy:

A country’s ability to compete in an ever more integrated world economy depends on a highly educated workforce. However, with many countries making more progress in this respect, the United States has lost its leading position.

A crisis of this magnitude demands serious debate and serious solutions. Americans deserve to hear each presidential candidate’s specific ideas for solving these urgent problems and providing all students with strong schools. Achieving long-term solutions to many of the other issues debated on the campaign trail—national security, the environment, and health care—will depend on strengthening American education.

When we launched ED in 08 in April 2007, we urged all candidates to address three common-sense priorities that hold tremendous promise for improving schools:

- **American education standards.** Regardless of where they live, all students need to acquire the knowledge and skills that prepare them for college, the workplace, and life. How can we make that happen?

- **Effective teachers in every classroom.** We need to measure teachers’ performance in the classroom, enable them to improve their skills, and pay them for producing superior results or accepting challenging assignments. How do we accomplish this?

- **More time and support for learning.** We need to give successful and struggling students alike more time for in-depth learning and personal attention. How can we provide all students with what they need to succeed?
This Policy Toolkit provides facts, research, and policy options that can help answer those questions. To create the Toolkit, we partnered with two of the most respected education organizations in the country.

The National Institute for Excellence in Teaching (NIET) worked with us to develop Section 2 of the Toolkit, “Effective Teachers in Every Classroom.” Founded in 2005, NIET was established to ensure a highly skilled, motivated, and competitively compensated teacher for every classroom in America. It promotes and supports the Teacher Advancement Program, which is being implemented in nearly 200 schools across the United States.

Launched in 1999 by the Milken Family Foundation and now operated by NIET, TAP seeks to restructure and revitalize the profession by creating an environment in which teachers and students can thrive. It does so by offering educators sustained opportunities for career advancement, ongoing school-based professional development, instructionally focused accountability, and performance pay. TAP builds broad-based support among educators, union leaders, policymakers, corporations, governments, foundations, and individuals to help close achievement gaps and ensure a quality educational opportunity for all students.

Another organization, Massachusetts 2020, worked with us to develop Section 3 of the Toolkit, “Expanded Time and Support for Learning.” Massachusetts 2020 pioneered the nation’s first statewide effort to expand and redesign the public school day by adding at least 25 percent more time for all students in a subset of schools. Its goal is to increase student achievement and the acquisition of 21st century skills. The Expanded Learning Time Initiative (ELT) launched in 2006-2007 with ten schools that enroll a total of nearly 5,000 students in five districts. It will expand to a total of 19 schools in nine districts in 2007-2008, and is expected to grow over the next few years to include 40 schools and 20,000 students. In partnership with the Massachusetts Department of Education, Massachusetts 2020 has provided technical assistance to districts and schools throughout the planning and implementation process, while also leading the public policy, research and evaluation, and communications efforts to build broad support and public financing for ELT schools.

In the fall of 2007, Massachusetts 2020 and the Rennie Center for Education Research and Policy will launch a joint venture to develop and lead a national strategy to support states and districts across the country in expanding learning time and opportunities for students in traditional public schools. The leaders and staff of the joint venture will focus on: (1) providing technical assistance to districts and states interested in exploring district-wide or statewide expanded learning time initiatives; (2) leading a federal policy and legislative agenda in partnership with the Center for American Progress to secure national demonstration funding and other resources for districts and states; and (3) launching a national research agenda on time and learning.

We anticipate that this Toolkit will be helpful to all national and state leaders who are working to raise standards, promote effective teaching, and find ways to provide more time and support to students. However, we urge the presidential candidates to consider this information carefully as they craft proposals to improve K-12 education. **Americans demand bold solutions and strong national leadership on education. The future of America’s children—and the nation they will inherit—depends on it.**
POLICY TOOLKIT

Section 1:
American Education Standards
American Education Standards
The Case for Action

America’s low education standards prevent our students from reaching their fullest potential and imperil our nation’s economic security. Standards vary tremendously from state to state, and many states have set the bar well below the level necessary to prepare all students for the challenges they will face after high school.

The next president must lead a national effort to raise education standards in every state. From New Hampshire to Nevada, all students deserve to learn skills that prepare them for success in college, careers, and life.

- Life after high school demands higher skills than ever before.
  - More than two-thirds of the new jobs created in our economy require students to go beyond high school and acquire college education or technical training.\(^1\)
  - Jobs that pay enough to support a family but don’t require a bachelor’s degree now require the same level of academic preparation as college. The testing company ACT, Inc. looked at the math and reading skills required of electricians, construction workers, upholsterers, and plumbers and concluded that they match the skills necessary to do well in first-year college courses.\(^2\)

- States have not set standards high enough to prepare students for college, careers, and life.

  Not Ready for College
  - Even among students who prepare for college by taking four years of English and three each of math, science, and social studies, only one in four leaves high school fully prepared to handle college courses.\(^3\)
  - More than one third of freshmen fail college placement tests and have to waste time and money taking remedial courses to catch up on skills they should have learned in high school. In community colleges, which now enroll nearly half of all undergraduates in America, the remediation rate exceeds 40 percent.\(^4\)
  - In some states, college remediation rates are even worse. Nearly six out of ten freshmen admitted to the California State University system in 2006 had to take remedial math or English courses. They were among the top third of high school graduates in the state and had earned a B average or better in high school.\(^5\) In Florida, more than three-quarters of community college freshmen have to take remedial courses.\(^6\)
  - The amount of time college students spend in remedial courses is rising. From 1995 to 2000, the percentage of colleges reporting that students had to spend at least one year in remedial courses increased from 28 percent to 35 percent.\(^7\)
Not Ready for Careers

- Four in five American manufacturing companies (84 percent) say schools are not doing a good job preparing students for jobs, and more than half cite specific deficits in math and science.

- Nearly three in four human resources officials (72 percent) rate young hires as deficient in basic writing skills, with 81 percent citing difficulties writing memos, letters, and reports.

- Almost half of recent high school graduates who entered the workforce (46 percent) say they are not prepared for the jobs they hope to get in the future. Employers agree, estimating that nearly half of high school graduates (45 percent) are not prepared to advance beyond entry level jobs.

- Local trade union apprenticeship programs are struggling to find qualified applicants. Jonathan Mitchell, training director at the International Brotherhood of Electrical Workers Local 490 in Concord, New Hampshire, says that last year about half of applicants failed a required entry test in math and reading.

  ■ Education standards vary tremendously across states, and many states have set very low expectations for their students.

  - According to the Thomas B. Fordham Foundation, more than two-thirds of students attend class in states with mediocre expectations for what students should learn.\(^8\)

  - Only 13 states have raised their graduation requirements to match the real-world demands of college and careers.\(^9\)

  - Out of 32 states studied by the U.S. Department of Education for a recent report, 24 had set performance benchmarks for fourth grade reading so low that they do not reach even the most basic level on the National Assessment of Educational Progress.\(^10\)

  ■ Some states appear to be actually lowering their standards in order to look good under No Child Left Behind.\(^11\) Left unchecked, this trend could prove disastrous for America’s students.

  ■ Students and their parents are being misled about the skills students will need after graduation, and they are being given a false sense of security about how well prepared students really are.

    - Almost 20 states reported that eighth graders improved in reading from 2003 to 2005, but only three states showed improvements on the National Assessment of Educational Progress. Some states that reported gains actually showed declines on that national assessment.\(^12\)

    - Although every state requires high school students to take tests, only a handful make sure those tests measure readiness for college and work.\(^13\)
• Although they rank 24th in actual math skills, American 15-year-olds rank first in the world in the percentage of students who say, “I get good grades in mathematics.”

- Low standards imperil America’s economic security and will make it difficult for students to compete in the increasingly competitive global job market.

• By the end of eighth grade, what passes for the U.S. math curriculum is two years behind the math being studied by eighth graders in other countries.14

• American 15-year-olds perform near the bottom in math and science. Out of 29 countries participating in a 2003 assessment, America’s students ranked
  ✓ 24th in math;
  ✓ 18th in science; and
  ✓ 15th in reading.15

• American 15-year-olds also rank near the bottom in real-world problem-solving skills, which are increasingly important in the global marketplace. The U.S. has the fourth highest percentage of very weak problem-solvers and the sixth lowest percentage of strong problem-solvers. Fewer than half of America’s 15-year-olds qualify as analytical, reasoning problem-solvers who can communicate solutions—a rate that ranks 24th out of 29 industrialized democracies.16

• We like to think America’s best students can compete with the best in the world, but that’s no longer true, either.

  ✓ According to the Organization for Economic Cooperation and Development: “The United States does not just have more students performing badly—it also has many fewer students performing well.”17

  ✓ America’s top math students rank 23rd out of 29 countries when compared with top students elsewhere in the world.18

- Surveys consistently show strong public support for rigorous American standards. For example, a survey conducted during February and March 2007 found that nearly three-quarters of the American public (73 percent) support one test and one set of standards for all students, compared with only 27 percent who support different tests and standards in different states.19

- There are many benefits to setting higher standards.

  • Setting higher standards will send clear signals to students and parents about the skills students need to succeed in college, careers, and life.

  • Setting higher standards will help ensure that all students graduate with skills to be competitive in a knowledge-based economy.

  • Benchmarking to world-class standards will help safeguard America’s global competitiveness and pay huge economic dividends. One economist estimates that if America could raise the skills of our students to just the middle of the pack of European nations over the next decade, our gross domestic product would grow by
an extra two percent over 20 years and an extra five percent over 30 years. That would give our economy a boost of $1.5 trillion in 2037 alone—more than triple what we currently spend on K-12 public education.20

■ There are many benefits to establishing more common standards across states.

- Common standards will improve instructional materials, including textbooks. In order to sell textbooks in every state, publishers currently cram them with enough material to cover all 50 state standards—literally too much to learn in one year.21 Teachers end up rushing through lessons and students fall behind.

- Common standards make sense for families who move their children across state lines in today’s highly mobile society.

- American standards will help ensure that all students leave high school prepared not just for their own state’s labor market but also for jobs across the country and around the globe. In today’s wired and digitized world, jobs can be done virtually anywhere, so the best opportunities will go to the best educated, no matter where they live.

- Including assessments in a policy proposal for American standards would enable states to adopt better tests at a lower cost. Because each state currently purchases its own assessments, states spend an estimated $600 million a year on testing. Yet few states can afford assessments that include more sophisticated questions that test critical-thinking and problem-solving skills.
American Education Standards
Policy Options

Even though authority rests with states to set education standards, there are many ways a
president can exercise leadership to elevate standards across America. The next president can
incentivize, support, and inspire states to adopt or create more rigorous and consistent
standards without having to mandate them. The goal should be a vigorous national effort to
raise American standards, an effort that is sensitive to political realities but bold enough to
ensure results.

Following are options and decision points for crafting a proposal to raise education standards.
Nearly all serious proposals include two components: pathways for getting to higher, more
consistent standards plus a set of incentives to convince states to buy in. But there are many
ways to realize each of those components.

I. PATHWAYS: How will we raise standards? There are at least two options.

Option A: Commission an Independent Organization to Create Model Standards.
Commission a well-respected independent body to create a set of rigorous “model” standards
and/or assessments that states can voluntarily adopt or adapt. Examples of such organizations
include the National Assessment Governing Board (NAGB), the National Academies of Science,
the National Science Foundation, or even non-profit groups such as Achieve, Inc.

Option B: Commission a Consortium of States to Create Model Standards.
Designate or commission a consortium of states to create a set of model K-12 standards.

Key questions to answer in crafting such policies include:

1) What should the standards be based on or benchmarked to?

   i) College readiness standards, i.e., the skills necessary to pass college placement
tests and/or do well in freshman courses, such as those identified in the American
Diploma Project (ADP) Benchmarks;

   ii) Career- or workplace-readiness skills, such as those identified in the American
Diploma Project (ADP) Benchmarks;

   iii) The National Assessment of Educational Progress (NAEP) frameworks or the
Programme for International Student Assessment (PISA) frameworks;

   iv) “World class” standards in other countries that have set high expectations and/or
perform especially well on international assessments of learning;

   v) The most rigorous state standards; or

   vi) Some combination of the above.

Attempts to establish “national standards” in the 1990s relied on groups of specialists in each
subject area to develop the standards. That led to a great deal of infighting about what should
be taught and an “everything but the kitchen sink” compromise that resulted in incoherent and
overstuffed standards no teacher could cover in one year.

A better approach would be to build on the success of the American Diploma Project and
benchmark standards to the real-world, college, and career demands students will face after
high school. Moreover, international benchmarking can ensure that standards provide students
with skills that will allow them to compete for opportunities in the increasingly competitive global economy.

2) What subjects and grade levels will be covered?

Some proposals do not specify subjects and grade levels while others do. Most include at least science and math, and some also include reading. Recent proposals generally do not include social studies, in part because that subject proved so politically contentious during efforts to establish national standards in the 1990s. However, any proposal to establish rigorous American education standards should ensure that standards cover all grades from K-12.

3) Should assessments be included? There are several options:

i) Standards only;
ii) Standards plus assessments;
iii) Standards plus a core of common test items;
iv) Standards only, but offer states funding or other incentives to align their own assessments.

The main disadvantage of including assessments is political, in that it might raise fears about a national testing program that could interfere with local curricula. However, there are several significant advantages to including assessments:

- Ensuring that standards and assessments are aligned in more states—which is too often not the case now;
- Permitting states that buy-in to save a considerable amount of money on their annual assessments;
- Helping to raise the overall quality of assessments, since sophisticated test questions are expensive and many states cannot currently afford them.

II. INCENTIVES: What incentives will be offered to induce states to adopt the voluntary standards or to raise standards on their own? There are several options:

i) Additional funding. Most proposals that offer monetary incentives define a set of required and allowable uses for the funds (such as developing instructional materials or training teachers), though that need not be the case.

ii) Legal flexibility. Some proposals offer states flexibility in meeting federal laws and regulations. The Education Trust would permit states that raise standards to re-start the timeline for meeting No Child Left Behind goals for student proficiency on state assessments and to set lower goals for how many students have to achieve proficiency on the new assessments. The Thomas B. Fordham Foundation would go even further, offering states complete freedom from most federal education regulations.

iii) Public reporting (“sunshine and shame”). Many proposals charge the Secretary of Education with publishing reports that show which states have set low standards and which have failed to raise their standards sufficiently. The idea is to shine a light on laggardy states and “shame” them into raising their standards. For example, the Department of Education can compare the percentage of students who meet...
proficiency benchmarks on state assessments with the percentage who meet proficiency benchmarks on the National Assessment of Educational Progress. In June 2007, the Department of Education published a sophisticated analysis using NAEP to compare proficiency benchmarks on state assessments across a common scale.22

The Bottom Line

Table 1 provides a summary of possible elements to include in a plan for a national effort to raise American education standards. Our view is that in addition to powerful incentives, the best proposals also will include a clear pathway to creating a set of voluntary model standards that are world-class and benchmarked to college- and career-readiness skills.

Table 1: Possible elements of a proposal to elevate American education standards

<table>
<thead>
<tr>
<th>Pathways</th>
<th>Incentives</th>
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</thead>
<tbody>
<tr>
<td>1. Model standards developed by an independent panel or organization</td>
<td>3. Financial incentives</td>
</tr>
<tr>
<td>2. Model standards developed by a consortium of states with assistance</td>
<td>4. Legal flexibility</td>
</tr>
<tr>
<td>from one or more organizations</td>
<td>5. Public reporting (shame/praise)</td>
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</tbody>
</table>

Example 1: A proposal based on model standards created by an independent panel or organization

Hold a national summit within the first 100 days of taking office to challenge the governors and other state leaders to raise K-12 standards. Commission NAGB to create voluntary model standards and assessments, benchmarked to international standards and college- and career-readiness skills. Under this plan, states would have several options:

a) States that adopt the standards and assessments will receive $4 million to create aligned instructional materials and conduct teacher training, or to fund other activities based on their own needs and priorities, along with flexibility to set new timelines and goals under No Child Left Behind.

b) States that choose not to adopt the standards and assessments can compete for discretionary grants of up to $2 million. Working alone or as members of consortia, they will use the grants to benchmark existing standards to the model standards and college- and career-readiness skills. States may then submit revised standards and assessments for evaluation against the model standards in order to be eligible for $3 million grants to create aligned instructional materials and conduct teacher training. They also may establish new timelines and goals under NCLB.

c) After two years, the Secretary of Education will publish an annual report showing the expectation gaps between state standards and the model standards, and between state assessment benchmarks and the NAEP assessment benchmarks, highlighting states with the largest gaps.
Example 2: A proposal based on model standards created by a consortium of states

Hold a national summit within the first 100 days of taking office to challenge the governors and other state leaders to raise K-12 standards. Designate a consortium of states, with support from one or more non-profit organizations, to create voluntary model standards benchmarked to international standards and college- and career-readiness skills. The consortium should use as a starting point the college- and workplace-skills readiness benchmarks developed by the American Diploma Project (ADP), which are already used as a benchmarking tool by the 30 states in the ADP Network. In addition:

a) Each state in the consortium will apply for certification that its standards meet or exceed the expectations laid out in the model standards. States that obtain certification are eligible for $4 million grants to create aligned instructional materials and conduct teacher training, or to fund other activities based on their own needs and priorities, along with flexibility to set new timelines and goals under No Child Left Behind.

b) States outside the original consortium may submit their standards for certification to become eligible for the same funding and flexibility described above.

c) States whose standards need substantial revision can apply for a one-time grant of $2 million over two years to work on aligning their standards to the model standards. These states must agree to submit their revised standards for certification that they substantially meet the expectations in the consortium’s model standards. States that obtain certification are eligible for $3 million grants to create aligned instructional materials and conduct teacher training, or to fund other activities based on their own needs and priorities, along with flexibility to set new timelines and goals under No Child Left Behind.

c) Provide grants for states that have received certification to work together to develop common assessments (or a core of common test elements) and to improve the quality of their assessments.

d) After two years, the Secretary of Education will publish an annual report showing the expectation gaps between state standards and the model standards, and between state assessment benchmarks and the NAEP assessment benchmarks, highlighting states with the largest gaps.
Examples: Existing Proposals

■ S. 224 “SPEAK Act,” Section 5, “Voluntary American Education Content Standards; American Standards Incentive Fund” (and H.R. 325)

✓ Pathway: The National Assessment Governing Board (NAGB) would create or adopt voluntary standards in math and science for grades K-12. The standards would be based on the NAEP frameworks in math and science for grades four, eight, and 12, and they would be internationally benchmarked and aligned with the skills necessary to be ready for college and the workplace.

✓ Incentives: States that adopt the voluntary standards would be eligible for competitive grants of up to $4 million over four years. The funds must be used to:
  ● Align assessments in math and science within four years;
  ● Align performance benchmarks on state assessments with NAEP’s achievement levels in math and science within four years;
  ● Align teacher certification, licensure, pre-service, and professional development requirements within three years;
  ● Provide technical assistance to districts and schools.

The funds may also be used to develop curricula and instructional materials.

■ The Aspen Institute Commission on No Child Left Behind, Beyond NCLB: Fulfilling the Promise to Our Nation’s Children

✓ Pathway: A distinguished national panel including NAGB creates voluntary standards and assessments in math, science, and reading based on the NAEP frameworks. States may adopt them or create their own standards and assessments based on them.

✓ Incentives: States that benchmark their standards against college and workplace readiness skills may participate in a national summit convened by the Secretary of Education. In addition, the Secretary of Education would issue periodic reports comparing the rigor of state standards and assessments with the voluntary American standards and assessments.


✓ Pathway: None. This legislation would neither create voluntary standards nor offer assistance to states to raise standards. Instead it would rely on the following incentive to encourage states to raise their standards.

✓ Incentives: After each release of NAEP results, the Secretary of Education would prepare a report comparing state assessment results with NAEP scores, ranking the states by the size of the gaps and identifying states with “significant discrepancies.” After five years, the Secretary of Education would issue a report on whether states have made progress raising standards.
The Thomas B. Fordham Foundation’s proposal described in two publications: 1) the Fordham publication *To Dream the Impossible Dream* (August 2006) and 2) the article “A New Federalism: The Case for National Standards and Tests” published in the journal *Education Next* (Fall 2006)

- **Pathway:** NAGB would develop standards and assessments, building on existing NAEP frameworks as well as those in leading states like Massachusetts, Indiana, and California. The U.S. Department of Education would then develop a national version of Adequate Yearly Progress (the accountability measure in No Child Left Behind) based on those standards and assessments.

- **Incentives:** The federal government would strike a deal with states: “If you opt into this national measurement and reporting system, all the pesky federal rules (such as ‘highly qualified teachers’) go away. Or you can keep your own standards and tests—and the full panoply of federal regulations.”

**S. 757, “National Mathematics and Science Consistency Act”**

- **Pathway:** The National Academy of Sciences would develop “voluntary national expectations for science and math education,” along with promising teaching practices and classroom-assessment items.

- **Incentives:** States could submit applications for formula grants pegged to the relative size of their K-12 enrollments—out of a total of $100 million over fiscal years 2008 to 2012—for instructional materials, hiring state agency support staff, and teacher training.

**The Education Trust, “Education Trust Recommendations for No Child Left Behind Reauthorization”**

- **Pathway:** None. Instead, states would voluntarily raise standards on their own. To qualify for the incentives described below, they would have to 1) obtain certification from higher education and business groups that the state’s 11th grade assessments are aligned with college- and career-readiness standards, and 2) obtain certification from a review panel appointed by the U.S. Department of Education that assessments in grades 3-11 are appropriately aligned.

- **Incentives:** In exchange, states would get some flexibility under federal law. States would be permitted to re-start the 12-year timeline for meeting the deadlines for student achievement under No Child Left Behind. They also would be permitted to set lower targets: 80 percent of students meeting the “proficient” level on the college- and career-readiness standards (preparation to succeed in credit-bearing courses in four-year colleges and universities) and 95 percent meeting a “basic” level of achievement (preparation for active citizenship and service in the military, entry into postsecondary education, and access to formal employment-related training/education opportunities).
“All Students Can Achieve Act of 2007” introduced by Senators Lieberman, Landrieu, and Coleman

✓ Pathway: NAGB would develop voluntary American standards and assessments in reading or language arts, math, and science based on the NAEP frameworks and aligned with college- and workplace-readiness skills. States could adopt the American standards and assessments, use them as a benchmark to raise their existing standards and assessments, or do neither.

✓ Incentives: The Department of Education would publish an annual report showing the gaps between state standards and assessments and the voluntary American standards.

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**America Competes Act: Support for states to raise standards**

On August 9, 2007, President Bush signed Public Law 110-69, the America Competes Act. The law authorizes $120 million in 2008 for competitive grants to states for aligning standards and assessments with college- and career-readiness skills. Grant funds must be used for:

(i) identifying and describing the content knowledge and skills students who enter institutions of higher education, the workforce, and the Armed Forces need to have in order to succeed without any remediation based on detailed requirements obtained from institutions of higher education, employers, and the Armed Forces;

(ii) identifying and making changes that need to be made to a state's secondary school graduation requirements, academic content standards, academic achievement standards, and assessments preceding graduation from secondary school in order to align the requirements, standards, and assessments with the knowledge and skills necessary for success in academic credit-bearing coursework in postsecondary education, in the 21st century workforce, and in the Armed Forces without the need for remediation.

States may also use grant funds to provide teacher training and extra support for students to meet the standards, as well as for:

(i) identifying changes in state academic content standards, academic achievement standards, and assessments for students in grades preceding secondary school in order to ensure such standards and assessments are appropriately aligned and adequately reflect the content needed to prepare students to enter secondary school.
### Table 2: Summary of Existing Proposals

<table>
<thead>
<tr>
<th>Bill or Proposal</th>
<th>Pathways for Raising Standards</th>
<th>Incentives for States to Raise Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. 224 “SPEAK Act”</td>
<td>Voluntary American standards in math and science developed by NAGB.</td>
<td>States that adopt the standards would receive $4 million over four years, a portion of which must be used to align state assessments with the American standards and with NAEP.</td>
</tr>
<tr>
<td>Aspen Institute’s Commission on No Child Left Behind</td>
<td>Voluntary standards and assessments in math, science, and reading developed by a distinguished panel including NAGB.</td>
<td>The Department of Education would publish periodic reports comparing the rigor of state standards and assessments with the voluntary national standards and assessments.</td>
</tr>
<tr>
<td>S. 164 “SUCCESS Act”</td>
<td></td>
<td>After each NAEP release, the Department of Education would issue a report comparing state vs. NAEP scores, ranking the states by the size of the gaps, and identifying states with “significant discrepancies.” After five years, the Department of Education would report whether states have raised standards.</td>
</tr>
<tr>
<td>Thomas B. Fordham Foundation</td>
<td>Voluntary standards, assessments, and aligned version of AYP, created by NAGB and based on NAEP frameworks as well as top states like MA, CA, IN.</td>
<td>States that adopt the standards would receive waivers for most federal education regulations.</td>
</tr>
<tr>
<td>S. 757 “National Mathematics and Science Consistency Act”</td>
<td>“Voluntary national expectations for science and math education” along with promising practices and classroom assessment items, developed by the National Academies of Science.</td>
<td>States that apply would receive formula grants pegged to the relative size of their K-12 enrollments—out of a total of $100M over fiscal years 2008-12—for instructional materials, hiring state agency staff, and teacher training.</td>
</tr>
<tr>
<td>Education Trust</td>
<td></td>
<td>States that obtain certification from 1) higher education and business groups that their 11th grade assessments are aligned with college- and career-readiness standards and 2) a federal review panel that their assessments in grades 3-11 are appropriately aligned would receive permission to re-start the NCLB 12-year timeline and set lower targets of 80 percent “proficient” and 95 percent “basic.”</td>
</tr>
<tr>
<td>“All Students Can Achieve Act”</td>
<td>Voluntary American standards and assessments in reading or language arts, math, and science based on NAEP frameworks and aligned with college- and workplace-readiness skills. States could adopt the standards, align their own standards and assessments to them, or do neither.</td>
<td>The Department of Education would report annually on the gaps between state standards and assessments and the voluntary American standards.</td>
</tr>
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American Education Standards
Frequently Asked Questions and Myths vs. Realities

Frequently Asked Questions

Q: What are standards? How are they different from assessments and performance benchmarks? Are they the same thing as curriculum?

Standards are a description of what should be learned, grade by grade, to prepare a student for life after high school, including college and good-paying jobs. For example, fourth grade math standards provide a description of the math skills that students should learn in fourth grade. Standards should be rigorous enough to prepare all students to become successful adults, but they are a floor rather than a ceiling. Schools can always teach students lessons and skills that go beyond what the standards require.

Example: A Massachusetts math standard for third graders

Identify and represent fractions (between 0 and 1 with denominators through 10) as parts of unit wholes and parts of groups. Model and represent a mixed number (with denominator 2, 3, or 4) as a whole number and a fraction, e.g., 12/3, 31/2.

Standards are sometimes called “content standards” to differentiate them from “performance standards” (described below) on assessments.

Assessments are the tests that students take at the end of each school year to measure how well they have mastered the standards. Currently, under the No Child Left Behind Act, states are required to administer annual assessments in reading and math to students in grades three through eight and once during high school.

Example: Here is a sample question tied to the fractions standard above from the Massachusetts mathematics assessment for third graders:

13 The coats shown below are hanging on coat hooks.

What fraction of the coats are white?

Write your answer in the Answer Box below.

Answer Box

13
Performance benchmarks (sometimes called “performance standards”) establish how well students must perform on the assessments in order to be considered proficient in subjects such as math and reading.

The difficulty of the benchmark depends on how many questions students must answer correctly, which questions—harder or easier—they must get right, and the minimum or “cut score” they must achieve on the test. Two states might have the exact same standards and assessments, but one state might set its performance benchmarks lower so that students can pass the assessment more easily.

Performance benchmarks are sometimes referred to simply as “standards.” For example, in June 2007, the Department of Education published a report showing that states had set very low expectations on their state assessments. The media reported that many states had “set low standards.” But the Department of Education had not examined state standards per se. Rather, it had compared the difficulty of scoring proficient on state assessments with the difficulty of scoring proficient on the National Assessment of Educational Progress.

“Curriculum” and “standards” are sometimes used interchangeably, but in reality there is a big difference. Standards describe the knowledge and skills that all students should learn by the end of each grade. Curriculum provides detailed instructions—such as lesson plans, student projects, and instructional materials—for teaching the required knowledge and skills.

In other words, standards, assessments, and performance benchmarks are tools for defining the expectations states have for their students. Curriculum is how teachers help students meet those expectations—and there are many different ways to do so.

The federal government is barred from mandating curriculum. Therefore, if a policy proposal for American standards includes references to curriculum, it is generally a model curriculum aligned with the standards and is meant to be a useful tool (as opposed to a mandate) to save teachers time or to help them with their lesson planning.

Q: What do you mean by “American education standards?”

We have 50 states, but we are one nation. All American students should learn basic skills that prepare them for college, for the workplace, and for life—no matter where they live. However, state standards are uneven. Some are very rigorous and some are very weak. To keep America competitive, standards should be benchmarked to the best in the world so that we raise standards, not lower them. The problem is not that we expect too much from our students or schools, it is that we settle for too little. That’s what we mean when we talk about American education standards: expectations worthy of our children, standards that provide the foundation for a better future and prepare young people to succeed in life.

Q: Are American education standards the same thing as No Child Left Behind?

No. No Child Left Behind is a federal law governing a large number of programs. As part of that law, states are required to test students in grades three to eight and once during high school. Each state tests students based on its own standards. What we want is for states to adopt high standards regardless of whether they do it for their own accountability systems or the one required by No Child Left Behind. We are calling for rigorous American education standards so that all students, no matter where they live, receive a quality education that...
prepares them for college, for work, and for life. Whether they live in New Hampshire or Nevada, Maine or Mississippi, all students need strong basic skills in subjects like math and English.

Q: What about students who do not learn as fast as others?

All children can learn. Some might need extra help or more time. The standards should set a common minimum expectation for all students, but we might need to give some students more time and individual help to achieve that expectation.
# Myths vs. Realities

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<tr>
<th>Myth</th>
<th>Reality</th>
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<tr>
<td>“The only way to have American education standards is for the federal government to mandate them.”</td>
<td>American standards need not be mandated by the federal government. There are many possible pathways to arrive at an agreement on American education standards, and that is part of the debate we should be having. For example, a president could work with a group of states to create model standards, and then offer other states incentives to adopt or match them.</td>
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<tr>
<td>“American education standards mean there will be a national curriculum.”</td>
<td>Some people use the terms “standards” and “curriculum” interchangeably, but in reality there is a big difference between them. Standards describe the knowledge and skills that all students should learn by the end of each grade. Curriculum provides detailed instructions—such as lesson plans and other materials—for teaching the required knowledge and skills.</td>
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<td>“If there are American education standards, local control will be lost.”</td>
<td>States and local communities are responsible for educating students, and we must respect that. The aim is not to “nationalize” the curriculum in each grade by having Washington officials dictate a lesson plan for every school in the country. We are simply saying that it should be an American priority to give all students the opportunity to learn what they need to meet the real-life challenges they will face after high school. There are many ways that national and state leaders can work together to accomplish this goal.</td>
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<td>“Teacher creativity will be lost if we adopt American education standards.”</td>
<td>Standards help teachers keep all students on track to graduate with the skills they need. They do not dictate how to teach. Standards might specify that fourth graders should learn how to multiply and divide fractions, but teachers can use their own creative approaches to teach that skill. Flexible and effective teaching techniques have never been more important. In addition, if we reach greater agreement on American standards, teachers will be able to share their best strategies with colleagues in more places around the country.</td>
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Defining a set of knowledge and skills students should learn in subjects like math, science, and reading does not prevent teachers from using imaginative techniques or encouraging creativity in students. In fact, creativity can be a powerful tool in working toward standards. A study published in 2006 in the *Journal of Creative Behavior* found that, “teachers who elicit student creativity turn out students that make substantial achievement gains” in reading and math.²³

| “American education standards mean more testing.” | American standards will not require teachers to test students more often. In fact, American standards can help states and districts administer fewer, less costly tests that are higher quality and are aligned to high expectations. |
| “Raising standards will cause more students to drop out of school.” | Higher expectations actually keep more students in school and on track to graduate. A national study found that high schools with a rigorous curriculum have lower dropout rates than those that allow students to take many low-level courses. For every two low-level math courses a high school offers, students are 30 percent more likely to drop out.²⁴ |
American Education Standards
Models and Examples of Collaborative Projects to Raise Standards

American Diploma Project (ADP) Network

The American Diploma Project Network is a coalition of 30 states working with Achieve, Inc., to align their K-12 standards, assessments, curriculum, and graduation requirements with the skills necessary to succeed in college and careers. Each state’s governor, business community, and education leaders (from K-12 as well as higher education) work together to define readiness for postsecondary education and work and then to raise expectations for students accordingly.

The network builds on ADP research conducted by Achieve in partnership with The Education Trust and the Thomas B. Fordham Foundation. In 2004, after two years of research, the ADP project published Ready or Not: Creating a High School Diploma that Counts. The study concluded that graduates need the same level of knowledge and skills to succeed in well-paying jobs as they do to handle credit-bearing college courses. The report also included math and English benchmarks that describe and illustrate the skills graduates need to succeed in postsecondary education or in “high-performance, high-growth jobs.”

For more information, visit: http://www.achieve.org/node/604

ADP Algebra II Multistate Assessment

In 2005, nine states working with Achieve’s ADP Network joined together to develop common standards and a common assessment for high school Algebra II courses. The states—Arkansas, Indiana, Kentucky, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, and Rhode Island—focused on Algebra II because research has shown that it is a critical gateway to success in college and careers.

The project has three goals:

- Improve curriculum and classroom teaching. Teachers will be able to focus on critical concepts and skills, and they will get test results back in time to adjust their lesson plans for the following year.

- Help students, parents, and colleges know whether students are ready for credit-bearing college courses. High schools will know how to better prepare students, and everyone will have better information about whether students are ready for college. That should save time and money currently wasted on remedial courses freshman year.

- Compare performance across participating states. Achieve plans to publish an annual report comparing performance and progress among the participating states.

The test will first be given in May 2008 to an estimated 200,000 students. Eventually, other states will be allowed to use the test and join the partnership.

For more information, visit: http://www.achieve.org/node/842
New England Common Assessment Program (NECAP)

New Hampshire, Rhode Island, and Vermont joined forces to develop a common set of standards known as the New England Common Assessment Program Grade-Level Expectations (NECAP GLEs), along with test specifications in reading, writing, and math.

According to the New Hampshire Department of Education:

The NECAP GLEs do not represent the full curriculum in mathematics or reading/language arts. Rather, they serve as an assessment framework for the development of the testing blueprints for common assessments to be administered in NH, RI, and VT, beginning in the 2005-2006 academic year. Each of the partner states intends to develop revised curriculum frameworks to accompany the NECAP GLEs. The revised frameworks will support good instruction and local assessment by modeling concepts and skills not easily assessed in an on-demand large-scale assessment (e.g., mental mathematics, self-correcting while reading).

For more information, visit:
http://www.ed.state.nh.us/education/doe/organization/curriculum/NECAP/GLEs.htm
American Education Standards
Research Related to Standards


   This report graded the quality and rigor of states’ academic standards. The Fordham Foundation examined state standards in five subjects: U.S. history, English/language arts, mathematics, science, and world history.

   The average grade for state standards across all subjects was a “C-minus.” Two-thirds of the nation’s K-12 students attend schools in states with C-, D-, or F-rated standards. Only three states had perfect scores: California, Indiana, and Massachusetts. Additionally, the study found a correlation between strong state standards and greater gains on the National Assessment of Educational Progress.


   ACT studied the skill requirements of occupations that offer a wage sufficient to support a family of four and that provide the potential for career advancement but do not require a four-year college degree. Examples included electricians, construction workers, upholsterers, and plumbers. It compared academic skill levels based on job profiles from ACT’s WorkKeys program with College Readiness Benchmarks on the ACT college admission and placement exam.

   The study found that well-paying jobs that do not require a four-year college degree do require reading and math skills comparable to what those students need in order to do well in freshman college courses. In other words, high school students who plan to enter workforce-training programs after they graduate need not just strong backs but also strong minds—academic skills similar to those needed by students who plan to earn a bachelor’s degree.


   This report, employing data from the 2004-2005 academic year, presents the results of applying a methodology for mapping proficiency benchmarks on state reading and mathematics assessments in grades four and eight onto the performance scale used by the National Assessment of Educational Progress (NAEP).

   The NAEP score equivalents of the states’ proficiency standards vary widely, spanning a range of 60 to 80 points. Most of the NAEP score equivalents fall below the cut-point corresponding to the NAEP proficient standard, and many fall below the basic standard. For example, out of 32 states in the study, no state had set performance benchmarks for fourth-grade reading high enough to meet the proficient level on NAEP, and 24 had set them so low that they did not reach even the most basic level.
4. ACT, Inc. (2004). *Crisis at the core: Preparing all students for college and work.* Iowa City, IA: Author.

ACT established benchmarks for college readiness by tracking students who had taken the ACT exam for entry into college and determining the score they needed in order to have a high probability of success in such college courses as English composition, algebra, and biology. The researchers then analyzed student scores to determine the proportion of high school students who currently meet those benchmarks.

The study found that, “even with a diploma in hand, many high school graduates do not have all of the skills to succeed in college-level coursework or workforce training.” Only 26 percent were judged ready for their first college course in biology, only 40 percent for college algebra, and only 68 percent for English composition. Taken together, only 22 percent of the 1.2 million students tested by ACT in 2004 were ready for college and work in all three academic areas—English, math, and science.


This study followed a nationally representative sample of students from the high school class of 1992 through their mid-20s in December 2000. It used data from students’ high school and college transcripts to track the success of students who attended a four-year college at any time, including those who started out in community colleges.

The findings confirmed a 1999 study by the same author: “The academic intensity and quality of one’s high school curriculum (not test scores, and certainly not class rank or grade point average) counts most in preparation for bachelor’s degree completion.” Moreover, the amount and rigor of high school courses students take matters far more than their socioeconomic status in predicting college success.


Achieve conducted a survey of state officials to monitor states’ progress in raising academic expectations so that standards, assessments, and graduation requirements are aligned with the skills necessary to succeed in college and careers.

The survey found that some states are making significant progress in raising their high school standards. However, the nation as a whole has a long way to go. Specifically:
- Only 12 states report that they have aligned their high school standards with the expectations of employers and college faculty;
- Only 13 states require students to complete a college- and work-ready curriculum to earn a diploma; and
- Only nine states administer college-readiness tests to all high school students as part of their assessment systems.

This report describes the results of the ACT nationwide survey of educational practices and expectations. Thousands of middle school, high school, and postsecondary teachers across subjects were surveyed.

The survey found:

- The majority of secondary and postsecondary teachers believe students’ preparation for college-level work is the same or even worse than it was five to ten years ago, despite attempts to improve college preparation.
- What postsecondary instructors expect college freshmen to know is far more targeted and specific than what high school teachers view as important. “It may be that [...] state standards are forcing high school teachers to treat all content topics as important, sacrificing depth for breadth.”
- Most high school teachers believe that meeting their state’s standards prepares students for college-level work, but 65 percent of postsecondary instructors disagree.


This study explored the key features of elementary school mathematics in Singapore and the U.S. in order to identify successful practices. Singapore is of interest because its students score at the top of international math assessments.

The study found that Singapore has a mathematically logical, uniform national framework that develops topics in depth at each grade. But the U.S. has no official national framework—and state frameworks differ greatly, some resembling Singapore’s and others lacking focus.

Moreover, Singapore has one set of textbooks that help students develop a deep understanding of abstract mathematical concepts through multi-step problems and concrete illustrations. However, textbooks commonly used in U.S. schools rarely go beyond definitions and formulas, focusing mostly on rote skills.

Also, because textbook publishers in the U.S. must sell to multiple state markets, common elementary math textbooks lack focus and cover almost twice as many topics per grade as Singapore’s textbooks. “In fact, Singapore students are expected to complete about one thorough lesson focused on a single topic per week, while U.S. students are expected to complete about one lesson on a narrowly focused topic each day.” The study concluded that having 50 disparate state standards is inefficient and unfair to students and teachers: “It is unfair to U.S. teachers to provide them with textbooks that are too thick and too inclusive because publishers must, for reasons of marketability, include content to fulfill the standards in multiple states.”

Finally, Singapore’s assessments are much more challenging than those in the U.S. In fact, Singapore’s *sixth grade* math tests are more challenging than America’s *eighth grade* National Assessment of Educational Progress in math. Singapore’s assessments contain
almost twice as many constructed-response items (questions that ask students to do more than pick the right multiple-choice answer) as the U.S. assessment.


This report examined the strength of states’ academic standards and the alignment of state tests to those standards. The study found that only 11 states met the criteria for having both strong content standards and documenting that their tests align to these standards in NCLB-required subjects and grades. The AFT recommended that states write clearer and more specific content standards in reading at all grade levels, create grade-by-grade or course-specific standards for high school, and create grade-specific science standards. It also recommended that Congress appropriate additional funding for state departments of education to develop quality assessment systems.
American Education Standards

Additional Resources


POLICY TOOLKIT

Section 2:
Effective Teachers in Every Classroom

In collaboration with:
Effective Teachers in Every Classroom
The Case for Action

Teachers have a greater impact on student learning than anything else in schools, yet states and districts do too little to attract and retain high-quality teachers. Current policies discourage effective teachers from staying in the profession, deter those who could become great teachers from entering the classroom at all, and give few incentives for strong teachers to take on tougher assignments. Ultimately, we are hindering teaching from becoming the esteemed profession that it ought to be.

America’s schools will need to hire 2 million new teachers over the next decade, and they must do so amidst a fierce battle for human capital in an ultra-competitive global society. This is a national challenge of unprecedented proportions. But it is also an historic opportunity for the next president to inspire states, districts, and schools to recruit America’s best and brightest to teach in our nation’s classrooms.

The next president must inspire a national effort to solve this problem, an effort built on the recognition that:

- Good teachers are the key to helping students gain the skills necessary to succeed in college, careers, and life;
- Every student deserves an effective teacher who can help him or her succeed academically;
- Teachers must be valued and rewarded for their performance on the job, including the learning they help students achieve; and
- We must find ways to attract talented teachers to high-need schools and fill shortages in subjects like math and science.

Teachers have a greater impact on student learning than any other school related factor.

- Students assigned to the most effective teachers gain a full additional year’s worth of learning over students assigned to the least effective teachers.  
- Having strong teachers three years in a row can boost students’ test scores as much as 50 percentile points (on a 100-point scale) above what they would gain with three ineffective teachers in a row.
- If we were to provide low-income students with good teachers rather than merely average teachers for five years in a row, we could eliminate the achievement gap entirely.
- Assigning students from any background to several ineffective teachers in a row deals them a crushing blow from which they seldom recover.
- There are huge differences among teachers—even among colleagues in the same school—in terms of their ability to produce student-learning gains.

Because an unprecedented number of teachers are nearing retirement, America’s schools will need to boost recruitment by 35 percent and hire an additional 2 million new teachers over the next decade.
Most school districts still compensate teachers only for years on the job and graduate school credits—neither of which do much to increase student achievement.

- The biggest improvements in teachers' effectiveness come early in their careers, typically during their first three to five years on the job.\(^{31}\)

- One recent study found that teachers who earn master’s degrees after they start teaching are, on average, less effective at improving student achievement than those who do not.\(^{32}\)

Because we offer few opportunities for higher pay and advancement, many talented Americans are driven away from—or out of—teaching.

- Seven in ten recent college graduates think teaching does not offer good opportunities for advancement.\(^{33}\)

- Academically talented young people are less likely to train to become teachers, less likely to take a teaching job, and less likely to stay in the classroom.\(^{34}\) Teachers who earned SAT or ACT scores in the top quarter are twice as likely to leave the profession within four years as teachers who scored near the bottom.\(^{35}\)

- Outside the field of education, adults who have strong academic skills earn more than adults who do not, and they can improve their earnings at faster rates. Four years out of college, the earnings gap between teachers and non-teachers who scored high on SAT or ACT tests is $10,709—but just six years later it nearly triples to $28,533. Wage gaps are similar among adults who have technical degrees in subjects related to math and science.\(^{36}\)

- Because they cannot earn higher pay for better performance, younger teachers have few options to build earnings earlier in their careers in order to save money, support a family, or buy a home.\(^{37}\)

- Most careers offer opportunities for advancement. But as every ambitious young teacher eventually discovers, American educators face a painful choice: They can settle for less pay in order to keep teaching, or they can garner a better salary by leaving the classroom for an administrative job—or by abandoning education altogether.

- Public schools once enjoyed a captive labor market because of discrimination in other professions against females and minorities. But now education must compete harder for top talent, and students are losing out.

  - The likelihood that a highly talented female in the top tenth of her graduating class would become a teacher shrank by half, from about 20 percent to about 10 percent, between 1964 and 2000.\(^{38}\)

  - A study by economists Caroline Hoxby and Andrew Leigh estimates that more than three-quarters of the decline in academic aptitude of teachers was caused by the compression of teacher salaries into uniform scales that only reward seniority and graduate degrees.\(^{39}\)
This is not to disparage the current generation of teachers, but rather to ask who the next generation of teachers will be. There are many talented, hard-working teachers in America’s classrooms. But we must change our current policies if we have any hope of recruiting the best and brightest Americans to fill the 2 million teaching jobs our schools will have over the next decade.

- Teacher attrition rates are too high and too costly.
  - Approximately one-third of teachers quit during their first three years, and by the fifth year half have left the profession. Those with high test scores are twice as likely to leave.
  - Teacher attrition has risen 50 percent over the last 15 years and now stands at about one in six teachers annually.
  - According to one estimate, teacher attrition costs the nation more than $7 billion each year to recruit, hire, and train new teachers.
  - Providing new teachers with greater support from mentor teachers would help reduce attrition rates, ensure that fewer low-income students are taught by novice teachers, and save taxpayers money related to turnover. In fact, novice teachers who participate in comprehensive induction programs which include mentoring by a teacher in the same subject are only half as likely to quit as those who receive no mentoring or only a bare bones induction program.

- Teachers are not motivated solely by money, but compensation does influence them—just as it does most people. Although working conditions matter greatly, low salary is one of the main reasons teachers leave high-poverty urban schools.

- We are not attracting and retaining enough experienced, effective teachers to work in our most disadvantaged and high-minority schools.
  - High-poverty urban schools lose more than one-fifth of their teachers each year—enough for an entire staff to turn over every half decade. Because vacancies are often filled with novices, America’s low-income and minority students are about twice as likely to be taught by inexperienced teachers.
  - More than 70 percent of math classes in America’s high-poverty and high-minority middle schools are taught by teachers who lack even a college minor in math or a math-related field.
  - Some states can now measure the impact of classroom teachers on student learning—and there are big inequities in teacher “effectiveness,” too. In Tennessee, African American students are 50 percent more likely to be assigned to ineffective teachers.
  - Courses in high schools serving mostly Latino students are nearly twice as likely to be taught by unqualified teachers as those in high schools with few Latino students.
- We are not attracting enough teachers to fill critical fields and subject areas.
  - More than one-third of math classes in U.S. middle and high schools are taught by someone who lacks even a college minor in a math-related field.51
  - All told, more than 12 million American students in grades seven to 12 are taught academic courses by teachers who have no college degree in the subject they’re teaching.52
- The public recognizes the importance of teacher quality and supports proposals to improve it.
  - Ninety-one percent of Americans believe that ensuring there are quality teachers in every classroom is very important.53
  - Ninety percent of parents favor increased pay for teachers who demonstrate high performance as a way to attract and retain good teachers.54
Effective Teachers in Every Classroom
Policy Options

Teachers have a bigger impact on student learning than anything else in schools. In fact, students assigned to the most effective teachers gain a full additional year’s worth of learning over students assigned to the least effective teachers. Research shows that giving low-income students good teachers for five years in a row would close the skills gap with their middle-class peers.

Sadly, current policies do little to put effective teachers in every classroom. In fact, most districts still compensate teachers based on seniority and graduate school credits—neither of which does much to boost student learning. We cannot expect to recruit and retain effective teachers in every classroom until we begin to value and reward teachers for the results they achieve on the job—not just how long they have been doing the job.

A president need not take on the role of “national school superintendent” to demonstrate strong leadership in this area. Working with other national leaders, he or she can leverage new and existing federal resources to inspire innovation by providing support to states and districts willing to implement cutting-edge initiatives to measure teachers’ performance in the classroom, help teachers improve their skills, and pay teachers more for producing superior results or taking on challenging assignments.

Key questions to answer in crafting such a policy include:

1. What should performance-based compensation be based on?
2. How should we measure student outcomes?
3. Should we base awards on individual or group performance?
4. If we include incentives based on teachers’ knowledge and skills, how can we best measure those things?
5. Should the plan include rewards for teachers who take on additional responsibilities or leadership roles in their schools?
6. Should the plan offer market incentives to attract qualified teachers to shortage fields and effective teachers to hard-to-staff schools?
7. How large should bonuses or additional compensation be?

1. What should performance-based compensation be based on?

At a minimum, performance pay should reward teachers for results in the classroom—how much their students actually learn. However, for both political and practical reasons, policymakers should consider additional ways to value and reward teacher’s on-the-job performance. For example, most plans include multiple measures of performance, such as demonstrating advanced skills and knowledge or performing well on evaluations.

Multiple measures of teacher performance help solve a practical problem. Many teachers work in grade levels or subject areas where there are no standardized assessments of student learning, so additional measures can enable all teachers in a school to participate in the program. (Another way to ensure that every teacher can participate is to include a mix of individual and group incentives, as discussed in question three below.)

Some experts worry that having too many measures can dilute the focus on student learning and spread available compensation too thin. *We agree with the recent report of the Working*
Group on Teacher Quality, which recommended that teacher compensation be based primarily on gains in student academic achievement.55

2. How should we measure student outcomes?

Objective measures of student achievement, such as those based on valid and reliable standardized assessments, are essential for the plan to have credibility. Such measures should focus on achievement gains—rather than end-of-year scores—to recognize that children are not randomly assigned to classrooms and students enter a teacher's classroom with different levels of preparation.

Fortunately, over the last 15 years, researchers have developed reliable ways to measure growth in student learning, including "value-added" measures that take into account each student's starting point and expected progress. Those methods can be used—and, indeed, are already used in many places—to provide a fairer picture of each teacher's contribution to his or her students' learning. (For more on this, see the additional resources section of this Toolkit, including the paper entitled The Test of Seriousness: Student Achievement and Performance-Based Compensation.)

Of course, there are other ways to measure student learning growth in addition to state assessments. Denver's ProComp system allows teachers to earn a small amount of additional compensation for meeting individually negotiated objectives for student growth. The objectives are based on diagnostic pre- and post-tests, high school end-of-course assessments, and other objective measures.

However, ProComp incentives that are tied to student gains on the Colorado Student Assessment Program are three times larger than the incentives tied to individually negotiated objectives. According to a new book by several of the plan's architects, "Denver proved it is possible to build into a salary system a component that takes into account the state test and grants significant salary increases to teachers whose students outperform expectations based on previous assessments of student learning." The plan's architects believe Denver's voters would not have approved the program otherwise.56

NOTE: It is easier to measure value-added growth in student learning in schools whose districts or states have developed longitudinal data systems, which can track student achievement from year to year and link student test scores to individual classroom teachers. Therefore, policymakers may want to include financial support for states to develop such systems. (However, it is possible to implement school-level models such as the Teacher Advancement Program (TAP) in states that have not yet developed full longitudinal data systems.)

3. Should we base awards on individual or group performance?

All plans should include strategies to evaluate and reward the performance of individual teachers. Research shows that classroom teachers are the key school related factor in student learning, so we must begin to compensate teachers based on their classroom performance and the results they achieve with their students.

However, since all teachers should have the opportunity to receive performance awards, many experts recommend a combination of shared and individual incentives, meaning that part of the performance compensation is based on teachers' individual performance and part on school-
wide or team performance. Team incentives can include any group of teachers who work together to raise student achievement—within a grade level, a department, or on interdisciplinary teams.

Plans should not limit the number of teachers who can earn awards. If every teacher contributes to improving student achievement, every teacher should be able to earn more. However, plans that include both individual and group incentives should place more weight on individual performance. For example, in the TAP model, approximately 20 percent of performance pay is based on school-wide student learning gains, while 80 percent is based on a combination of a teacher’s classroom student learning gains (approximately 30 percent) plus evaluations of that teacher’s classroom performance (approximately 50 percent).

4. If we include incentives based on teachers’ knowledge and skills, how can we best measure those things?

Rewarding teachers for obtaining, demonstrating, and exhibiting advanced knowledge and skills has become increasingly popular. Some plans provide awards to teachers who obtain new skills through ongoing professional development and document their impact in the classroom. Others award teachers who obtain certification from the National Board for Professional Teaching Standards. Still others implement evaluations of teachers’ professional practice that include multiple classroom observations.

For example, in schools implementing the TAP model, teachers undergo a rigorous evaluation of their professional practice that:

- includes classroom observations conducted at least four times per year;
- relies on trained mentor and master teachers as well as administrators;
- is based on a framework that clearly describes good teaching practice and has been validated by research;57
- gathers a range of additional evidence of the teacher’s impact on student learning; and
- provides detailed feedback to help teachers improve.

Such evaluation systems can avoid the major problem with so-called “merit pay” programs attempted in decades past, which often relied exclusively on principals’ personal evaluations of teachers. Teachers reasonably worried that some administrators might play favorites rather than reward true excellence. Recent research suggests that principals are, in general, fairly accurate in identifying highly effective and highly ineffective teachers.58 However, along with value-added methods for measuring actual student learning gains, modern evaluation systems can go a long way toward overcoming concerns about the fairness of performance-based compensation.

5. Should the plan include rewards for teachers who take on additional responsibilities or leadership roles in their schools?

In addition to incentives based on individual and group performance, some plans create career ladders that offer additional compensation to effective teachers who are willing to shoulder important responsibilities outside the classroom. The benefits can be great if responsibilities include mentoring colleagues and leading school improvement efforts. Career ladders can help spread good teaching practices, help more teachers become effective, help recruit and retain greater numbers of talented Americans to the teaching profession, and reduce the huge—and costly—turnover rates among novice teachers in many schools.
Career ladders also can serve as the cornerstone of another important element in any performance pay system—opportunities for teachers to raise their skills through job-embedded, school-based professional development. If teachers are to be paid based on performance, they need the tools and the time to learn new skills by observing accomplished colleagues, collectively analyzing student work, and using data to determine areas that may need improvement. Such programs are best developed and directed by master and mentor teachers who provide ongoing coaching and individual assistance to colleagues.

Again, however, career ladders should complement rather than supplant compensation based on results. Ideally, mentor and master teachers should be recruited from the most effective teachers in a school or district.

6. Should the plan offer market incentives to attract qualified teachers to shortage fields and effective teachers to hard-to-staff schools?

Yes. Despite massive shortages of teachers in some fields and huge inequities in access to effective teachers in disadvantaged schools, fewer than 15 percent of school districts now offer such pay incentives. Policymakers have several options:

i) Propose a combined program that offers teachers performance pay only if they also teach in hard-to-staff positions or schools;

ii) Propose a combined program in which teachers need not work in hard-to-staff positions or schools to be eligible for performance pay, but those who do are eligible for bigger performance-based awards than those who do not; or

iii) Propose market incentives for hard-to-staff subjects and schools as part of a separate grant program, so that states or districts that do not want to craft performance pay plans are still eligible.

If policymakers choose the third option, we recommend they attach some kind of teacher quality requirement to the market incentives. For example, in Hamilton County, Tennessee, only teachers who have high effectiveness scores on the Tennessee Value-Added Assessment System are eligible to earn a $5,000 bonus plus a range of other incentives to work in one of Chattanooga’s low-performing schools. As a recent report by a panel of expert teachers put it:

Don’t offer incentives to just any teacher who wants to teach in a high-needs, low-performing school. Limit these incentives to teachers who can demonstrate that they are effective with high-needs students and will be able to address the school’s specific learning needs. Sending a willing but unqualified or underprepared teacher to such a school could do more harm than good.

7. How large should bonuses or additional compensation be?

Most current programs offer relatively small bonuses or salary increases, often too small to make much of a difference. Most experts now recommend that policymakers offer significant performance rewards, for example, bonuses of at least five percent of teachers’ salaries, while some say it will take even more. As described above, one possibility is to combine market-based incentives with performance-based incentives. For example, under the proposed TEACH Act, teachers who work in a shortage field in a high-needs school and meet performance criteria based on strong student learning gains and classroom evaluations could earn an additional $12,500 per year.
The Bottom Line

Table 1 provides a summary of possible elements to include in a proposal to support states or districts that want to implement performance-based systems for providing effective teachers in every classroom. Some policymakers might want to offer more flexibility for states and districts to mix and match these or other elements, while others might want to ensure that local plans include certain elements.

Our view is that plans should at least include performance pay for individual teachers based on student gains in academic achievement, plus market incentives for hard-to-staff subject areas and schools. If, as many experts recommend, policymakers allow or require states and districts to use multiple measures of teacher performance, compensation should be based primarily on gains in student achievement.

### Table 1: Possible elements of a plan to support performance-based programs

<table>
<thead>
<tr>
<th>Differential Pay Options</th>
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<tbody>
<tr>
<td>1. Student gains in academic achievement</td>
</tr>
<tr>
<td>a. Individual teachers</td>
</tr>
<tr>
<td>b. Teams of teachers</td>
</tr>
<tr>
<td>c. School-wide</td>
</tr>
<tr>
<td>2. Knowledge and skills, such as meeting benchmarks on rigorous evaluations</td>
</tr>
<tr>
<td>3. Career ladders that reward mentor and master teachers who agree to take on additional responsibilities</td>
</tr>
<tr>
<td>4. Market Incentives</td>
</tr>
<tr>
<td>d. Hard-to-staff fields</td>
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<tr>
<td>e. Hard-to-staff schools</td>
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</table>

Example: A proposal to attract and retain effective teachers in America's classrooms

This plan would double the federal investment in teacher quality by providing matching grants to states and districts to support their efforts to attract and retain the most effective teachers in our nation's highest-need classrooms and critical subject areas. It would challenge educators, states, and districts to reform teacher compensation systems to better reflect student achievement goals by outlining key elements of teacher compensation reform, providing national support for state and local efforts, and encouraging educators to take a leadership role in shaping these systems.

- **Reward effective teachers and encourage them to teach in high-need schools.** Provide grants to states and districts to develop performance-based compensation plans that reward teachers who demonstrate high skill and obtain better results, and offer those teachers additional incentives to teach in America's neediest schools. The plan would encourage local innovation while keeping the focus on student achievement by specifying that performance rewards should be based primarily on student learning gains. It would also provide funding for states and districts to develop data systems that can identify highly effective teachers based on value-added student achievement gains.
• **Retain effective teachers by offering greater opportunities for professional advancement without leaving the classroom.** Provide grants to states and districts to develop career ladders that provide successful teachers with opportunities to earn greater compensation by taking on additional leadership roles and responsibilities. These expert teachers would lead comprehensive mentoring and professional development programs for their colleagues, helping to improve student achievement school-wide and reducing costly turnover rates among newer teachers. State and district plans must include objective systems for identifying highly effective teachers and rewarding all teachers who demonstrate high skills and obtain better results.

• **Ensure students have teachers with expertise in the subjects they teach.** Provide funding for states to create local incentive programs to attract and keep qualified teachers in shortage subjects such as math and science, with an emphasis on shortages in high-need schools. The system should provide ongoing rewards for teachers with demonstrated aptitude in high-need schools and subjects, as opposed to one time recruitment bonuses, since one time bonuses can result in ineffective teachers being recruited or effective teachers leaving after a short period of time.

States and districts could apply for grants under multiple programs if they wanted to combine incentives in innovative ways.
Examples: Existing proposals and programs

- S. 1339, “The Teacher Excellence for All Children Act of 2007” (and H.R. 2204)

  ✔ “Recruiting Talented New Teachers”
  - Creates TEACH Grant programs to provide students with up-front scholarships of up to $4,000 per year for four years in a bachelor’s degree program or two years in a master’s degree program in exchange for a commitment to teach a shortage subject in a high-need school for at least four years.
  - Creates a $200 million grant program for institutions of higher education to recruit teachers from among students majoring in math, science, foreign languages, special education, or English Language Learning.
  - Increases teacher loan forgiveness from $17,500 to $20,000 and expands it to include reading specialists; provides loan forgiveness in incremental sums over a five-year commitment; and makes the program permanent.

  ✔ “Closing the Teacher Distribution Gap”
  - Creates a $2.2 billion matching grant program for districts to provide annual bonuses to “exemplary, highly-qualified” teachers and principals to work in high-need schools for four years, with extra compensation for teachers in shortage subjects in high-need schools. Exemplary rating must take into account:
    - learning gains made by the teacher’s students;
    - evaluations based on research-validated rubrics and multiple classroom observations by master teachers and principals;
    - evidence of teaching skill documented in performance-based assessments; and
    - National Board certification.
  - Establishes a $200 million grant program for districts to implement career ladder programs. These programs augment the salaries of teachers who take on additional responsibilities—for example, becoming mentor or master teachers in high-need schools—and provide annual bonuses to career, mentor, and master teachers based on their performance.

  ✔ “21st Century Data, Tools, and Assessment”
  - Creates a $200 million grant program to assist states and districts in creating value-added data systems to track teacher effectiveness and improve classroom instruction.

  ✔ “Keeping Our Best Teachers in the Classroom”
  - Creates $100 million grant program to enable districts or consortia of districts to establish and support Teacher Centers that provide high-quality professional development.
  - Provides tax relief for teachers and principals in high-need schools and teachers in shortage subjects ($15,000 annual exclusion from income; $25,000 for those teaching in a high-need school and subject).
  - Increases the above-the-line tax deduction for teaching supplies by elementary and secondary teachers (from $250 to $500) and makes the provision permanent.
S. 1775, “No Child Left Behind Act of 2007”

✓ Expands the Department of Education’s ten state growth model demonstration to all 50 states in order to measure individual student progress towards grade-level proficiency. Eligible states must adhere to the No Child Left Behind Act’s 2014 proficiency deadline, have robust data systems, maintain well-established assessments, and set annual goals based on grade-level proficiency standards.

✓ Recognizing that high-quality teachers are the most important factor in improving student achievement, the bill:
  ● Emphasizes alternative certification and incentive, differential, and performance-based pay; and
  ● Requires states and districts to implement a plan ensuring low-income and minority children are as likely to be taught by highly-qualified teachers as their peers in more affluent schools.

Additional teacher provisions include:
  ● Authorization of the Teacher Incentive Fund; and
  ● Allowance for districts and principals to renegotiate collective bargaining agreements, giving them greater ability to reward quality teachers who agree to teach in high-poverty schools through incentive, differential, or performance-based pay.

S. 114, “Innovation Districts for School Improvement Act”

✓ Offers competitive grants to 20 districts (10 in urban areas and 10 in non-urban areas) to:
  ● Establish longitudinal data systems that can determine the value-added effectiveness of specific teachers;
  ● Assess the effectiveness of individual teachers based on value-added measures using national, state, or district averages to determine one year of expected growth;
  ● Award incentives for effective teaching, including incentives for individual teachers based on student gains, a professional evaluation, and team performance;
  ● Establish a differentiated pay scale to provide incentives for effective teaching; teaching shortage subjects such as math, science, and special education; and teaching in hard-to-staff or low-performing schools; and
  ● Establish a career ladder and additional compensation for novice teachers, career teachers, mentor teachers, and master teachers. Mentor and master teachers are required to create a “learning community” in each school that provides professional development based on analysis of student outcomes, individual coaching, and study teams.
"Teacher Incentive Fund" program authorized by Public Law 109-149

✓ Provides grants to states, districts, and charter schools to develop, implement, or improve comprehensive performance-based compensation systems for teachers and principals, especially in high-need schools, who raise student achievement and close the achievement gap. The performance-based compensation system must:
  ● consider, among other factors, gains in student academic achievement as well as classroom evaluations conducted multiple times during each school year, and
  ● provide educators with incentives to take on additional responsibilities and leadership roles.

H.R. 1761, “Teacher Incentive Fund Act”

✓ Authorizes the Teacher Incentive Fund and will:
  ● Assist states, districts, and nonprofit organizations to develop, implement, or improve comprehensive performance-based compensation systems for teachers, especially in high-need schools, who raise student achievement and close the achievement gap. Requires differentiated compensation to be based primarily on measurable increases in student achievement and allows:
    o Incentives for hard-to-staff schools or shortage subject areas;
    o Incentives for successfully fulfilling additional responsibilities; and
    o Incentives based on evidence of skills and knowledge, such as mastery of content knowledge and superior teaching skills.
  ● Study and review performance-based compensation systems for teachers and principals to evaluate their effectiveness, fairness, quality, consistency, and reliability.

Public Law 110-28 (May 25, 2007), Title IV, Chapter 7, “Hurricane Education Recovery”

✓ $30 million for use by Louisiana, Mississippi, and Alabama for recruiting, retaining, and compensating new and current teachers, principals, assistant principals, and other educators who commit to work for at least three years in public elementary or secondary schools in areas affected by Hurricane Katrina and Hurricane Rita. The funds can be used for paying salary premiums, performance bonuses, housing subsidies, signing bonuses, relocation costs, and loan forgiveness.

✓ Funds may also be used to:
  ● build capacity, knowledge, and skills of teachers, principals, and other educators so that they can provide an effective education, including the design, adaptation, and implementation of high-quality formative assessments;
  ● establish partnerships with nonprofit entities with a demonstrated track record in recruiting and retaining outstanding teachers, principals, and other educators; and
  ● pay for release time for teachers and principals so that they can identify and replicate successful practices from the fastest-improving and highest-performing schools.

✓ Any state that elects to use part of the funds for performance bonuses will collaborate with local education agencies, teachers’ unions, local principals’ organizations, local...
parents’ organizations, local business organizations, and local charter school organizations to develop a plan for a rating system for the bonuses. If no agreement is reached, the state department of education must notify Congress of non-agreement and will have 30 days to establish and implement a rating system based on classroom observation and feedback more than once annually, conducted by multiple sources (including, but not limited to, principals and master teachers), and evaluated against research-based rubrics that use planning, instructional, and learning environment standards to measure teacher performance. (These provisions do not apply to any states that enacted a state law in 2006 authorizing performance pay for teachers.)

■ “All Students Can Achieve Act of 2007” introduced by Senators Lieberman, Landrieu, and Coleman

✓ States must create comprehensive data systems that track students’ academic progress and any other factors that affect their success. Data systems must link student achievement data to teachers, allowing states to measure teacher effectiveness.

✓ Would provide grants for programs that change teacher compensation, including better pay for more effective teachers, and incentives for effective teachers to teach in high-need schools.

✓ Calls for school-based reward systems for teachers, administrators, and other staff members that work in high-need schools in order to close the achievement gap.
Table 2: Summary of existing proposals and programs

<table>
<thead>
<tr>
<th>Bill or Proposal</th>
<th>Performance and Market Incentives</th>
<th>Career Ladders</th>
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<tr>
<td>S. 1339 “The Teacher Excellence for All Children Act of 2007”</td>
<td>Creates $2.2 billion matching grant program for districts to provide annual bonuses for “exemplary, highly qualified teachers” to work in high-need schools or shortage subjects in high-need schools. Exemplary rating based on performance measures, including 1) strong student learning gains; and 2) evaluations based on research-validated rubrics and multiple classroom observations by master teachers and principals.</td>
<td>Establishes $200 million grant program for districts to establish and implement career ladders that augment salaries of teachers based on additional responsibilities and effective performance.</td>
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<tr>
<td>S. 1775 “No Child Left Behind Act of 2007”</td>
<td>Emphasizes incentive, differential, and performance pay.</td>
<td>Provides funding for development of multiple career paths and increased compensation for teachers.</td>
</tr>
<tr>
<td>S. 114 “Innovation Districts for School Improvements Act”</td>
<td>Provides grants to districts to create data systems that can evaluate teacher effectiveness based on student learning gains; offer incentives for effective teaching; establish differentiated pay scales to compensate teachers for effective teaching and teaching in shortage subjects or hard-to-staff and low-performing schools</td>
<td>Calls for career ladders for teachers to work as mentor and master teachers. Additional compensation for teachers with enhanced roles or responsibilities.</td>
</tr>
<tr>
<td>H.R. 1761 “Teacher Incentive Fund Act”</td>
<td>Authorizes the Teacher Incentive Fund, which awards grants for the development, implementation, or improvement of comprehensive performance-based compensation systems.</td>
<td>Allows for increased pay for teachers who successfully fulfill additional responsibilities.</td>
</tr>
<tr>
<td>Public Law 110-28 (May 25, 2007)</td>
<td>Allocates funds for recruiting and retaining educators in LA, MS, and AL through such mechanisms as paying salary premiums, performance bonuses, housing subsidies, etc. Educators must commit to staying three years.</td>
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<tr>
<td>“All Students Can Achieve Act”</td>
<td>Establishes grants for programs that change teacher compensation, including better pay and incentives. Calls for school-based reward systems.</td>
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Effective Teachers in Every Classroom
Frequently Asked Questions and Myths vs. Realities

Frequently Asked Questions

Q: Why should we focus on policies related to teacher compensation and not other reforms aimed at improving teacher quality in America?

Research has confirmed that teacher quality is the most important school-related factor for student achievement. Teacher compensation is a key workforce tool that can be used to promote teacher quality and thus improve student achievement. Teacher compensation reform is promising because: 1) research shows that there is little connection between the current single-salary schedule and teacher quality, 2) research shows that teachers, and those considering teaching, are influenced by financial incentives, 3) compensation reform can reach all teachers in the workforce, and 4) such policies align teacher compensation with student achievement goals. Research also shows that incentive programs are more cost effective at raising student achievement than other programs, such as those that only provide teachers with additional resources.61

Q: Why offer bonuses for effective teachers?

With more than 2 million teacher vacancies in the coming years, we need to better attract and retain effective educators in our nation’s classrooms. This is particularly true in high-need schools and subject areas like math and science, in which there are often shortages of qualified, effective teachers. There is simply no way to help underachieving students excel without providing effective teachers. Bonuses, career opportunities, and professional support have been shown to improve teacher recruitment, retention, and effectiveness.

Q: Why not simply raise compensation across-the-board for all teachers?

The real question is, why does the current system pay effective and ineffective teachers the same? If the goal is to increase student achievement, the compensation system should promote that goal. Unlike an across-the-board pay raise, performance pay systems reward teachers for measurable improvements in their teaching skills and their ability to help students learn. Effective teachers are rewarded for their success, which helps to keep them in the classroom, particularly in high-need schools.

Additionally, the cost of an across-the-board raise for every teacher is very high. Bringing all teachers up to the nation’s average teacher salary would cost more than $9.5 billion per year. And giving all teachers a $10,000 raise would cost approximately $30.6 billion annually.62 Over time, we need to raise the compensation for teachers in order to attract the best talent to the profession. But that should be accomplished as part of a comprehensive rethinking of how we compensate teachers—including their performance and their willingness to take on tougher assignments. Recent college graduates believe teachers are underpaid, but they also believe that teaching does not offer enough opportunities for advancement based on hard work and results.63 Policymakers should try to solve both of those problems at the same time.

Q: What are the benefits of giving teachers opportunities for career advancement?
Most careers offer opportunities for professional growth and advancement. Teaching has traditionally not offered this opportunity; teachers who want to take on more responsibility and earn greater pay are forced to leave the classroom and become administrators or enter other fields. A career path provides a way for teachers to remain in the classroom where they are desperately needed, and at the same time pursue greater professional challenges, accomplishment, and pay. Creating positions for master teachers, mentor teachers, and coaches will not only keep outstanding veteran teachers in the classroom, but will provide novice teachers with much needed mentoring and support. Giving teachers opportunities to assume greater roles and responsibilities also enables them to share instructional leadership with the principal and more effectively contribute to student achievement.

In addition, career ladders help attract outstanding educators to where they are needed most. There are cases of outstanding educators who leave schools in upper- and middle-class neighborhoods in order to take on positions with more responsibility and greater pay at schools with lower-income student populations.

**Q: Why offer professional development as part of performance-based compensation plans? Why not just give bonuses for good results?**

All educators pursue teaching with the aim of helping their students learn, but they often are not provided with the tools and support to meet their goals. Performance-based compensation helps focus educators on what’s most important—student academic success. Quality professional development provides teachers with the support they need to ensure that success. By providing ongoing professional development aligned to student achievement goals and offering structured opportunities to collaborate and share best practices with colleagues, teachers will be more likely to help students make achievement gains. All teachers, even the most effective ones, can benefit from relevant and ongoing professional development. In addition, experience shows that teachers are willing to be held accountable if standards are clear and there are mechanisms for helping them improve their practice.
## Myths vs. Realities

<table>
<thead>
<tr>
<th>Myth</th>
<th>Reality</th>
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<tr>
<td>“Performance pay is just another term for the old ‘merit pay’ system where teachers were paid based on a single, year-end test or on an unfair and potentially biased evaluation by the principal.”</td>
<td>Historically, so-called “merit pay” programs were viewed as unfair because of the measures they used. Some programs rewarded teachers based only on end-of-year test scores, giving an advantage to teachers who worked with students who were already high-achievers. Other programs based awards on a single classroom visit by the principal, which led to accusations of bias and favoritism. But modern performance pay systems are very different. They are based on fair measures of teacher performance, such as growth in student achievement (i.e., value-added measurement of student learning gains), rather than year-end scores. Moreover, many systems include new ways to conduct more objective teacher evaluations, such as multiple classroom visits conducted by several trained/certified evaluators using clearly defined standards and objectives.</td>
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<td>“Performance pay will create unhealthy competition among teachers by pitting one teacher against another in a profession dedicated to teamwork.”</td>
<td>Research and on-the-ground experience show that most teachers in schools with performance pay programs feel collegiality is very strong. For example, the pilot for Denver’s ProComp plan found that individual incentives did not sabotage collegiality among teachers. The plan therefore included only a very small group incentive and targeted the rest of the funds toward individual incentives. In addition, by allowing all teachers who meet the requirements to be eligible for a bonus—as opposed to setting a cap on the number of teachers who can earn a bonus—teachers can focus on improving their own skills and their students’ achievement and not worry about competing with the teacher next door.</td>
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<tr>
<td>“Performance pay is unfair because teachers with the ‘best’ students get the rewards, while teachers with more challenging students are at a disadvantage.”</td>
<td>All students can learn, regardless of external factors and socioeconomic conditions. Modern performance pay systems measure student achievement gains over the course of the year. “Value-added” assessments take into account</td>
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Strong American Schools, a project of Rockefeller Philanthropy Advisors, is a nonpartisan campaign supported by The Eli and Edythe Broad Foundation and the Bill & Melinda Gates Foundation promoting sound education policies for all Americans. SAS does not support or oppose any candidate for public office and does not take positions on legislation.
students’ starting points and expected gains, rather than simply looking at end-of-year scores. Regardless of where their students start the year academically, teachers are evaluated and rewarded based upon their own contributions to student learning.

By using value-added measurements, performance pay systems reward all teachers who make significant progress with their students.

<table>
<thead>
<tr>
<th>“Test scores should not be used to measure teacher performance because they do not accurately measure student academic achievement. It is especially unfair to base a teacher’s performance on students’ scores on a single test.”</th>
<th>Education researchers and economists have documented that standardized tests do provide meaningful information. In fact, research has found that test scores predict students’ later success in education and the job market. (See The Test of Seriousness: Student Achievement and Performance-Based Compensation in the ‘Additional Resources’ section and at <a href="http://www.edin08.com/uploadedFiles/Issues/Issues_Pages/SAS%20PolicyBrief%20TestsPerfPay%20July20%202007.pdf">http://www.edin08.com/uploadedFiles/Issues/Issues_Pages/SAS%20PolicyBrief%20TestsPerfPay%20July20%202007.pdf</a> for more information.)</th>
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<tr>
<td>“Teachers oppose performance pay.”</td>
<td>Many of the most successful performance pay programs have been designed and put in place with the full support and active participation of teachers. For example, teachers voted in large majorities to institute performance pay in Denver and in a number of cities that implemented the Teacher Advancement Program (TAP), including Minneapolis, Chicago, Cincinnati, and Columbus, Ohio. Some well-intentioned teachers oppose performance pay out of fear because they do not know what “performing well” will entail. When professional development and other support is provided and achievement goals are clear, teachers support performance pay.</td>
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<tr>
<td>“Performance pay systems will never happen because teachers’ unions will oppose them.”</td>
<td>Since teachers are the key to the success of any incentive pay program, their support is essential. That’s why successful programs require teacher buy-in, often through a vote from the faculty before a school starts the program. As a result, local teachers’ associations affiliated with the National Education Association (NEA)</td>
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and the American Federation of Teachers (AFT) have shown a willingness to try performance pay when they have strong, grassroots support from their membership. In Denver, Cincinnati, Minneapolis, and Columbus (OH), the local teachers’ unions were responsible for bringing performance pay to schools in the district.

<table>
<thead>
<tr>
<th>“Performance pay wouldn’t work because teachers are not in it for the money.”</th>
<th>Teaching offers many sources of satisfaction beyond pay. But it is a mistake to treat teachers like volunteers rather than paid professionals. Economists have shown that current and prospective teachers do respond to monetary incentives. Based on his own and others’ research, the Urban Institute economist Dan Goldhaber sums it up: “Research shows that teachers are responsive to monetary incentives,” and “There is, in fact, ample evidence that teachers are sensitive to differences in compensation, especially when they work in high-minority and high-poverty schools.”</th>
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Effective Teachers in Every Classroom
Model Programs and Local Examples

Below are brief descriptions of selected teacher incentive programs in operation or in final planning stages across the country.

■ The Teacher Advancement Program (TAP)

In 1999, the Milken Family Foundation created the Teacher Advancement Program (TAP), a bold new strategy to attract, develop, motivate, and retain talented teachers. TAP has been in operation since 2000. Now a part of the National Institute of Excellence in Teaching (NIET), TAP operates in more than 130 schools in 14 states plus the District of Columbia and reaches 4,000 teachers and 60,000 students.

TAP’s goal is to draw more talented people to teaching and to keep them in the classroom by making the profession more attractive and rewarding. TAP provides the opportunity for good teachers to earn higher salaries and advance professionally, just as they would in other careers, without leaving the classroom. At the same time, TAP helps teachers become the best they can be by giving them opportunities to learn better teaching strategies and by holding them accountable for their performance in the classroom.

TAP is based on four elements:

1. **Multiple career paths.** TAP allows teachers to pursue a variety of positions throughout their careers—career, mentor, and master teacher—depending upon their interests, abilities, and accomplishments. As teachers move up the ranks, their qualifications, roles, and responsibilities increase—as does their compensation. Multiple career paths allow good teachers to advance without leaving the classroom.

2. **Ongoing applied professional growth.** TAP schools must restructure their schedules to provide time during the regular school day for teachers to meet, learn, plan, mentor, and share ideas with other teachers so they can constantly improve the quality of their instruction. Ongoing Applied Professional Growth focuses on instructional issues that specific teachers face with specific students. Teachers use data to target areas of need instead of trying to implement the latest fads in professional development.

3. **Instructionally focused accountability.** TAP has developed a comprehensive system for evaluating teachers, and it rewards teachers for how well they teach their students. Teachers are held accountable for meeting the **TAP Teaching Skills, Knowledge and Responsibility Standards**, as well as for the academic growth of their students. Every teacher in a TAP school is evaluated at least four times each year by trained and certified evaluators, including master and mentor teachers, as well as the principal.

4. **Performance-based compensation.** TAP compensates teachers according to their roles and responsibilities, their performance in the classroom, and the performance of their students. Teachers receive performance pay based on the learning gains of students in their classrooms (30 percent); meeting the **TAP Skills, Knowledge and Responsibility Standards** (50 percent); and school-wide gains in student
achievement (20 percent). The system also supports districts in offering competitive salaries to those who teach in hard-to-staff subjects and schools.

While each element is a powerful reform in its own right, it is the integration of those four elements that makes TAP comprehensive, unique, and effective.

The Teacher Advancement Program was most recently evaluated in 2007. Findings show that in all six states that were analyzed, a higher percentage of TAP teachers made an average year’s growth or more with their students than teachers in similar, non-TAP schools. In addition, a strong majority of TAP teachers surveyed reported that TAP’s professional development is relevant and useful, and that teacher collaboration is strong in TAP schools.

For more information, visit: [http://talentedteachers.org/](http://talentedteachers.org/)

**The South Carolina Teacher Advancement Program (SCTAP)**

The South Carolina Teacher Advancement Program is based on the Teacher Advancement Program described above. The ultimate goal of the SCTAP is to develop policies, practices, and procedures to improve teacher quality that can be used in all of South Carolina's public schools.

South Carolina began implementing TAP in six schools during the 2001-2002 school year. In 2004, the state legislature passed a provision that enables South Carolina schools labeled as “needing improvement” under NCLB to select TAP as an Alternative Technical Assistance program. By 2006, 17 schools had implemented TAP, and the number of SCTAP schools is expected to grow dramatically over the next five years.

South Carolina recently received two federal Teacher Incentive Fund (TIF) grants to implement TAP in dozens of additional schools:

- The first grant is the largest TIF award to date, totaling $34 million over five years to implement a modified version of TAP. This project will use performance-based compensation to address problems with recruitment and retention in 23 high-need schools in six districts. By the fifth year of the project, SC TIF has the potential to affect more than 60,000 children and 5,000 teachers and principals. The project will modify the basic TAP model to include higher and more varied teacher bonuses, bonuses for principals and assistant principals, more competitive pay for master and mentor teachers, a higher proportion of performance pay pegged to value-added student learning gains, use of Measurement of Academic Progress (MAP) tests to give K-3 teachers individual value-added scores, and inclusion of related arts in the individual value-added gains calculations.

- The second TIF grant, totaling $7 million over five years, was awarded to Florence County School District Three. Three school districts—Florence School District 1, Florence School District 3, and Laurens School District 56—will partner on a system of performance pay based on the TAP model. Florence County plans to implement the TAP program in six high-need schools, modifying it slightly to provide higher and more varied teacher bonuses, principal and assistant principal bonuses, and more competitive pay for master and mentor teachers.
The South Carolina Teacher Advancement Program was evaluated as part of the national evaluation of TAP in 2007 as mentioned above.

For more information, visit: [http://www.scteachers.org/tadvance/advance.cfm](http://www.scteachers.org/tadvance/advance.cfm)

- **Minnesota Q Comp**

In July 2005, Minnesota enacted Quality Compensation for Teachers (Q Comp), an $86 million reform package to better align teacher compensation with student achievement. Q Comp provides funding to districts and charter schools to create performance-based compensation systems.

### Required Q Comp Components:

1. **Multiple career paths.** Give teachers who are highly skilled and have high levels of student performance opportunities to move into, for example, master and mentor teaching positions with additional responsibilities that are rewarded by additional compensation.

2. **Ongoing, job-embedded professional development.** Provide research-based professional development that enables teachers to improve their practice.

3. **Performance or professional pay for teachers.** Introduce changes to the compensation system in order to give administrators some flexibility to reward teachers for high levels of student performance, and to offer competitive salaries for teachers, particularly in hard-to-staff subject areas or high-need schools. The performance pay must untie compensation from the traditional schedule that relies on years of service and education credits and use rigorous evaluations, school achievement gains, and student achievement gains for performance bonuses.

4. **Teacher evaluation system.** Create a comprehensive, standards-based teacher review system that considers input from a variety of sources. Peer reviewers, such as master and mentor teachers, along with principals, will evaluate each teacher’s performance several times during the school year. The evaluations must be one consideration for teacher bonuses.

5. **New salary schedule for teachers.** Reform the “step and lane” salary schedule and implement a new 21st century system that recognizes teachers as professionals. As stated above, the new salary schedule must untie compensation based solely on seniority and education credits and move to one that is performance-based. The design of the new salary schedule is done locally between the district and local teacher union.

Source: Adapted from “Frequently Asked Questions” at [http://education.state.mn.us/MDE/Teacher_Support/QComp/Frequently_Asked_Questions/index.html](http://education.state.mn.us/MDE/Teacher_Support/QComp/Frequently_Asked_Questions/index.html)

Currently, 35 Minnesota school districts and 14 charter schools have been approved for Q Comp and have received funding for implementation. More than 130 additional districts have
contacted the Minnesota Department of Education to indicate they plan to submit applications for funding.

Q Comp has not yet been formally evaluated; however, those schools that use Q Comp funds to operate TAP are included in the national evaluation of TAP mentioned above.

For more information, visit:
http://education.state.mn.us/MDE/Teacher_Support/QComp/index.html

- Denver ProComp

ProComp was designed by the Denver Public Schools (DPS) and Denver Classroom Teachers Association (DCTA) Joint Task Force on Teacher Compensation. The task force included five teachers, five administrators, and two citizens appointed by DCTA and DPS. ProComp grew out of a four-year performance-pay program piloted in 16 schools beginning in 1999. In November 2005, Denver voters approved a $25 million mill levy increase to fund ProComp district-wide. Teachers hired in or after 2006 are automatically enrolled in the program, while veteran teachers have the option to participate. According to the Denver Post, approximately 1,800 out of Denver's roughly 4,000 teachers have enrolled.66

ProComp replaces the district’s uniform salary schedule with a menu of possibilities for earning additional compensation over base pay. The system includes pay incentives for student growth (including gains on the Colorado Student Assessment Program); working in hard-to-staff schools and positions; acquiring and demonstrating knowledge and skills; and earning satisfactory ratings on an annual evaluation.

The table below outlines the performance awards teachers in the ProComp system can earn in one year.

<table>
<thead>
<tr>
<th>Knowledge &amp; Skills</th>
<th>Evaluation</th>
<th>Market Incentives</th>
<th>Student Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development Unit (PDU)</td>
<td>Advanced Degree/NBPTS</td>
<td>Tuition Reimbursement</td>
<td>$1,000 Lifetime Account</td>
</tr>
<tr>
<td>2% of Index Salary Increase</td>
<td>9% of Index Salary Increase</td>
<td>1% of Index Salary when rated satisfactory</td>
<td>3% of Index Salary when rated satisfactory</td>
</tr>
<tr>
<td>$684</td>
<td>$3,078</td>
<td>$1,000</td>
<td>$342</td>
</tr>
</tbody>
</table>

Source: http://denverprocomp.org

The pilot version of this program, called the Pay for Performance Pilot, was evaluated from 1999 to 2003. Findings show that students whose teachers set more rigorous student growth objectives achieved higher mean scores on standardized tests. Results also show that students' achievement rose as the length of teacher participation in the program increased. Principals with hard-to-staff positions saw a nearly 10 percent increase in applicants for teaching jobs for the 2006-2007 school year. One elementary school had more than 100 applicants for three positions.67

For more information, visit: http://denverprocomp.org
Benwood Initiative (Hamilton County Schools, Tennessee)

Launched during the 2001-2002 school year in nine urban elementary schools in Hamilton County, Tennessee, the Benwood Initiative is an intensive effort to improve student achievement by improving teacher quality and instruction.

The primary focus of the Benwood Initiative is to attract quality teachers to the city’s nine most troubled schools. Market incentives to attract these teachers included a $5,000 annual bonus, free tuition toward a master’s degree, a $10,000 loan toward a down payment on a house near one of the schools (forgivable if teachers stay at the school for at least five years), and $2,000 per teacher in schools that significantly improve overall test scores. This bonus plan was accompanied by changes in school leadership, additional training for teachers, and more sophisticated use of data to measure student progress.

Although the initiative has not been formally evaluated, there have been dramatic improvements in the Benwood schools. The percentage of third graders scoring proficient or advanced in reading rose from 53 percent in 2003 to 73 percent in 2006. All Benwood schools made dramatic gains in every subject—some of the highest in the state—and five of the schools received straight A’s on Tennessee’s 2006 value-added (TVAAS) report card. Moreover, teacher retention has improved dramatically, with new teacher hires dropping from 68 in 2002 to 28 in 2006.68

For more information, visit: [http://www.pefchattanooga.org/tabid/64/Default.aspx](http://www.pefchattanooga.org/tabid/64/Default.aspx)

Mission Possible, Guilford County Schools (Greensboro, North Carolina)

“Mission Possible” is a district-based comprehensive teacher incentive program that was launched during the 2006-2007 school year in the Guilford County Schools in Greensboro, North Carolina. The program is funded by an $8 million grant from the U.S. Department of Education’s Teacher Incentive Fund as well as a $2 million grant from the University of North Carolina system and Action Greensboro, a coalition of local foundations.

The program attracts and retains highly effective teachers in high-poverty, low-performing schools in the district through multiple mechanisms, including financial incentives to recruit teachers and additional incentives to reward performance. Recruitment incentives are available to K-2 teachers; grade 3-8 teachers of math, language arts, or reading; and high school math and English teachers. Performance incentives are based on value-added gains in student test scores.

District administrators initially selected for participation 20 schools that were not meeting the educational needs of their students. The selection was based on multiple criteria, including the percentage of students on free- or reduced-price lunch, the school’s Adequate Yearly Progress (AYP), the state accountability status, and the rate of teacher turnover.

For more information, visit: [http://www.gcsnc.com/mission_possible/index.htm](http://www.gcsnc.com/mission_possible/index.htm)

Lead Teacher Project, Brooklyn, New York

The Lead Teacher Project (LTP) was established by a coalition including the Community Collaborative to Improve District 9 Schools (CC9), the New York City Department of Education,
and the United Federation of Teachers (UFT). The campaign for Lead Teachers began during the 2003-2004 school year. Armed with thousands of signatures from a petition drive, letters of support from elected officials, and more than a quarter of a million dollars in pledges from foundations, CC9 leaders and their partners met with New York City Schools Chancellor Joel Klein, who embraced the idea of Lead Teachers. After negotiating the details of teachers' salaries, the NYC Department of Education pledged $1.6 million to support the program. In September 2004, the coalition launched the LTP in ten low-performing schools in the South Bronx’s District 9.

The LTP is designed to attract and retain experienced teachers. The purpose is to upgrade the capacity of the teaching force by:

- providing peer support to strengthen and stabilize the teaching force;
- attracting highly skilled teachers from other parts of New York City; and
- providing opportunities to highly qualified teachers for professional advancement within the teaching profession.

The initial LTP design calls for two lead teachers to share a classroom. Each lead teacher spends half of his or her time in the classroom, which serves as a laboratory for other teachers to visit and learn. The other half of each lead teacher’s time is spent leading professional development activities to support other teachers.

The Academy for Educational Development conducted a two year review of the program and reported that after the second year, nearly 100 percent of lead and supported teachers found the program helpful in their schools and with their teaching. The turnover among supported teachers fell by more than 50 percent. Third grade reading scores for students of supported teachers outpaced gains made by students in all New York City schools. Finally, the majority of other teachers in the schools wanted to be part of the program in the future; when asked to name one thing that should be changed, the most common response was a desire to expand the program’s availability.

Sources:


For more information, visit: http://www.annenberginstitute.org/CIP/nyco.html
Effective Teachers in Every Classroom
Research on Performance-Based Compensation

Over the past 25 years, there have been dozens of performance-based compensation programs attempted in school districts across the country. These programs have varied in rigor and design, some lasting longer than others. Although the research on the effectiveness of these programs is limited, the overall results are promising; most show that monetary incentives lead to increased student achievement and positive changes in teacher behavior. Additionally, the research shows that when the programs are designed and implemented well, the results are even more positive.

Below are brief summaries of twelve evaluations of incentive programs in the U.S. and other countries.


   This report describes the first attempt to evaluate the effects of performance pay on a national scale. Figlio and Kenny analyzed national data from a federal survey of schools, supplemented by a survey of their own, to assess the effects of performance pay on student test scores. The study did not examine the features or quality of performance pay programs; it considered only whether schools had one in place.

   The analysis showed that offering salary incentives of any kind is associated with a small but statistically significant increase in student test scores (1.3 to 2.1 points) in both public and private schools. The authors report: “We find that test scores are higher in schools that offer individual financial incentives for good performance. Moreover, the estimated relationship […] is strongest in schools that may have the least parental oversight.”


   This report provides an evaluation of an Israeli incentive program that rewarded teachers in grades 10-12 with cash bonuses for “improvements in their students’ performance on the high school matriculation exams in English, Hebrew, and math.” Individual bonuses were based on each teacher’s rank relative to other teachers in each subject, and the bonuses ranged from $1,750 to $7,500. These amounts were considered substantial given that the average annual income of a high school teacher in Israel was $30,000.

   Using data from the 1999-2000 and 2000-2001 school years, Lavy’s results suggest that performance incentives have a significant and positive effect on student achievement. The results also show that the incentive program modified teaching methods and led to a major increase in teachers’ efforts (e.g., overtime and added after-school instruction). Additionally, Lavy found that the incentive program was more cost effective in raising student achievement than other programs, such as group-incentive programs or “added resource” programs.

This report evaluates the effectiveness of the Teacher Advancement Program (TAP), “a comprehensive school reform aimed at restructuring and revitalizing the teaching profession while attaining measurable gains in student achievement.” The program provides four key elements: 1) multiple career paths, 2) ongoing, applied professional development, 3) instructionally focused accountability, and 4) performance-based compensation. TAP uses multiple measures to determine the performance awards. Half of each teacher’s bonus is based on his or her classroom evaluations. The other half is determined by student achievement growth (30 percent from student learning gains in the teachers’ own classroom and 20 percent from school-wide gains). Performance bonuses range from $450 to $5,000 per year. The program also includes compensation for taking on extra responsibilities: $2,000 to $7,000 for mentor teachers and $4,500 to $11,000 for master teachers.

The evaluation examined the effects of TAP on student achievement and on teacher attitudes. Using a rigorous form of value-added analysis conducted by researchers William Sanders and June Rivers of the SAS Institute, Solmon et al. found that in all six states analyzed, a higher percentage of TAP teachers made an average year’s growth or more with their students than similar, non-TAP teachers. Additionally, a strong majority of survey respondents found TAP’s professional development to be useful and reported experiencing strong teacher collaboration.


This report used data from a randomized experiment (leveraging Tennessee’s class size reduction experiment called STAR) to evaluate the effects of Tennessee’s Career Ladder Evaluation System (CLES), a program first implemented in 1984 and no longer in operation. CLES offered teachers the option to participate in a career step system organized into five levels, from probation to level III, and provided salary supplements for teachers willing to take on additional responsibilities (levels I-III). The supplements ranged from $1,000 to $7,000 and were based on qualitative evaluations conducted by a three-member team of peers.

The results show that students with career ladder teachers had higher test scores (three percentile points in math, two percentile points in reading). According to Dee and Keys, these gains are relatively large.


This report evaluates the incentive program implemented in Dallas Independent School District (DISD) from 1991 through 1995. The bonuses were provided on a school-wide basis to “winning” schools, using multiple outcome measures (two standardized test scores, other end-of-course tests, student attendance, and dropout rates). Winning principals and teachers received $1,000 and other staff received $500.

Compared to other reform programs and to five similar school districts in Texas that did not implement incentive programs, the Dallas program had positive impacts on the pass rates of seventh grade students in some subgroups (white and Hispanics, but not African-
Americans). Depending on the model used to measure the difference, seventh grade pass rates in Dallas were 2.5 to 20 percentage points higher than the state average over the course of four years. In addition, the results show that dropout rates consistently declined more in Dallas than other cities during all three years, and attendance at elementary schools consistently increased.


This report provides a comprehensive review of Denver’s Pay for Performance (PFP) Pilot between 1999 and 2003 (a version of this pilot later became the district-wide ProComp system). An effort by the Denver Classroom Teachers Association and Denver Public Schools, the PFP program provided performance bonuses to participating teachers based on two self-determined objectives. Each teacher was required to provide his or her principal with evidence that they had met their objectives. Principals then evaluated the evidence and determined which teachers should receive an award. Teachers were offered $500 for each objective met during the first year and $750 per objective the second year.

According to CTAC, “at all three academic levels (elementary, middle, and high school) higher mean student achievement in pilot schools is positively associated with the highest quality objectives.” In other words, students whose teachers had better objectives achieved higher scores on the standardized tests. Additionally, CTAC found that student achievement rose as the length of teacher participation in the program increased.


This report examines the impact on student achievement of Vaughn Elementary’s teacher evaluation system. Vaughn Elementary is a charter school in the Los Angeles Unified School District that, since its inception in 1993, has used an evaluation system that links teachers’ knowledge and skills to their pay. Teachers are evaluated against extensive rubrics and are awarded up to $13,000 per year for high performance.

The results show a strong, positive, and statistically significant relationship between teacher evaluation scores and student achievement in reading. In math, the results were positive, but not statistically significant.


This report describes an evaluation of the Achievement Challenge Pilot Project (ACPP) in Little Rock, Arkansas. The program was created in 2004 and is still in operation. ACPP provides teachers in its five pilot elementary schools with per-student bonuses based on the average academic growth of the entire class on a set of standardized tests. The larger the average gains, the larger the per-student bonus, up to $11,200 per year.

Winters et al. found that, in comparison to similar non-participating schools, “providing teachers with bonuses based on test score improvements increased student math
proficiency by approximately seven percentile points.” They note: “This gain in achievement after one year’s time is roughly equal to one-sixth of the nationwide average test score gap between black and white students. If the observed benefit of the merit pay program were to compound for six years, it would close the black-white test score gap.” Moreover, ACPP teachers were twice as likely to view low-performing students as an opportunity to demonstrate teaching prowess rather than as a burden.


This report evaluates a performance pay system implemented in 1999 at Community High School, an alternative high school in Michigan. Given the context of the school, this performance pay system provided incentives to teachers based on student retention and student evaluations. Teachers at the school were given a bonus if 80 percent of enrolled students were still attending at the end of each quarter and if they received an average score of at least 4.65 out of five from their student evaluations. The maximum award a teacher could earn in one year was $27,412.

In comparison to a similar alternative high school in the same county, the increase in course completion percentages was much larger at Community High School (20 percentage points).


This report evaluates the performance pay system in England. Launched during the 1999-2000 school year, this program was offered to teachers who had at least nine years of experience and were thus eligible for the Upper Pay Scale (UPS). Teachers had to apply to participate in the plan. They were then given the opportunity to earn additional pay for demonstrating “sustained and substantial performance,” based on qualitative reviews conducted by head teachers.

According to the value-added analysis, the incentive program added, on average, almost half a grade of learning growth per child for eligible teachers (though there were no improvements for math teachers).


This paper evaluates an incentive program implemented in two school districts in Kenya by a Dutch NGO during the 1998 and 1999 school years. Teachers in grades four to eight were offered school-wide bonuses depending on how well their students ranked on the national primary school exam (the KCPE), which “determines what secondary schools, if any, will accept graduating primary school students.” Depending on how their school ranked, teachers could receive bonuses from 21 percent to 43 percent of a typical teacher’s monthly salary.

Using data from the KCPE and another exam, Glewwe et al. found that students in schools with the incentive programs had higher test scores than similar students in schools that do
not have incentive programs. But test scores were no longer significantly different in 2000 after the incentive program had been discontinued.

In addition, there is some research showing that even small market-based incentives can help with the recruitment and retention of teachers in high-need schools and shortage subjects:


This report analyzes the effect of an incentive program in North Carolina aimed at attracting and retaining certified math, science, and special education teachers to high-poverty or low-performing secondary schools. Administered from 2001 to 2004, the program awarded eligible teachers annual bonuses of up to $1,800. Part-time teachers in relevant subjects were eligible for prorated awards. Uncertified teachers in math, science, or special education were not eligible. Teachers who stayed at their schools maintained eligibility even if the school was no longer eligible for the program. This provision was implemented to “eliminate both uncertainty and any perverse incentives for teachers to keep test scores low so that the school would remain eligible.”

Clotfelter et al. found that “the sum of $1,800 per year was sufficient to reduce turnover rates of the targeted teachers by roughly 12%.” However, they also found that there were failures to communicate about the program, and many teachers were not provided with accurate information about their eligibility and the award. The researchers estimate that better communication could have doubled the program’s effect.
Effective Teachers in Every Classroom
Additional Resources


POLICY TOOLKIT

Section 3: Expanded Time and Support for Learning

In collaboration with:
Expanded Time and Support for Learning
The Case for Action

Few things operate as they did 100 years ago. Our health care, transportation, and commerce have transformed beyond recognition to meet the demands of a changing world. Although times have changed, our schools have not. The vast majority of America’s schools and classrooms today still operate on a schedule designed to accommodate the needs of farms and factories. This inability to adapt and create a schedule that meets the demands of the 21st century society has put American students at a competitive disadvantage.

Our children deserve an education that prepares them for the future—success in college and the workforce and a healthy, fulfilled life. In order to prepare our children for success in the 21st century, our schools need to continue to innovate and improve.

Today, our country needs to rethink the school schedule, both in its design and in the time given to educating young people each day and throughout the year. Without additional learning time for those who need it, our students will fall farther behind. Additional time can also help our top performing students become experts in subjects like science and foreign languages, which require additional learning time. Global competitiveness is not something America’s students will continue to attain with six-hour school days nine months of the year.

- Expanding learning time for our students will increase America’s ability to compete in the global economy. Australia, Canada, United Kingdom, Japan, Poland, South Korea, and other nations have school days that are as much as 25 percent longer than ours. As a result, the performance of America’s schools lags behind that of most industrialized countries.68

- According to the Center for American Progress, “Many of the countries that outperform the United States on international comparisons of student performance keep their students in school longer [...] There is little doubt that the extra time students in other countries devote to education contributes to the differences in academic achievement.” On average, students in nations participating in the Trends in International Mathematics and Science Study (TIMSS) spent 193 days annually in school, compared with only 180 in the U.S. Over 12 years, this deficit translates into a gap of nearly one full school year.70

- Unless we change our thinking about how much time it takes to educate American children to be successful, contributing citizens, we face the prospect of an unprecedented economic and social decline. Despite substantial investments in education during the last two decades, we have not gotten very far, very fast because we have clung to a traditional calendar that has no basis in research.

- With more time, schools can create a school day that better prepares students for our changing world—one that emphasizes deeper subject matter knowledge, includes enrichment programs that develop problem-solving abilities and critical-thinking skills, and integrates the resources of an entire community focused on helping students succeed. With an expanded and redesigned school day, young people are better able to master the wide variety of skills needed to thrive in a complicated and competitive world.

- The skills necessary to become a successful adult have increased substantially over the last two decades, yet we have not provided students with the additional time or support they
need to achieve at much higher levels. Growing numbers of special education students and English language learners, in particular, need more time to catch up.

- Expanded learning time can help close the achievement gap. Studies show that the achievement gap between less affluent and more affluent students widens while students are out of school during the long summer vacation. By the time they reach fifth grade, low-income children lag their middle class peers by 2.5 grade levels in literacy. Expanding the school year and improving the learning experiences available to disadvantaged students during the summer will reduce the persistent achievement gap between low-income and high-income students.

- Expanded learning time can ensure that all students receive a well-rounded education. Because of the national push to raise students’ math and reading skills, many schools and districts have increased the time spent on those subjects—particularly in elementary school. But without more total time for learning, some schools have squeezed hours from other subjects, like science and social studies. In addition, activities that help engage students in school—such as the arts and physical education—are being significantly cut. Expanding the school day or year allows schools and districts to provide adequate learning time for all students in all subjects.

- Expanded learning time brings a variety of benefits to everyone—students, families, and teachers. By expanding learning time and rethinking the way we use that time, American schools will improve instruction in the basics, add opportunities for enrichment, and offer more personalized attention and support to students. The specific benefits include:
  
  - Teachers of math, reading, writing, science, and history will have more time to answer students’ questions, explore topics in greater depth, and incorporate hands-on projects like science labs that require longer class periods.
  
  - Literacy will improve because students will have time to learn reading skills and practice reading independently.
  
  - More time will allow schools to better support struggling students and help them catch up with their peers. Schools will have time to provide regular education classes and smaller group tutoring for special education students, English Language Learners, and others who need additional instruction.
  
  - Teachers will have more time to provide students with individualized and small group instruction. They can support struggling students and challenge high achievers. All students benefit from this personal attention.
  
  - Expanding learning time allows schools to offer a wide range of enrichment programs such as art, music, and technology that engage students in ways traditional academics don’t. Students will have the ability to learn about 21st century subjects such as robotics and forensics, put on plays, and learn instrumental music. They will have time for apprenticeships with local businesses and to try their hands at video production and computer animation.
  
  - The vast majority of charter schools offer more learning time. Following their example by allowing schools to expand their schedules will give parents more
choices. Parents could choose between a typical six- or 6.5-hour schedule or an expanded eight- or nine-hour day, selecting the option that best suits their families’ needs.

- Schools that have been redesigned with expanded learning time gain a sense of innovation and ownership, and a can-do spirit that is too often missing in our schools. Because teachers, administrators, community organizations, and parents have to work together to redesign the calendar, these schools take on a new life. Participants ask, “How will we make our school better?” instead of simply assuming change won’t work.

- Teachers have more time to strengthen their teaching and the curriculum by planning collaboratively, observing each other, and analyzing student data.

- Parent connections with the school improve. When the school day better aligns with the work day, parents are more likely to pick up their children at school and interact with teachers. If parents are not able to make it to school, they are still more likely to be home when their children arrive after school.
Expanded Time and Support for Learning Policy Options

We must expect students to learn more than they ever have so they can be better prepared for college, careers, and life. But learning takes time and support. In demanding more from our students, we must also give them what they need to succeed.

There are a number of ways a president could work with other national leaders to enable more states, districts, and schools to provide expanded learning time and support for students.

Expanded Learning Time

1. Federal pilot program to promote innovative use of additional learning time

A presidential candidate could call for a federal initiative to provide competitive grants to schools, districts, and states to expand the school day or the school year. The funding should allow for planning and implementation phases, with the implementation funding guaranteed as long as participating states/districts/schools demonstrate appropriate progress on benchmarks defined by the initiative. Grants would be provided on a per pupil basis for all students in a school to attend the expanded schedule. This type of policy would spur state innovation while also developing the evaluation and research base to improve our knowledge of how additional time and support for students can improve academic achievement and student engagement.

2. More flexibility in use of federal funding

Allow the blending of federal funding streams for the purpose of adding learning time and support for students. Allowing schools to integrate funding from Title I, 21st Century Learning Communities, Perkins, and other federal sources would allow schools to create a more comprehensive approach to expanding learning time for all students.

3. Allow NCLB’s Supplemental Education Services (SES) funds to be used to expand learning time

One of the basic premises of SES is that students attending eligible schools need more time to reach state standards. However, the way SES is currently structured and utilized ensures that most children in an eligible school do not receive the supplemental services. A recent analysis by RAND for the U.S. Department of Education concluded that only about a quarter of elementary students and less than one in ten secondary students take advantage of the services. By making it possible for a school to use SES funds to redesign its school day and/or year, an entire school could benefit from additional learning time. In order to make an SES-expanded time policy financially feasible and aligned with its intention to provide choice to parents, a stipulation that requires parent input would likely be part of any policy proposal.

4. Promote use of existing NCLB provisions on extending learning time

Sections 1114 and 1115 of NCLB contain little used provisions for extending school days and years to improve schools. A policy that would clarify these provisions and give incentives for enacting them could promote the addition of time and redesign of the school
day and year. Incentives could include additional funds for staffing, transportation, technical assistance, planning, and renegotiating labor agreements.

Expanding the school day or the school year is an important way to provide students with additional support. But there are other ways national leaders can enable more states, schools, and districts to help students develop the skills they’ll need as adults.

Providing Additional Support to Students

1. Helping all students graduate from high school

With the right data and tracking systems in place, districts can identify a majority of eventual dropouts—up to 85 percent—by ninth grade, and many well before that. The federal government could provide grants to school districts to create early warning systems that identify students on the path to dropping out in middle and high school. It also could provide much greater funding for dropout prevention programs that help students who are identified as at risk. Because the targeted interventions that work with very high-risk students are fairly expensive—from $1,185 per student to $1,600 per student per year—the funds could target the districts and high schools with especially high dropout rates.

Finally, the federal government could provide more funding to high schools under Title I of the Elementary and Secondary Education Act so that high schools can give students much greater academic and social support, particularly during the critical transition to high school in ninth grade. For example, last year several Johns Hopkins University researchers proposed a “15 percent solution” in which the federal government would provide $1.5 billion to fix the 15 percent of American high schools that produce 50 percent of the nation’s dropouts. The funds would pay for proven high school reform models, like the Talent Development Program, that combine intensive academic and social supports beginning in ninth grade.

2. Helping all students graduate fully prepared for college and work

Studies show that although the vast majority of middle and high school students say they plan to go to college, very few begin planning early enough or have enough information on what it takes to get ready for college and careers. Some states and school districts are establishing programs to help students develop a “college and career readiness plan” starting in middle school. They do so by providing better information to students and their parents about the courses they will need to take in order to avoid remedial classes in college, and by following up with students to track their progress. Working with other national leaders, a president could provide funding that allows more states and districts to establish such programs.

In addition, the federal government could fund the creation of “early readiness assessments” that warn students who are at risk of performing poorly on college-placement tests. The testing company ACT, Inc. has created a program called Educational Planning and Assessment System (EPAS) that allows students to take a series of tests beginning in middle school: “Student achievement is assessed at three key transition points in EPAS—8th/9th, 10th, and 11th/12th grades—so that academic progress can be monitored to ensure that each student is prepared to reach his/her post-high school goals.” And the California State University system created the Early Assessment Program (EAP) that enables eligible
high school juniors to take an assessment to gauge whether they are ready for credit-bearing college courses. Last year, 134,000 high school juniors voluntarily took the EAP mathematics test and 158,000 completed the English test.

3. **Providing academic programs to prevent summer learning loss**

Research shows that while students are out of school during the long summer vacation, the achievement gap between less affluent and more affluent students widens as students with fewer resources lose ground. A president could work with other national leaders to offer competitive grants to local school districts for summer learning programs focused on academic skills.
Expanded Time and Support for Learning
Frequently Asked Questions and Myths vs. Realities

Frequently Asked Questions

Q: How would students and teachers benefit from more time?

More time in school delivers five broad benefits to teaching and learning.

1. Longer days usually come with longer class periods, which allow for more time on task. This means students have more time to practice and absorb a new concept or skill rather than rushing to the next lesson.75
2. Longer classes enable teachers to delve more deeply into subject matter.76
3. Classes like art, music, and gym can be reinstated in schools where they have been squeezed out. These subjects broaden students’ educational experiences and engage children in learning who may not find core academic subjects as approachable.77
4. More time allows for more interaction and deeper relationships between teachers and students—which, not surprisingly, usually promote academic achievement.78
5. A longer day enables schools to set aside time for teachers to engage in collaborative planning and on-site professional development, which research has shown to have the greatest impact on teachers’ effectiveness and, in turn, on student proficiency.79

Q: What does research say about adding time to the school day?

Simply put, expanding time for learning can help students learn more. However, more time by itself does not automatically lead to improvements in education. Like money, time must be used well, and educators must understand its benefits and pitfalls. A review of the literature by WestED titled Improving Student Achievement by Extending School: Is It Just a Matter of Time? describes three kinds of time spent in school: (a) allocated time, or the total time in the school day, (b) engaged time, or the time actually spent on academic content (as opposed to taking attendance or managing classroom behavior), and (c) academic learning time, or the precise time when students’ focus is perfectly aligned with the content so that real learning is taking place.

Research has found that only when schools increase the amount of academic learning time will students actually learn more. As a result, in the school re-design process, educators must not only focus on how they will add more time to the schedule and to individual classes, but also work diligently within classrooms and enrichment activities to ensure that all students are actively developing skills or acquiring knowledge.80 By the same token, without additional allocated time, schools are limited in how much academic learning time they can add, and expanding academic learning time within any particular academic class still does not allow for more time in well-aligned enrichment activities.

Q: How does the amount of time American children spend learning compare to that of children in other countries?

There is a good deal of misinformation about the length of the school day and year in other countries. To clarify some of the conflicting reports, the following is a table with some of the key information on school year, school day, and total learning time, as reported in aggregate by

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Strong American Schools, a project of Rockefeller Philanthropy Advisors, is a nonpartisan campaign supported by The Eli and Edythe Broad Foundation and the Bill & Melinda Gates Foundation promoting sound education policies for all Americans. SAS does not support or oppose any candidate for public office and does not take positions on legislation.
students and teachers. No set of aggregate data will capture all the nuances of the educational landscape, but at least this table allows for an apples-to-apples comparison. The table shows that the U.S. falls near the bottom in total number of instructional hours and somewhere in the middle of the pack in time spent on homework. Data are drawn from the highly respected Organization for Economic Cooperation and Development, a non-governmental organization with 46 member countries. (More data can be found at www.oecd.org/edu/eag2005.) The table includes countries (listed in alphabetical order) to which American students are often compared.

<table>
<thead>
<tr>
<th>Country</th>
<th>Instructional Hours/Week</th>
<th>Hrs. of Remedial + Enrichment Classes/Week</th>
<th>Instructional Weeks/Year</th>
<th>Total Annual Learning Hours in School</th>
<th>Total Hrs. Homework/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>24.14</td>
<td>1.19</td>
<td>38.6</td>
<td>977.74</td>
<td>5.70</td>
</tr>
<tr>
<td>Canada</td>
<td>23.59</td>
<td>1.87</td>
<td>n/a</td>
<td>n/a</td>
<td>5.64</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>23.58</td>
<td>0.67</td>
<td>41.0</td>
<td>994.25</td>
<td>3.80</td>
</tr>
<tr>
<td>France</td>
<td>24.79</td>
<td>0.80</td>
<td>37.8</td>
<td>967.30</td>
<td>6.80</td>
</tr>
<tr>
<td>Germany</td>
<td>22.60</td>
<td>0.73</td>
<td>39.7</td>
<td>1,015.92</td>
<td>6.26</td>
</tr>
<tr>
<td>Hungary</td>
<td>23.90</td>
<td>0.92</td>
<td>36.6</td>
<td>908.41</td>
<td>9.95</td>
</tr>
<tr>
<td>Ireland</td>
<td>27.39</td>
<td>0.92</td>
<td>33.1</td>
<td>937.06</td>
<td>7.73</td>
</tr>
<tr>
<td>Japan</td>
<td>23.84</td>
<td>1.98</td>
<td>38.9</td>
<td>1,004.40</td>
<td>3.82</td>
</tr>
<tr>
<td>Korea</td>
<td>30.28</td>
<td>6.79</td>
<td>35.6</td>
<td>1,319.69</td>
<td>3.49</td>
</tr>
<tr>
<td>Mexico</td>
<td>24.16</td>
<td>7.10</td>
<td>23.9</td>
<td>747.11</td>
<td>5.85</td>
</tr>
<tr>
<td>Turkey</td>
<td>23.10</td>
<td>4.90</td>
<td>35.7</td>
<td>999.60</td>
<td>8.90</td>
</tr>
<tr>
<td>U.S.</td>
<td>22.21</td>
<td>2.94</td>
<td>36.0</td>
<td>905.40</td>
<td>5.68</td>
</tr>
</tbody>
</table>

Q: Are teachers compensated for additional time?

In most cases teachers are compensated for additional time. The particulars of teacher compensation for working additional hours are determined at the district level, or in the case of charter schools, at the school level. For traditional district schools, compensation arrangements usually require negotiations between the teachers’ union and the district administration. Staggering teachers’ work schedules, adding staff, and partnering with community-based organizations are also options for consideration.
### Myths vs. Realities

<table>
<thead>
<tr>
<th>Myth</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Adding more time to the school day or year won’t make schools better—it’s just more of the same.”</td>
<td>Thoughtful policy proposals for adding more time and support for learning should call for a redesigned and expanded day that allow schools to rethink from the ground up what they teach and how they teach. More time and support for learning should mean more time for science, social studies, and foreign languages; more effective math and literacy programs; and significantly expanded enrichment courses that engage children and excite them about school, such as art, music, physical education, robotics, drama, and video production. In schools that have added time in a thoughtful manner, teachers can use the extra time to engage students in hands-on projects and use innovative techniques to help them learn. These schools are also better able to teach the diverse learners in each class—allowing them to challenge students who are doing well and better support students who are struggling.</td>
</tr>
<tr>
<td>“More time in school will harm children because they need to have time to just be kids. More time sitting behind a desk is not what children need. Plus, many families simply want their children home in the afternoon.”</td>
<td>With a calendar of 180 six-hour days, children spend only 20 percent of their waking hours in school. There is ample room to add time to the school schedule and still have children spend the majority of their time out of school. For example, expanding the school schedule by 25 percent would increase students’ time in school by just six percent of their total waking hours. Students in schools that have added more time and support for learning often report spending more relaxing time with their families because they can complete most of their homework with assistance during the expanded day. Also, the expanded schedule allows time for more engaging teaching and learning, including hands-on projects, athletics, and apprenticeships.</td>
</tr>
<tr>
<td>“Adding time and support for learning is only for poor, urban schools, or it is a punishment for underperforming schools.”</td>
<td>All students—urban, suburban, and rural—can benefit from a longer school year or an expanded and redesigned school day. In fact, many wealthy parents send their children to private schools that require students to participate in school activities until late afternoon. Every student benefits from additional core academic time and enrichment</td>
</tr>
</tbody>
</table>
Additional time unlocks teachers and students from the confines of a six-hour schedule, enabling schools to provide a learning environment that is stimulating and engaging and addresses all levels and styles of learning. American schools lag behind most industrialized countries and some developing countries in instructional hours per week and total learning hours per year.

Adding time is about redesigning the school day to better prepare all students for life in the 21st century. More time allows schools to implement a richer, more varied schedule that provides a high-quality, well-rounded education to all students, regardless of academic level or socio-economic status.

| “A longer school day will leave my child too tired and bored.” | At many schools, the current schedule with short class periods leaves teachers and students feeling rushed.

An expanded school day provides students with the opportunity to learn at a more reasonable and effective pace and be engaged by the hands-on, project-based learning that expanded learning time affords. In Massachusetts, attendance at schools that have expanded time has improved in part because students are the opposite of bored—they are excited about the significantly expanded enrichment courses in art, music, and physical education. |

| “More time in school will interfere with my child's after-school activities.” | Efforts to expand the school day or year can include partnerships with community-based organizations, including programs that have traditionally been after-school programs. In Massachusetts, these partnerships have led to enrichment classes from which the entire student population benefits, including rock climbing, instrument lessons, art, and swimming. |
Expanded Time and Support for Learning
Model Programs and Local Examples

Below are brief descriptions of selected initiatives to expand learning time across the country.

- **Massachusetts Expanded Learning Time Initiative**

  **Type of Program:** State funded competitive grant program.

  **Summary:** With the help of a local education non-profit, Massachusetts 2020, the state has created a competitive grant program that allows participating districts to add at least 300 hours to the school schedule for a combination of more core academics, more enrichment, and more time for teachers’ collaborative planning and professional development. This program has two phases. A district must first apply and be approved for a planning grant from the state DOE. After receiving a planning grant, the district then works with a small group of its schools to create an implementation plan that details how each school will add time and redesign their educational approach to make better use of that time. If the district’s plan is approved, then each participating school receives $1,300 per pupil to implement expanded learning time.

  **Strengths:**
  - **Teacher and union engagement.** The initiative requires the participation of teachers and union leadership in planning and redesigning the school day and year. Although the level and nature of teacher participation vary across districts, schools in which high quality teachers participate create the most effective redesign and implementation plans.
  - **Innovation.** The additional learning time is so substantial that it requires a school or district to completely rethink how it will approach teaching and staffing in order to use the day most effectively.
  - **Flexibility.** The state has a limited number of requirements, so each school is able to develop an implementation and redesign plan that fits the particular needs of its students, teachers, and communities. This flexibility means that teachers engage in and own the redesign and are energized by the chance to rethink their schools from the ground up.
  - **Accountability.** Schools and districts will only continue to receive funding if they implement their plans effectively and improve student outcomes.
  - **Whole-school approach.** The additional time becomes part of the regular school schedule; all students participate, not just a targeted subset.

  **Scope:** In FY 2008, Massachusetts has allocated $13 million for this initiative. That is double the FY 2007 allocation and will allow a total of 19 schools serving nearly 10,000 students to add 300 hours to the school schedule. Presently, 50 additional schools are planning for implementation in fall 2009.
- **Miami-Dade County’s School Improvement Zone**

**Type of Program:** District-led effort to improve underperforming schools.

**Summary:** Miami-Dade’s School Improvement Zone uses an extended school day and year as a central component of a comprehensive approach to improving the performance of 39 underperforming schools (20 elementary, 11 middle schools, and eight high schools). These schools have added time to the school day for all students—plus an extra period for low-performing students—and extended the school year by seven days.

The district is also working extensively with these schools to implement revamped and standardized literacy and math curricula, site-specific benchmark assessments, a culture of rigor and high-achievement, small-group tutoring for underperforming students, double periods in math and reading, and additional staffing to support English language learners and special education students. Other highlights include block scheduling, school-based professional development for teachers and principals, and additional compensation for teachers.

**Strengths:**

- **District support and leadership.** The superintendent of Miami-Dade County Public Schools (M-DCPS) has made the Zone Schools one of his highest priorities. This support is evident in the funding that has been provided for implementing the Zone plan, as well as the support provided to these schools for professional development, curriculum, and staffing.

- **Student support.** The Zone schools are using the additional time to provide much greater academic and personal support to all students—in particular the students who are struggling the most. This support is varied and includes tutoring, small class sizes, and differentiated instruction tailored to a student’s academic needs.

- **Clear expectations.** The district has set clear objectives for each school in terms of instruction, expectations for students, student support, teacher collaboration, and student outcomes. This clarity serves to focus the school and its staff on doing what is essential to improve student achievement.

- **Feeder pattern.** The participating schools are arranged in a feeder pattern so that students from Zone elementary schools move on to Zone middle schools and in turn, Zone high schools. Therefore, by the time a student graduates from high school, he or she will have experienced a great deal of additional learning time.

**Scope:** The initiative began in January 2005 and serves nearly 45,000 students, 12 percent of Miami-Dade County Public Schools’ student population.
Charter schools (including KIPP and Achievement First)

**Type of Program:** Publicly funded charter schools that use more time than the typical six-hour, 180-day schedule to accomplish their mission.

**Summary:** The vast majority of charter schools (upwards of 80 percent in states such as New Jersey, Illinois, and Massachusetts) have added time beyond the typical schedule of 32.5 hours per week (6.5 hours per day). The lessons learned from charter schools and how they use additional time can be instructive to schools around the nation.

Some charter schools, including the Knowledge is Power Program (KIPP) and Achievement First schools, offer as much as 25 to 60 percent more learning time than the traditional school schedule. The additional time allows them to accelerate learning so that students who are below grade level can become prepared for high school and college. The additional time allows these schools to offer more remediation (which leads to more high-level courses), more enrichment, and more opportunities to develop a culture of high expectations. Charter schools around the country have been able to offer longer days, Saturday classes, and mandatory summer programs for remediation and acceleration.

**Strengths:**
- **Flexibility and autonomy.** By design, charter schools typically have control over their own schedules and can create and adjust the school day and year as they see fit. This gives them a tremendous advantage over the vast majority of public schools that are governed by district schedules, transportation schedules, and labor agreements that stipulate start and end times.

- **Starting from scratch.** Many charter schools started from scratch and built in additional time and support for learning from day one. In many ways, starting with more time from the inception is easier than converting a school with an existing schedule into one with expanded time, especially with regard to staffing and family schedules. Teachers and parents often choose these schools in part because of their expanded schedules.

- **Applying lessons learned to traditional public schools.** The lessons learned by charter schools on how to use additional time, how to fund it, and how to incorporate additional teacher and student support into an expanded schedule will be very instructive to traditional schools. In fact, the use of time may be the first area in which charters have a significant impact on the operation of district-based public schools.

**Scope:** In the 2006-2007 school year, there were more than 4,000 charter schools in the nation serving more than 1.1 million students. A recent survey by the Center for Education Reform found that 32 percent of charter schools feature an expanded day or year. (The study can be found at [www.edreform.com/_upload/cer_charter_survey.pdf](http://www.edreform.com/_upload/cer_charter_survey.pdf))
New Mexico’s K-3 Plus Pilot Project

Type of Program: State funded competitive grant program.

Summary: The New Mexico K-3 Plus project seeks to improve the literacy, numeracy, and social skills of students in grades K-3 by adding at least 25 instructional days to the school calendar in high-poverty schools. Launched in 2003 as a small pilot that added time just for kindergartners in four districts, the New Mexico project is expanding this fall to include grades K-3. It will run through 2013. The purpose of the program is to demonstrate that increased time in kindergarten and the early grades narrows the achievement gap between disadvantaged students and other students, increases cognitive skills, and leads to higher test scores for all participants.\(^8\) In order to take part, eligible schools must have an approved full-day kindergarten literacy program in effect at the time of application.

Strengths:

- **Targeted.** The New Mexico initiative is focused on helping the highest-poverty schools, in which 85 percent or more of students are eligible for free or reduced-price lunch.

- **Assessment and evaluation.** Because the K-3 Plus program is designed to be a longitudinal study of the impact of a longer school year on disadvantaged students, all participating schools must administer the DIBELS (a literacy assessment) in order to gauge the effect of the initiative. Schools can use additional evaluation methods, but DIBELS serves as the common assessment for evaluation of the initiative’s results.

- **Starting small and growing.** The initiative was first tested at the kindergarten level in just four districts. Based on the successful outcomes in those districts, legislative champions were able to gain support for expansion to a much larger six-year pilot that includes grades K-3.

- **Sustained funding.** All participating districts and schools are guaranteed funding for their K-3 Plus programs for six years (through the 2012-2013 school year).

Scope: New Mexico’s K-3 Plus Project began in 2003 as a $400,000 initiative serving four districts. This year the project will expand to a $7 million, six-year pilot serving approximately 360 classrooms across the state.
Expanded Time and Support for Learning
Selected Research on Time and Support

**Expanded Time for Learning**

The articles described below represent some of the more pivotal or comprehensive research on the relationship between educational time and student outcomes. Together, they form a persuasive argument that additional time can have an enormous impact on learning outcomes. They also make clear that additional time must be used well in order to produce better outcomes for students.


The researchers tracked kindergarteners from four 180-day magnet schools and from a year-round magnet school with a 210-day school year.

Change-score analyses revealed that extended year students made significantly more progress in mathematics than their peers from the beginning of kindergarten to the beginning of first grade. Extended year and traditional calendar students made similar progress during the traditional kindergarten year, but over the three month summer break the extended year students made approximately four months' progress, while the traditional students advanced only two months. The gap in achievement between the two groups was due entirely to the dosage of their schooling. Extended year students made similar gains in reading, again advancing beyond their traditional schedule peers during the summer. Moreover, students who received more schooling showed much higher self-esteem with regards to academics after the summer.


A number of research studies have shown that low-income students fall behind their more affluent peers when they are not in school over the summer. Alexander, Entwisle, and Olson followed several hundred randomly selected Baltimore students through elementary school, examining performance on reading comprehension tests given twice per year—one in the spring and once in the fall. Their research showed that, during elementary school, low-income students actually lose ground, scoring somewhat lower on reading tests after they have been out of school for several months.


This group of researchers asked teachers to keep “time diaries” to collect data on how time is spent in elementary schools across a variety of types of schools. The authors found that the length of the school day, as well as the time spent in academics and in enrichment activities, varies by the student body. White students are more likely to have a longer...
school day than African-American students and white students are significantly more likely to have enrichment activities and recess than African-American students.


McREL conducted this study to examine how well state standards align with the time actually available to teach those standards. Surveying four teams of seasoned teachers (averaging 18 years of experience) across three states (Colorado, Wyoming, and North Dakota), McREL asked each team to determine how many hours it would take to enable students to reach proficiency in each specific state learning standard in the language arts, civics, mathematics, and science across four grade levels—second, fifth, eighth, and 12th.

The study revealed that the teachers themselves believed that there are insufficient instructional hours available in three of the four grades to teach enough to enable students to achieve proficiency on state learning standards.


This report analyzes the effective practices of eight public schools that provide at least 15 percent more time than the conventional schedule. The study aimed to understand how these schools—which were chosen specifically because they had demonstrated success—managed to organize, staff, pay for, and sustain a school built around more time; and how educators felt the additional time strengthened their capacity to enable all students to achieve proficiency. The report also makes clear that the additional time is effective because important characteristics are present in each school, such as high-quality teaching and high-capacity leadership.


While not focused on time per se, this authoritative study on the components of a high-quality education suggests that when schools design educational programs, they must seriously consider how they allot time. As the authors write, “Providing students with time to learn also includes providing enough time for them to process information. [...] The implication is that learning cannot be rushed; the complex cognitive activity of information integration requires time.”

Additional Support for Students

Research has shown that American students are not receiving the support they need to graduate from high school prepared for college, careers, and life. The benefits of providing additional support are tremendous.

This study examined a federal database with information on 11,000 students who attended more than 1,000 high schools in the early 1990s. Students were asked how much support they received from teachers, and teachers reported on how much guidance they were able to give students.

The study found that providing adequate support and guidance to students reduces the probability of dropping out by nearly half. It also found that students from all social backgrounds, including the middle class, benefit from greater support. However, support is most critical for students who come from disadvantaged backgrounds or who had struggled academically in the past—those most at risk of dropping out in the first place.


The testing company ACT, Inc. conducted an extensive survey of nearly 3,000 middle and high school students in six different states.

The results revealed that many students need more help from schools to effectively plan for the future. Too many students don't start thinking about their post-high school plans early enough, and those who do may not be taking the right classes to prepare to meet their goals.

Close to one-fourth (22 percent) of eighth and ninth grade respondents had not yet even thought about their post-high school plans, let alone planned a program of study to help them meet their goals. In addition, only two-thirds of the students who were planning to attend college said they were taking a college preparatory program of study in high school. Nearly one in three had not even begun to consider ways to finance college or training.

The ACT report recommends that school districts set up a formal program to help students develop a college-readiness plan starting in middle school. It urges schools to work with all students and their parents, explaining to them the importance of taking a challenging curriculum and the effect it can have on their future educational, career, and income options. It also recommends that schools work with families to calculate college costs and develop a plan to meet those costs.
Time and Support for Learning
Additional Resources


End Notes

1 Remarks delivered by U.S. Secretary of Labor Elaine L. Chao at the Economic Club of America in Miami, Florida, Wednesday, May 31, 2006. Available at http://www.dol.gov/sec/media/speeches/20060531_miami.htm

2 ACT, Inc. (2006). Ready for college or ready for work: Same or different? Iowa City, IA: Author.


Education Week. (2000). Quality counts 2000: Who should teach? Bethesda, MD: Author. The findings are based on an Education Week analysis of data from the federal Baccalaureate and Beyond study.


Based on calculations by Lewis Solmon of the National Institute for Excellence in Teaching.


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Cognitive scientists have found that learning is most likely to endure when students have the opportunity to encounter subject material through a mixture of learning contexts and media. Such contextual variety is more likely to occur when the time is available to engage in several separate, but related and mutually reinforcing, activities. See Bransford, J.D., et al., eds. (2000). *How people learn: Brain, mind, experience and school*. Washington, DC: National Academy Press. (pp. 58–62)


Miami-Dade Public School District. [www.dadeschools.net](http://www.dadeschools.net)

American Federation of Teachers, [www.aft.org](http://www.aft.org)


National Alliance for Public Charter Schools, [www.publiccharters.org](http://www.publiccharters.org)

New Mexico Public Education Department, [www.ped.state.nm.us](http://www.ped.state.nm.us)