



# Policy Matters

Setting and Measuring Benchmarks for State Policies

## RAISING EDUCATIONAL ACHIEVEMENT

*A Discussion Paper for the Policy Matters Project*

# POLICY MATTERS: Setting and Measuring Benchmarks for State Policies

## Raising Educational Achievement: Recommendations for State Policy

A DISCUSSION PAPER FOR THE *POLICY MATTERS* PROJECT

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for the  
Study  
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# Preface

## About the Policy Matters Project

*Policy Matters* is an initiative of the Center for the Study of Social Policy in collaboration with the National Center for Children in Poverty (NCCP) and Child Trends. The *Policy Matters* project is designed to develop and make available coherent, comprehensive information regarding the strength and adequacy of state policies affecting children, families, and communities. The project seeks to establish consensus among policy experts and state leaders regarding the mix of policies believed to offer the best opportunity for improving child and family well-being. A series of policy briefs, policy papers, guides for self-assessment, and 50-state comparative reports are envisioned. The project focuses on six core results: school readiness, educational success, family economic success, healthy families, youth development, and strong family relationships. These six core results comprise one composite of a family-strengthening policy agenda.

## About This Paper

This paper presents a framework for policies and policy benchmarks aimed at improving the educational achievement of children and young adults. This framework is intended to help states think strategically about policy decisions that create educational opportunities for families, and to contribute to a national consensus on policy directions for those interested in promoting better educational outcomes.

Although educational achievement may be attained in many ways, this paper examines a combination of essential factors: teacher quality, school quality, student achievement, post-secondary education, and education finance. Section I discusses the current challenges to elementary, secondary, and post-secondary education across the states. Section II sums up the implications of the current state of American education for state policymaking. Section III presents a framework and policy logic model for a policy agenda to improve educational outcomes for children, youth, and young adults. Section IV details the policy options and preliminary benchmarks that research and practice evidence suggest can promote educational achievement for students from low-income families. For each set of policies, this paper presents a statement of the strategic policy objective, specific policy recommendations, and suggested benchmarks for each recommendation.

Taken together, the policies identified here present a powerful and compelling agenda for improving educational outcomes leading to well-rounded, conscientious, and competitive citizens. While other policy remedies are possible, this paper limits its focus to those policies more fundamental to educational achievement and with greater evidence supporting their effectiveness. Over time, recommendations and benchmarks will be improved, as more research and practice evidence is available. Future benchmarks may be modified to allow consistent tracking of state progress and to overcome data limitations. Thus, this paper presents a preliminary set of benchmarks. In the future, *Policy Matters* intends to assess states' progress toward meeting those benchmarks that more effectively and directly benefit low-income families and children.

This paper is offered as an invitation for further deliberation and action regarding policies leading to student educational achievement. It represents a beginning consensus among the experts involved in the educational achievement workgroup and those who have given written and verbal feedback to the paper. In the future, through multiple and broadly inclusive discussions with state and national policymakers, administrators, practitioners, and advocates, the project hopes to expand this initial consensus to a national, bi-partisan consensus on policy directions for those interested in promoting positive educational outcomes.

## About the Partners

The Center for the Study of Social Policy is a non-profit, non-partisan policy organization located in Washington, D.C. The Center's mission is to promote policies and practices that improve the living conditions and opportunities of low-income and other disadvantaged persons. The Center works in partnership with federal, state, and local governments and communities to shape new ideas for public policy, to provide technical assistance to states and communities, and to develop and lead networks of innovators.

While CSSP developed and authored this report, work on the *Policy Matters* project has expanded to include two additional partners.

The National Center for Children in Poverty (NCCP) identifies and promotes strategies that prevent child poverty in the United States and that improve the lives of low-income children and their families. NCCP designs and conducts field-based studies to identify programs, policies, and practices that work best for young children and their families living in poverty. NCCP further advances its mission by disseminating information about early childhood care and education, child health, and family and community support to government officials, private organizations, and child advocates, and provides a state and local perspective on relevant national issues.

Child Trends is a non-profit, non-partisan research organization dedicated to improving the lives of children by conducting research and providing science-based information to improve the decisions, programs, and policies that affect children. In advancing this mission, Child Trends collects and analyzes data; conducts, synthesizes, and disseminates research; designs and evaluates programs; and develops and tests promising approaches to research in the field. Child Trends has achieved a reputation as one of the nation's leading sources of credible data and high-quality research on children.



# Raising Educational Achievement:

## RECOMMENDATIONS FOR STATE POLICY

### 1 Background

Public elementary and secondary education is the only universal domestic service supported by United States taxpayers. Every state requires mandatory attendance of students, usually from age 6 through ages 16 or 18. The amount and quality of education received by a young adult has a direct effect on his or her ability to obtain and retain a job with potential for growth in responsibility and compensation, to form a healthy family, and to be a contributing member of the community. For example, over the past 20 years, in constant dollars, income has declined for men with fewer than four years of post-secondary education.<sup>1</sup> Because of its importance to our nation's well being, improving the quality of public education has been a top concern of the American public and a high priority of state and federal officials.

Because education in the United States is highly decentralized and comprised of both public and private providers, actually improving the entire system is a complex and sizeable challenge. The blend of public and private agencies, state to district to local authority, varying funding sources, growing student diversity, and disconnected secondary and post-secondary institutions all contribute to the difficulty of improving educational quality and student achievement. To advance student achievement, state policymakers must craft policies that overcome these challenges. In addition, the state policymaker must respond to federal policy decisions that have significant policy and practice implications on education and local schools.

Although the federal government contributes only about eight to nine percent of the costs of public elementary and secondary education costs, its policy effects on both state and local education are much greater than the proportion of federal funds might indicate. This disproportional effect occurs because federal education funds for elementary and secondary education are highly targeted to low-income students, and federal laws place many conditions on school systems that accept these funds. Because federal requirements have varying policy implications for different levels of public education, presentation of background information is divided into elementary and secondary education and post-secondary education.

## **Public Elementary and Secondary Education**

The challenges facing the states' primary and secondary education systems are associated with changes in the demographic profile of school enrollment, gaps in achievement among various population groups, problems with teacher quality and financial resource allocations, and current reforms that call for major shifts in how schools perform their educational missions.

### ***Enrollment***

Both public and private school enrollment is growing dramatically in the United States, and increasing proportions of students are from racial and ethnic minority groups whose families historically have had the highest rates of poverty. Four states – California, Mississippi, New Mexico, and Texas – already have public school student enrollments where racial and ethnic minority students comprise the majority of enrollees.<sup>2</sup> Indeed, student diversity is increasing in all states.

The nation's schools also serve a growing number of immigrant students and English language learners (so-called "limited English proficient students"). In the 1997-98 school year, almost 3.5 million students, or about eight percent of the total public school enrollment, were English language learners (ELLs). Two-thirds were in elementary schools. These students were concentrated in certain states, with California (25 percent), New Mexico (23 percent), Alaska (17 percent), Arizona (14 percent), and Texas (13 percent) enrolling the greatest proportion of their students as ELLs.<sup>3</sup> ELLs are also concentrated in urban school districts, with over 36 districts (over half of which are in California) enrolling 10,000 or more ELLs in the 1998-99 school year.<sup>4</sup>

While two-thirds of ELL students are native born and are currently enrolled in elementary schools, increased enrollment of immigrant students poses a growing challenge at the middle and high school levels. Immigrant students make up a larger proportion of high school students (5.7 percent) than elementary school students (3.5 percent) and vary in language background, prior education, country of origin, and poverty status. Most come from Latin America, Asia, and the Caribbean (80

percent), speak Spanish (75 percent), and are poor. An estimated 10 to 20 percent of immigrant students have had interrupted schooling of up to two years.<sup>5</sup> These significant changes in student diversity require states to respond with increased sensitivity to student needs and provide more intense academic supports in some cases.

### *The Achievement Gap*

Despite years of education reform efforts, a majority of American students do not perform at proficient levels in reading, math, science, and other subjects. For example, only 32 percent of fourth graders were proficient or advanced readers in 2000, up from 29 percent in 1992. The other two-thirds read at basic or below basic levels. In 1998, the last year in which eighth graders were tested nationally, only 33 percent were proficient or advanced readers, again up from 29 percent in 1992. The news is comparable in math and science.<sup>6</sup>

Disparities in achievement by race, ethnicity, and family income cause special concern. On national reading and math tests, two-thirds of African American, Hispanic, and low-income students in the fourth and eighth grades perform below the basic level.<sup>7</sup> In response to these disparities, national and state leaders have launched numerous efforts to close achievement gaps.

## **EXAMINING THE ACHIEVEMENT GAP USING NAEP SCORES**

While some limited progress in closing achievement gaps occurred between 1971 and 1990, the differences in student performance among African American, Latino, and white students and between low-income and more affluent students remain large. The National Assessment of Educational Progress (NAEP) tests tell the story over time, revealing that achievement gaps grow as students progress through school.<sup>8</sup> By the end of their school careers, 17-year-old African American and Latino students read and do math at the same level as 13-year-old white students.<sup>9</sup>

States differ significantly in how their minority and low-income students perform on NAEP tests and the size of their achievement gap. For example, on the 1998 NAEP reading test for fourth graders, African American students scored higher in Connecticut than in any other state, but so did Connecticut's white students. And despite higher scores for Connecticut's African-American children, Connecticut still had one of the largest achievement gaps of any state by race and ethnicity. States with small achievement gaps include Hawaii, Kansas, Maine, and West Virginia.<sup>10</sup>

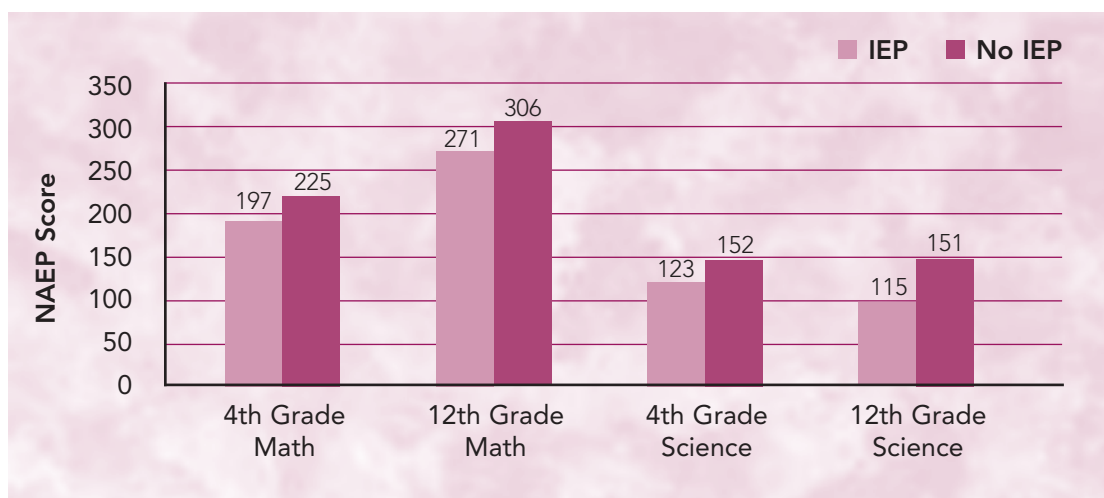
NAEP results make it clear that African American and Latino students do much better in some states than in others. In 1998, African American students in Texas wrote as well or better than white students in seven other states. While Latino scores on the 1998 fourth-grade NAEP reading test declined nationally, in Connecticut they soared. If the entire nation had done as well as Connecticut fourth graders, the national reading gap between white and Latinos would have been cut in half.<sup>11</sup>

David Grissmer and his colleagues at the Rand Corporation examined state NAEP scores over several years. They found striking differences in African American student performance among states, with African American family characteristics explaining little of the distribution and state per-pupil expenditure variations having a positive, but insignificant effect.<sup>12</sup>

Another important way to look at state variations on NAEP tests is to perform analyses that hold constant the variations from state-to-state in family characteristics like minority status, family income, and parents' education. The results are dramatic. While both Texas and California now have majority minority student enrollments, when these and other family characteristics are excluded as factors of test score results, Texas is the highest performing state and California the lowest. If family characteristics are not held constant, raw NAEP scores generally show northern rural states with the highest scores and southern states and California with the lowest.<sup>13</sup>

There is one more troubling achievement gap – the gap between students with and without disabilities. While most students with disabilities experience conditions that do not severely impair cognition, the gap in achievement with their general education peers is often stark (see Figure 1). For example, the 1996 NAEP scores in mathematics reveal a 28-point gap (with ten points equaling one year) in performance among fourth grade students with and without an individualized education plan (IEP) that increases to 36 points among twelfth graders. Results from the 1996 NAEP in science reveal a similar gap: a 28-point gap among fourth graders with and without an IEP that increases to 36 points among twelfth graders. Gaps in achievement also occur among students with disabilities by ethnic group. In particular, white students with IEPs score on average 18 to 33 points higher than minorities with disabilities on the NAEP math assessments and 27 to 30 points higher on NAEP science assessments across fourth through twelfth grades.<sup>14</sup>

Figure 1. Comparison of Student Achievement on 1996 NAEP Scores for Math and Science for Students with and without IEPs



### *The Teacher Quality Gap*

The nation also faces a “teacher quality gap” that contributes significantly to disparities in educational outcomes. Most U.S. students experience differences in teacher quality based primarily on whether they live in urban, rural, or suburban neighborhoods and on their race, ethnicity, primary language, and family income. For example, students in schools with enrollments of mostly low-income or minority students are about twice as likely to have inexperienced and/or under-qualified teachers. An analysis of federal data by the Education Trust found that students in high-poverty high schools are more likely in every subject area to be taught by teachers who lack even the equivalent of a minor in the subjects they teach.<sup>15</sup>

### *The Resource Gap*

Despite numerous court cases, financial investments in most states continue to be skewed toward more affluent students and neighborhoods. They typically have the best-equipped schools and offer teachers the best working conditions, even though researchers and policymakers concede that low-income students need greater resource investments to reach the same educational outcomes as their more advantaged peers. The U.S. General Accounting Office (GAO) reports greater equity in the distribution of federal funds than state funds. They found that federal funding was more targeted to low-income students than state funding was in 45 of 47 states.<sup>16</sup>

### *Standards-based Reform*

For over a decade, educators at all levels have put in place a standards-based framework for education reform. Federal legislation enacted in 1994, the Goals 2000 legislation, and the reauthorization of the Elementary and Secondary Education Act established the foundation for implementation of standards-based reform at the state and local levels. However, states implemented the basic principles of these laws unevenly. The No Child Left Behind Act of 2001 (NCLB Act) builds upon and makes significant changes to the 1994 laws, places greater emphasis on accountability, and greatly increases funding for the 2002-03 school year (For a brief outline of the NCLB Act, see Appendix A).

### *Testing*

Two of the most controversial aspects of the standards-based reform framework are: (1) the use of student tests to gauge individual student and school progress and (2) the use of tests to compare district and state performance. Student tests and public analysis of the results have existed for decades. However, the greater consequences attached to current tests and their measurement of student performance against standards are relatively new. These greater consequences have led to the use of the term “high stakes,” connoting the potentially serious rewards or sanctions for students, schools, and teachers.

The NCLB Act toughens testing requirements. It requires state testing in grades three through eight and defines more precisely the measure of “adequate yearly progress” that schools and districts must make to avoid identification as a school or district in need of improvement. In the past, districts and states primarily used norm-referenced tests to measure student performance.

## **STANDARDS-BASED EDUCATION REFORM: THE BASICS**

The tenets of the standards-based education framework begin with the belief, stated in federal policy, that all students can learn at high levels if taught to high levels. The elements of standards-based reform begin to take shape when state and local educators and community members reach consensus on “what students should know and be able to do,” develop a set of specific and challenging subject content standards, and develop student academic achievement standards based upon that consensus. State and local educators then must put in place a rigorous curriculum, aligned with the standards, for all students. The challenging curriculum must be designed to ensure that students are actually taught what they are expected to know.

The standards framework continues with the premise that everyone participating in the education enterprise—students, teachers, schools and district administrators, and state officials—should be held accountable for reaching a measurable level of performance and accomplishment. Longitudinal analysis of student and school performance on student tests primarily determine educational success. Rewards and sanctions, based on degrees of progress and success, follow for both students and schools.

An important element in the standards-based framework is the provision of expert assistance to students and schools that need significant improvement. Many schools provide extended learning opportunities for struggling students after school and during the summer. The NCLB Act also calls for every state and district to have a system of help available to failing and struggling schools.

Researchers agree that turning around low-performing schools requires a whole-school, comprehensive approach to reform, and Congress recognized this in 1998 when it enacted the Comprehensive School Reform Demonstration (CSRD). The CSRD is a state-administered initiative that provides increased funds for schools that adopt intensive and comprehensive reform approaches based on scientific research.

Norm-referenced tests are not very useful, however. Even if students perform above average on norm-referenced tests, students in poor performing schools, districts, or states could still fall far below the standard of needed knowledge for success in the next grade, in college, or in a good job. For years, norm-referenced testing systems have allowed students, their families, and community members to believe that their

schools were adequate. But research has documented this distortion by showing that an “A” in high poverty schools is equivalent to a “C” in affluent schools.<sup>17</sup> Yet, many school districts continue to use norm-referenced tests in addition to newer standards-based tests or assessments – increasing the number of tests students must take.

Another endemic problem with student testing has been the failure to disaggregate results by subgroups of students—such as minority status, income level, limited English proficiency, gender, and disability. The failure to disaggregate test results has masked the fact that many students are being left behind, particularly in schools and districts where overall test results are favorable. A few states, notably Texas, have publicly reported disaggregated data for each school for several years. Under the NCLB Act all states must report disaggregated testing data by school and district beginning with the 2002-2003 school year.

Many states that have put in place standards-based tests and reported results by subgroups have also ended the practice of “social promotion.” “Social promotion” describes the process of passing students on to the next grade or even giving them a high school diploma, even though they have not learned what they should have in order to progress to the next grade level. This has been a particular concern for poor and minority students, who may leave high school with a diploma but without the skills it represents.

Tests are also “high stakes” for teachers, principals, and district superintendents. Student test results determine whether schools and their employees are rewarded with increased funds, offered help in the form of additional professional development opportunities if the school needs to improve, or sanctioned. Such sanctions sometimes include reconstitution—the removal and replacement of current teachers and administrators.

The NCLB Act allows states to design their own standards and corresponding tests. However, for the first time, Congress has set up a way to compare student achievement across all states. Each state will be required to participate in the National Assessment of Educational Progress (NAEP) biannual reading and math tests in order to measure whether results reported on state tests are confirmed by NAEP results.

### *Charter and Nontraditional Schools*

A relatively recent development in American education has been the creation of charter schools and nontraditional schools that offer a menu of learning options. Because these schools receive federal and state dollars, they also must comply with the standards-based requirements previously described, a fact that has led to controversy about whether these schools should be held accountable for student achievement gains. In addition, these schools, particularly nontraditional schools, often do not receive a fair share of state and local formula funds based on student enrollment and are, consequently, under-funded.

### *Safe and Supportive Schools*

Safe and supportive learning environments are critical for students' educational success. The U.S. Department of Education reports that violence in schools has declined over the past decade. But despite the fact that schools have always been and remain one of the safest places for children, public perception is that schools have become more dangerous.

Student "connectedness" to schools is closely related to feeling safe and supported in school. In 1993, Congress mandated the first national study of adolescent health designed to measure the social settings of adolescent lives, the ways in which adolescents connect to their social world, and the influences of these social settings and connections to their health. The resulting study, the National Longitudinal Study of Adolescent Health (the Add Health Study), examined schools as one social factor affecting adolescents and found school connectedness to be the one factor associated with lower prevalence of every risky youth behavior (e.g., drug abuse, early and unprotected sex, and poor nutrition) and increased emotional well-being.<sup>18</sup> Feelings of school connectedness did not vary by race or ethnicity, gender, school level, or location (rural, urban, or suburban).

However, the Add Health Study did *not* find that feeling connected to school alone leads directly to high achievement in school; some disconnected students actually do well in school. The relationship between school connectedness and higher academic achievement appears to be mediated by the effect of school connectedness on risky behavior and well-being. There is evidence that when programs are implemented to improve student academic performance, students who are more connected demonstrate greater responsiveness to the programs.<sup>19</sup>

### *Schools Connected to Their Communities*

The notion that schools must be connected more formally to their students' families and their surrounding communities has gained significant attention. These connections may take many forms. For example, schools often work with parents on how they can support their children's learning. Sometimes such schools offer adult education courses as well. Many businesses have formed partnerships with high schools, particularly to co-sponsor "school-to-work" learning and employment programs for youth. And, community-based organizations frequently partner with schools to provide extended learning programs.

Community schools are another effort to connect schools to their surrounding communities. The national Coalition for Community Schools describes community schools as sets of partnerships and places "where services, supports, and opportunities lead to improved student learning, stronger families and healthier communities." By using public schools as a hub, many partners offer a range of activities for students, families, and neighbors before, during, and after school, seven days a week.<sup>20</sup>

## **Parent Engagement**

Student learning takes place in multiple environments – in their homes as well as their schools and communities. Research has documented that under-educated parents can support their children’s learning, reaching positive results comparable to those for children of more educated parents. Parental involvement and expectations are critical to student success and achievement. Parents need to create a comfortable environment for learning, have high expectations for their children’s education, help their children set goals and plan steps for success, and help children organize their time and activities effectively.<sup>21</sup>

Clark also discovered that low-achieving students spend most of their out-of-school time on activities of little educational benefit to them, while high-achieving students engage in more activities that reinforce what they learned in school. He identified specific out-of-school activities that positively affect the in-school achievement of low-income students. These “high-yield learning activities” include discussions with knowledgeable adults, including parents; leisure reading (e.g., teen magazines or sports pages); writing activities (e.g., journals or phone messages); homework help and study; helping others (e.g., chores or community service); and playing games that use cognitive skills (e.g., Monopoly or Scrabble).<sup>22</sup>

With so many factors affecting public secondary education, state policymakers must be strategic about the education policies they craft. Clarity about the aims and philosophy of education, and an understanding of the positive and unintended negative effects of policy decisions, is critical.

## **Post-Secondary Education**

Today, a post-secondary degree is necessary for individuals to establish a middle class lifestyle. Historically, access to higher education has not been seen as a right or a requirement, as has elementary and secondary education. A growing consensus, however, recognizes the public benefits conferred by having a substantial portion of the adult population with post-secondary degrees. College-educated adults are more likely to achieve full economic security for themselves and their families. They participate more consistently in community affairs and are more likely to be voters in public elections. College graduates have greater access to health and educational resources for themselves and their children. In general, success in post-secondary education provides a way for individuals to move up through the socioeconomic strata of society.

Initial post-secondary degrees include two- or three-year associate degrees from public community colleges, certified credentials from public or private technical schools, and four-year bachelor’s degrees from public and private colleges and universities. However, with the exception of future income by job categories, a growing body of research raises questions about the quality of post-secondary education and student results. This research generally focuses on access, attainment, and financing.

### *Post-Secondary Entry and Completion Rates*

While high school completion rates have increased dramatically over the past century, and the completion rate gap has shrunk between minority and nonminority youth, the gaps in college entry and college completion rates remain large among racial, ethnic, and income groups. A majority of African American and white high school graduates go on to college, but at different rates (62 percent and 69 percent respectively), while fewer than half (47 percent) of Latinos do so.<sup>23</sup> Significant variations exist by state. For example, in 1998, 41 percent of white 18- to 24-year-olds in Illinois were enrolled in college compared to only 24 percent from minority groups. In Alabama, 61 percent of 18- to 24-year-olds from high-income families were enrolled in college, as compared to only 27 percent of students from low-income families.<sup>24</sup>

College completion rates display even greater variance. Large proportions of college freshmen do not return for their sophomore year – 26 percent at four-year colleges and 45 percent at two-year colleges in 1998.<sup>25</sup> In 1998, half (52 percent) of full-time, first-time freshmen at four-year colleges earned a bachelor's degree within five years. State completion rates ranged from Vermont's high of 68 percent to a low of 28 percent in Louisiana. Only 7 percent of 24-year-olds from low-income families had college degrees in 1997 compared with 48 percent from high-income families.<sup>26</sup>

Disparities also exist in enrollment patterns between two- and four-year institutions, particularly for whites and Hispanics. In 1999, white students comprised 75 percent of four-year institution enrollment and 67 percent of two-year institution enrollment; African Americans were 11 percent and 12 percent respectively at these institutions; and Hispanics were 6 percent and 13 percent respectively.<sup>27</sup>

Two major factors – inadequacies in K-12 preparation and affordability – account for disparities in post-secondary enrollment and completion. Inadequate preparation is demonstrated by the fact that one-half of all students must take remedial courses in college. Affordability of higher education depends primarily on tuition levels, the level of financial aid from federal and state governments, and individual institutional decisions. Tuition, financial aid, and institutional decisions vary widely by state. For example, in Mississippi, tuition costs at community colleges are 19 percent of income for a typical low-income family, while in New York the tuition costs are 30 percent of family income.<sup>28</sup>

### *Inequities in Post-Secondary Financial Aid*

More discouraging than tuition inequities are trends in financial aid that do not favor low-income students. Not only has growth in federal and state financial aid not kept up with growth rates in tuition, but financial aid to relatively well-off students has grown. For example, in 1981, states distributed 91 percent of their financial aid on the basis of need or need in combination with academic qualifications. By 1999, need-based distribution of financial aid had dropped to 78 percent.<sup>29</sup> In addition,

state trends toward tax credits and other “breaks” like prepaid tuition, mostly benefit middle- and upper-income families, leaving low-income students with fewer resources for getting a college education.

### *Adult Literacy*

Adult literacy is another important post-secondary education issue. While there is little consensus on definitions of “illiteracy” or “functional illiteracy,” the National Adult Literacy Survey, most recently completed in 1992, provides insight into relative literacy among adults. The survey measured five levels of literacy with 21 to 23 percent of respondents demonstrating the lowest skill levels and 25 to 28 percent the second lowest. Of those scoring in the lowest level, nearly two-thirds had dropped out of high school and 25 percent were immigrants.<sup>30</sup> Adult literacy programs are continually under-funded, with long waiting lists common in many parts of the country.

### *Trends in Student Transition to Post-Secondary Education*

Several relatively new, positive developments may improve transition to college and the delivery of post-secondary education. First, a growing number of high school students begin college before completing the traditional twelfth grade. They enroll “dually” in high school, attend “middle college” programs, or participate in “tech prep” programs. These opportunities provide many students with a more gradual exposure to the demands of post-secondary environments. Second, the increasing use of educational technology enables institutions to overcome place-based limitations and combines distance learning and short classroom educational approaches. Third, teacher preparation is being completed in various ways. For example, some states, like Texas, now prepare new teachers outside of university schools of education. These new teachers are prepared in community colleges—for college graduates changing careers—and in school district-operated education training programs.

Making post-secondary education accessible and affordable, and helping students succeed at college, are major challenges for state educators and policymakers. In many respects, the success of post-secondary education is not solely up to the post-secondary system. Success at higher education institutions depends, in part, on policy efforts to strengthen public elementary and secondary systems and to align those systems with the requirements for post-secondary education.



# Summing Up:

## THE EDUCATION POLICY CONTEXT

**2** Three factors tend to shape education policy decisions at the state level. First, federal policy plays a significant role in determining the general parameters of many education-related policy decisions. Second, state education policy is influenced by trends in research and current education theory. Third, state education policy is shaped by the particular needs present in the state. Examples of these factors and their impact on the education policy context are discussed below.

### *Federal Legislation and State Education Policy*

One way the federal and state policy context affects education is through the required measurement of education success and quality, particularly for elementary and secondary education. Under the NCLB Act, states must report annually, in much more detail, about student achievement, teacher quality, and the quality of teacher professional development. Other important measures—e.g., class size, resource expenditures, high school graduation rates, and college entrance and completion—are also required. States are beginning to track improvements over time. Eventually, it will be possible to compare strengths, weaknesses, and inconsistencies among states in policy implementation and outcomes, especially at the elementary and secondary levels.

### *Education Research and Its Implication for Education Policy*

Findings from educational research also help shape the context in which state education policy decisions are made. For example, research can answer some questions about what leads directly to education success. Over 20 years ago, Ron Edmonds identified correlates for school success that have held up over time. They include strong instructional leadership from principals; high expectations for students; teacher behaviors that convey these high expectations; a pervasive and broadly understood instructional focus; a safe, orderly climate conducive to teaching and learning; and use of pupil achievement measures as the basis of program evaluation. These findings are instructive for state policy.

A recent American Youth Policy Forum (AYPF) report on raising minority academic achievement analyzed and summarized the results of a 22-month examination of successful efforts used by districts or schools. AYPF found that no single strategy was responsible for positive outcomes. Rather, the report concluded that successful programs undertook a comprehensive set of strategies to achieve these results. The strategies most frequently identified, from most to least, were: program quality, academically demanding curriculum, professional development, family involvement, reduced student-to-teacher ratios, individualized supports for struggling students, extended learning time, community involvement, long-term (multiple-year) supports for youth, and scholarships and/or financial support.<sup>31</sup>

David Grissmer and colleagues at the Rand Corporation have systematically examined what accounts for state test score differences for students from similar families. They found that higher per-pupil spending and better use of funds explained the biggest variations. By better spending, the researchers meant allocation of funds to achieve lower pupil-teacher ratios in the lower grades, higher public prekindergarten participation, teachers' reports of adequate resources, and fewer inexperienced teachers. They found no effect for teachers with advanced degrees and ambiguous effects of teacher salary levels on state test scores.<sup>32</sup>

Their extensive analyses led Grissmer and his colleagues to several conclusions with significant policy implications. Those most relevant to the *Policy Matters* effort include:

- Appropriately targeted expenditures can raise student achievement; and
- Although the evidence is less compelling, additional money spent on low-income and minority students is more effective and efficient than spending money on their more advantaged peers.<sup>33</sup>

On the whole, state policymakers must contend with a variety of pressures and factors impacting education policy. The parameters set forth in federal policy, the local needs and decisions of state, district, or school agencies, and findings from education research and theory each influence the education policymaking process. A coherent framework accounting for these factors is needed if state level policy and system decisions are to be effective at producing positive benefits for young people and preparedness for young adults.

The remainder of this paper offers a framework for “educational achievement” policies. Section III presents the design and terminology used in the policy logic model, then outlines the model, mapping backward to the result: *All students are successful in school, post-secondary education, and prepared for high performance jobs.* Section IV offers some preliminary policy recommendations and benchmarks for use in assessing and comparing state policies aimed at promoting this result.



# Educational Achievement:

## A FRAMEWORK

### 3 Key Definitions

#### *Definition of Policy*

The term “policy” refers to those formal statements and decisions reflected in state statutes, executive orders, memorandums of understanding, and judicial rulings. The policies recommended in this paper represent a beginning set of state policies for (1) framing an educational achievement policy agenda and (2) laying the basis for both an assessment tool and a comparative report of state policy efforts. The recommendations are not exhaustive but attempt to define a set of policies whose cumulative impact may lead to higher levels of student educational achievement. The recommendations meet a number of criteria that guided the deliberations of an interdisciplinary work group charged with reaching consensus on a select number of policies with the best potential for improving educational results. These general criteria include:

1. Demonstrated effectiveness in the research and evaluation literature;
2. Support by the collective wisdom of practitioners from the field;
3. Address children and families for whom outcome data are most disparate;
4. Have sufficient scope and scale to address the outcome;
5. Are politically and administratively feasible; and
6. Are compatible with the values and assumptions of a family-strengthening perspective.

While satisfying these criteria sometimes proved difficult, and therefore some important or favored policies may not be included, the mix of policies herein offers a starting point for some action and refinement.

### *Definition of Benchmarks*

A “benchmark” is a point of reference from which measurements may be made or something that serves as a standard by which others may be measured. Benchmarks convey not only the general idea of measurement, but also set an explicit standard for performance. Where indicators measure a change in a result or condition, benchmarks allow for measurement of such changes against an established standard. Consequently, benchmarks make possible certain judgments about the success or failure of a measured change that indicators alone do not. Here, the concept of benchmarks is applied to policies that are designed to achieve specific outcomes or results.

## **Educational Achievement: A Policy Logic Model**

Figure 2 presents a logic model for the state-level core result “educational achievement,” long-term outcomes, indicators, and a mix of state policies to enhance the likelihood of educational accomplishment. Although the logic model is presented in linear terms for ease of representation, the relationships are far more complex, iterative, and interactive than the model suggests.

### *Core Result and Long-term Outcomes*

This policy logic model focuses on the result: All children and youth are successful in school and post-secondary education and prepared for high performance jobs. Two long-term outcomes operationally define the educational success result:

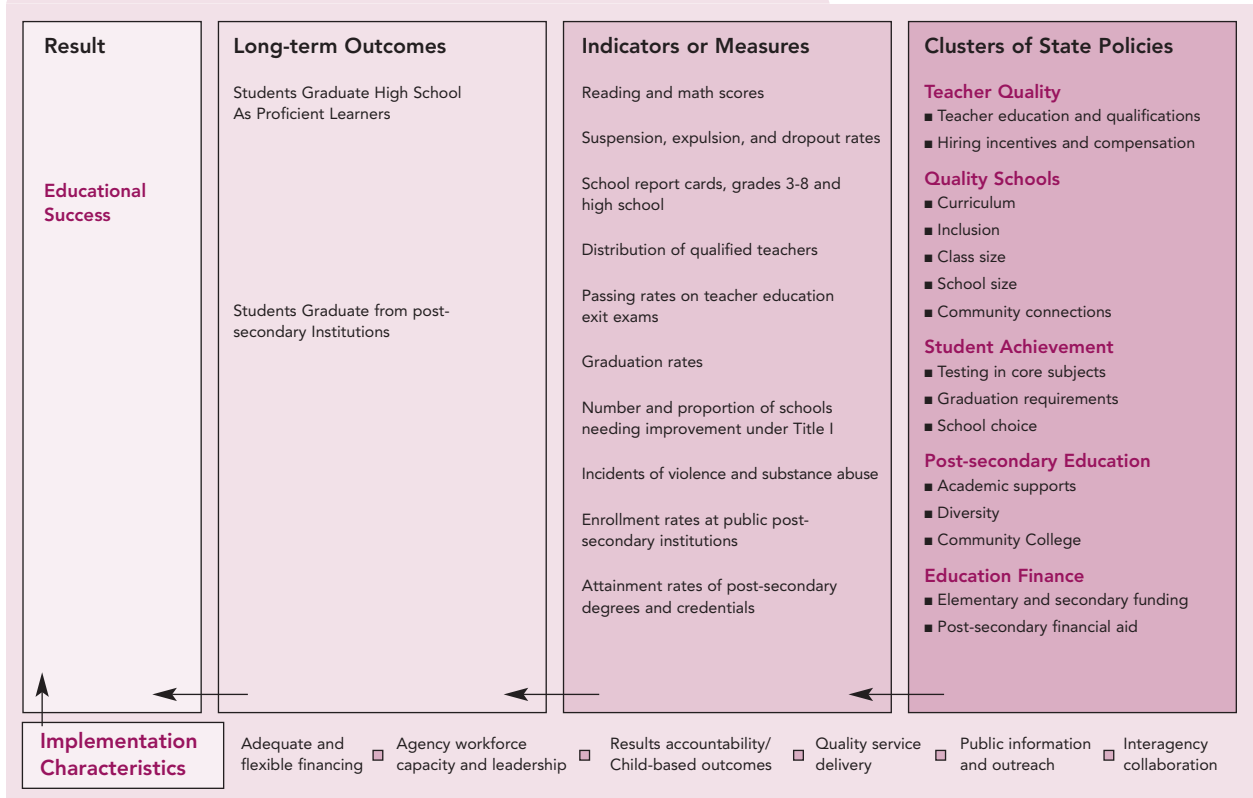
1. All students graduate from high school as proficient learners,<sup>34</sup> and
2. All students graduate with a post-secondary degree or credential.<sup>35</sup>

Both outcomes must be present for students to be successfully launched as young adults.<sup>36</sup>

### *Indicators and Measures*

Educators, government officials, and education policy researchers have identified a number of indicators for measuring education and school success. The major indicators (each disaggregated by race, ethnicity, income, gender, disability status, and primary language) amenable to state policy at the elementary and secondary school levels include:

Figure 2: Educational Achievement Policy Logic Model



- Reading and math scores
- Student suspension and expulsion rates
- Public reports on school success at impacting student achievement in grades three through eight and in high school
- Distribution of qualified teachers (e.g., percentage of teachers on emergency or provisional credentials, and percentage of classes not taught by qualified teachers)
- Passing rates on Praxis or exit exams for teacher education programs
- State and district budgets and expenditures by key subcategories (e.g., teacher salaries, professional development, curricula, and laboratory materials and equipment)
- Number and proportion of schools identified as in need of improvement under Title I
- Incidents of violence and substance abuse among students
- Dropout rates

The major indicators of educational success in post-secondary education, disaggregated similarly for subgroups, include:

- Proportion of students enrolled in remedial courses in public institutions
- Enrollment rates at post-secondary institutions
- Attainment rates for post-secondary degrees or credentials

### *Categories of State Policy*

Several categories of state policy affect the potential for achieving the long-term outcomes. These policy categories include:

- **Teacher quality**, which refers to the qualifications, distribution, and training of teachers;
- **School quality**, which includes a focus on kindergarten, curriculum quality, inclusion of students for whom English is a second language and students with disabilities, class size, school size, and school-community connections;
- **Student achievement**, which features testing policies, graduation requirements, and school choice;
- **Post-secondary education and training**, which addresses remediation, access by diverse groups, and community colleges; and
- **Education finance**, which addresses the financing of kindergarten through grade twelve (K-12) and post-secondary education for students and institutions.

**RECOMMENDED POLICIES BY CATEGORY**

<p><b>Teacher Quality</b></p> <ul style="list-style-type: none"><li>• Teacher education and qualifications</li><li>• Hiring incentives and compensation</li></ul>	<p><b>Student Achievement</b></p> <ul style="list-style-type: none"><li>• Testing in core academic subjects</li><li>• Graduation requirements</li><li>• School choice</li></ul>
<p><b>School Quality</b></p> <ul style="list-style-type: none"><li>• Curriculum</li><li>• Inclusion</li><li>• Class size</li><li>• School size</li><li>• Community connections</li></ul>	<p><b>Post-Secondary Education</b></p> <ul style="list-style-type: none"><li>• Academic supports</li><li>• Diversity</li><li>• Community colleges</li></ul>
	<p><b>Education Finance</b></p> <ul style="list-style-type: none"><li>• Elementary and secondary funding</li><li>• Financial aid for post-secondary</li></ul>

### *Implementation*

While the logic model outlines the conceptual relationship between desired results and state-level policies, the relationship is by no means linear. Several factors either enhance or inhibit the likelihood of an enacted policy's success at producing intended outcomes. Implementation capacity and activities are major factors contributing to its success.

The principal implementation categories necessary for the achievement of state policies to achieve educational success are:

- Financing
- Agency and school workforce capacity and leadership
- Quality service delivery
- Public information and outreach
- Accountability, monitoring, and data systems
- Interagency collaboration

These strategies, in combination, have the potential for improving the overall capacity of education systems to fulfill their missions, track progress, and improve the capacity of communities and families to address their educational concerns.



# Preliminary Policy Benchmarks

**4** The preceding discussion of the educational achievement policy logic model outlines the conceptual relationships among the core result (“educational achievement”), the two major outcomes defining this result, and the categories of policies designed to impact the result. The logic model also presents, in general terms, the specific policies and implementation characteristics that are believed to contribute to desired economic outcomes for families. If, however, the project is to translate the general list of policies into a system for comparing state efforts, specific, scaleable criteria must be developed. These criteria then become the basis upon which specific benchmarks might be set.

Tables 1 through 5 summarize five policy clusters and their recommended policies. The first column in each table lists the cluster’s policies. Column two of each table lists for each policy the key policy decisions that must be addressed if the policy is going to have the greatest likelihood of success. Column three, in turn, lists for each key policy feature a range of options available to states. In some cases, a simple “yes” or “no” is used to describe whether a policy feature exists in state policy. In other places, a range of specific options is detailed for each decision. Bold items in column three represent the desired or acceptable benchmark against which to assess state policies. Options in column three are listed in descending order, from most to least desirable.

## Teacher Quality Policies and Benchmarks

Following the influences of the home and family, teaching quality is the biggest predictor of student educational success. There is substantial research evidence documenting that students with highly qualified teachers make the best academic progress, without regard to socioeconomic factors.<sup>37</sup> With passage of the *Elementary and Secondary Education Act* (ESEA) of 2001, states and districts are under increasing pressure to better define “highly qualified” teachers and to do more to ensure that children have access to them. This requires that state governments pay close attention to the training, recruitment, retention, and compensation of a strong teacher workforce.

### *Policy 1: Teacher Education and Qualifications*

State policies can create a more equitable distribution of quality teachers by ensuring that schools with large numbers of economically and culturally disadvantaged students and rural schools get well-qualified teachers. Moreover, an emerging research-based consensus defines the notion of “well-qualified” teacher as a teacher with deep knowledge in course content and how students learn, and competency in teaching; creating positive learning environments; assessment strategies; collaborating with parents, colleagues, and communities; and the pursuit of professional growth.<sup>38</sup> The training and education teachers receive is an important predictor of their teaching success. To better prepare prospective teachers for the classroom, state policy should strengthen course work, licensure, and exit exam requirements for teaching.

**1.1 Teacher Content Knowledge.** One predictor of teacher quality is the level of content knowledge a teacher possesses for the subjects they teach. For example, research demonstrates that teachers of high school math and science with a college major in the subjects they teach elicit greater student gains than out-of-field teachers. While research does not demonstrate consistent results for master’s level education, an undergraduate major in the field of teaching has a greater effect on teacher quality and student performance than a certification.<sup>39</sup> And yet, 15 to 22 percent of middle-grade students in English, math, and science had teachers who lacked a postsecondary major, minor, or certification in these subjects. Thirty to 40 percent of students in biology, life science, and English as a second language (ESL) had such teachers.<sup>40</sup> At the classroom level, teachers lacking even a college minor in their subject area teach 24 percent of all secondary classes in core academic subjects. For classrooms in high poverty areas, teachers without a minor in the subject instruct 34 percent of classrooms.<sup>41</sup> However, there is some positive news regarding state policy requirements for content knowledge and teacher education. Thirty-eight states currently require middle and high school

teachers to possess a bachelor's degree with a major or minor in an academic content area for certification. Consequently, half of the nation's newest teachers – compared to 32 to 41 percent of more experienced teachers – now possess an academic major.<sup>42</sup> States should require all teachers to have a bachelor's degree in the subjects they teach.

**1.2 Emergency and Provisional Licenses.** To meet an increasingly serious shortfall in the supply of teachers, schools nationwide awarded teacher waivers or provisional licenses to six percent of all teachers. In some states, waivers accounted for more than 10 percent of the teacher population. Only four states reported having a 100 percent certification rate and 21 report less than one percent. However, the relatively low statewide number of provisional teachers masks a disproportionate distribution of teachers holding temporary provisional or emergency teacher licenses. As much as eighteen to 23 percent of teachers in some high-poverty school districts held waivers or provisional licenses, concentrating some of the least prepared candidates in areas with the greatest need for quality teachers.<sup>43</sup> Some states, like New York, prohibit teachers with provisional or temporary licenses from teaching in low-performing schools. At minimum, state teacher qualification policy should require schools to limit the number and term of service for emergency and provisional teachers who serve as lead teachers in each school.

**1.3 Praxis or Exit Examination Requirements.** Another way to ensure that only quality teachers enter the teacher workforce is to require prospective teachers to demonstrate minimum levels of skill and knowledge appropriate for their subject areas and the school curriculum *before* entering the profession. In many states, the minimum level of knowledge or “cut-off” scores on licensure tests is very low. For example, California requirements for the California Basic Educational Skills Test were set at the 10th grade level. Among the 29 states using the Praxis Pre-Professional Skills Test to assess prospective teachers in math, reading and writing, only Virginia adopted cut-off scores near or above the national median score in all three areas. The remaining states generally established cut-off scores in the 20-30th percentile for math and the 40th percentile or lower for reading. In 2001, 24 states had policies linking teacher certification and student content standards, 8 states were in the process of developing such standards, and 18 states and the District of Columbia did not have standards set.<sup>44</sup> States should require that graduates of teacher preparation courses or schools of education take Praxis or exit examinations with cut-off scores at the 40th percentile of the national median. In addition, state policy should require that state certification requirements be aligned with student content standards.

## *Policy 2: Hiring Incentives and Compensation*

Disparities in the distribution of teachers between affluent and high-poverty communities reflect inequities in the allocation of resources and ineffective administrative decisions at the district and school level.<sup>45</sup> Shortages of qualified teachers and significantly high teacher turnover rates make the recruitment, retention and distribution of teachers a pressing problem in many states and districts.<sup>46</sup> To remedy this situation, states most often look to across-the-board teacher salary increases as a strategy for recruiting and retaining quality teachers. However, across-the-board pay increases, while useful, neither fully address the pressing problem of unequal distribution of quality teachers nor do they appropriately reward teachers with higher levels of knowledge, stronger job performance, willingness to teach more difficult subjects and students with more difficult behaviors. States can ensure that communities and students with the greatest needs for highly qualified teachers receive them by combining financial incentives with compensation levels and pay scales commensurate with professional preparation, continuing education, and job performance. For incentives to be maximally effective at improving teacher retention, recruitment, and assignment of highly qualified teachers to low-performing schools, the mix of incentives must be comprehensive and the size of the incentives sufficient.<sup>47</sup> The following policy options should be considered by states:

**2.1 Financial Bonuses for Recruitment and Retention.** Financial bonuses are one strategy for improving the entrance of prospective teachers into the field and for rewarding high performance among incumbent teachers. Financial bonuses can be targeted to prospective teachers, former teachers, and other professionals interested in joining the teaching field and are generally of four types – signing bonuses, bonuses for additional skills and knowledge, bonuses for teaching in certain subject areas, and bonuses for teaching in low-performing or hard-to-staff schools. As of June 2002, Maryland, Massachusetts, New York, and South Carolina offered signing bonuses. Thirty-three states provide salary supplements for teachers awarded the National Board for Professional Teaching Standards (NBPTS) certificate, with three of these states offering additional bonuses to NBPTS-certified teachers willing to teach in low-performing schools. Four states – New York, Utah, Florida, and Georgia – have adopted legislation authorizing bonuses to teachers willing to teach in high-need subject areas in their states. Louisiana, Florida, North Carolina, South Carolina, Kentucky, and Alabama offer bonuses to teachers willing to teach and/or provide assistance in low-performing schools.<sup>48</sup> To meet the dual purposes of improving overall teacher performance and of attracting quality teachers to low-performing schools, states should: (a) enact at least two of these four bonus measures; (b) make bonus measures available to prospective

new and former teachers and mid-career professionals interested in entering the field; (c) require 3 or more years of service in low-performing schools as a condition of receiving some bonuses; and (d) enact bonuses sufficient enough to attract teachers to subjects and schools in need of quality teachers. Early evidence suggests that bonuses ranging from 20 to 50 percent of teacher salaries may be needed to attract quality teachers to school settings and subjects posing significant challenges.<sup>49</sup>

**2.2 Skill-based Pay Scales/Certification Bonuses.** Teacher salary scales should provide for salary adjustments indexed to their performance appraisals, skills, and knowledge levels.<sup>50</sup> One of the bonus incentives discussed above – bonuses for additional skills and knowledge – holds promise for significantly impacting the number of quality teachers in low-performing schools. States could define advances in skills and knowledge with the use of state certifications or NBPTS certification. For example, California offers a model certification bonus program that (1) awards all teachers in all schools for acquiring national certification, and (2) offers additional incentives to any nationally certified teacher working in low-performing schools or filling critical need subject areas. All nationally certified teachers receive a one-time \$10,000 bonus. Those agreeing to work in low-performing schools receive an additional \$20,000 bonus – \$5,000 per year for four years of service. In the programs first year of operation (2000-2001), nearly 50 percent of California’s nationally certified teachers elected to serve in low-performing schools. In the second year, close to 60 percent taught in such schools. Nearly 2,700 Maryland teachers are earning bonuses of \$2,000 per year for helping to close the quality teacher gap in low-performing schools. Florida’s teachers receive \$1,000 per year.<sup>51</sup> States should use certification bonuses linked to service in low-performing schools as a strategy for creating better access to highly qualified teachers. States also should use certification bonuses to support mentor relationships between nationally certified teachers and beginning teachers in low-performing schools.

**2.3 Tuition Reimbursement, Loan Forgiveness, and Teaching Fellowships.** Tuition reimbursement, loan forgiveness, and teaching fellowship programs generally cover some or all of a prospective teacher’s education costs in exchange for an agreed upon term of service in the public school system. Once teachers have completed their terms of service, the state either pays the lender on behalf of the teacher or waives tuition costs. Teachers who fail to fulfill the term of their agreement must repay any grants or loans outstanding. Several states fund reimbursement, loan forgiveness or fellowship programs. For example, California’s Assumption Program of Loans for Education pays \$11,000 to lenders for student loans for any teacher agreeing to teach full-time for four

years. If the teacher is certified in math, science or special education the state pays an additional \$4,000 and another \$4,000 if the teacher agrees to serve in a low-performing school. Between 1998 and 2001, participation in California's program grew from 400 to 6,500 teachers. Alabama, Mississippi, North Carolina, South Carolina, and Virginia offer similar scholarship or loan forgiveness programs.<sup>52</sup> States should make their teacher recruitment and retention incentive packages more complete by offering loan forgiveness, scholarship, or fellowship programs that link service in public schools to forgiveness of tuition costs.

**2.4 Housing Incentives.** Housing incentives are another way states can attract highly qualified teachers and administrators, especially in areas with high housing costs or facing high teacher demand. Housing incentives offer a number of advantages, including their ability to connect teachers to the community, make home ownership more affordable, attract teachers to rural and remote areas, and help decrease turnover. In addition, school districts may be able to offer housing incentives for little or no cost. Housing incentives include relocation assistance, reduced or free rent and utilities, housing loans and grants, reduced mortgage rates or home costs, down-payment assistance, and tax credits. California, Connecticut and Mississippi offer various housing incentive programs to its teacher workforce. Implementation evidence from states offering such incentives also indicates that housing incentive programs should be tied to teacher willingness to serve for a specified term, usually three to four years.<sup>53</sup>

**2.5 Parity in Salary Scales.** On average, new college graduates in fields other than teaching earned approximately \$40,000 per year. In 2000-2001, average teacher pay for beginning teachers surpassed \$30,000 for the first time in history. However, the salary gap between beginning teachers and college graduates widened between 1995 and 2001. And while increases in experienced teacher salaries were somewhat smaller than gains for beginning teachers, experienced teacher salaries did outpace inflation in four of five years between 1998 and 2003.<sup>54</sup> Between 2000-2002, eleven states adopted teacher salary increases.<sup>55</sup> Such increases usually were made in an attempt to bring teacher salaries up to the national average and to prevent the attrition of teachers seeking better pay in other states, districts, or careers.<sup>56</sup> To improve pay parity between teachers and other white collar professions, states should increase beginning and experienced teacher pay to the national average. States should also tie a portion of these enhanced incentives to mentoring younger teachers in troubled schools.

Table 1: Teacher Quality Policies, Features, and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>1</b> Teacher Education and Qualifications</p>	<p><b>1.1</b> State requires new teachers to possess a bachelor’s degree with a major or minor in an academic content area for certification</p>	<ul style="list-style-type: none"> <li>• <b>Both middle and high school teachers</b></li> <li>• Middle school teachers only</li> <li>• High school teachers only</li> <li>• Not required</li> </ul>
	<p><b>1.2</b> Limits on emergency and provisional status</p>	<ul style="list-style-type: none"> <li>• None allowed</li> <li>• None allowed in low-performing schools</li> <li>• <b>Limited number per school with limited terms</b></li> <li>• Limited number with no term limits</li> <li>• No policy</li> </ul>
	<p><b>1.3a</b> Teacher graduates required to pass Praxis or equivalent exit exams for reading, math, and writing with cut-off scores at:</p>	<ul style="list-style-type: none"> <li>• 50 percentile or higher</li> <li>• <b>40-49th percentile</b></li> <li>• 30-39th percentile</li> <li>• 20-29th percentile</li> <li>• Below 20th percentile</li> </ul>
	<p><b>1.3b</b> State requires teacher certification be aligned with student content standards</p>	<p><b>Yes</b> • No</p>
<p><b>2</b> Hiring Incentives and Compensation</p>	<p><b>2.1a</b> Financial bonuses provided for (a) entering the teaching field with certification, (b) teaching in high-poverty schools, (c) teaching in subjects with shortages, and (d) for additional skills or knowledge.</p>	<ul style="list-style-type: none"> <li>• 4 of 4 bonus types</li> <li>• 3 of 4 bonus types</li> <li>• <b>2 of 4 bonus types</b></li> <li>• 1 of 4 bonus types</li> <li>• No bonuses offered</li> </ul>
	<p><b>2.1b</b> Financial bonuses are offered to: (a) prospective teachers, (b) former teachers, and (c) mid-career professionals</p>	<ul style="list-style-type: none"> <li>• <b>All three are eligible</b></li> <li>• 2 of 3 eligible</li> <li>• 1 of 3 eligible</li> <li>• No bonuses offered</li> </ul>
	<p><b>2.1c</b> State financial bonuses are tied to teacher willingness to serve a term of:</p>	<ul style="list-style-type: none"> <li>• 5 years</li> <li>• 4 years</li> <li>• <b>3 years</b></li> <li>• 2 years</li> <li>• 1 year</li> <li>• No term requirement</li> </ul>

Continued on page 30

Table 1: Teacher Quality Policies, Features, and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>2</b> Hiring Incentives and Compensation</p>	<p><b>2.1d</b> Financial bonuses are sufficient to attract and retain teachers, especially in high-poverty or low-performing schools</p>	<ul style="list-style-type: none"> <li>• 50 percent of base salary</li> <li>• 40-49 percent</li> <li>• <b>30-39 percent</b></li> <li>• 20-29 percent</li> <li>• 10-19 percent</li> </ul>
	<p><b>2.2a</b> State offers certification bonus for teachers serving in low-performing schools</p>	<ul style="list-style-type: none"> <li>• <b>Bonus tied to NBPTS</b></li> <li>• Bonus tied to state certification</li> <li>• Bonus tied to other measure of skills</li> <li>• No bonuses offered</li> </ul>
	<p><b>2.2b</b> State certification bonus is enhanced for:</p>	<ul style="list-style-type: none"> <li>• Service in both low-performing schools (LPS) and mentoring</li> <li>• <b>LPS only</b></li> <li>• Mentoring only</li> </ul>
	<p><b>2.3a</b> State ties tuition reimbursement, loan forgiveness, or fellowship programs to teacher willingness to serve a term of:</p>	<ul style="list-style-type: none"> <li>• 5 years</li> <li>• 4 years</li> <li>• <b>3 years</b></li> <li>• 2 years</li> <li>• 1 year</li> <li>• No term requirement</li> </ul>
	<p><b>2.3b</b> State ties tuition reimbursement, loan forgiveness, or fellowship programs to (a) certification in high-need subject area and (b) service in low-performing schools:</p>	<ul style="list-style-type: none"> <li>• All teachers, tied to 2 of 2 criteria</li> <li>• <b>All teachers, tied to 1 of 2 criteria</b></li> <li>• All teachers, tied to neither criteria</li> <li>• No program exists</li> </ul>
	<p><b>2.4a</b> State funds or provides housing incentives to teachers willing to work in low-performing schools or districts</p>	<p><b>Yes</b> • No</p>
	<p><b>2.4b</b> State housing incentives are tied to teacher willingness to serve a term of:</p>	<ul style="list-style-type: none"> <li>• 4 years</li> <li>• <b>3 years</b></li> <li>• 2 years</li> <li>• 1 year</li> <li>• No term requirement</li> </ul>
	<p><b>2.5</b> Teacher salaries are comparable to other professions requiring similar education</p>	<ul style="list-style-type: none"> <li>• Comparable to other white collar professions</li> <li>• <b>Equivalent to the national average</b></li> <li>• Below the national average</li> </ul>

**NOTE:** Bold Policy Options represent the proposed benchmark for each policy decision

## Quality Schools Policies

Researchers, analysts, and advocates have identified numerous state policies that are useful for establishing and maintaining high quality schools. Recent evaluations of reform measures undertaken in four metropolitan school systems confirm that system-wide, comprehensive approaches achieve greater improvements in student progress in mathematics and reading than do school-by-school approaches.<sup>57</sup> Moreover, attending high-quality kindergarten classes improves the academic performance of children in later grades.<sup>58</sup> To improve the overall quality of schools, lawmakers should consider improvements in school curriculums; school and class size; inclusion of students with disabilities, low-income students and minority students; and school and community connections.

### *Policy 3: Curriculum Requirements*

Unlike most other industrialized countries, there is no national standard curriculum in the United States. And while very few states provide more than “curriculum frameworks” or lists of textbooks for local adoption, there are signs of positive change, especially in the area of early reading. At the high school level, state policy has begun to address certain tracking issues by eliminating the “general” track and requiring that schools offer upper-level and advanced placement courses. Continued improvements in the quality of school curriculums is an important step in improving overall school quality.

**3.1 Curriculum Frameworks in Core Subjects.** In a review of state standards and accountability systems, the Fordham Foundation found modest improvements in the specificity, measurability, and content of state standards. According to the report, between 1998 and 2000, the number of states receiving “honors” recognition for their standards in English rose from 6 to 19, in history from 4 to 10, in geography from 6 to 15, in math from 12 to 18, and in science from 13 to 19. Nine states, up from three in 1998, managed an honors rating in all five subjects.<sup>59</sup> The use of strong curriculums for core subjects helps to ensure that all children receive adequate instruction and skills in subjects necessary for academic and career success. One national research study found that completing a rigorous high school curriculum was strongly related to student persistence and staying on track to a bachelor’s degree in postsecondary education.<sup>60</sup> Giving this growing evidence and progress, states should prescribe curriculum frameworks that meet professional standards in each of five core subjects – math, science, language arts, history and geography.

**3.2 Upper-level and Advanced Placement Courses.** Advanced Placement (AP) courses provide students with challenging secondary educational experiences and help students become better prepared for higher education. However, not

all students have access to rigorous courses, making it more difficult to compete for admission into some universities. Specifically, minority students, inner-city and rural students, students from low-income families, high-poverty schools, and families where parents have less than a high school diploma are most likely to have limited access to AP courses.<sup>61</sup> Completion of challenging courses and subject-matter tests benefit students by making them eligible for college honors courses, earning them college credits prior to beginning their college careers, and helping them remain successfully engaged in postsecondary education.<sup>62</sup> In 2000, 22 states enacted legislation to improve access to challenging academic content in subjects as diverse as English, math, science, foreign languages, statistics, art and music theory. Generally, state policy measures varied, including: mandated course offerings (4 states), financial incentives to districts and schools providing AP courses and improving student performance (12 states), teacher training in teaching AP courses (7 states), subsidies for student tests following completion of AP courses (9 states), and accountability incentives for schools or districts offering AP courses (8 states).<sup>63</sup> To ensure educational equity in course offerings, states should mandate the offering of AP courses statewide and enact at least two of the other strategies to ensure that students in high-poverty communities have access to challenging course instruction. In 2000, three of the four states mandating AP courses would meet this benchmark.

**3.3 General Track Prohibition.** Because rigorous courses are better suited for preparing students, states should prohibit “general track” curriculum options in secondary schools. These below core curriculums do not require students to learn the skills and content necessary for academic, job, career, and life success. Little more than half of students participating in such courses and enrolling in four-year institutions remain continuously enrolled. Students from core or less than core curriculums are nearly twice as likely to transfer, and are five times more likely to drop out of college than their peers in rigorous classes.<sup>64</sup> Rather than diluting school curriculums, states should ensure that course work for students not choosing advanced classes be equally as rigorous in expectations and standards for skills development.<sup>65</sup> One approach for meeting this aim is the integration of vocational and academic course work and materials for students in skill-training curricula, which results in significantly improved levels of achievement and greater likelihood that students will go on to enroll in post-secondary education.<sup>66</sup> States should eliminate low-level courses or tracks from school curriculums.

#### *Policy 4: Inclusion*

Education inclusion policies focus specifically on two student populations: children of immigrant families and children with disabilities. The focus on immigrant students generally involves the provision of bilingual or English-as-a-second-language (ESL) programs for English language learners. This is a controversial issue with wide policy variations among states. Second, there is general consensus that students with disabilities should be educated with their non-disabled peers to the extent practicable. States should provide added in-class staff assistance where needed to achieve this goal. Specifically, states should adopt:

**4.1 Bilingual and English-as-a-second-language (ESL) Programs.** Between the 1997-98 and the 2001-02 school years, about eight percent of the total public school enrollment were English language learners.<sup>67</sup> However, the total number of ELL students grew by over 310,000 students in one school year,<sup>68</sup> with greater concentration in urban school districts. For example, more than 36 districts enrolled 10,000 or more English language learners in the 1998-99 school year.<sup>69</sup> And though enrollment of foreign-born immigrant children in secondary school outpaces enrollment of such children in elementary school, significantly smaller numbers of immigrant children receive ELL instruction in middle or high school than those in elementary schools.<sup>70</sup> With this increased enrollment, however, has come some disagreement regarding the best methods and policies for instructing ELL students. On the one hand, some argue for English-only or “sheltered” English instruction and dissolution of bilingual education. Consistent with this approach, ballot initiatives in California (1998) and Arizona (2000) implemented “sheltered” English immersion programs for ELL students, aimed partially at moving language-minority students more quickly into mainstream academic classes.<sup>71</sup> On the other hand, traditional ESL or bilingual programs do not require any time limit for instruction. They do generally place some emphasis on acquiring English proficiency, interacting with English-speaking peers in other classrooms as soon as possible, and acquiring skills for grade promotion and graduation.<sup>72</sup> While the conceptual debate continues, there is little research to support selection of any particular program, nor is there a compelling answer to the question of how long language instruction is required. In a review of three research studies and practices in six states, the GAO found that four to eight years appear warranted for becoming proficient in English in all subjects. They also found that most programs last four years or less. Though no consensus exists for either the definition of proficiency or how long it takes to achieve it, the studies reviewed by the GAO suggest that approximately four years are needed for ELL students to develop language skills commensurate with their English-speaking peers.<sup>73</sup> Based upon this tentative finding, state

policy should ensure that ELL students receive between three and five years of bilingual and English-as-a-second-language support. States should also require teachers in ESL and bilingual/dual language classrooms to hold certifications in teaching these subjects. Of the 37 states offering ESL teacher certification and the 23 that offer bilingual/dual language certification, 23 require teachers in ESL classrooms and 17 require teachers in bilingual/dual language classrooms to have the appropriate certification.<sup>74</sup>

**4.2 Inclusion of Children with Disabilities.** With passage of the *Education of All Handicapped Children Act of 1975*, states have been required to educate children with disabilities in the “least restrictive environment.” This requirement was reinforced in the Individuals with Disabilities Education Act (IDEA) Amendments of 1997. Increasingly, the least restrictive environment has come to mean the regular classroom for many students with disabilities, and greater attention is being paid to the actual outcomes experienced by students with disabilities. Between the 1988-89 and the 1998-99 school years, the percentage of students spending at least 80 percent of their school time in classrooms providing the general curriculum increased from 31 percent to 47 percent. This improvement has occurred even though the population of students with disabilities has outgrown increases in total school enrollments. Increases were greatest for students with specific learning disabilities and smallest among students with multiple disabilities and students who are deaf and blind.<sup>75</sup> To meet the intent of federal legislation, states should set a policy goal of including at least 50 percent of students with disabilities in regular classrooms for their school instruction.

**4.3 Individualized Education Plans.** Another way states can ensure that students with special needs are included in the regular school environment is to require all children with disabilities to have individualized education plans (IEP) and financial support for any required services. Nationally, over 6.3 million students or 13.3 percent of all students had IEPs in the 2001-2002 school year.<sup>76</sup> This is up from 6 million or 12.8 percent the previous school year.<sup>77</sup>

### ***Policy 5: Class and School Size***

Over the past few years, reduction of class size, particularly in the early elementary grades, has been the subject of federal and state policymaking and evaluation. One systematic examination of variation in test scores among states for students of similar family backgrounds found that lower pupil-teacher ratios, especially in the lower grades, explained higher achievement levels.<sup>78</sup> Some states have moved to reduce average class size for all schools; others require reductions only in high-poverty schools. In addition to smaller class size, smaller school enrollments are associated

with higher levels of student achievement than is now typical in urban middle and high schools. To address the policy of class and school size, states should adopt:

**5.1 Class Size Standards for K-3.** Class size reduction is a popular school reform measure among teachers, administrators, parents and policymakers. And although some argue that class size reduction is too expensive as a strategy compared to some other strategies,<sup>79</sup> research on the relationship between class size and student achievement is generally viewed as providing some support for the efficacy of smaller classes on a range of outcomes, especially in the early grades. Moreover, class size reduction should be viewed as one strategy to be combined with others such as improving teacher quality.<sup>80</sup> Twenty-one states have invested \$2.3 billion in class size reduction efforts since the 1980s. The federal government, through its 1998 Class Size Reduction Program, has invested another \$1.2 billion in lowering class size in the early grades. The federal program recommends no more than 18 students per class nationwide.<sup>81</sup> Some research indicates that a class size of 18 or fewer students per classroom is necessary if gains in student achievement are to be realized.<sup>82</sup> In a randomized experimental study of the effects of class size on student achievement, researchers found that students participating in smaller classes (13-17 students) and beginning such classes earlier rather than later demonstrated significantly greater achievement than students in larger classes (22-26 students), and these effects endured in all school subjects through eighth grade, the last grade at which achievement was measured.<sup>83</sup> Given this research evidence, states should establish a class size standard for kindergarten through grade three at no more than 17 children per teacher.

**5.2 Class Size Standard for Grades 4-12.** The benefits of smaller class size in the early grades appear to endure into high school. States can protect earlier investments in class size reductions in grades K-4 and improve the quality of instruction and attention to students in later grades by keeping class sizes manageable throughout the school years. States should establish a standard ratio of 25 children per teacher as the maximum class size for grades 4-12.<sup>84</sup>

**5.3 Maximum School Enrollment Levels.** Like smaller class size, there is evidence that smaller schools have a positive effect on academic achievement, graduation rates, student behavior, and school safety. Smaller schools also decrease the achievement gap between students in low-income and more affluent communities and schools. While there is no agreed upon definition for small school size, most estimates range from 400 to 600 students for high school.<sup>85</sup> Some argue for small size definitions based upon grade levels rather than total school enrollment, especially where individual schools span a small number of grades (e.g., K-2 versus K-8).<sup>86</sup> Like small class size, critics of small

school size reforms argue that the costs are prohibitive. However, the relative cost effectiveness of small schools depends largely on whether the costs are calculated on a per pupil or a per graduate basis. Because small schools graduate students with greater success, per graduate comparisons make small schools equal to or superior to larger schools in terms of cost. The cost-effectiveness of small schools has been demonstrated in both rural and urban states.<sup>87</sup> Given the available research on the effectiveness of small schools, states should consider two policy options. First, states should at least limit the size of schools in all low-income, highly-concentrated neighborhoods. Second, states should set maximum school size limits at the elementary (151-250 total students), middle (300-400 students) and high school (450-600 students) levels.

### *Policy 6: Community Connections*

Policies that enable and strengthen community involvement in public education result in enhanced quality, increased public support, and expanded educational options for students. In addition, by fostering greater connections with their surrounding communities, schools contribute to the positive civic and social development of young people. To enhance a school's connection to the community, states should adopt:

**6.1 School-to-Work Programs.** School-to-work programs now exist in all states and many – but not all – public secondary schools. Evaluations show that they contribute to successful completion of high school and to perceived likelihood of future labor market activity.<sup>88</sup> Other research indicates that youth employment programs have positive impacts on student achievement motivation, school engagement, and educational expectations.<sup>89</sup> Though no overwhelming consensus regarding school-to-work programs emerges from the research literature, some evidence does exist to suggest states should make investments in such programs as a method for improving student motivation and short-term work prospects.

**6.2 Service-Learning Programs.** One of the principal conclusions of a 2002 synthesis report on youth development by the National Academy of Sciences was that community programs, including ones sponsored by businesses, service organizations, and government, provide important opportunities for youth to develop personal and social assets.<sup>90</sup> Other research indicates that participants in service learning programs are more competent socially, are personally and socially more responsible, and performed better in the classroom and on state basic skills tests.<sup>91</sup> Though some research on service-learning programs indicates only short term gains for students as a whole, the gains experienced by non-white and educationally disadvantaged young people

were significant and the program costs were inexpensive relative to the benefits yielded.<sup>92</sup> In view of this evidence, states should seek to improve school-community connections by making voluntary service learning programs available statewide.

**6.3 Adult Education Programs.** Adults without a high school diploma or with no college education rely on publicly supported adult education programs. The U.S. Department of Education’s 1999 National Household Education Survey, Adult Education Interview, found that 22 percent of adults in the U.S. without a high school education and 57 percent of those with a high school diploma but no college had participated in an adult education program during the past 12 months.<sup>93</sup> However, in most states, long waiting lists exist for adult literacy programs.<sup>94</sup> States can facilitate both quality and accessibility of adult education programs by ensuring adequate access to such services. Some states ensure this by appointing the community college system as the lead agency in literacy initiatives.

Table 2: Quality Schools Policies

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>3</b> Curriculum Requirements</p>	<p><b>3.1</b> State adopts curriculum frameworks that meet professional standards in core subjects – math, science, language arts, history/civics</p>	<ul style="list-style-type: none"> <li>• <b>4 of 4 subjects</b></li> <li>• 3 of 4 subjects</li> <li>• 2 of 4 subjects</li> <li>• 1 of 4 subject</li> <li>• No subjects</li> </ul>
	<p><b>3.2</b> State creates equity in upper level and advanced placement course instruction by mandating AP courses and (a) providing financial incentives to districts and schools providing AP courses and improving student performance, (b) offering teacher training for teaching AP courses; (c) offering subsidies for student completing AP courses, and (d) tracking the effectiveness of schools or districts offering AP courses</p>	<ul style="list-style-type: none"> <li>• Mandates and 4 of 4 other strategies</li> <li>• Mandates and 3 of 4 subjects</li> <li>• <b>Mandates and 2 of 4 subjects</b></li> <li>• Mandates and 1 of 4 other strategies</li> <li>• Mandates courses only</li> <li>• None of the strategies are employed</li> </ul>
	<p><b>3.3</b> State law prohibits tracking students into course options with little academic expectations or standards</p>	<p><b>Yes</b> • No</p>

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Table 2: Quality Schools Policies

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>4</b></p> <p><b>Inclusion Policies</b></p>	<p><b>4.1a</b> State requires and provides funding for bilingual and ESL programs for:</p>	<ul style="list-style-type: none"> <li>• 5 years or more</li> <li>• <b>3-5 years</b></li> <li>• 1-3 years</li> </ul>
	<p><b>4.1b</b> State requires teachers of ESL and bilingual/dual language classes to be certified</p>	<ul style="list-style-type: none"> <li>• <b>Both ESL and bilingual certifications required</b></li> <li>• Either ESL or bilingual certification</li> <li>• Certifications offered but not required</li> <li>• Neither offered or required</li> </ul>
	<p><b>4.2</b> Students with disabilities spend 80% of time in the general curriculum</p>	<ul style="list-style-type: none"> <li>• <b>50% or more of disabled children,</b></li> <li>• 26-49%,</li> <li>• 1-25%</li> </ul>
	<p><b>4.3</b> Individual education plan (IEP) assessments and financial support for all required services</p>	<p><b>Yes</b> • No</p>
<p><b>5</b></p> <p><b>Class and School Size</b></p>	<p><b>5.1</b> State has established K-3 class size standards at:</p>	<ul style="list-style-type: none"> <li>• 12:1 or fewer</li> <li>• <b>13-17:1</b></li> <li>• 18-21:1</li> <li>• 22:1 or higher</li> <li>• No Limit</li> </ul>
	<p><b>5.2</b> State limits maximum class size for grades 4-12:</p>	<ul style="list-style-type: none"> <li>• 20:1</li> <li>• <b>21-25:1</b></li> <li>• No Limit</li> </ul>
	<p><b>5.3a</b> State applies limits on maximum school size for:</p>	<ul style="list-style-type: none"> <li>• All schools</li> <li>• <b>High poverty areas only</b></li> <li>• No limits applied</li> </ul>
	<p><b>5.3b</b> State enacts maximum school size limits for:</p> <ul style="list-style-type: none"> <li>• Elementary schools at:</li> </ul>	<ul style="list-style-type: none"> <li>• 150 students or less</li> <li>• <b>151-250 students</b></li> <li>• 251-350 students</li> <li>• 351 students or more</li> <li>• No limits</li> </ul>

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Table 2: Quality Schools Policies

POLICY	KEY FEATURE	POLICY OPTIONS
<b>5</b> Class and School Size	Middle schools at:	<ul style="list-style-type: none"> <li>• 299 students or less</li> <li>• <b>300-400 students</b></li> <li>• 401-500 students</li> <li>• 501 students or more</li> <li>• No limits</li> </ul>
	High schools at:	<ul style="list-style-type: none"> <li>• 299 students or less</li> <li>• 300-449 students</li> <li>• <b>450-600 students</b></li> <li>• 601 students or more</li> <li>• No limits</li> </ul>
<b>6</b> Community Connections	<b>6.1</b> State makes school-to-work programs available statewide:	<b>Yes</b> • No
	<b>6.2</b> State makes service-learning programs available:	<ul style="list-style-type: none"> <li>• Required for graduation</li> <li>• <b>Voluntary Basis</b></li> <li>• No</li> </ul>
	<b>6.3</b> State funds adult education programs statewide:	<b>Yes</b> • No

**NOTE:** **Bold Policy Options** represent the proposed benchmark for each policy decision

## Student Achievement Policies

Nearly all education reform and improvement initiatives have as their goal the improvement of student achievement. And while student achievement is defined in various ways, including performance on standardized tests, classroom performance, and achievement in non-academic activities, there is broad consensus that helping students achieve at higher levels is essential for their long-term academic, career and work, financial, and personal success. Five state policies lay the foundation for higher levels of student achievement and preparation for higher education and employment.

### *Policy 7: Testing*

State education systems can promote greater student achievement by establishing high-quality testing based on clearly defined standards. Some states have designed their own well-regarded tests, while others have purchased “off-the-shelf” tests from commercial publishers. The latter runs the risk of failing to align their tests adequately with the curriculum content standards they have adopted. Once state

tests are developed or purchased, a state has to determine its desired student performance levels—usually some variation of achievement at below basic, basic, proficient, and advanced levels. States vary, with some setting much higher performance demands on students than others for each category.<sup>95</sup> To improve the quality, effectiveness, and appropriateness of state testing policies, state testing policy should include:

**7.1 Testing Aligned to Subject Matter Standards.** For state achievement tests to be relevant and appropriate, they must cover material that students are expected to learn as defined by curriculum standards. In a review of state standards and accountability systems, the Fordham Foundation found modest improvements in the specificity, measurability, and content of state standards. However, according to the Fordham Foundation, only five states effectively combined strong standards with strong accountability approaches. The remaining states enacted a combination of mediocre to weak standards and weak accountability measures.<sup>96</sup> In their review, Education Week found that 12 states with criterion-referenced assessments aligned their tests to state standards in each of the core subjects.<sup>97</sup> States should establish a system of testing and align it with subject matter standards for each grade level and the curriculum that children receive in classrooms.

**7.2 Special Projects and Portfolios as Alternatives to Testing.** To accommodate students with special needs, states should specifically include provision for special projects and portfolios as supplements and alternatives to testing. There is broad consensus and support for this approach. Over 100 national civil rights, education, and advocacy organizations have endorsed a set of criteria to guide the use of alternative assessments.<sup>98</sup>

**7.3 Testing Accommodations.** In some cases, two accommodations to traditional testing are necessary. States should specifically require and provide support for accommodations for testing students with disabilities and students for whom English is a second language.<sup>99</sup> The National Center on Education Statistics issued a report on language accommodations on large-scale assessments for ELL students. They found that ELL student performance was significantly lower on assessments than English-speaking students and that students who speak a language other than English in the home fared worse than students who speak English at home. However, ELL students allowed to use accommodations performed significantly better than students without accommodations, especially when customized dictionaries are available.<sup>100</sup> There is also research evidence that modifying tests to reduce unnecessary

language complexity on math assessments significantly improves test performance for ELL students.<sup>101</sup> Because language difficulties influence the validity of assessments for ELL students, states should require language accommodations be made for students with limited English proficiency, especially customized dictionary accommodations and linguistic modifications to reduce language complexity.

### **Policy 8: Graduation Requirements**

Graduation requirements determine whether students are allowed to exit high school without having mastered necessary core content. These requirements may include four years of language arts, three years each of math and science, and requirements in history, civics, and health education. Courses can be offered in traditional academic settings or in technical and career-oriented courses of study. States should consider the following policy requirements for high school graduation:

**8.1 Minimum Graduation Requirements.** Some researchers have defined a rigorous curriculum leading to graduation as including 4 years of English, 4 years of mathematics, 3 years of foreign language, 3 years of social studies, 3 years of science, and at least one AP course or test taken. These researchers have shown positive relationships between completing rigorous high school curriculums and persistence in college studies.<sup>102</sup> These requirements also reflect “the new basic curriculum” recommendations contained in *A Nation at Risk*.<sup>103</sup> However, in 2001, only Alabama, Georgia, North Carolina, and South Carolina required students to complete coursework consistent with these research recommendations in English/language arts, math, science, and social studies. Another 18 states met these recommendations in three of the subjects, usually English/language arts, social studies, and science.<sup>104</sup> Given this research and the ability of most states to reach this requirement, states should require prospective graduates to complete the recommended rigorous curriculum.

**8.2 Graduation Exam Requirements.** In the late 1970s, Florida became one of the first states to require students to pass exams before graduating from high school. In response to businesses and colleges that complained of unprepared high school graduates, many other states followed Florida’s example. By 2000, half of all states either implemented or were in the process of implementing requirements for end-of-course or end-of-school exams as a condition for receiving a high school diploma.<sup>105</sup> To ensure students have mastered necessary knowledge for work and higher education, states should require graduating students to pass end-of-course exams.

Table 3: Student Achievement Policies, Features and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<b>7</b> Testing	<b>7.1</b> State adopts a standardized test that is:	<ul style="list-style-type: none"> <li>• <b>Customized and aligned to curriculum</b></li> <li>• Customized but not aligned</li> <li>• Purchased “off-the-shelf”</li> </ul>
	<b>7.2</b> Projects or portfolios are included in testing:	Yes • No
	<b>7.3a</b> Accommodations available for testing of students with disabilities and ESL students	<ul style="list-style-type: none"> <li>• <b>Accommodations for both ESL and educational disabilities</b></li> <li>• Accommodations for either ESL or developmental disabilities</li> <li>• No accommodations</li> </ul>
	<b>7.3b</b> State requires testing accommodations for ELL students, including: customized dictionaries and reducing language complexity	<ul style="list-style-type: none"> <li>• <b>2 of 2 accommodations</b></li> <li>• 1 of 2 accommodations</li> <li>• No accommodations required</li> </ul>
<b>8</b> Graduation Requirement	<b>8.1</b> State requires 4 years of language arts, 4 years of math, 3 years of social studies and 3 years of science to graduate	<ul style="list-style-type: none"> <li>• <b>Requirements met in all 4 subjects</b></li> <li>• Required in 3 of 4 subjects</li> <li>• Required in 2 of 4 subjects</li> <li>• Required in 1 of 4 subjects</li> <li>• Not required for any subject</li> </ul>
	<b>8.2</b> State requires students to pass end-of-course/school exams to graduate	Yes • No
<b>9</b> School Choice	<b>9.1a</b> Students may transfer from low-performing to higher-performing school with free transportation	Yes • No
	<b>9.1b</b> State provisions for school choice are:	<ul style="list-style-type: none"> <li>• <b>Statewide in scope</b></li> <li>• Limited to some districts</li> <li>• No provisions</li> </ul>
	<b>9.1c</b> State administrative procedures for school choice and transfers are clear and made widely available to the public	Yes • No

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Table 3: Student Achievement Policies, Features and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<b>9</b> School Choice	<b>9.1d</b> State requires and funds evaluation of school choice policies	<b>Yes</b> • No
	<b>9.2a</b> State charter school laws have clear accountability provisions	<b>Yes</b> • No
	<b>9.2b</b> State charter school laws allow multiple chartering authorities	<b>Yes</b> • No

**NOTE: Bold Policy Options** represent the proposed benchmark for each policy decision

*Policy 9: School Choice*

School choice is an area of both rich state experimentation and considerable controversy. Research to date is very unclear about which options (e.g., private school vouchers, universal public school choice, and charter schools) support student achievement gains.<sup>106</sup> Controversy and uncertainty notwithstanding, states have forged ahead in establishing varying degrees of school choice, most notably in the form of charter schools. As of fall 2002, 2,699 charter schools were open in the United States. The states with the greatest number of charter schools in 2002 were Arizona (465), California (427), Texas (228), Florida (227), and Michigan (196). There are no charter schools in New Hampshire, and only one in both Mississippi and Wyoming.<sup>107</sup> States can support positive outcomes for children by preventing the restriction of children and families to under-performing schools and preserve the ability of students and families to receive high-quality education at a school of their choice. To foster student achievement through school choice, states should adopt the following:

**9.1 Clear Student Transfer Procedures.** States should provide for transfers from low-performing to higher-performing schools with free transportation at all public schools. In addition, states should adopt transfer procedures that ensure equity for students and families exercising choice by implementing transparent transfer decision-making processes. A 1997 study in Massachusetts found that the provision of transfers resulted in school improvements at schools that lost enrollment due to transfers, did not affect racial/minority enrollment patterns, and reflected parental desires to get better academic opportunities for their children.<sup>108</sup> In 2001, 18 states adopted statewide provisions for school choice.<sup>109</sup> To expand the base of knowledge for improving the performance of all schools,

and to track the effects of school choice policies, states should require and fund the evaluation of its school choice policies.

**9.2 Charter and Nontraditional Schools.** Charter and nontraditional schools offer educational opportunity to students whose needs can be better met in alternative educational settings. In 2001, 22 states established strong charter school laws.<sup>110</sup> States should enact charter school laws with clear accountability provisions and provisions that expand charter authority beyond local school boards.<sup>111</sup>

## Quality Post-Secondary Education Policies

Public post-secondary education policies vary widely from state to state. Generally speaking, post-secondary institutions are allowed much more “academic freedom” than elementary and secondary schools and are guided by fewer state policies. However, state policy decisions can improve the quality and the access of low-income and minority families to post-secondary schooling.

### *Policy 10: Academic Supports*

One of two major factors accounting for disparities in post-secondary enrollment and completion is the inadequacy of elementary and secondary education. Low-quality elementary and secondary education increases the number of poorly prepared students entering post-secondary institutions. These students will need remedial support in one or more classes to fully take advantage of educational opportunities and embark upon high-wage career paths. In addition, working adults who have been out of school for some time, as much as 60 percent of immigrant college students, and many low-income or disadvantaged students benefit from academic support.<sup>112</sup> Given that these students have the potential to succeed in post-secondary education and that remedial supports are bridges to career paths, states should require:

**10.1 Remedial Academic Supports in Four-Year Institutions.** States should require that state-supported four-year institutions of higher learning provide academic supports to poorly prepared students. According to a survey conducted by the National Center for Education Statistics (NCES), 41 percent of first-time students at undergraduate institutions required remedial instruction in mathematics, reading, or writing.<sup>113</sup> In a survey of both four-year and two-year institutions, the Education Commission of the States found that 60 to 70 percent of students at two-year institutions required remediation in some states.<sup>114</sup> Moreover, remediation is relatively inexpensive, comprising less than one percent of total annual higher education budgets.<sup>115</sup> States can encourage and support enrollment of historically under-represented and non-traditional student groups with both financial assistance (discussed in the Education Finance section) and the provision of remedial courses and

academic supports for under-prepared but capable students. Specifically, states should provide funding for remedial supports and ensure that remedial credits count for financial aid, full-time status, and graduation requirements.<sup>116</sup>

### *Policy 11: Diversity*

Substantial enrollment disparities characterize many colleges, universities, and other institutions of higher learning. In a landmark case, the U.S. Supreme Court ruled that diversity is an acceptable goal for university admissions criteria.<sup>117</sup> While the court provided little clear guidance on how best to meet this goal, universities and colleges are free to seek the creation and benefits of a more diverse student body. Encouragement of enrollment by historically under-represented groups and people with disabilities will support improved prospects for families and children in these groups. To improve diversity at post-secondary institutions and create greater opportunity for historically under-represented and non-traditional groups, states should consider the following policy options:

**11.1 Admissions Incentives.** While debates over the effectiveness or desirability of affirmative action have raged for years, the U.S. Supreme Court has ruled that diversity is an allowable post-secondary admissions goal, and that admissions procedures that consider race, class, and other factors are not inherently unconstitutional. States should provide incentives for admission of minority, low-income, and students with disabilities into state-supported institutions of higher learning, especially flagship state universities.<sup>118</sup>

**11.2 Inclusive Eligibility for Need-based Financial Aid.** For many low-income workers, older students, high school graduates, and public assistance recipients, higher education provides a path to better employment and careers. However, financial access to higher education poses a significant barrier for such students. To assist financially needy students gain access to higher education, states should craft policies making need-based financial assistance available to qualified students. If broader campus diversity is the goal, such policies should include immigrant students, former foster youth, recipients of public assistance, former inmates, older adults returning to college, and other non-traditional students among those eligible to receive need-based financial aid and/or waivers of in-state tuition.

### *Policy 12: Community Colleges, Articulation and Workforce Development*

Community colleges provide a crucial bridge between public secondary school completion and higher education or skilled work opportunities for many young people and adults. With regard to education, community colleges are vital institutions for preparing many young people for study at four-year institutions and for older students transitioning to new fields or careers. Community colleges are also

important because of their accessibility to many rural areas and their commitment to serving very diverse educational needs.

In addition, the community college system is a critical component of state policy approaches to workforce development, with 19 states designating community colleges as lead agencies for worker training.<sup>119</sup> But while community colleges are critical, whether enrollees and graduates receive an education suitable for the employment market is not clear.<sup>120</sup> A significant issue for state-supported community college systems is the extent to which they offer education and training that match the employment market and the state's needs for a skilled workforce, and lead to further post-secondary education. To improve general education levels and to prepare enrollees for high-wage employment, state community college policies should require:

**12.1 Transfer and Articulation.** Transfer from community colleges to four-year institutions is the only route to a four-year degree for many students and prospective employees. Given the significant number of students needing remedial education, most of whom will opt for or be required to attend community college for remedial support, it is critical that transfer procedures and articulation agreements be well established. The Education Commission for the States concludes, “Effective articulation and transfer policies assure the efficient use of education funds, students’ time and promote education and social equity for all who pursue a post-secondary education.”<sup>121</sup> For transfer and articulation policies to be most effective at reaching the 65 percent of community college students who will transfer before completing a two-year degree, practitioners suggest that states (a) legislatively require comprehensive agreements between community college and four-year institutions, and (b) establish uniform policies that provide for the transfer and credit of individual courses within a defined set of core course requirements. Currently, some form of legislation exists in 30 states but only three – Illinois, Florida, and Washington – have legislatively defined programs that treat two-year and four-year institutions equally. Other states have commissions to encourage the development of transfer and articulation policies, or have cooperative agreements most often negotiated between institutions.<sup>122</sup>

**12.2 Targeted Funding for High-Demand Jobs and Disadvantaged Workers.** One way for states to improve the effectiveness of community colleges at educating and training students for high-wage employment is to target special funding to high-demand fields and disadvantaged students. Given that training resources are often scarce, effective targeting helps to ensure that students and colleges maximize available resources. Using a variety of strategies, including scholarships, grants, incentives, and loan forgiveness, 21

states support worker training in high-demand fields. Eighteen states target disadvantaged students to receive this training at community colleges. Definitions of “disadvantaged” vary in the states but generally include: low-income adults and TANF recipients, displaced workers, veterans, people with disabilities, youth with certain risk factors, and ex-offenders.<sup>123</sup> Specifically, state policy should target funding to a high-demand need particular to local or regional economies (e.g., nursing and information technology) and preserve some funding for disadvantaged groups.

**12.3 Assessments of Workforce Needs.** States should require and support regular assessments of workforce needs to facilitate the matching of community college curricula to job market and workforce needs.<sup>124</sup>

Table 4: Quality Post-Secondary Education Policies, Features and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<b>10</b> Academic Supports	<b>10.1</b> State requires academic supports for poorly prepared but capable students at four-year institutions, including: (a) funding for remedial education; (b) remedial credits counted for financial aid; (c) remedial credits counted in full-time status requirements; and (d) remedial credits counted for graduation requirements	<ul style="list-style-type: none"> <li>• 4 of 4 recommended features</li> <li>• <b>3 of 4 features</b></li> <li>• 2 of 4 features</li> <li>• 1 of 4 feature</li> <li>• None</li> </ul>
	<b>11.1</b> Provision of admission incentives for minority and low-income students and students with disabilities, especially in flagship institutions	<ul style="list-style-type: none"> <li>• Required at all institutions</li> <li>• <b>Required at some (flagship) institutions</b></li> <li>• Left to each institution</li> <li>• None</li> </ul>
<b>11</b> Diversity	<b>11.2</b> Immigrant students, students receiving public assistance, former foster youth, older adults, and formerly incarcerated students eligible for need-based financial aid and in-state tuition	<ul style="list-style-type: none"> <li>• 5 of 5 groups</li> <li>• 4 of 5 groups</li> <li>• <b>3 of 3 groups</b></li> <li>• 2 of 3 groups</li> <li>• 1 of 3 groups</li> <li>• None</li> </ul>

Continued on page 48

Table 4: Quality Post-Secondary Education Policies, Features and Options

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>12</b></p> <p><b>Community Colleges and Technical Training</b></p>	<p><b>12.1a</b> State policy ensures community college courses articulate with four-year college and university requirements</p>	<ul style="list-style-type: none"> <li>• <b>Required in legislation</b></li> <li>• Statewide cooperation agreements</li> <li>• Institution-negotiated agreements</li> <li>• None</li> </ul>
	<p><b>12.1b</b> Articulation and transfer policies are:</p>	<ul style="list-style-type: none"> <li>• <b>Comprehensive, course-by-course agreements</b></li> <li>• Applied to certain majors or blocks of study</li> <li>• Applied only to the entire core of course or associate's degree</li> </ul>
	<p><b>12.2a</b> Worker skill training targeted to high-growth, high-earning jobs</p>	<p><b>Yes</b> • No</p>
	<p><b>12.2b</b> State targets available training funding to disadvantaged groups, including: (a) low-income adults, (b) TANF recipients, (c) displaced workers, (d) veterans, (e) people with disabilities, (f) youth with certain risk factors, and (g) ex-offenders</p>	<ul style="list-style-type: none"> <li>• 7 of 7 groups</li> <li>• 6 of 7 groups</li> <li>• 5 of 7 groups</li> <li>• <b>4 of 7 groups</b></li> <li>• 3 of 7 groups</li> <li>• 2 of 7 groups</li> <li>• 1 of 7 groups</li> <li>• None</li> </ul>
	<p><b>12.3</b> Regular assessments completed to match courses to job market and workforce needs</p>	<ul style="list-style-type: none"> <li>• <b>At least biannually</b></li> <li>• Less frequently than every other year</li> <li>• None required</li> </ul>

**NOTE: Bold Policy Options** represent the proposed benchmark for each policy decision

## Education Finance Policies

Despite numerous court cases, financial investments in most states continue to be skewed toward more affluent students and neighborhoods. More affluent neighborhoods and students typically have the best-equipped schools and offer teachers the best working conditions, even though researchers and policymakers concede that low-income students need greater resource investments if they are to achieve education outcomes comparable to their more advantaged peers.<sup>125</sup>

### ***Policy 13: Elementary and Secondary Funding***

Evidence suggests state policy should: (1) require equal per-pupil base funding, (2) allocate additional funds to schools in high-poverty areas, and (3) provide full funding per full-time-equivalent student in nontraditional and charter schools.<sup>126</sup>

Thus, state public education funding policy should include:

**13.1 State Investments in Public Elementary and Secondary Education.** A number of state school financing systems have been ruled unconstitutional because of funding inequity.<sup>127</sup> Nationally, the bulk of education funding is balanced, on average, with local revenue sources contributing nearly 43 percent and state sources nearly 50 percent.<sup>128</sup> In most states, state and local sources account for 85-95 percent of education funding, with federal sources providing the remainder. However, the proportion of total education funding from these sources in some individual states was wide ranging. For example, for the school year ending in 2000, reliance on local funding sources for education ranged from lows of 2.2 percent (Hawaii), 14.4 percent (New Mexico), and 19.6 percent (Vermont) to highs of 65.8 percent (Nevada) and 61.5 percent (Illinois). To create greater school funding equity between students high-poverty and low-poverty communities, states should balance funding for elementary and secondary education between both state and local funds, rather than relying heavily on locally generated property taxes. State funding should account for 50-60 percent of the state and local share of education funding. Twenty-six states maintained this level of investment in the 1999-2000 school year, and another 17 states assumed at least 40 percent of total state education costs.<sup>129</sup>

**13.2 Targeted Funding for Low-Income Communities.** States should provide additional targeted funding support to districts with high concentrations of economically and educationally disadvantaged students. A recent survey found that 30 of 47 responding states provided less rather than more support to the school districts serving the largest enrollments of minority and poor children.<sup>130</sup>

**13.3 Funding for Charter and Nontraditional Schools.** State funding per student enrolled in charter or nontraditional schools should be equal to per-student support for the regular school program. While these schools receive federal and state dollars and must comply with the standards-based requirements, nontraditional schools often do not receive an equitable share of state and local formula funds based on student enrollment and are consequently underfunded. Currently, funding for charter schools and nontraditional schools is generally negotiated as part of their charters, though several states provide state funding at less than 100 percent.<sup>131</sup> Also, states should use the same

grade-based funding adjustment formulas for charter schools that are used for public schools, allow charter schools to build cash reserves, and provide start-up and early implementation grants to non-conversion charter schools.<sup>132</sup>

#### ***Policy 14: Financial Aid for Post-Secondary Education***

The affordability of higher education depends primarily on tuition levels, the level of financial aid from federal and state governments, and individual institutional decisions. Tuition, financial aid, and institutional decisions vary widely by state.

In addition, the availability of state aid is declining nationally. For example, the percentage of state-appropriated aid for post-secondary education allocated on the basis of need fell almost 15 percent between 1982 and 2000.<sup>133</sup> This decline in state investments in post-secondary institutions precipitated a nearly 10 percent increase in family tuition costs, the largest in a decade.<sup>134</sup> To improve the affordability of post-secondary education for low-income students, state policy should include:

**14.1 Need-based Financial Aid for Post-Secondary Education.** States should provide to all academically qualified students (a) need-based financial aid to meet the full tuition costs of attending state institutions of higher learning, and (b) work-study options to assist them in meeting educational and living expenses. For the 2002-2003 school year, four states did not allocate any funding for need-based financial aid. Another four states allocated over three times more in non-need-based aid than to need-based assistance. The shift to greater reliance on tuition costs, and the dwindling of need-based aid, makes it harder for financially needy families to send their children to college. Only two states – Kentucky and Minnesota – appear to offer work/study supports to students in need.<sup>135</sup>

Table 5. Education Finance Policies

POLICY	KEY FEATURE	POLICY OPTIONS
<p><b>13</b></p> <p>Elementary and Secondary Funding</p>	<p><b>13.1</b> Percentage of education funding provided by the state</p>	<ul style="list-style-type: none"> <li>• <b>50-60%</b></li> <li>• 25-49%</li> <li>• 1-24%</li> <li>• None</li> </ul>
	<p><b>13.2</b> Allocates extra funds for districts with high concentrations of economically and educationally disadvantaged students</p>	<p><b>Yes</b> • No</p>
	<p><b>13.3a</b> Charter and nontraditional schools receive full funding for each FTE enrollee</p>	<p><b>Yes</b> • No</p>
	<p><b>13.3b</b> Charter and nontraditional schools subject to same funding adjustment formulas as public schools</p>	<p><b>Yes</b> • No</p>
	<p><b>13.3c</b> Charter and nontraditional schools allowed to build cash reserves</p>	<p><b>Yes</b> • No</p>
	<p><b>13.3d</b> State provides funding support for start-up and early implementation of charter and nontraditional schools</p>	<p><b>Yes</b> • No</p>
<p><b>14</b></p> <p>Financial Aid for Post-Secondary Education</p>	<p><b>14.1a</b> State provides financial support for academically qualified students</p>	<ul style="list-style-type: none"> <li>• <b>Merit and need-based support</b></li> <li>• Merit-based only;</li> <li>• None</li> </ul>
	<p><b>14.1b</b> State provides funding for work/study assistance at colleges and universities</p>	<p><b>Yes</b> • No</p>

**NOTE:** Bold Policy Options represent the proposed benchmark for each policy decision



# Conclusion

## 5

Educational achievement is a critical factor in helping families achieve and maintain independence, stability, and health. For many states, public education tops the list of policy concerns. This paper offers a framework for considering the adequacy of state education policies that focus on a set of key policy issues – quality schools, highly qualified teachers, student achievement, quality post-secondary education, and adequate financial support for education. Implicit in the framework are a number of widely held convictions:

- All students deserve, and schools must offer, a quality education.
- Every teacher should be highly qualified and effective in the classroom.
- Every student should be expected to perform at high levels.
- Higher education and skills development are essential for a productive and competitive American workforce.

The framework is meant to assist state policymakers in determining the best array of policies for meeting these ideals, and for moving disadvantaged children and their families into the nation's social and economic mainstream.

Ensuring student success and achievement is no easy task. Changing demographics, funding limitations, and long-standing practices all pose significant challenges to improving the educational opportunities available to all students. Major reform and improvement efforts are underway, including federal reforms like NCLB, and state and educator led efforts to integrate learning systems like P-16. These initiatives attempt to either re-conceptualize the entire education system or to raise performance-based expectations and standards. Whether these attempts will be successful depends in large measure on the appropriateness and adequacy of the state policies that support them.



# Appendix A

## THE NO CHILD LEFT BEHIND ACT OF 2001: A BRIEF OUTLINE OF ITS PROVISIONS, APPROPRIATIONS, AND RECOMMENDED ACTIVITIES

The *No Child Left Behind Act of 2001 (NCLB Act)* contains 10 titles and authorizes numerous existing and new programs. Congress appropriated \$22.1 billion – an 18 percent increase over FY 2001 funding – for NCLB Act programs. Congress also increased funding significantly for special education, up 17 percent to \$8.7 billion. Most of the large NCLB Act programs target high-poverty schools and are administered by state education agencies. These include:

**Title I** – Improving the Education of the Disadvantaged: \$12.384 billion, a 21 percent increase

Part A – Improving Basic Programs Operated by Local Education Agencies at \$10.350 billion, up 18 percent

Part B – Student Reading Skills Improvement Grants, all targeted to elementary and preschool students, at \$1.225 billion

Part F – Comprehensive School Reform Program at \$310 million, a 19 percent increase

**Title II** – Preparing, Training, and Recruiting High Quality Teachers and Principals

Part A – Teacher and Principal Recruiting Fund, which consolidates the former Class-Size Reduction and Eisenhower professional development programs, at \$2.85 billion, a 28 percent increase

**Title III** – Language Instruction for Limited English Proficient and Immigrant Students

Part A – English Language Acquisition, Language Enhancement, and Academic Achievement Act, which consolidates former bilingual and immigrant education programs into a state and local formula grant program, at \$665 million, a 45% increase

**Title IV** – 21st Century Schools

Part A – Safe and Drug-Free Schools and Communities at \$644 million

Part B – 21st Century Community Learning Centers at \$1 billion, an 18 percent increase

The NCLB Act builds on the standards-based framework for education that Congress enacted in Goals 2000 and the *Elementary and Secondary Education Act* as amended in 1994. It *establishes a goal of proficiency for all students in core content areas by 2014*. It assumes state and local educators and community members have reached consensus on what students should know and be able to do; have developed a set of specific and challenging academic content and student performance standards; and have put in place a rigorous curriculum, aligned with the standards, for *all* students.

The NCLB Act greatly strengthens previous accountability requirements. It requires state testing in grades three through eight and defines more precisely the measure of “*adequate yearly progress*” for schools and districts. It also states, for the first time, that the federal government will no longer subsidize unqualified teachers and paraprofessionals. Another important element in the standards-based framework is the provision of expert assistance to students and schools that need significant improvement.

The NCLB Act includes frequent references to requirements that program activities be based on “scientifically based research” and for “*explanation[s] of why the activities are expected to improve student academic achievement.*” The one-half page definition of “scientifically based research” remains controversial.

The NCLB Act puts states, districts, and schools on notice to end the common practice of hiring and assigning the least qualified teachers and the weakest paraprofessionals to high poverty and minority schools. State plans must spell out steps to ensure that poor and minority students are “not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers” and measures they will use to evaluate and publicly report progress with these steps.

Beginning with the 2002-03 school year, all newly hired teachers in Title I schools must be highly qualified. By the end of the 2005-06 school year, states must ensure that in *every* school all teachers in core academic subjects are highly qualified. States must establish annual measurable objectives for district gains in the percentages of teachers

who are highly qualified and participating in high-quality professional development. In 2003, states and districts must begin reporting on their progress annually.

Retroactive to January 2002, new *paraprofessionals* in Title I schools must meet higher education standards. High school diplomas alone will be insufficient. Paraprofessionals will need at least two years of post-secondary education or must pass a rigorous state or local academic assessment of their knowledge and ability to assist with instruction of reading, writing, or math, or readiness for these subjects. Current paraprofessionals must meet these requirements after four years. Paraprofessionals who work as translators or with parental involvement are exempt from these requirements. Acceptable assignments for Title I paraprofessionals for the first time are spelled out in legislation. Principals must annually report in writing their school's compliance with this provision.

In various places throughout the NCLB Act, Congress has specified the program approaches and activities that it believes are most likely to result in improved academic achievement for students in low-performing schools. While they are not mandates, federal officials are likely to examine state and local plans with the expectation of finding several of them in use. They include:

- Intensive professional development programs that are both cost-effective and easily accessible
- Training in how to teach and address the needs of students with different learning styles
- Well researched comprehensive school reform models supported by successful technical assistance providers
- Introduction of more rigorous, high-quality curricula
- Mentoring of students by a responsible adult or student
- Mechanisms to recruit and retain highly qualified teachers including scholarships, signing bonuses, and incentives such as differential pay
- Professional development strategies delivered through the use of technology, peer networks, and distance learning
- Professional development through coaching
- Training on how to understand and use data and assessments to improve classroom practice and student learning
- Teacher mentoring by exemplary teachers
- Support from distinguished schools that have closed the achievement gap and exceeded adequate yearly progress requirements
- Team teaching and reduced class schedules
- Induction programs for new teachers and principals

- Alternative routes for state certification of teachers and principals
- Reformed tenure systems
- Teacher testing for subject matter knowledge
- School leadership academies
- Merit-based pay systems
- Differential and bonus pay for teachers and principals with records of success in high-need academic areas and in high-poverty schools and districts
- Teacher advancement initiatives such as becoming mentors or exemplary teachers
- Advanced placement and pre-advanced placement programs for students
- Extended learning time and programs for students before and after school, weekends, and summers
- Preschool programs
- Parent involvement training for teachers and principals
- School-parent compacts that outline shared responsibility for improving student achievement
- Meaningful involvement of parents and the local community in planning, implementing, and evaluating school improvement activities
- Fund consolidation and budget reallocation for schools and districts

# Appendix B

## POLICY MATTERS PROJECT OVERVIEW

State policymakers, whether they are governors, state legislators, executive agency managers or policy advocates, are concerned about the effectiveness of the policies and programs they develop. However, the ability to assess the success of existing and new policy initiatives to produce positive and lasting results for families and children is frequently elusive. Currently, there is no commonly accepted way to assess the degree to which state policies advance or detract from the goal of improving child, family, and community well-being.

While policies are often developed to address or produce a certain set of outcomes, the relationship between policy and outcomes is not well understood. Little investigation of the impact of policy on system improvement and on outcomes for children and families has occurred, leaving policymakers and administrators without the needed information to guide the development and implementation of policy that will produce results.

In such an environment, how can state legislators and leaders know whether policies they implement are supportive of families? How can they discern whether the mix of policy improvements and legislative changes bring them closer to achieving better outcomes? How can policymakers and leaders make informed decisions about an array of policy choices for families? To answer these questions, the Center for the Study of Social Policy, with support from the Annie E. Casey Foundation, has begun a project to develop a results-based framework that proposes benchmarks for state policies.

*Policy Matters* offers coherent, comprehensive information regarding the strength and adequacy of state policies affecting children and families. This is done by establishing consensus among policy experts and state leaders regarding the cluster of policies believed to offer the best opportunity for improving key child and family results. Further, the project puts forth benchmarks for gauging the strength of existing state policies aimed at these results.

## How the Policies Are Organized

*Policy Matters* examines six related results: school readiness; educational achievement; youth engaged in positive, productive roles; family economic success; healthy families; and strong family relationships. When viewed collectively, these six results form one possible composite of family-strengthening policy. Included are results that focus on the entire family (family economic success, healthy families, and strong family relationships) as well as results that focus more narrowly on young children (school readiness), youth (educational achievement and youth engaged in positive, productive roles), and particular issue areas (education, health, and economic success). The mix of results and policies focuses on a broad life span, from birth to retirement (see Figure 1), and a broad range of potential policy categories (see Tables B.1 – B.6).

Each of the six results is guided by a working definition and focus:

- **School Readiness** is defined broadly as the preparedness of young children, ages 0-8 years, to enter school and the preparedness of schools to receive young children into public educational settings. The cluster focuses on young children and the major policies that support their social, cognitive, and emotional development and on child-serving systems and their capacities to deliver high-quality, developmentally appropriate care and education. The school readiness policy cluster includes: child care quality, affordability, and accessibility; Head Start, public preschool, and kindergarten quality and standards.
- **Educational Achievement** focuses on the public school and post-secondary educational achievement of students and the provision of quality public and education services. The educational success policy cluster includes policies governing class size and school enrollment, school accountability systems, teacher quality and retention, alternative education, curriculum standards, testing, and post-secondary financial aid.
- **Youth Engaged in Positive, Productive Roles** is defined as the availability of healthy personal, civic, peer, family, and community options for young people, ages 8-24. This area focuses on the developmental needs of pre-adolescents, adolescents, and young adults and the crucial transitions between each of these

periods of increasing maturity. Policies in this cluster include those that encourage and support youth in meaningful civic roles, prepare young people for work and other adult roles, and make available quality child welfare, juvenile justice, after-school, school-to-work, and health promotion services.

- **Family Economic Success** refers to the ability of working age (18-65) adults and families (up to 200 percent of the federal poverty level) to earn enough pay and benefits to provide for their basic needs and to accrue long-term assets like homes and retirement benefits. This policy cluster includes policies that support the acquisition and retention of quality jobs (e.g., WIA and TANF), improve income and earnings (e.g., state-enhanced minimum wage, personal income tax thresholds, earned income tax credit, health insurance and affordable housing), encourage and protect the development of assets (e.g., Individual Development Accounts, anti-predatory lending), and create an economic safety net for families (e.g., unemployment insurance).
- **Healthy Families** refers to the physical and mental well-being of families and examines the availability, quality, and accessibility of appropriate health care services for low-income families. This policy cluster includes policies related to health insurance coverage and benefits, health safety nets, health support services like transportation and translation, and policies promoting healthy behaviors and environments.
- **Strong Family Relationships** is defined as the relational well-being of families. While the successful promotion of “strong family relationships” is clearly tied to ensuring family economic success and family health, this result focuses primarily on strengthening the formation of families, the interaction of parents and children, the connection of families to social networks, and the adequacy and quality of necessary family resources. This policy cluster includes food security (e.g., food stamps and WIC), child welfare, domestic violence, family formation, homelessness, affordable housing, father involvement, and family support (e.g., home visiting, family and medical leave, and parent education) policies.

The categorization of policy according to desired results is imprecise. For the purposes of this project, specific policies were assigned to a category either because the category offered the “best fit” for the policy or because the workgroup tasked with developing benchmarks for that result area was best suited to discuss the policy in question. Many policies appropriately apply to many of the desired results and are referenced in each applicable paper. For example, health insurance coverage plays a role in achieving all six of the results. In addition, some policies appear in multiple categories with a shifted focus depending on the category. Policies appearing in multiple result areas are likely to be “high leverage” policies because of their potential impact on multiple outcomes.

## How the Project Is Organized

Given the breadth and complexity of state policy, it is important to clarify what the *Policy Matters* project intends to produce. Specifically, *Policy Matters* is an attempt to meet the information needs of policymakers, advocates, administrators, and local leaders with four products. These products, while distinct from one another, are developed sequentially and build upon the successful completion of the previous product.

First, six policy papers will be developed and published during this project. Each paper, one for each of the six result areas, will offer a strategic policy framework for achieving a specific result and set of outcomes. The policy papers will include a short list of policies that collectively have: (1) evidence supporting their effectiveness at effecting the desired result; (2) the best chance of being supported by multiple constituencies; and (3) sufficient scale and scope for impacting the desired result. For each recommended policy, the papers also will posit the key attributes and interactions between policies that are thought to enhance the policy's effectiveness. Teams of state and national policy experts will review drafts of the papers and meet to reach consensus on specific policy recommendations. The papers could be a positive contribution to the strategic understanding of the link between policy and results for children and families.

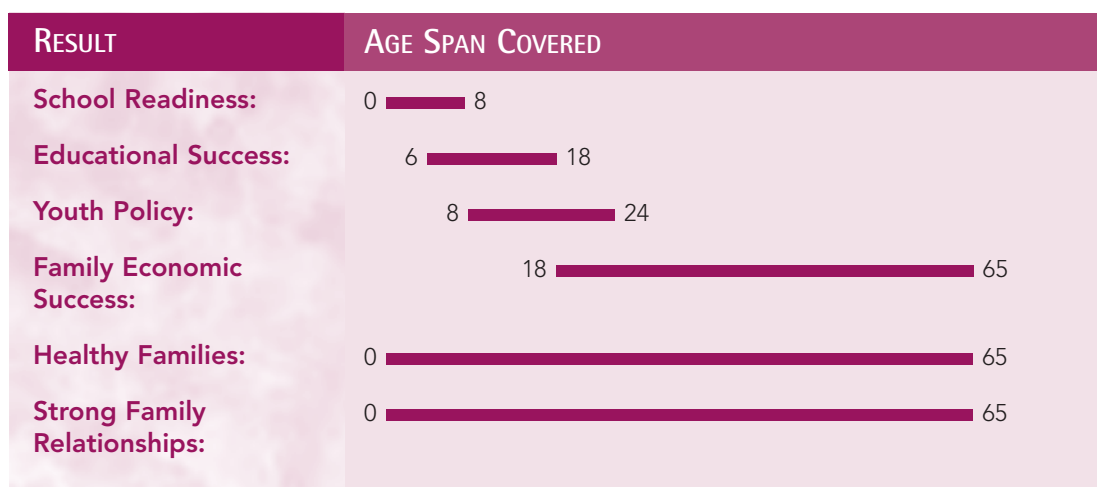
Second, *Policy Matters* offers coherent, comprehensive information regarding the strength and adequacy of state policies affecting children and families by establishing benchmarks for a cluster of policies aimed at specific child and family results. The recommended policies and their benchmarks will be published for consideration.

Third, the project will develop the policy papers and policy benchmarks into a *self-assessment tool* useful for those involved in policy planning and advocacy. The self-assessment tool might include a range of policy options beyond the "core" policies recommended in the policy papers and benchmarks product. An easy-to-use tool that identifies strengths and weaknesses in a state's policy agenda is envisioned. The tool will be widely available to state and local leaders.

Fourth, this effort could lead to a Kids Count-like product that compares state policy efforts. However, where Kids Count is concerned with *child* well-being, this effort is concerned with assessing *policy*. The effort to set benchmarks for state policy might be thought of as a *policy well-being* project that measures an individual state's policy against agreed upon benchmarks in critical areas. By measuring the strength of state policies against established benchmarks, the project hopes to provide further insight on the policy context of state success at achieving positive outcomes for children and families.

While the collection of products described previously could be useful to the field of policy analysis, this current project is not an attempt to track a wide range of possible policies related to a given topic. Nor is the project intended to be a policy clearinghouse or program “best practices” guide. Lastly, the project is not a well-being indicator, evaluation, or measurement project, though information from these activities helps to shape our policy focus. All of these activities are valuable contributions and services, and many organizations do an excellent job at one or more of them. However, these activities are beyond the scope of the current project.

Figure B.1. Overlapping Age Spans for *Policy Matters* Results



Scale: Ages 0 – 65 years

Table B.1. Preliminary List of “School Readiness” Policies

CLUSTER	POLICIES
<b>Ready Systems of Early Care and Education (ECE)</b>	<ul style="list-style-type: none"> <li>• State-funded ECE Programs</li> <li>• Child Care Subsidy Programs</li> <li>• Child Care Tax Provisions</li> <li>• Licensing and Accreditation</li> <li>• Professional Development and Compensation</li> <li>• ECE Systems Development</li> <li>• ECE Standards and Assessments</li> <li>• Facilities/Capital Investments</li> </ul>
<b>Ready Schools</b>	<ul style="list-style-type: none"> <li>• Kindergarten Quality</li> <li>• ECE Systems Development</li> </ul>

Table B.2. Preliminary List of “Healthy Families” Policies

CLUSTER	POLICIES
<b>Health Care Services</b> <ul style="list-style-type: none"> <li>• Affordability</li> <li>• Availability</li> <li>• Accessibility and Appropriateness</li> </ul>	<ul style="list-style-type: none"> <li>• Health Insurance Coverage Caps on Out-of-pocket Expenses</li> <li>• Provider Incentives</li> <li>• Streamlined Enrollment Procedures</li> <li>• Culturally and Linguistically Appropriate Services</li> <li>• Mental Health Services and Supports</li> </ul>
<b>Health-related Behaviors</b>	<ul style="list-style-type: none"> <li>• Tobacco Tax and Enforcement</li> <li>• Alcohol Tax and Enforcement</li> <li>• School Health Education and Food Services</li> </ul>
<b>Health-supporting Environments</b>	<ul style="list-style-type: none"> <li>• Lead-based Paint Abatement</li> <li>• Firearm Safety</li> </ul>

Table B.3. Preliminary List of “Strong Family Relationships” Policies

CLUSTER	POLICIES
<b>Family Formation and Maintenance</b>	<ul style="list-style-type: none"> <li>• Marriage Promotion</li> <li>• Birth Supports</li> <li>• Out-of-Wedlock Pregnancy Prevention</li> </ul>
<b>Support for Participation and Nurturance</b>	<ul style="list-style-type: none"> <li>• Father Involvement</li> <li>• Child Support Enforcement</li> <li>• Family and Medical Leave</li> <li>• Respite Care</li> </ul>
<b>Lasting Stability and Safety</b>	<ul style="list-style-type: none"> <li>• Child Welfare</li> <li>• Domestic Violence</li> </ul>

Table B.4. Preliminary List of “Youth Engaged in Positive, Productive Roles” Policies

CLUSTER	POLICIES
<b>Universal Policies</b>	<ul style="list-style-type: none"> <li>• Education</li> <li>• Preventive Health and Health Education</li> <li>• Health Care Services</li> <li>• Civic Participation</li> </ul>
<b>Vulnerable Youth Policies</b>	<ul style="list-style-type: none"> <li>• Child Welfare and Transition to Independence</li> <li>• Juvenile Justice</li> <li>• Career and Work Preparation</li> <li>• Runaway and Homeless Youth Services</li> </ul>
<b>Youth-focused Policies</b>	<ul style="list-style-type: none"> <li>• Youth Programming</li> <li>• Coordination of Youth Programs</li> <li>• Youth Representation on Boards and Committees</li> </ul>

Table B.5. Preliminary List of “Family Economic Success” Policies

CLUSTER	POLICIES
<b>Work Preparation</b>	<ul style="list-style-type: none"> <li>• Temporary Assistance for Needy Families (TANF)</li> <li>• Workforce Investment Act (WIA)</li> </ul>
<b>Work Attachment</b>	<ul style="list-style-type: none"> <li>• Health Insurance Coverage</li> <li>• Child Care Subsidies</li> <li>• Housing Location</li> </ul>
<b>Income Support Policy</b>	<ul style="list-style-type: none"> <li>• Income Tax Thresholds</li> <li>• Sales Tax</li> <li>• State Earned Income Tax Credits (EITC)</li> <li>• Housing Subsidies</li> <li>• Child Support</li> <li>• State-Enhanced Minimum Wage Policy</li> <li>• Food Security</li> </ul>
<b>Asset Development and Protection</b>	<ul style="list-style-type: none"> <li>• Homeownership</li> <li>• Asset Promotion</li> <li>• Anti-predatory Lending</li> <li>• Unemployment Insurance</li> </ul>
<b>Job Creation</b>	<ul style="list-style-type: none"> <li>• Public Sector Employment</li> <li>• Employer-based Wage Subsidies</li> </ul>

Table B.6. Preliminary List of “Educational Success” Policies

CLUSTER	POLICIES
<b>Student Achievement</b>	<ul style="list-style-type: none"> <li>• Testing in Core Academic Subjects</li> <li>• School Choice</li> <li>• Graduation Requirements</li> </ul>
<b>Quality Schools</b>	<ul style="list-style-type: none"> <li>• Curriculum</li> <li>• Inclusion</li> <li>• Class and School Size</li> <li>• Community Connections</li> </ul>
<b>Teacher Quality</b>	<ul style="list-style-type: none"> <li>• Teacher Education and Qualifications</li> <li>• Hiring Incentives and Compensation</li> </ul>
<b>Education Finance</b>	<ul style="list-style-type: none"> <li>• Elementary and Secondary Funding</li> <li>• Financial Aid for Post-secondary Education</li> </ul>
<b>Quality Post-secondary Education</b>	<ul style="list-style-type: none"> <li>• Academic Supports</li> <li>• Diversity</li> <li>• Community College Supports</li> </ul>

## ENDNOTES

- <sup>1</sup> National Center for Educational Statistics, *The Condition of Education 2001* (Washington, D.C.: U.S. Department of Education, 2001).
- <sup>2</sup> The U.S. Census terminology for minorities is African Americans, Asians/Pacific Islanders, Native Americans/Eskimos, and Hispanics.
- <sup>3</sup> R. F. Macias et al., “Summary Report of the Survey of States Limited English Proficient Students and Available Educational Programs and Services, 1997-98” (Washington D.C.: National Clearinghouse on Bilingual Education, 2000); also available at [www.ncbe.gwu.edu](http://www.ncbe.gwu.edu).
- <sup>4</sup> *Ask NCBE No. 2* (Washington, D.C.: National Clearinghouse on Bilingual Education, 2001), available at [www.ncbe.gwu.edu](http://www.ncbe.gwu.edu).
- <sup>5</sup> Carola Suarez-Orozco, “Meeting the Challenge of Schooling Immigrant Youth,” *NABE News* Vol. 24, no. 2 (Washington D.C.: National Association of Bilingual Education, December 2000).
- <sup>6</sup> The National Assessment of Educational Progress (NAEP), *The Nation’s Report Card* (Washington, D.C.: National Center for Education Statistics, 2000), available at [www.nces.ed.gov/nationsreportcard](http://www.nces.ed.gov/nationsreportcard); hereafter cited as NAEP, *The Nation’s Report Card*, 2000.
- <sup>7</sup> NAEP, *The Nation’s Report Card*, 2000.
- <sup>8</sup> NAEP tests are standards-based tests of a representative random sample of public and private school students nationally. They have been designed so that results can be examined and compared over time. Since the 1970s, data have been collected by subgroups of African American, Hispanic, and low-income students. Since 1990, tests of representative samples have been given in states. While state participation has been voluntary, over 40 states have participated.
- <sup>9</sup> See The National Assessment of Educational Progress, *The Nation’s Report Card*.
- <sup>10</sup> Kati Haycock, Craig Jerald, and Sandra Huang, “Closing the Gap: Done in a Decade,” *Thinking K-16* (Washington, D.C.: Education Trust, Spring 2001), available at [www.edtrust.org](http://www.edtrust.org); hereafter cited as Haycock, Jerald, and Huang, “Closing the Gap.”
- <sup>11</sup> Haycock, Jerald, and Huang, “Closing the Gap.”
- <sup>12</sup> Ann Flanagan and David Grissmer, “The Role of Federal Resources in Closing the Achievement Gap of Minority and Disadvantaged Students” (Arlington, VA: The Rand Corporation, 2001); hereafter cited as Flanagan and Grissmer, “The Role of Federal Resources.”
- <sup>13</sup> David Grissmer, Ann Flanagan, Jennifer Kawata, and Stephanie Williamson, *Improving Student Achievement: What the NAEP Test Scores Tell Us* (Arlington, VA: Rand Corporation, 2000).
- <sup>14</sup> U.S. Department of Education, *21<sup>st</sup> Annual Report to Congress on the Implementation of IDEA*, Tables IV-12, IV-13, IV-15, and IV-17 (Washington, D.C.: Author, 1999).
- <sup>15</sup> Haycock, Jerald, and Huang, “Closing the Gap.”
- <sup>16</sup> General Accounting Office, *School Finance: State and Federal Efforts to Target Core Students* (Washington D.C.: General Accounting Office, 1998). This study relied on 1991-92 data, the last year data was collected.
- <sup>17</sup> Anne Riccuiti, William Thompson, and Michael Vaden-Kieman, *Prospects: Student Outcomes Final Report* (Washington D.C.: U.S. Department of Education, 1997).
- <sup>18</sup> C. A. McNeely, J. M. Nonnemaker, and R. W. Blum, “Promoting Student Attachment to School: Evidence from the National Longitudinal Study of Adolescent Health,” *Journal of School Health* 72, no. 4 (2002): 138-146; available at [www.samhsa.gov/preventionpartners/connectedness.asp](http://www.samhsa.gov/preventionpartners/connectedness.asp).
- <sup>19</sup> Clea A. Sucoff McNeely, “School Connectedness: The Relationship Among Promoting Academic Success, Reducing Risky Behavior, and Increasing Civic Responsibility,” in *Students Continually Learning: A Report on Presentations, Student Voices and State Actions* (Washington, D.C.: Council of Chief State School Officers and Forum for Youth Investment, 2001).
- <sup>20</sup> For more information on community schools, see [www.communityschools.org/](http://www.communityschools.org/).
- <sup>21</sup> Reginald Clark in conference proceedings for “Parent Perspectives: Challenges and Success of Family Involvement on Academic Achievement” (Portland, OR: Northwest Regional Educational Laboratory, 1999).
- <sup>22</sup> Carter J. Savage, *Project Learn: Making the After-School Hour Work for Boys and Girls Club Members* (Atlanta, GA: Boys and Girls Clubs of America, Inc., 1999).
- <sup>23</sup> Education Trust, “Achievement in America 2001,” Powerpoint Presentation (Washington, D.C.: Author), available at [www.edtrust.org](http://www.edtrust.org).
- <sup>24</sup> National Center for Public Policy and Higher Education, *Measuring Up 2000: The State-by-State Report Card for Higher Education* (San Jose, CA: Author 2000).
- <sup>25</sup> Tom Mortenson, *Post-Secondary Opportunity*, No. 89 (November, 1999).
- <sup>26</sup> Tom Mortenson, Research Seminar on Public Policy Analysis of Opportunity for Post-Secondary, 1997, unpublished paper.

- <sup>27</sup> National Center for Education Statistics, “Fall Enrollment in Colleges and Universities Surveys” (Washington, D.C.: U.S. Department of Education, April 2001); Integrated Post-Secondary Education Data System, “Fall Enrollment” (Washington, D.C.: U.S. Department of Education, April 2001).
- <sup>28</sup> National Center for Public Policy and Higher Education, *Measuring Up 2002* (San Jose, CA: Author, 2002), available at [www.measuringup.org](http://www.measuringup.org).
- <sup>29</sup> National Center for Public Policy and Higher Education, “Losing Ground: A National Status Report on the Affordability of American Higher Education” (San Jose, CA: Author, 2002).
- <sup>30</sup> National Institute for Literacy, “Reading Facts” (Washington, D.C.: Author, 2002), available at [www.nifl.gov/nifl/facts/reading\\_facts.html](http://www.nifl.gov/nifl/facts/reading_facts.html).
- <sup>31</sup> Donna Walker James, Sonia Jurich, and Steve Estes, *Raising Minority Academic Achievement: A Compendium of Education Programs and Practices* (Washington, D.C.: American Youth Policy Forum, 2001).
- <sup>32</sup> Grissmer et al., “*Improving Student Achievement.*”
- <sup>33</sup> Flanagan and Grissmer, “The Role of Federal Resources.”
- <sup>34</sup> Under the *No Child Left Behind Act*, each state must define “proficient” levels of student performance for grades 3 through 8 and one high school grade. Definitions may vary from state to state. The most highly regarded definition of student performance levels are those set by the National Assessment Governing Board for the National Assessment for Educational Progress (NAEP). For example, they describe 4<sup>th</sup> grade proficient reading as follows: “Students performing at the *proficient* level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth-graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making inferences.”
- <sup>35</sup> For the purpose of this paper, a post-secondary institution is a private or public institution offering a two- or four-year degree or credential.
- <sup>36</sup> Other outcomes and indicators affecting student learning are addressed in other *Policy Matters* papers. For example, preschool attendance, which seems to lead to higher elementary school academic performance, is discussed in the school readiness paper. Family income is directly relevant to post-secondary education access and is discussed in the family economic success paper.
- <sup>37</sup> For a brief overview of teacher quality and its impact on student performance, see Michael Allen, “Teaching Makes A Difference,” Powerpoint Presentation (Denver, CO: Education Commission of the States, March 14, 2002).
- <sup>38</sup> National Commission on Teaching and America’s Future, *No Dream Denied: A Pledge to America’s Children – Summary Report* (Washington, D.C.: National Commission on Teaching and America’s Future, January 2003), p. 5; hereafter cited as National Commission on Teaching and America’s Future, *No Dream Denied*.
- <sup>39</sup> Dan D. Goldhaber and Dominic J. Brewer, “Teacher Licensing and Student Achievement,” *Better Teachers, Better Schools*, eds. Chester E. Finn, Jr. and Marci Kanstoroom (Washington, D.C.: Thomas B. Fordham Foundation, 1999); Grissmer, et al., *Improving Student Achievement*.
- <sup>40</sup> M. M. Seastrom, K. J. Gruber, R. Henke, D. J. McGrath, and B. A. Cohen, *Qualifications of the Public School Teacher Workforce: Prevalence of Out-of-field Teaching, 1987-88 to 1999-2000* (Washington, D.C.: National Center for Education Statistics, May 2002).
- <sup>41</sup> Craig D. Jerald, “All Talk, No Action: Putting an End to Out-of-field Teaching,” (Washington, D.C.: Education Commission of the States), p. 4.
- <sup>42</sup> U.S. Department of Education, *Meeting the Highly Qualified Teachers Challenge* (Washington, D.C.: Author, 2002), p. 25; hereafter cited as U.S. Department of Education, *Meeting the Highly Qualified Teachers Challenge*.
- <sup>43</sup> U.S. Department of Education, *Meeting the Highly Qualified Teachers Challenge*, p. 34.
- <sup>44</sup> U.S. Department of Education, *Meeting the Highly Qualified Teachers Challenge*, pp. 23-28.
- <sup>45</sup> U.S. General Accounting Office, *School Finance: State and Federal Efforts to Target Poor Students* (Washington, D.C.: Author, 1998); Richard M. Ingersoll, “Out-of-Field Teaching, Educational Inequality, and Organization of Schools: An Exploratory Analysis” (Seattle, WA: Center for the Study of Teaching and Policy, University of Washington, January 2002).
- <sup>46</sup> National Commission on Teaching and America’s Future, *No Dream Denied*.
- <sup>47</sup> Cynthia D. Prince, “Higher Pay in Hard-to-Staff Schools,” (Arlington, VA: American Association of School Administrators, June 2002); hereafter cited as Prince, “Higher Pay.”
- <sup>48</sup> Prince, “Higher Pay,” pp. 21-23. The range and type of bonus awards vary across the states. For example, the Massachusetts’ signing bonus program offers \$20,000 over four years to mid-career professionals willing to pursue alternative certification and enter the teaching field. For teaching in low-performing schools, bonuses ranged from \$1,800 per year in North Carolina to a high of \$19,000 and \$20,000 in South Carolina and California, respectively.
- <sup>49</sup> E. A. Hanushek, J. F. Kain, and S. G. Rivkin, “Why Public Schools Lose Teachers” (Cambridge, MA: National Bureau of Economic Research, November 2001).

- <sup>50</sup> The National Governors Association provides a review of state approaches to addressing salary scales that reflect performance and skill enhancement. See Dane Linn, "Rewarding Teacher Quality: An Investment in the Future," (Washington, D.C.: National Governor's Association, October 2001), available at [www.nga.org](http://www.nga.org).
- <sup>51</sup> Prince, "Higher Pay," p. 22.
- <sup>52</sup> Southeast Center for Teaching Quality, "Recruiting Teachers for Hard-to-Staff Schools: Solutions for the Southeast and the Nation" (Chapel Hill, NC: Author, January 2002); Price, "Higher Pay," p. 29-30.
- <sup>53</sup> Prince, "Higher Pay," pp. 23-29, 33-34.
- <sup>54</sup> American Federation of Teachers, *Survey and Analysis of Teacher Salary Trends* (Washington, D.C.: Author, 2003).
- <sup>55</sup> Prince, "Higher Pay," p. 2.
- <sup>56</sup> American Federation of Teachers, *Survey and Analysis of Teacher Salary Trends 2002* (Washington, D.C.: Author, 2003). The most favorable comparisons of average teacher salaries (\$44,367) are to Accountant III (\$54,503), Buyer/Contract Specialist III (\$59,981), and Assistant Professors at public universities (\$47,476). The full report is available at [www.aft.org/research/survey01/beginning.html](http://www.aft.org/research/survey01/beginning.html).
- <sup>57</sup> Manpower Demonstration Research Corporation, *Foundation for Success: Case Studies of How School Systems Improve Student Achievement* (Washington, D.C.: Council of the Great City School, September 2002); the full report is available at [www.cgcs.org](http://www.cgcs.org).
- <sup>58</sup> J. R. Cryan, R. Sheehan, J. Weichel, and I. G. Bandy-Hedden, "Success Outcomes of Full-day Kindergarten: More Positive Behavior and Increased Achievement in the Years After," *Early Childhood Research Quarterly* 7, no. 2 (June 1992): 187-203. More detailed recommendations for kindergarten policy is provided in another *Policy Matters* paper entitled *Improving the Readiness of Children for School: Recommendations for State Policy*. That report is available at [www.cssp.org](http://www.cssp.org).
- <sup>59</sup> Chester E. Finn, Jr. and Michael J. Petrilli (Eds), *The State of State Standards 2000* (Washington, D.C.: Thomas B. Fordham Foundation, January 2000); hereafter cited as Finn and Petrilli, *State Standards 2000*.
- <sup>60</sup> L. Horn, L. K. Kojaku, and C. D. Carroll, "High School Academic Curriculum and the Persistence Path Through College: Persistence and Transfer Behavior of Undergraduates Three Years After Entering Four-Year Institutions" (Washington, D.C.: U.S. Department of Education, August 2001); hereafter cited as Horn, Kojaku, and Carroll, "High School Academic Curriculum." The authors defined rigorous curriculum as including four years of English, four years of mathematics, three years of foreign language, three years of social studies, three years of science, and at least one AP course or test taken.
- <sup>61</sup> Horn, Kojaku, and Carroll, "High School Academic Curriculum," National Research Council, *Learning and Understanding: Improving Advanced Study of Mathematics and Science in U.S. High Schools* (Washington, D.C.: National Academy Press, 2002); hereafter cited as National Research Council, *Learning and Understanding*.
- <sup>62</sup> Horn, Kojaku, and Carroll, "High School Academic Curriculum," Jennifer Dounay, "Advanced Placement Courses and Examinations – State-level Policies" (Denver, CO: Education Commission of the States, January 2000).
- <sup>63</sup> Jennifer Dounay, "Advanced Placement Courses and Examinations – State-level Policies." The report only surveyed those states with legislation addressing advanced placement courses; district or school level policies were not reviewed. The four states mandating course offerings were Indiana, Ohio, South Carolina, and West Virginia. Financial incentives were established in Arkansas, Colorado, Florida, Massachusetts, Minnesota, Missouri, Oklahoma, South Carolina, Texas, Utah, and West Virginia. Accountability incentives were required in Colorado, Louisiana, Missouri, New Jersey, Oklahoma, Utah, Virginia, and Wisconsin. Programs or funding for teacher training were offered in Arkansas, Indiana, Iowa, Minnesota, Oklahoma, Texas, and West Virginia. States providing subsidies for student test fees were Arkansas, California, Florida, Indiana, Massachusetts, and Minnesota, Oklahoma, Texas, and Wisconsin.
- <sup>64</sup> Horn, Kojaku, and Carroll, "High School Academic Curriculum."
- <sup>65</sup> National Research Council, *Learning and Understanding*.
- <sup>66</sup> Gene Bottoms, Alice Presson, and Mary Johnson, *Making High Schools Work: Through Integration of Academic and Vocational Education*, summarized by the American Youth Policy Forum on its website, *High Schools That Work*, available at [www.aypf.org/compendium/CL508.pdf](http://www.aypf.org/compendium/CL508.pdf).
- <sup>67</sup> R. F. Macias et al. *Summary Report of the Survey of States Limited English Proficient Students and Available Educational Programs and Services, 1997-98* (Washington D.C.: National Clearinghouse on Bilingual Education, 2000), available at [www.ncbe.gwu.edu](http://www.ncbe.gwu.edu); National Center for Education Statistics, "Overview of Public Elementary and Secondary Schools and Districts: School Year 2001-02" (Washington, D.C.: Author, May 2003).
- <sup>68</sup> National Center for Education Statistics, "Overview of Public Elementary and Secondary Schools and Districts: School Year 2001-02." In the 2000-01 school year, just over 6 million ELL students were enrolled. In the following year, 6.3 million ELL students received English proficiency services.
- <sup>69</sup> Ask NCBE No. 2 (Washington, D.C.: National Clearinghouse on Bilingual Education, 2001) available at [www.ncbe.gwu.edu](http://www.ncbe.gwu.edu).
- <sup>70</sup> Jorge Ruiz de Velasco and Michael Fix, "Overlooked and Underserved: Immigrant Students in U.S. Secondary Schools" (Washington, D.C.: the Urban Institute, December 2000).

- <sup>71</sup> The work of Ron Unz and English for the Children typify this approach. “Sheltered” English immersion programs provide limited, usually one year, instruction to ELL students in classes where they do not have to compete with native English-speaking counterparts in mainstream classes. For a general review and more information on bilingual education policy and programs, see the Education Commission of the States website at [www.ecs.org](http://www.ecs.org).
- <sup>72</sup> Among these more traditional programs are English as a Second Language (ESL), transitional bilingual education, and dual-language immersion programs. Most of these programs have their genesis in the *Bilingual Education Act (Title VII) of 1968*, which is a part of the *Civil Rights Title VI* prohibiting discrimination, requires schools provide equal education opportunities to language-minority students. The Act requires students remain in adequate programs until they can read, write, and comprehend English well enough to enter mainstream school curriculums. See the Education Commission of the States website at [www.ecs.org](http://www.ecs.org).
- <sup>73</sup> U.S. General Accounting Office, *Public Education: Meeting the Needs of Students with Limited English Proficiency* (Washington, D.C.: Author, February 2001).
- <sup>74</sup> National Center for Education Statistics, 1999.
- <sup>75</sup> U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002* (Washington, D.C.: U.S. Government Printing Office, 2002).
- <sup>76</sup> U.S. Department of Education, National Center for Education Statistics, “Overview of Public Elementary and Secondary Schools and Districts: School Year 2001-02” (Washington, D.C.: Author, May 2003).
- <sup>77</sup> U.S. Department of Education, National Center for Education Statistics, “Overview of Public Elementary and Secondary Schools and Districts: School Year 2000-01” (Washington, D.C.: Author, May 2002).
- <sup>78</sup> Grissmer et al.
- <sup>79</sup> See for example, R. Greenwald, L. V. Hedges, and R. D. Laine, “The Effect of School Resources on Student Achievement,” *Review of Educational Research* 66, no. 3 (1996): 361-96.
- <sup>80</sup> U.S. Department of Education, *Reducing Class Size: What Do We Know?* (Washington, D.C.: Author, 1998); J. McRobbie, J. D. Finn, and P. Harman, “Class Size Reduction: Lessons Learned from Experience,” Policy Brief No. 23 (San Francisco, CA: WestEd, August 1998).
- <sup>81</sup> For an overview of class size research and policies, see ERIC Clearinghouse on Educational Management, “Class Size: Can School Districts Capitalize on the Benefits of Smaller Classes?” *Policy Report 1* (Eugene, OR: Author, Spring 2000).
- <sup>82</sup> See for example, H. Pate-Bain, C. M. Achilles, J. Boyd-Zacharias, and B. McKenna, “Class Size Does Make a Difference,” Phi Delta Kappan (November 1992): 253-56; David C. Illig, “Reducing Class Size: A Review of the Literature and Options for Consideration” (Sacramento, CA: California Research Bureau, California State Library, 1996); B. A. Nye, L. V. Hedges, and S. Konstantopoulos, “The Long-Term Effects of Small Classes: A Five-Year Follow-up of the Tennessee Class Size Experiment,” *Educational Evaluation and Policy Analysis* 21, no. 2 (Summer 1999): 127-142.
- <sup>83</sup> J. D. Finn, S. B. Gerber, C. M. Achilles, and J. Boyd-Zacharias, “The Enduring Effects of Small Classes,” *Teachers College Record* 103, no. 2 (2001): 145-183. Student achievement was measured using both norm and criterion-referenced achievement tests.
- <sup>84</sup> Education World, “Class Size Reduction.”
- <sup>85</sup> Joe Nathan and Daren Febey, *Smaller, Safer, Saner Successful Schools* (Minneapolis, MN: Center for School Change, September 2001); C. B. Howley and R. Bickel, “Small Works: School Size, Poverty and Student Achievement” (Washington, D.C.: Rural School and Community Trust, February 2000); Kathleen Cotton, “New Small Learning Communities: Finding from Recent Literature” (Portland, OR: Northwest Regional Educational Library, December 2001).
- <sup>86</sup> B. K. Lawrence, et al., *Dollars and Sense: The Cost Effectiveness of Small Schools* (Washington, D.C.: The Rural School and Community Trust, 2002).
- <sup>87</sup> See for example, P. E. Funk and J. Bailey, “Small Schools, Big Results: Nebraska High School Completion and Postsecondary Enrollment Rates by Size of School District” (Lincoln, NE: Nebraska Alliance for Rural Education, 1999); L. Stiefel, P. Iatarola, N. Fruchter, and R. Berne, “The Effects of Size of Student Body on School Costs and Performance in New York City High Schools” (New York, NY: Institute for Education and Social Policy, New York University, 1998).
- <sup>88</sup> David Neumark and Mary Joyce, “Evaluating School-to-Work Programs Using the New NLSY” (Cambridge, MA: National Bureau of Economic Research, May 2000), available at <http://papers.nber.org/papers/W7719>.
- <sup>89</sup> G. Farkas, R. Olsen, E. Stromsdorfer, L. Sharpe, F. Skidmore, D. Smith, and S. Merrill, *Post-program Impacts of the Youth Incentive Entitlement Pilot Projects* (New York, NY: Manpower Demonstration Research Corporation, 1984).
- <sup>90</sup> Board of Children and Youth, Institute of Medicine, National Academy of Sciences, *Community Programs to Promote Youth Development, Executive Summary*, (Washington, D.C.: National Academy Press, 2002).
- <sup>91</sup> For research on service learning and student social competence, see W. Morgan and M. Streb, *How Quality Service-Learning Develops Civic Values* (Bloomington, IN: Indiana University, 1999); for research on personal and social responsibility, see for example, D. Weiler, A. LaGoy, E. Crane, and A. Rovner, *An Evaluation of K-12 Service Learning in California: Phase II Final Report* (Emeryville, CA: RPP International and the Search Institute); T. Berkas, *Strategic Review of the W. K. Kellogg Foundation's Service Learning Projects, 1990-1996* (Battle Creek, MI: W. K. Kellogg Foundation); D. Loesch-Griffin, L. A. Petrides, and C. Pratt, *A Comprehensive Study of Project YES – Rethinking Classrooms and Community: Service-Learning as Educational Reform* (San

Francisco, CA: East Bay Conservation Corps); for student academic achievement, see B. Schaffer, *Service-Learning: An Academic Methodology* (Stanford, CA: Stanford University Department of Education); R. Shumer, "Community-Based Learning: Humanizing Education," *Journal of Adolescence* 17, no. 4 (1994): 357-367; D. Loesch-Griffin, et al., *A Comprehensive Study of Project YES*.

<sup>92</sup> Center for Human Resources and Abt Associates, *Summary Report: National Evaluation of Learn and Serve America* (Waltham, MA: Center for Human Resources, Brandeis University, July 1999). This document provides an assessment of short- and long-term impacts of fully implemented service-learning programs on school achievement, civic participation and attitudes.

<sup>93</sup> See *Quick Tables and Figures* available at [www.nces.ed.gov](http://www.nces.ed.gov); U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), "Adult Education Interview" (Washington, D.C.: Author, 1999).

<sup>94</sup> Forrest P. Chisman, *Leading from the Middle: The State Role in Adult Education and Literacy*, (New York: Council for the Advancement of Adult Literacy, August 2002). The report is available at [www.caalusa.org](http://www.caalusa.org).

<sup>95</sup> Several organizations (Achieve, Council on Basic Education, American Federation of Teachers, Education Week, and others) have reviewed these variations in standards of achievement and made quality judgments about them, although their judgments are not uniform.

<sup>96</sup> Finn and Petrilli, *State Standards 2000*.

<sup>97</sup> Source: *Education Week* 17 (January 10, 2002).

<sup>98</sup> Northwest Regional Educational Laboratory, *Student Assessment and Testing*, available at [www.nwrel.org/cnorse/booklets/educate/11.html#2](http://www.nwrel.org/cnorse/booklets/educate/11.html#2).

<sup>99</sup> Regarding accommodations for students with disabilities, the ERIC Clearinghouse on Disabilities and Gifted Education at the Council for Exceptional Children notes that many states now make accommodation for the testing of children with disabilities. Their website provides examples of various approaches at [ericec.org/digests/e564.html](http://ericec.org/digests/e564.html). Also, the ERIC Clearinghouse on Assessment and Evaluation provides information on statewide test accommodations for students whose primary language is not English, suggesting such accommodations as extra time, bilingual dictionaries, and permission to ask teachers for word translations. See ERIC Identifier: ED458289, authored by Charles Stansfield and Charlene Rivera, available at [www.ed.gov/databases/ERIC\\_Digests/ed458289.html](http://www.ed.gov/databases/ERIC_Digests/ed458289.html).

<sup>100</sup> National Center for Education Statistics, *The Effects of Accommodations on the Assessment of LEP Students in NAEP* (Washington, D.C.: Author, September 2001).

<sup>101</sup> J. Abedi, C. Lord, and J. R. Plummer, Final Report of Language Background As a Variable in NAEP Mathematics Performance (Los Angeles, CA: Center for the Study of Evaluation, 1997); J. Abedi, C. Lord, and C. Hofstetter, Impact of Selected Background Variables on Students' NAEP Math Performance ((Los Angeles, CA: Center for the Study of Evaluation and National Center for Research on Evaluation, Standards, and Student Testing, 1998).

<sup>102</sup> Horn, Kojaku, and Carroll, "High School Academic Curriculum."

<sup>103</sup> National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform* (Washington, D.C.: U. S. Department of Education, April 1983).

<sup>104</sup> National Center for Education Statistics, *Elementary and Secondary: Regulations*, Table 153 – State Requirements for High School Graduation, in Carnegie Units: 2001 (Washington, D.C.: Author, June 2001).

<sup>105</sup> National Governor's Association, "High School Exit Exams: Setting High Expectations" (Washington, D.C.: Author, 1998).

<sup>106</sup> For example, see U.S. Department of Education, *A Study of Charter School Accountability* (Washington, D.C.: Author, June 2001), available at [www.ed.gov/pubs/studies](http://www.ed.gov/pubs/studies); American Federation of Teachers, *Do Charter Schools Measure Up? The Charter School Experiment After 10 Years* (Washington, D.C.: Author, July 2002), available at [www.aft.org/research/reports/charter/csweb/sum.htm](http://www.aft.org/research/reports/charter/csweb/sum.htm).

<sup>107</sup> Source: Center for Education Reform.

<sup>108</sup> David J. Armour and Brett M. Peiser, *Competition in Education: A Case Study of Interdistrict Choice* (Boston, MA: Pioneer Institute for Public Policy Research, 1997), available at [www.pioneerinstitute.org](http://www.pioneerinstitute.org).

<sup>109</sup> Robert A. Moffitt, Jennifer J. Garrett, and Janice A. Smith, *School Choice 2001: What's Happening in the States* (Washington, D.C.: Heritage Foundation); hereafter cited as Moffitt, Garrett, and Smith, *School Choice 2001* available on the Heritage Foundation's website at [www.heritage.org/research/education/schools/](http://www.heritage.org/research/education/schools/).

<sup>110</sup> Moffitt, Garrett, and Smith, *School Choice 2001*.

<sup>111</sup> See for example, Education Commission of the States, "Charter School Finance: Policies, Activities and Challenges in Four States," (Denver, CO: Author, March 1998); Education Commission of the States, "Emerging Issues in Charter School Financing" (Denver, CO: Author, 1996); Gary Miron and Christopher Nelson, "Autonomy in Exchange for Accountability: An Initial Study of Pennsylvania Charter Schools" (Kalamazoo, MI: Western Michigan University, October 2000); and RPP International and the University of Minnesota, "A Study of Charter Schools: First Year Report" (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1997).

<sup>112</sup> Davis Jenkins and Katherine Boswell, "State Policies on Community College Remedial Education: Findings from a National Survey" (Denver, CO: Education Commission of the States, September 2002).

- <sup>113</sup> National Center on Education Statistics (NCES), “Remedial Education at Higher Education Institutions in Fall 1995” (Washington, D.C.: U.S. Department of Education, October 1996).
- <sup>114</sup> Davis Jenkins and Katherine Boswell, “State Policies on Community College Remedial Education: Findings from a National Survey.”
- <sup>115</sup> David W. Breneman and William N. Haarlow, *Remediation in Higher Education* (Washington, D.C.: Thomas B. Fordham Foundation, 1998).
- <sup>116</sup> The State Policy Issues Database Online, a service of the Western Interstate Commission for Higher Education, offers information on existing state policies related to education for poorly prepared students and specifically addresses policies on remediation and academic supports. See [www.wiche.edu/Policy/SPIDO](http://www.wiche.edu/Policy/SPIDO).
- <sup>117</sup> *Grutter v. Bollinger et al*, 539, United States Supreme Court, June 23, 2003.
- <sup>118</sup> For a summary of surveys of “best practices” related to improving admissions of minority, low-income, and disabled students to post-secondary education, see Andrea Reeves, “Learning What We Know About Pre-College Outreach Programs,” *PathNotes* (Washington, D.C.: Pathways to College Network, September 2000), available at [www.pathwaystocollege.net/newsletter/Pathnotes\\_September2002.pdf](http://www.pathwaystocollege.net/newsletter/Pathnotes_September2002.pdf).
- <sup>119</sup> Davis Jenkins and Katherine Boswell, “State Policies on Community College Workforce Development: Findings From a National Study” (Denver, CO: Education Commission of the States, 2002). The nineteen states are: Alaska, Alabama, Arkansas, Colorado, Delaware, Iowa, Kansas, Kentucky, Maine, Missouri, Mississippi, Nebraska, New Hampshire, Nevada, North Carolina, North Dakota, Virginia, Washington, and Wisconsin.
- <sup>120</sup> For an examination of the mixed results of community college preparation for information technology employment, see Robert I. Lerman, Stephanie Riegg, and Harold Salzman, “The Role of Community Colleges in Expanding the Supply of Information Technology Workers” (Washington, D.C.: Urban Institute, May 2000).
- <sup>121</sup> Education Commission of the States, “Overview: Transfer/Articulation,” available at [www.ecs.org](http://www.ecs.org).
- <sup>122</sup> Education Commission of the States, “Transfer and Articulation Policies” (Denver, CO: Education Commission of the States, February 2001).
- <sup>123</sup> Davis Jenkins and Katherine Boswell, “State Policies on Community College Workforce Development: Finding from a National Study” (Denver, CO: Education Commission of the States, 2002).
- <sup>124</sup> Larry J. Warford and William J. Flynn, “New Game, New Rules: The Workforce Development Challenge,” *Leadership Abstracts* 13, no. 2 (April 2000), available at [www.league.org](http://www.league.org).
- <sup>125</sup> General Accounting Office, *School Finance: State and Federal Efforts to Target Poor Students* (Washington D.C.: Author, 1998).
- <sup>126</sup> Grissmer et al, “*Improving Student Achievement*.”
- <sup>127</sup> Those states include Arkansas, West Virginia, Wyoming, Kentucky, Montana, New Jersey, and Texas. For more on state funding inequities see, Kent McGuire, *Emerging Issues in State-Level School Financing*, ERIC Digest Services Number EA56; ERIC Identifier: ED324777, available at [www.ed.gov](http://www.ed.gov).
- <sup>128</sup> Source: National Center for Education Statistics, Common Core of Data (CCD), “National Public Education Financial Survey, 1999-2000” (Washington, D.C.: U.S. Department of Education).
- <sup>129</sup> *Ibid.*
- <sup>130</sup> Education Trust, “The Funding Gap: The Students Who Need the Most Get the Least” (Washington, D.C.: Author, August 8, 2002), available at [www.edtrust.org/main/news/08\\_08\\_02\\_fundinggap.asp](http://www.edtrust.org/main/news/08_08_02_fundinggap.asp).
- <sup>131</sup> States include Minnesota, New Jersey, Arizona, and Colorado. See the Center for Education Reform website, at [www.edreform.com/school\\_reform\\_faq/charter\\_schools.htm](http://www.edreform.com/school_reform_faq/charter_schools.htm).
- <sup>132</sup> Education Commission of the States, “Charter School Finance: Policies, Activities and Challenges in Four States” (Denver, CO: Author, March 1998).
- <sup>133</sup> Thomas G. Mortenson, “Shutting the College Doors: Are We Cutting Off the Route to the Middle Class,” a paper prepared for the Education Commission of the States National Forum on Education Policy, July 10, 2002, available at [www.post-secondary.org/archives/Reports/71002HollywoodCA.pdf](http://www.post-secondary.org/archives/Reports/71002HollywoodCA.pdf).
- <sup>134</sup> The College Board, *Trends in College Pricing, 2002* (New York, NY: The College Board, 2002).
- <sup>135</sup> Source: Western Interstate Commission for Higher Education, [www.wiche.edu/Policy/SPIDO](http://www.wiche.edu/Policy/SPIDO). Alaska, Georgia, South Dakota, and Wyoming do not offer need-based aid. Alabama, Idaho, Louisiana, and Mississippi offered three times in non-need-based aid compared to need-based aid.

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