



A Double the Numbers Publication from Jobs for the Future

Raising Graduation Rates in an Era of High Standards

Five Commitments for State Action

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Improved Graduation Rates***

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JOBS FOR THE FUTURE

CREATING STRATEGIES
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JOBS FOR THE FUTURE seeks to accelerate the educational and economic advancement of youth and adults struggling in today's economy. JFF partners with leaders in education, business, government, and communities around the nation to: strengthen opportunities for youth to succeed in postsecondary learning and high-skill careers; increase opportunities for low-income individuals to move into family-supporting careers; and meet the growing economic demand for knowledgeable and skilled workers.

Raising Graduation Rates is one of a series of Double the Numbers publications from Jobs for the Future. These publications are designed to deepen support for state and federal policies that can dramatically increase the number of low-income young people who graduate high school ready for college and work and enter and complete post-secondary education.

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The State Context: Growing Challenge, New Opportunity

In the first half of the twentieth century, states and school districts took on the challenge of refashioning the American high school into a universal institution. In the first decade of the twenty-first century, an even more formidable challenge has presented itself: how to ensure that high schools are successful not just in graduating the students who enter their doors but also in preparing those students to succeed in college.

Moving forward swiftly on both high school graduation and college preparation rates constitutes an ambitious and “dual” agenda. Neither the federal government nor the state governments hold a blueprint outlining the steps to getting there. Although the American education system was built on the promise of a free public education, the system has never been held accountable for all young people completing high school, let alone finishing fully prepared to pursue further education. But this is exactly what demographers and economists are telling us must be done if the nation is to be competitive in a global economy driven by technological innovation and if young people are to take productive roles in that economy, enjoying a good quality of life and contributing to healthy communities.

Beginning in the early 1990s, most states took the critical first steps of establishing academic standards and assessments for measuring student progress in meeting those standards. For the most part, this commitment to standards-based education reform has resulted in a steady increase in the percentage of

young people reaching at least the minimum benchmarks set and a diminution of the achievement gap between different demographic groupings of students in reaching those benchmarks.

In 2005, Achieve, Inc., and the National Governors Association cosponsored a national education summit that for the first time ever focused exclusively on high schools. The impetus for the summit was the 2004 American Diploma Project report, *Ready or Not: Creating a High School Diploma that Counts*, which concluded that for far too many young people, the high school diploma represented a “broken promise” that could no longer guarantee a graduate was ready to compete in the college classroom or the modern workplace. At the close of the summit, an initial group of 13 states—now grown to 32—committed to raise standards and graduation requirements to a college- and work-ready level as part of a multi-state Achieve effort called the American Diploma Project Network. Achieve’s most recent annual 50-state survey reveals a steady growth in the last three years in the number of states that are trying to address the gap by putting in place policies consistent with a college- and career-ready agenda (Achieve 2007b).¹

Yet even as a growing number of states were making the commitment to close the expectations gap, more troubling news about high schools began to emerge from major media outlets throughout the country. After remaining invisible for many years, dropouts became a topic of intensifying public interest and scrutiny. Between 2006 and 2007, *Time Magazine* ran a cover story entitled “Dropout Nation,” the *Oprah Winfrey Show* aired a two-part special on high school and collaborated with *Time* on a poll to draw continuing attention to dropouts, major press outlets throughout the United States reported on a survey of dropouts conducted by Civic Enterprises, and MTV launched *The Dropout Chronicles* at a National Dropout Summit cosponsored by a number of high-visibility media outlets, Civic Enterprises, and the Bill & Melinda Gates Foundation.

In the midst of this growing spotlight on high school graduation rates and dropout rates, the governors of the 50 states agreed to sign the National Governors Association Graduation Compact—an agreement to measure graduation rates as carefully as academic performance, and to do so with a common measure across states.² The Compact, in combination with the American Diploma Project Network, signals that a growing number of state leaders have begun to grapple with one of the most difficult and important challenges of K-12 reform:

How to substantially increase the percentage of young people graduating from high school while also continuing to bring academic standards into alignment with

the skills and knowledge required for success in higher education and employment.

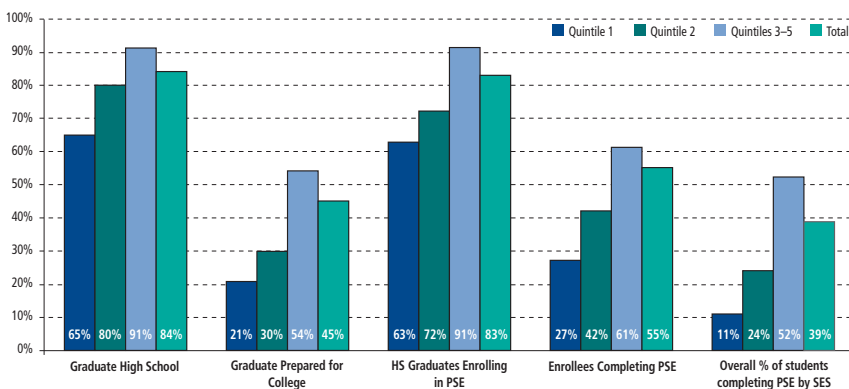
Leaks in the Educational Pipeline

Addressing this challenge requires a new level of attention to the graduation and achievement gaps among different income and racial groups. At a time when the fastest-growing portion of our youth population is low-income, African-American, and Hispanic, only 65 percent of those from the lower rungs of the socioeconomic ladder earn a high school diploma, compared with 91 percent of students from the middle and upper levels. (See Figure 1.) This chasm-like gap in high school graduation rates between students from low-income families with limited formal education and their peers from higher-income, more educated families is becoming increasingly evident as national research is augmented by state analysis of cohort graduation rates.

Less visible is the inadequate academic preparation of many high school graduates, especially those from low-income backgrounds. According to a recent study using data from the National Education Longitudinal Survey (Goldberger 2007), only 21 percent of high school graduates from the lowest socioeconomic group are adequately prepared for college-level work (somewhat, very, or highly prepared), compared to 54 percent of graduates from the middle and upper levels.³ As expected, the lack of adequate academic preparation relates to high college failure rates as well. While one out of two students from middle- and upper-class families can be expected to earn a college degree, only one in ten students from the lowest socioeconomic group will do so.

The young people who are on the wrong side of the achievement and graduation gaps do not have lower aspirations or less motivation than their more affluent peers. They too are “keen economists” who recognize the demands of the workforce and aspire to a college degree. In fact, the majority of them persist for years in seeking educational credentials. Yet, as these results and other state and national data on high school and postsecondary graduation rates suggest, many of these young people never reach their goal. Students who struggle in high school too often find themselves without opportunities, quality

Figure 1: The completion gap between low-SES and high-SES students is the cumulative result of gaps in achievement along every step of the education pipeline.



Percentage of eighth graders by SES status who attain different levels of education.
Source: Goldberger (2007).

educational options, or a guiding hand to help them catch up and get back on track to a college-ready high school diploma. Absent such supports, many of them leave high school without a credential and enter into a futile search for other pathways to a postsecondary credential and family-sustaining wage.

A recent analysis of data from the National Educational Longitudinal Survey shows that close to 60 percent of dropouts earn a high school credential within 12 years of starting high school—in most cases by obtaining a GED certificate. These young people do not stop there; they persist in seeking education beyond high school. Unfortunately, this persistence does not pay off the way young people might hope. Although nearly half of these GED holders enroll in a two- or four-year postsecondary institution, fewer than 10 percent of those who enroll ever earn a degree, leaving them with limited career prospects at best (Almeida, Johnson, & Steinberg 2006).

The achievement and graduation gaps indicated by this data augur serious consequences for both the economic standing and the social well-being of the nation. Increasingly, all of our states rely on an educated workforce to fuel their major growth industries—such as health, biotechnology, and communications. Yet the percentage of young people in the United States earning a college degree remains disappointingly low. Between 1997 and 2005, the percentage of 25- to 29-year-olds holding a Bachelor's degree grew by less than 1 percent, and it remains below 30 percent of the young adult population (Goldberger 2007). Once a leader of developed nations in the percentage of adults holding a college degree, the United States has fallen to tenth in its percentage of degree holders among 25- to 34-year-olds (OECD 2007).

At the same time, states are finding that young people who do not complete high school cost the states a great deal: their higher rates of unemployment and lower earnings result in reduced tax revenues, and their higher rates of unemployment, poorer health, and higher rates of incarceration leave the state with big public assistance, medical, and public care costs (Levin et al. 2007).

Increasingly aware of the impact of globalization and deindustrialization on state economies, governors and other state policymakers have begun to pay close attention to high school and college completion rates, especially in comparison with other nations and other states. Some have set numeric goals for postsecondary completion rates; others are awaiting the results of commissions or blue ribbon panels studying the “pipeline” that links education to economic growth. And, although many states have initiated high school improvement or reform efforts in the recent past, for the most part these have set general guidelines for improvement and have not focused on improving the educational options and outcomes of low-income students.

A Time for Action

The time is right for state action. The renewed attention to the scope of the dropout problem provides a critical opportunity to address the educational needs of low-income and minority students, especially those who are not on track to an on-time graduation or are out of school altogether. State policy and opinion leaders have key roles to play in ensuring that these young people graduate from high school and are on pathways to success in postsecondary education. At a time when the extent and character of the dropout challenge is becoming more visible, the necessary state policy push for college and work-ready standards must be complemented by strong policies that make those standards achievable for *all students*.

For states to make progress on this ambitious agenda, they will need to ask themselves the question that is at the heart of this paper: *What combination of new policies and innovative strategies will help states address the dropout challenge in their high schools and, at the same time, ensure that struggling students are better prepared to earn a postsecondary degree or credential?*

This paper calls upon state policymakers to commit to five key outcomes and suggests strategies and action steps that they can take to focus their high

school reform efforts on ensuring that these commitments are met. The recommended strategies build on the recent actions of states to support the twin goals of college readiness and graduation for all, as well as on a growing body of research and innovative practice and programming that has yielded important new information about the kinds of supports that are required to help low-income and struggling students persevere and succeed. By building on and complementing ongoing systemic educational reform efforts with these strategies, policymakers can (and in some cases have begun to) gain traction in improving educational outcomes and options of high school aged students, especially low-income and struggling students.

**Commitment 1:
A High School Diploma That Signifies College-
and Work-Readiness**

Completion of a high school program of study of high academic intensity and quality has a significant impact on success after high school, especially for low-income, African-American, and Hispanic students. A key challenge states are facing is how to ensure equal access for all to such a program of study and to do so without the unintended consequence of stifling local and school-based innovation and flexibility in curriculum design.

**Commitment 2:
Pathways to Graduation and College Success
for Struggling and Out-of-School Students**

Many students find high school to be an alienating and discouraging experience. As a growing body of research and practice indicates, schools that are effective—particularly for low-income, African-American, and Hispanic young people—tend to be small and emphasize relationships and relevance along with academic rigor. These schools combine personal attention, a college-going culture, and positive peer pressure with evidence-based practices to help students catch up, accelerate their learning to achieve higher standards, and connect to postsecondary institutions and career possibilities. Far too few such schools exist, and most states lack the vehicles or mechanisms for helping to ensure that such schools are developed or replicated in communities with concentrations of struggling students and dropouts.

**Commitment 3:
Turnaround of Low-performing High Schools**

A relatively small subset of high schools account for much of the current “graduation gap” that separates low-income, African-American, and Hispanic students from their more affluent and white peers. But these schools, called “dropout factories” by some, have proven immune to several generations of reform. The challenge for school districts and states is to develop strategies and policies that are powerful and comprehensive enough to interrupt patterns of poor performance. To achieve the desired outcome, states will need to differentiate among schools not making their performance targets in order to identify the subset of high schools that are the highest priority for assistance, and then work with those districts to turn them around or replace them with more effective options.

**Commitment 4:
Increased Emphasis on Graduation Rates
and College-Readiness in Next-Generation
Accountability**

Most state accountability systems focus schools and districts on improving student academic performance, as measured primarily by the scores that students get on statewide assessments. As states begin to tackle the dropout crisis and move to prepare more students to succeed in college, policymakers will need to consider additional accountability indicators, recognitions, and incentives to encourage and pressure schools and districts to hold onto struggling students, get them back on track to a diploma, and increase student readiness for college and careers.

**Commitment 5:
Early and Continuous Support for
Struggling Students**

“Early warning” indicators, such as failing core academic courses in middle school and/or ninth grade and sporadic attendance, can help schools and districts to reliably predict which students are highly likely to drop out of high school. States need to support districts in developing accurate data on such leading indicators and in providing just-in-time interventions and supports that will help students who are struggling get back on track to graduation.

A Framework for State Action

Organized around the five commitments, this paper offers a framework for how states can significantly accelerate their progress in improving graduation rates for low-income and struggling students while continuing to push forward on aligning standards to college and work readiness. With the focus on the particular dynamics of, and strategies for, high school improvement and dropout reduction, the framework proposes a set of action steps and strategies for each commitment, based on a rationale and summary of recent state progress. Drawing on national and state research, as well as on the experiences of pioneering states, school districts, and best-in-class programs, the paper provides guidance to state leaders on how to be more strategic and intentional in improving the educational outcomes of low-income and struggling students.

This framework is intended to complement and leverage existing reform initiatives in states, which in many cases focus on a set of critical, systemic, K-12 issues, including: teacher quality; school leader preparation and effectiveness; literacy across the curriculum; science, technology, and mathematics instruction; and early childhood education (universal kindergarten and pre-K programming). To make good on the five commitments outlined in this framework, states will need to look at each of these initiatives through the specific lens of improving the educational outcomes of low-income and struggling high school aged students to and through postsecondary credentials.

Commitment 1: A High School Diploma That Signifies College- and Work-Readiness

Young people and their families have internalized the message: High school is no longer enough; aim for college. Nationally, the number of students who aspire to college credentials has doubled in recent years, with the largest growth occurring among low-income students. In 2002, 80 percent of tenth graders named a Bachelor's degree or higher as their ambition, up from 40 percent in 1980 (Roderick 2006). But so far, these high aspirations are not paying off with higher college completion rates.

Although approximately two-thirds of graduating seniors actually do enroll in college, only a third of these young people attain their goal of a college degree within four years, and only just over half earn a degree within six years from entrance. While one out of two students from middle- and upper-class families can be expected to earn a college degree, only one in ten students from the lowest socioeconomic group will do so (Goldberger 2007).

With competition growing for an adult workforce to fuel—and attract—growth industries, the mismatch between high school preparation and college expectations is a serious issue for states. While a number of factors can affect whether a student completes college, a substantial body of research shows that a young person's course of study in high school is the single biggest predictor of college success—greater than family background, parents' education level, test scores, class rank, and GPA (Barth 2003).

One growing state response to this recent research is to require more coursework in the core subject matters that are needed for college entrance and success. According to recent research conducted by Achieve, Inc., 18 states have increased course requirements for graduation and require students to complete a college- and work-ready curriculum (Achieve 2007a). These states fall along a continuum from mandating a core curriculum as a diploma requirement for all youth (e.g., Michigan, Minnesota) to making the core the “default curriculum” with an opt-out possibility (e.g., Indiana, Texas).

The move toward a core college-preparatory program of study is an important trend. At the same time, it is evident to those undertaking this work that simply adopting new course requirements is only the first step in ensuring that all students take and complete a more challenging and intensive program of study in

high school. Educational policymakers and leaders have begun to roll up their sleeves to address the complex and interrelated issues of quality, consistency, and equity.⁴ In doing so, they will also need to guard against the unintended consequence of once again enshrining the very school curriculum, structures, organization, and schedule that have contributed to the currently high level of student disengagement and failure.

Action Area 1: Ensure equity, quality, and consistency in the delivery of a core program of study aligned to college expectations.

The young people who stand to benefit the most from a high-intensity and demanding program of study are low-income students and students of color. Recent research has found that a strong academic program of study that includes a math sequence at least through Algebra II in high school reduces the Bachelor's degree attainment gap between white and African-American and Hispanic students by more than half. Moreover, the benefits of a college-ready course of study extend to all students, whether or not they go on to college, and previously low-performing students benefit the most (ACT 2007; Adelman 1999; Barth 2003).

State policymakers can take a number of immediate steps to ensure that new course requirements within a core program of study lead to such positive results:

- Monitor course-taking patterns across the state, disaggregated for race and income, and assess how the data relates to achievement and graduation gaps.
- Enhance data systems to include student-level transcript data in order to assess the relationship between completing the core program of study, college readiness, and postsecondary attainment.
- Develop a process and multiple measures to assess and enhance depth and consistency in content and rigor of core courses.

Course-taking patterns indicate which students across the state are completing a college-preparatory program of study and whether there are gaps related to race, ethnicity, or income. But ultimately policymakers need to know whether new course titles equate to students' learning more challenging concepts and skills. One strategy that is gaining currency among states is to use end-of-course examinations in key subjects. Currently, 16 states have end of course exams within their state high school assessment systems (e.g., New York, Tennessee, Virginia) and another 11 states plan to implement them (Achieve 2007b). End-of-course exams can be useful to show who has access to rigorous curriculum and which students may need more support and help to reach proficiency in core courses. Equally important, test results can be analyzed to identify teachers who are especially successful in helping struggling students and who can serve as models to their peers, as well as those who can use additional support and professional development.

Under the auspices of Achieve's American Diploma Project Network, 13 states have joined together in the construction and implementation of a common end-of-course Algebra II test, based on evidence that this subject is a key gateway course to college success.⁵ The common test will help to support equity across diverse schools by promoting consistency and quality in Algebra II courses within and among states.

Curriculum audits is another strategy that a few states are beginning to use to make a deeper assessment of consistency, quality, and equity. Rhode Island is the first state to create a statewide approach to validating local district courses. In spring 2007, the state began reviewing all district high school curricula to determine whether they are adequately aligned with the state standards. The state will only endorse the diplomas in districts assessed to be in alignment. Delaware also requires all districts to submit course content for review to examine their alignment with state standards (Achieve 2007a).

Such an approach could be adapted in larger states to allow for targeted reviews or provide tools to districts to carry out their own audits of high school courses. Public reporting of this information can help to build the public will and appetite for college prep for all.

Action Area 2: Allow for innovation at the local level.

A key impetus leading states and districts to invest considerable time, energy, and resources in standards-based reform has been the desire to go beyond “seat time” and the accumulation of Carnegie units as the only measures of rigor and academic success. In theory, the existence of clear standards allows for variance in how districts and schools ensure that their students meet those standards.

Most high schools continue to offer a traditional curriculum organized around the usual sequence of courses within each academic discipline. However, some charter schools, as well as district schools with charter-like conditions, offer more integrative, interdisciplinary, or project-based coursework, such as humanities (teaching literacy and communication skills through an examination of historical content) or an integrated four-year math sequence. In fact, such approaches often constitute a central aspect of the design of the new schools serving young people who have traditionally been least well-served by their schools and least well prepared for college and careers. (See box, “Curriculum Innovation in Boston.”)

After conducting extensive research on high-poverty schools around the country, a group of researchers recently concluded that the subset of high-performing high-poverty schools employ innovative strategies that are substantially different from those that dominate in the nineteenth and early-twentieth century “Old World” model of education still common in most schools today. High-poverty schools that “beat the odds” with challenged students do so by operating less like an efficient factory, moving everyone along the conveyer belt at the same time, and more like an effective modern hospital, with all of its systems organized to analyze, diagnose, and form teams to serve its clients (Calkins et al. 2007).

As more states and districts endorse a core program of study, it is important for state policymakers to leave the door open to evidence-based innovative approaches with a track record of success in helping low-income students gain access to and engage with the skills and knowledge they will need to thrive in a twenty-first century world. For example, policymakers can:

Curriculum Innovation in Boston

In 2004, Boston enacted a new graduation policy that encourages and makes explicit flexibility for district high schools to adopt innovative curriculum sequences that keep students engaged, equip them to pass the state tests, and prepare them for postsecondary education. One of the options offered in the policy is for schools to implement a humanities curriculum that integrates English and history courses.

Since enactment of the policy, seven new small schools have developed and received approval from the district for humanities course curricula. The district has engaged four partners to provide content and curricular support and coaching: WriteBoston, Facing History and Ourselves, Primary Source, and Lesley University/Art Institute of Boston. At the same time, teachers have participated in “residencies” where they spend time observing and learning in the classroom with experienced humanities teachers at two Boston pilot high schools, Fenway High School and Boston Arts Academy. These schools have used their charter-like autonomies to make humanities a central part of their core curriculum. In addition, coaches from the district’s Office of High School Renewal work with the teachers implementing the humanities curriculum at the new schools to help them create literacy-rich classrooms, use primary source material, and develop and share tools such as writing rubrics.

- Develop adaptive end-of-course exams that allow for students in interdisciplinary or integrative courses to complete the assessment over a period of time, taking sections of the exams as appropriate to the topics of study in their coursework;
- Include materials for integrated or interdisciplinary courses in curriculum guidelines, sample syllabi, and model lessons the state provides to districts;
- Communicate clear messages to the districts that the state will support different delivery models for the core program of study.

The first group of states to embrace new required core programs of study are still in the early stages of implementation. As they move forward a key challenge they will face is clarifying the difference between a core program of study and a more lock-step set of courses. Charter schools and new small district schools in the state can often provide helpful examples of how different delivery models are still possible. Thirty-eight states currently produce course-level standards and/or model curricular materials for schools (Achieve 2007b). Such materials

could also include guidelines and sample syllabi that incorporate examples of thematic and integrated coursework. This would help underscore the message that the goal of access for all to a core college-ready program of study does not require a rigid delivery system but rather allows for innovations such as Boston's integrated humanities curriculum.

Action Area 3: Promote dual enrollment and other forms of college course-taking in high school.

One of the most promising ways to support college readiness is to make it possible for young people to experience the level of academic work required to succeed in college by taking college courses or college-like seminars while in high school. Such coursework can challenge and raise the aspirations of youth who are struggling to persist in and complete high school and serve as a bridge for first-generation college-goers who might feel that college is “just not for me.”

Often accelerated learning, such as is encouraged by Advanced Placement courses or the International Baccalaureate program, is viewed as only for students who have proven themselves academically. New evidence emerging from more universal dual enrollment approaches and new models of “college in high school” indicate the power of such approaches even for struggling students and dropouts (Vargas 2007). To support the development of accelerated learning and college experience and credits in high school for the full range of learners, state policymakers should:

- Legislatively enact and fund dual enrollment for a broad range of learners, including targeted support for overage, undercredited, and returning dropouts;
- Support districts and schools in increasing access for all their students to college-level work in high school (e.g., Advanced Placement, International Baccalaureate).

Dual enrollment legislation in some states, such as Indiana, Louisiana, and Pennsylvania, is designed to include support for struggling students and out-of-school youth. Indiana's Fast Track to College offers students, including returning dropouts at least nine-

teen years of age, the opportunity to earn a high school diploma while earning credits toward a post-secondary degree. Louisiana provides for dual enrollment between high schools and community/technical colleges for students aged 16-21.

A number of states have created incentives for districts and schools to open up their Advance Placement and International Baccalaureate courses to a broader range of students by developing state systems for grading schools that give credit to schools and districts for the percentage of students who complete AP courses and other forms of college-in-high-school. For example, Florida's indicators include the percent of students that completed at least one AP, IB, or dual enrollment course.

Commitment 2: Pathways to High School Graduation and College for Overage, Undercredited, and Out-of-School Youth

Nationally, one-third of high school freshmen enter already overage for grade and behind in skills (Olson 2006). These students face an uphill struggle to adjust to high school demands and get on track to graduation. Getting and staying on track also proves to be daunting for some of their peers, who enter high school with a stronger academic profile but fall behind quickly and begin to drift away. The proportion of struggling students who are not on track to graduate from high school is even higher in low-income, African-American, and Hispanic communities, and it is especially concentrated in the non-selective, often high-poverty high schools in these districts (Balfanz & Legters 2004). A detailed statistical study in New York City revealed that nearly 140,000 young people were either overage or undercredited or had already dropped from the school rolls (Lynch 2006).

Developing systemic solutions to a problem of this scale presents states and communities with, in the words of Michele Cahill, “an invention challenge of unprecedented magnitude.”⁶ A key conclusion to draw from emerging research on high-poverty, high-performance schools is that beat-the-odds schools do not just make a traditional model of education work better; they reinvent what schools do. Often the high schools that beat the odds are small schools that emphasize relationships and relevance along with academic rigor. They combine personal attention

What Can We Learn from “Beat the Odds” Schools?

Findings from recent studies converge around a set of school organizational and instructional practices that characterize high-poverty high schools that beat the odds with struggling students.

- 1 Focus on the transition into high school**—It is not left up to the students alone to negotiate the often bumpy transition from the middle grades into high school. Teachers and counselors meet individually and/or in groups with incoming students. Some models include summer programs between eighth and ninth grade, and/or an intensive, first-semester focus on skills to help students prepare for high school—both socially and academically.
- 2 Support students in staying on track**—Early warning systems are in place to identify and immediately reach out to students and families when students evidence attendance or performance problems, especially in literacy or numeracy skills. Schools are organized to provide referrals or to offer necessary supports, opportunities, and services to students and families.
- 3 Extend learning time**—Teachers and administrators take responsibility for ensuring that students get the instructional time they need—during and beyond school hours—to stay on track with college preparatory requirements. Schools enable older students to accumulate or recover credits over shorter periods of time by organizing the calendar differently (for example, by trimesters), using technology for distance learning, customized instruction, and feedback, and using extended learning time for projects geared to real-world standards (see no. 5).

- 4 Provide academic challenge for all**—All students are expected to take on academic challenges (honors-level work or college-level work while in high school) and are supported in doing so. Teachers feel part of a professional learning community in which they are supported with high-quality curricula and professional development particularly focused on keeping the intellectual level high, even while helping students to catch up on skills.
- 5 Align performance standards to college and career readiness**—Schools focus explicitly on preparing students for life beyond high school, rather than on graduation as an end goal. They use college and work-level standards as benchmarks against which to assess the academic rigor and relevance of their courses. They embrace external standards and use assessment data to improve curricula and school practices, not just to measure students’ past performance.
- 6 Focus on transition from high school to college and careers**—Schools make explicit links among academic work, student interests, college success, and careers, by creating opportunities for upper-grade students to pursue accelerated academic learning, college exposure and course-taking, and work internships (paid or unpaid). Such experiences are used as opportunities for students to develop twenty-first century skills of self-management, communication, and continuous learning that will help them succeed in college and careers.

Sources: Quint (2006); Just for the Kids (2006); Education Trust (2005)

and a positive peer culture with evidence-based practices to help students catch up, accelerate their learning, and connect to postsecondary institutions and career possibilities. (See box, “What Can We Learn from ‘Beat the Odds’ Schools?”)

Most states and districts have very limited capacity to encourage and support the development of such new models and pathways. At best, they have made small investments in alternative education programming, often targeting such schools and programs primarily to students with histories of behavioral difficulty. In many cases, school funding policies and practices result in the schools with the most underserved and challenging-to-serve students receiving the fewest resources and the least experienced teachers (ACT 2007; Peske & Haycock 2006).

While high school turnaround and improvement strategies (see page 15) will eventually help to stem the bleeding of students from traditional high schools, new, high-quality pathways that offer and demonstrate new ways to increase college-readiness for low-income and struggling students will also be necessary. States have a key role to play in encouraging and supporting the development and expansion of such models. Through legislative and/or administrative action, policymakers can ensure that the state has the vehicles to enable such development to occur.

Action Area 1: Create vehicles for the development and expansion of new schools for overage/undercredited students.

Longitudinal data on the educational pipeline indicates that a majority of young people who leave high school without a diploma continue to pursue the goal of high school graduation and a college credential (Almeida, Johnson, & Steinberg, 2006). The problem is the dearth of school models and pathways to get them to this goal. Beyond offering and overseeing charters, most states do not have strategies for supporting the development of new school options, particularly for the most underserved populations of high school aged young people.

States that are trying to improve the graduation rate of overage, off-track, and out-of-school youth are finding that they need vehicles that can establish strong, evidence-based design criteria that can be used to develop and/or import appropriate school models. Specifically, states are taking action steps to:

- Develop capacity for new school development through a dedicated state office and/or officially sanctioned intermediaries;
- Give priority to charter schools directed at overage, off-track, and out-of-school youth;

- Revise and strengthen alternative education legislation so that it becomes a vehicle for promoting high-quality options. (See box, “Oregon Alternative Education Policies.”)

North Carolina and Texas stand out for their efforts to support the vehicles needed for new school development. North Carolina has created the New Schools Project, a public/private partnership that operates as a school development entity for “Learn and Earn” high schools across the state, as part of its mission of coordinating statewide high school reform efforts and providing technical assistance and resources to local partners to plan new small high schools or redesign existing under-performing high schools. (See box, “Learn and Earn in North Carolina.”)

Similarly, the Texas High School Project is a public-private initiative committed to increasing graduation and college going through redesigning low-performing high schools, creating new school models, and fostering innovative partnerships between high schools and higher education institutions. During the THSP’s first few years of operation, the Community Foundation of Texas has served as the primary school development entity orchestrating site selection and technical assistance processes. The foundation will share that responsibility with the Texas Education Agency as THSP continues to start up new schools.

Oregon Alternative Education Policies

Under Oregon statute, all school districts must maintain alternative learning options that are flexible with regard to environment, time, structure, and pedagogy. Unlike many states, which designate alternative education for students with behavioral challenges, Oregon holds to a broad definition of alternative programming as a “school or separate class designed to best serve students’ educational needs and interests and assist students in achieving the academic standards of the school district and the state.”

Districts can create and operate alternative schools within the district or they may contract with community-based organizations and institutions to run alternative programs. The contracting school districts approve the sites and evaluate them according to a menu prepared by the state.

Every student in a contract alternative school is funded at a minimum rate of 80 percent of the state per pupil allotment. Weights in state funding add dollars for up to two additional

categories per student (e.g., special education, English language learner, pregnant/parenting). In addition, alternative schools and programs may be funded in two ways: based on enrollment or on attendance. If a school has fairly consistent attendance and regular hours, it is funded for enrollment based on an annual count of students. Schools that have unusual hours, programming, or class sizes because they serve a more challenging population are funded by attendance (i.e., according to the number of days students attend).

Students in alternative settings may earn credit in a variety of ways, such as showing classroom or equivalent work (e.g., a supervised independent study, career-related learning experiences, project-based learning), demonstrating competency or mastery via passing exams, providing work samples, or providing documentation of prior learning activities/experiences (e.g., certification of training).

Texas also has created an incentive to the development of charter schools for dropouts, by waiving its cap on open enrollment charters if the applying school will serve at least 75 percent at-risk students or returning dropouts. Nevada too has lifted the cap on charter schools that exclusively serve at-risk students.

Action Area 2: Create the conditions to allow for and foster new pathways and models.

Among the many students who are not on track to graduate from high school on time or have already dropped out, there are subgroupings at very different points in their academic trajectory and for whom different approaches and models are proving to be most appropriate. For example, school districts such as New York and Chicago are finding that a substantial subgroup of dropouts may have already earned half or more of their credits. Often older, with personal or family responsibilities, these young people may be most likely to complete high school in a flexible late-afternoon, evening, and weekend program structured more like a college than like a high school and designed to allow for credit acceleration. Their needs may be quite different from those of younger struggling students who were kept back a year or more in middle school, and then struggle with attendance and credit issues in ninth grade. For these young people, an alternative high school offering smaller classes and more support services may be essential.

To design and execute the full range of high-quality models for the underserved populations of young people, school developers need charter-like conditions that give them the needed flexibility to do whatever is necessary to serve these students well. They also need school leaders and teachers who understand the barriers to learning that can be exacerbated by poverty and neighborhood and family crises but do not use these barriers as excuses for lower achievement.

To move in this direction states can take action steps to:

- Allow charter-like flexibilities to new schools designed to serve struggling students;
- Leverage dual enrollment to support early college high school models, such as Gateway to College, that blend secondary and postsecondary education for this population;

Learn and Earn in North Carolina

North Carolina has embarked on an ambitious effort to create a system of small high schools as part of a statewide high school redesign effort. This includes the design and implementation of “Learn and Earn” high schools—early college high schools designed to enable thousands of students across the state to earn both a high school diploma and up to two years of college credit or an Associate’s degree, tuition-free, in five years. Faculty from K-12 and higher education work together to integrate course offerings and provide a seamless system of early awareness and college preparatory academic and exploratory experiences to young people starting as early as sixth grade.

A primary support vehicle for this work is the North Carolina New Schools Project, a public/private partnership that operates as the state’s premier school-development entity. The NSP was launched to coordinate statewide high school reform efforts, as well as to provide technical assistance and resources to local partners to plan the new small high schools. For example, the NSP provides multiyear implementation grants to selected schools to develop innovative new models of teaching and learning.

The NSP expects to provide support to over 100 new small high schools over the next several years. Strong support from the governor and other state leaders has been instrumental in rapidly expanding education options in North Carolina. Currently, 33 early college high schools are open and a total of 75 are planned. Tuition waivers are available to students in early college programs. In addition, the governor has provided increasing levels of support within the state budget for the expansion and sustenance of new small high schools.⁷

- Develop a pipeline of highly skilled teachers and leaders into these schools, through offering incentives, including differential pay, educational and credentialing opportunities, and career advancement;
- Stimulate the creation of high-quality schools through an innovation fund and other strategies, such as debt financing and assistance in locating and securing adequate facilities for new schools.

North Carolina again offers a strong example of several of these strategies in action. Accelerated instruction, including postsecondary credits for students who are at risk of dropping out of high school, can be found in 2003 legislation called the “First in America Innovative Education Initiatives Act.” This North Carolina law authorizes community colleges and local school boards to jointly establish innovative programs for students who would benefit from accelerated instruction and/or are at risk of dropping out. This was followed by the establishment of the New Schools Project, a public/

private partnership that operates as the state's premier school-development entity. (See box, "Learn and Earn in North Carolina.") Pennsylvania recently enacted and funded dual enrollment legislation that includes set-asides for youth who are economically disadvantaged and set-asides for specific dual enrollment programs such as Philadelphia's Gateway to College, a collaboration between the School District of Philadelphia and the Community College of Philadelphia. The program allows out-of-school youth with relatively high levels of credit attainment and an eighth-grade reading level to be "dual-enrolled," working simultaneously toward high school diplomas and college credits.

Both North Carolina's New Schools Project and the Texas High School Project are partnering with Jobs for the Future and the University Park Campus School to create "clinical sites"—successful schools that offer opportunities for principals, teachers, and coaches in early college high schools to experience first hand the practices of preparing students for college.

Commitment 3: Turnaround of Low-performing High Schools

One of the most serious educational challenges for state policymakers is what to do to interrupt the flow of young people who drop out or are pushed out of the subset of large, underperforming high schools where graduation is an iffy proposition. Many of these high schools are already identified as low-performing based on their academic performance under NCLB accountability. But adding accountability for improving the cohort graduation rates—as a handful of states have started to do and as a reauthorized NCLB is likely to require—will result in far more high schools being identified for corrective action. In one of the first states to report disaggregated cohort graduation rates, officials calculated that the number of high schools identified as in need of improvement would grow by 30 percent or more if the state were to add the schools that met their achievement targets but had a graduation rate of 55 percent or lower.⁸

Using a proxy measure of four-year cohort graduation rates, Robert Balfanz and Nettie Legters of Johns Hopkins University identified 2,000 high schools across the country that graduate 60 percent or fewer of their students, functioning, in effect, as "dropout factories." Found in every state, these high schools are especially concentrated in cities and in high-poverty areas (urban and rural). While these schools represent only 15 percent of the roughly 14,000 public high schools in the United States, they produce more than half of the dropouts. Two and a half million young people attend these schools, including over one-third of the country's African-American and Hispanic public high school students (Balfanz & Legters 2004).

With their thick stew of problems, such high schools often defy attempts at incremental and generic school reform. Balfanz and Legters found that in the dropout factory high schools, as many as 80 percent of the ninth graders are overage when they enter high school, require special education services, have less than seventh-grade reading and math skills, or are repeating a grade for the second or even third time (Balfanz 2006). At the same time, because of teacher seniority rules and assignment processes, these schools often have more than their share of new, inexperienced or underqualified teachers (Peske & Haycock 2006). The combination of struggling students, high teacher and principal turnover, and fragmented reform initiatives can lead to low morale, fatigue, and a culture of low expectations (Calkins et al. 2007).

The challenge for school districts and states is to come up with strategies and policies that are powerful and comprehensive enough to interrupt this downward spiral. The action areas outlined here suggest an approach states can take that begins with differentiating among schools not making their performance targets in order to identify a subset of high schools of the highest priority for assistance. Once these schools are identified, states need a set of policies and strategies directed at creating significant change in the conditions and incentives within which these schools operate so as to attract entrepreneurial teachers and leaders and to ensure that they have the expertise and authority to act. Finally, the state investment in high school turnaround and dropout reduction needs to be commensurate with the magnitude and depth of the problem.

Action Area 1: Prioritize Turnaround Efforts in “Dropout Factory” High Schools.

Around the country, state officials are already concerned about the large numbers of schools that are likely, by 2009-10, to fall into the most extreme federal designation for failure. In some states, this number has already overloaded state and district capacity to provide restructuring support. The challenge is to ensure that chronically dysfunctional high schools get the help they need to make the kinds of fundamental changes that result in better outcomes for students, most of whom come from low-income families and communities. This will require a system for identifying and intervening first in the high schools that are chronically failing to improve academic performance and/or graduation rates.

Most states have the authority to play a direct role in district decision making around the restructuring of low-performing schools and to take corrective action when districts fail to make fundamental changes in chronically underperforming schools. However, few have chosen to do so (Ziebarth & Hassel 2005). The factors influencing states’ roles around low-performing schools are numerous but include lack of capacity, the absence of a sense of urgency, the number of schools facing restructuring, the political climate, and the legal relationship between districts and the states.

States generally have allowed even those schools falling into the most extreme federal designation for failure—seven years of low performance—to avoid replacement or major changes in governance by choosing the option of engaging in “another form of major restructuring.” This, too often, means still more years of incremental change strategies that produce little improvement in student outcomes. Work is further complicated by a lack of flexibility and reluctance to act at the district level, caused by a combination of long-standing bureaucratic practices, top-down management practices, collective bargaining agreements, and tight budgets with competing priorities.

Academic improvement and rising graduation rates are the ultimate measures of whether a school is making adequate yearly progress. Yet it can take a full cohort or two of ninth graders (which means at least four to five years) to know whether the turnaround

efforts in a high school are indeed working. In the lowest-performing schools, the problem is too urgent to allow for such a long time to elapse before stepping up or changing the intervention strategies. Recent research in Chicago and several other cities has demonstrated that particular interim measures—for example, the on-time promotion rate of ninth graders into tenth grade—can be highly predictive of whether students will complete high school. Based on such evidence, states can establish interim indicators that provide reliable early indications of progress.

The action steps recommended below can lay the foundation for a statewide high school turnaround effort:

- Differentiate among high schools to determine which need immediate fundamental turnaround assistance or redesign/replacement based on achievement and cohort graduation rate indicators.
- Establish a consistent, evidence-based, and transparent set of benchmarks and indicators to measure interim progress toward higher graduation rates and college readiness (e.g., ninth-to-tenth-grade on-time promotion; failure of two or more core courses in ninth grade).
- Create a clear set of incentives and sanctions that foster and support local school restructuring efforts but also ensure that a lack of progress results in greater state intervention.

Under pressure from NCLB and local concerns about the slow pace of reform in chronically underperforming schools, a number of states are taking a more active role to both push and support meaningful change in low-performing school. (*See box, “Florida State Requirements for Lowest-performing Schools That Repeatedly Fail to Improve.”*)

Like Florida, Arizona has also created incentives (such as significant on-site technical assistance and up to \$60,000 in funding for schools to implement restructuring plans) to promote and support restructuring efforts at the local level, while also ensuring that a lack of reform progress will result in significant state intervention (including alternative governance arrangements) (Calkins et al. 2007).

Florida State Requirements for Lowest-performing Schools That Repeatedly Fail to Improve

Florida provides extensive supports to its lowest-performing schools, including technical assistance, capacity-building measures, and funding (\$1,000 more per student). Low-performing schools that repeatedly fail to make progress are subject to a state-imposed reform plan that requires school districts to take action on 26 reform measures, such as:

Staffing

- Require teachers to reapply for their jobs
- Differentiate pay for highly effective teachers
- Hire proven educational leaders
- Employ safety and attendance personnel

Oversight

- Establish committee of community members to oversee reforms
- Document aggressive efforts to enroll students in choice and supplemental services
- Report monthly progress

Student Support

- Provide intensive support to students retaking graduation exam
- Establish extended day programs for academic credit recovery
- Employ reading and math coaches for each grade
- Make contractual guarantees to entering ninth grade students

Community assessment teams closely monitor the schools and report monthly to the state department of education on the schools progress instituting reforms.⁹ Districts that refuse to comply with the state reform measures face increased public scrutiny (e.g., state review teams monitor reform activities at the school every two weeks) and financial sanctions (e.g., withholding of discretionary funding). These actions have served to both change conditions in underperforming schools and increase incentives for districts to reform before the state intervenes.

Source: Calkins et al. 2007 (Supplement)

Action Area 2: Create the conditions, capacity, and resources for turnaround.

For the most part, past efforts to turn around low-performing high schools have not produced the desired results. These efforts have tended to focus on introducing new instructional programs, accompanied by replacing the school leader and perhaps a percentage of the teachers. But they have not built a strong pipeline of entrepreneurial leaders and high-capacity teachers, with sufficient incentives to attract them into such schools. Nor have they addressed the fundamental operating conditions that shape how effectively these professionals can do their jobs.

In many states, this is a period of tight budgets and tough choices. Yet even with the competing needs in a state, the chronic dysfunction and underperformance of some high schools and the bleeding of young people from these schools must be addressed. High school turnaround cannot be accomplished on the cheap. For example, it may require upgrading the data system, instituting a longer school day or school year for catch-up and acceleration, and funding public-private partnerships with expertise in turnaround and the flexibility to bring that expertise to bear in the schools.

The action steps recommended below are designed to help states to create the necessary conditions and build the capacity required for a more ambitious and comprehensive approach to restructuring, redesigning, or replacing the dropout factory high schools.

- Establish criteria by which schools gain greater freedom to act, including autonomy over staffing, schedule, organization, and governance.
- Ensure sufficient expertise and capacity—within the state department of education as well as through partnerships with intermediary organizations—to support school turnaround.
- Attract entrepreneurial educators to lead and teach in turnaround schools, by offering incentives that could include, for example, career tracks, credentials, and financial benefits.
- Provide adequate resources and funding to support turnaround efforts.

While no state has yet embraced this whole agenda (see box, “12 Tough Questions,” for a tool to access your state’s progress), a few are putting one or more of these building blocks in place. One approach is to experiment with “turnaround zones” or clusters—such as can be found in New York, Chicago, and several other major cities—that are using the threat of school closure and replacement to change the operating conditions in the lowest-performing high schools.

For example, in 2007, the state board of education in Massachusetts offered two of the lowest-performing high schools and two of the middle schools the opportunity to become state “Commonwealth Pilot Schools.” With the approval of the superintendent

and at least 65 percent of the teachers in the school, each of these schools decided to join this cohort. These schools will gain charter-like autonomy over their budget, staffing, school calendar, curriculum, and governance structure.

Several states also offer incentives for high-skilled teachers and principals to help turn around low-performing schools. For example, Georgia enacted a grants program to attract high-performance principals to low-performing middle and high schools. Virginia has a program to develop a cadre of principals who specialize in turning around chronically

troubled schools and are eligible for a range of incentives. Arkansas has a similarly program (National Governors Association 2006).

Commitment 4: Increased Emphasis on Graduation Rates and College-Readiness in Next Generation Accountability

For the past two decades, state education reform has been synonymous with setting academic standards and developing assessments to monitor how well schools and districts are doing in meeting those standards. In most states, such efforts have resulted in

12 Tough Questions

A Self-Audit for States Engaged in School Turnaround

Evaluating Your State's Commitment

- 1 Has your state visibly focused on its lowest-performing five percent of schools and set specific, two-year turnaround goals, such as bringing achievement at least to the current high-poverty school averages in the state?
- 2 Does your state have a plan in place that gives you confidence that it can deliver on these goals?
- 3 If not: Is there any evidence that the state is taking steps to accept its responsibility to ensure that students in the lowest-performing schools have access to the same quality of education found in high-performing, high-poverty schools?

Evaluating Your State's Strategy

- 4 Does your state recognize that a turnaround strategy for failing schools requires fundamental changes that are different from an incremental improvement strategy?
- 5 Has your state presented districts and schools with:
 - A sufficiently attractive set of turnaround services and policies, collected within a protected turnaround "zone," so that schools actively want to gain access to required new operating conditions, streamlined regulations, and resources; and
 - Alternative consequences (such as chronically underperforming status and a change in school governance) that encourage schools and districts to volunteer?
- 6 Does your state recognize that turnaround success depends primarily on an effective "people strategy" that recruits, develops, and retains strong leadership teams and teachers?

Enabling Conditions:

- 7 Does your state's turnaround strategy provide school-level leaders with sufficient streamlined authority over staff, schedule, budget, and program to implement the turnaround plan? Does it provide for sufficient incentives in pay and working conditions to attract the best possible staff and encourage them to do their best work?
- 8 **Building Capacity—Internal:** Does your state have a strategy to recruit, develop, and place highly capable leadership teams and teachers on behalf of the lowest-performing schools?
- 9 **Building Capacity—External:** Does your state have a strategy to develop lead partner organizations with specific expertise needed to provide intensive school turnaround support?
- 10 **Clustering for Support:** Within protected turnaround zones, does your state collaborate with districts to organize turnaround work into school clusters (by need, school type, region, or feeder pattern) that have a lead partner providing effective network support?

State Leadership and Funding

- 11 Is there a distinct and visible state entity that, like the schools in the turnaround zone, has the necessary flexibility to act, as well as the required authority, resources, and accountability to lead the turnaround effort?
- 12 To the extent that your state is funding the turnaround strategy, is that commitment (a) adequate and (b) at the school level, contingent on fulfilling requirements for participation in the turnaround zone?

Source: Reprinted from Calkins et al. (2007, page 3).

some movement in the right direction, as evidenced by the fact that an increasing percentage of students are achieving the minimum competency target set by the state. Some states have also narrowed the achievement gaps among students of different racial and ethnic backgrounds.

For policymakers, this good news has been tempered by several growing concerns. One centers on the potential unintended consequence of high-stakes testing creating an incentive for high schools to “lose” students who are struggling and are far below grade level. A very different but equally critical area of concern is that proficiency targets are, for the most part, set too low. Achieve’s annual survey of states’ progress on closing the gap between the expectations young people are held to in high school, and the ones they will face in college and workplace, shows how far states still have to go, despite some steady progress, in aligning standards, assessment, and graduation requirements with the demands of college and work (Achieve 2007b).

A number of states have begun responding to these issues. Nearly a dozen states have begun to follow through on the Graduation Rate Compact signed by their governors, and, for the first time, they are calculating and publicly releasing four-year cohort graduation rates, for all students and for different student subgroups. The 32 states participating in the American Diploma Project Network have made a commitment to raise the expectations of academic performance to a college and career-ready standard, and 18 of them have a recommended or required core program of study aligned to those standards, with an additional 16 states reporting plans to do so (Achieve 2007a).

As yet, few states have taken the next critical step of including measures of both diploma attainment and college readiness in the accountability system. Placing a high priority on the cohort graduation rate in the accountability system will give states a powerful lever to encourage districts and schools to pay attention to the progress of all students. It will signify the state’s commitment to count and account for every student. This will be especially important as

states simultaneously raise the standards to a college and work-ready level.

The challenge will be to recalibrate accountability for high schools to support the twin goals of increasing the number of students graduating and making sure that graduates are prepared for college and work. To this end, several states are now in the process of reviewing and revising their frameworks and measures for high school accountability. The first step is to set clear, easy-to-understand targets for improvements in the cohort graduation rate and growth in the percentage of students reaching the college and work-ready standard. This will require the state to use an expanded set of indicators that go beyond scores on statewide assessments and that recognize and reward schools for both holding onto students and graduating more students college-ready.

Action Area 1: Establish high school graduation rates as a core accountability measure with clear targets for progress.

As state policymakers learn the results of applying a cohort graduation rate in their state, they are realizing that the equity concerns driving attention to the achievement gap cannot be fully addressed without simultaneously closing the graduation gap. To close the graduation gap, states will have to pay much more substantial attention to graduation rates, especially of low-income, African-American, and Hispanic students, and they will have to hold schools accountable for ensuring that all students, including those who are off track to graduate on time, earn their high school diploma. At the same time, state policymakers will need to find a way to avoid penalizing alternative schools designed to serve students who transfer there after becoming seriously off track to graduation or dropping out altogether.

By taking the following action steps, states can go a long way toward focusing attention on the true extent of the dropout crisis and the large number of young people who are overage for grade and not on track to graduate from high school:

- Set clear and statistically viable progress measures for increasing graduation rates, incorporating on-track metrics predictive of high school graduation (e.g., ninth-to-tenth grade promotion, failure of

two or more courses in a year) to assess whether students are on the trajectory to graduation.

- Publicly report four- and five-year cohort graduation rates, by district and school and disaggregated for subgroups, including low-income.¹⁰
- Allow for the use of an adjusted cohort graduation rate for “second chance” high schools designed for overage, undercredited students and dropouts.

The insufficient weight given to graduation rates in state accountability systems is the result, at least in part, of federal law and regulations that put substantially more emphasis on academic indicators than on graduation rates in measuring school and district performance. Only a few states—notably Louisiana—have determined a way to weight graduation rates within their state accountability index for high schools. In Louisiana’s accountability numeric index, a school that keeps a low-performing student in school gets a higher score than a school that lets that student drop out. Additionally, in the new model, 30 percent of high school performance is determined by the number of points high schools receive for keeping students in school and getting them across the finish line, with higher values earned for students who attain both a high school diploma and a diploma plus “endorsements” that signify readiness for college and careers. (See box, “Louisiana’s Graduation Index.”)

NCLB did not establish a common comparable measure of graduation rates. In its wake, many states have adopted numerous, often meaningless, graduation rate measures, resulting in no real graduation rate accountability and no expectation that American high schools make progress to improve graduation rates. In light of the growing number of states reporting four-year cohort graduation rates and the availability of accepted proxies for cohort rates (such as the cumulative promotion index¹¹), there is growing consensus among national policymakers and policy advocates that the reauthorization of NCLB will offer more explicit language to hold schools and districts accountable for graduation rates. States that take the initiative in establishing graduation rate accountability could serve as models to inform the debate as the reauthorization process continues over the next year.

Louisiana’s Graduation Index: Promoting Graduation and College- and Work-Readiness

Louisiana has established a keen focus on improving high schools that have historically been plagued with low levels of academic achievement and low graduation rates. As a key strategy, education leaders turned their attention to the accountability system, establishing a graduation index to create incentives for high schools to both keep students enrolled to graduation and provide a rigorous curriculum through their senior year.

Each student in the graduation cohort receives the designated points; scores are weighted and account for 30 percent of high school performance score.

STUDENT RESULT	POINTS
Academic Endorsement (college-ready)	180
TOPS Opportunity Award or Career/Tech Endorsement	160
IBC (International Baccalaureate course) or TOPS Tech with Dual Enrollment or Articulation Credit	140
Regular High School Diploma	120
GED	90
Skills Certificate/Certificate of Achievement	60
Attender	30
Dropout	0

Action Area 2: Develop an expanded set of indicators for holding high schools accountable for college-ready graduates.

Scores on statewide achievement tests including end-of-course exams are the focus of the educational accountability system in many states. While these data provide valuable information, they do not tell educators, policymakers, or the broader public everything they need to know about how well their schools are preparing students to compete in a global economy. The focus needs to shift to put more emphasis on what students do and accomplish in high school, including graduating from high school and successfully completing a college preparatory course of study, as well as earning college credits and industry-recognized credentials while still in high school.

Schools can and should do much more to help students earn credentials and credits that accelerate success after high school. Industry-recognized credentials can open doors to higher-paying jobs

that help students pay for further education. Earning a minimum number of college credits while in high school helps students know what it takes to be successful in college courses. It increases not only their confidence but their college-going and completion rates as well; and stimulates more rigor in high school courses (Vargas 2007).

A Proposed Framework of Next-Generation High School Accountability Indicators

1 Stay in school and graduate on time

- Four-year cohort graduation rate
- Five-year cohort graduation rate
- Percentage of “off-track” ninth graders who earn enough credits to be promoted to tenth grade

2 Successfully complete a core course of study

- Percentage of students who complete recommended or required core course of study
- Percentage of students who perform at the proficient level or higher on end-of-course exams
- Percentage of students who successfully complete level of mathematics aligned with entrance into community colleges and state four-year colleges and universities

3 Earn career-ready industry-recognized credentials and/or college credit

- Percentage of recent graduates who earn industry-recognized credentials that prepare youth for meaningful careers
- Percentage of graduates who earn a minimum number of college credits before graduation (through Advanced Placement, International Baccalaureate, Early College, dual enrollment, etc.)
- Percentage of high school students who graduate with a minimum number of college credits

4 Succeed in postsecondary education and careers

- Percentage of recent graduates who need postsecondary remediation
- Percentage of recent graduates who persist in postsecondary education
- Percentage of recent graduates who attain career-ready certificates, Associate’s, or Bachelor’s degrees
- Percentage of recent graduates who enter the military or find meaningful, family-supporting employment within three years of graduation

Source: *Achieve and Jobs for the Future (2007)*.

Action steps that states can take to create accountability systems that provide incentives for districts and schools to both graduate more students and ensure that graduates are prepared for college and work include:

- Establish reliable graduation rate and college- and work-readiness measures.
- Use these measures to recognize and reward schools both for graduating more students and for having more graduates meet a recognized standard of college-readiness and especially to identify and reward schools with high concentration of low-income students that outperform their counterparts.
- Incorporate graduation rate and college-ready assessment measures into the state high school accountability system.
- Reward schools for helping students earn industry-recognized credentials and college credit.

States have begun to express interest in taking a critical look at their high school accountability and working to fashion “next generation” accountability systems that create the right incentives for achieving the twin goals of more graduates and more graduates college and work-ready. For example, North Carolina’s State Board of Education has convened an independent Blue Ribbon Commission on Testing and Accountability to provide a comprehensive review of the state’s accountability system. The commission, comprised of local educators, legislators, testing and accountability experts, and business leaders, is charged with examining how well the state’s current accountability system aligns with new expectations for student learning and school performance and making a final report and recommendations to the state board of education. (*See box, “A Proposed Framework of Next-Generation High School Accountability Indicators.”*)

Preliminary data on Louisiana’s Graduation Index (*see box, page 17*) suggest that expanding the indicators for high school accountability has helped to create the right incentives for promoting graduation and college and career readiness. The first year the Graduation Index was fully operational, the proportion of seniors not graduating decreased to 8 percent and the number of industry-based certifications

earned by students doubled. In addition, districts and schools appeared to be more focused on dropout prevention and recovery.

To help prepare students for college, states are pursuing different strategies to build college-ready tests into their high school assessment systems. The most common strategy, currently being pursued by 18 states, is end-of-course exams. Several states are considering amending their current high school tests so that they are better measures of college-readiness. And a handful of states including Colorado, Maine, and Michigan now require all high school students to take a standardized test—usually the ACT or the SAT—to assess their level of college-readiness. (Maine has also obtained grant funding to provide every eleventh grader complementary access to an online SAT test prep course.) Each approach has its benefits and drawbacks, and it is too early to tell which will be most useful in assessing college- and work-readiness (Achieve 2007b).

Commitment 5: Early and Continuous Support for Struggling Students

The knowledge base about how to identify likely dropouts and keep them on track has been growing, making it more possible than ever before to target investments to the most promising and effective practices and policies. This research further advances the possibility, and the obligation, to address these issues at the state level.

The new research challenges the common misconception that dropping out is a singular, idiosyncratic event, an individual decision at one moment in time that is largely influenced by personal or social circumstances beyond a school's influence or control. On the contrary, dropouts follow identifiable patterns of performance and behavior—patterns that schools, districts, and states can and should analyze and address.¹²

In groundbreaking studies in large urban districts with high dropout rates, researchers have pinpointed indicators that reliably identify students who, absent a school-based intervention, are unlikely to graduate. Recent studies conducted by Elaine Allensworth and colleagues at the Consortium on Chicago School Research, using data from the Chicago public

schools, showed that an on-track indicator that signals when ninth graders are falling seriously off the track to earning a diploma is 85 percent predictive of future dropouts (Allensworth & Easton 2005).¹³ In the Philadelphia public schools, Robert Balfanz at Johns Hopkins University and Liza Herzog at the Philadelphia Education Fund found that school-based factors, such as behavior reports and poor grades as early as sixth grade, have value in predicting who later will drop out (Balfanz & Herzog 2005).

The power of this research is that it offers a set of academic indicators that are highly predictive and over which the school has control. It is especially powerful when considered in combination with a growing body of evidence about highly effective practices and strategies for addressing early academic difficulty in high school. The perception has long been widespread that we do not know what, if anything, works in dropout prevention or reentry. This is no longer the case.

Researchers have validated the efficacy of practices such as: more intensive focus on literacy and numeracy skills in the early months of ninth grade to help students improve their skills enough to handle high school-level texts and assignments; extended learning time in the after-school hours as part of the catch-up and acceleration strategy; and quick response to academic failure, even before the reporting of first semester grades. Such strategies have resulted in significantly more students passing gateway academic courses such as algebra and in higher promotion rates from ninth to tenth grade, both of which are highly predictive of whether a student graduates from high school (Kemple et al. 2005).

To realize the benefits of this new research, state policymakers need to take steps to improve their data systems and help school districts to develop leading indicators of students at greatest risk of dropping out so that schools can intervene before it is too late. To realize a return on investment, states will also have to

ensure adequate support services to address both the academic and environmental challenges that impede student learning. This will ensure that struggling students reach the finish line of a college-ready high school graduation.

Action Area 1: Develop an early warning system to reliably identify potential nongraduates.

Early warning systems have great value in helping local and state policymakers predict which students (and how many) are unlikely to graduate unless appropriate interventions and supports are triggered and delivered. Studies on indicators predictive of dropping out like those in Chicago and Philadelphia have been repeated in Boston, Indianapolis, New York, and Portland, Oregon with similar results. These communities are using this data to inform and guide the design of school-based interventions and new school models. Emerging results from this work point to the promise of this approach. For example, several of New York City's transfer schools—small, personalized schools designed to help students who are overage and undercredited graduate from high school and move on to postsecondary education—are graduating two to three times more of these students than are comprehensive high schools (Lynch 2006).

The need for indicators that accurately predict future dropouts is most immediate at the local level. Unfortunately, most school districts lack the capacity to carry out the data research necessary to establish predictive early warning indicators. The state can play a critical role in helping districts be strategic in determining the scope and dimensions of the local challenge and targeting resources accordingly. As part of its critical role, the state can:

- Analyze available state data to identify the scope of the problem and which districts have high concentrations of young people with high risk of dropping out;

- Support those districts to develop early warning systems at middle school and ninth-grade levels.

Several states have taken a first step toward ensuring that school disconnection is identified early enough to provide timely and targeted support. For example, in its 2006 dropout legislation, Indiana requires schools and districts to use an “off-track” indicator to report the number of ninth graders who do not have enough credits to be promoted to tenth grade and to advise those students of credit recovery and/or remediation options. Nevada legislators, aware of how important it is to help students stay on track to graduation, recently passed legislation that allows eighth graders to enter high school to take classes in subject areas they have passed, while accessing credit recovery for courses they may have failed in the eighth grade. Such legislation lays important groundwork, yet schools and districts will likely need additional resources and support to fully benefit from it.

Action Area 2: Ensure that identified students get necessary supports.

One of the marks of an entrepreneurial and effective leader of a school serving struggling students is his/her ability to find and develop the resources to ensure that students get the supports they need to succeed. This often requires combining a number of different funding sources, each with its own eligibility and reporting requirements and its own demands (Thakur & Henry 2005). The challenge for state policymakers is to facilitate such braiding of resources as part of an overall plan for providing the necessary supports and services to struggling students throughout the state.

Helping struggling students to get to the finish line of a college-ready high school diploma will require states to use available resources and expertise more strategically, even if this requires thinking differently about K-16 investments, as well as investments that might cross youth-serving systems.

For example, states can take the following steps:

- Ensure that statewide initiatives designed to improve student outcomes (e.g., literacy, expanded day/year; STEM) target resources to high schools with substantial numbers of struggling students.

- Promote statewide collaboration among agencies to enable braided funding across youth-serving systems to provide necessary academic and social supports.
- Provide incentives to school districts to partner with community-based organizations in the development and delivery of multiple pathways to graduation.

A number of states have identified dropouts as a statewide priority. At least 13 states have recently passed education legislation that specifically addresses struggling students and out-of-school youth, including Alabama, Georgia, Illinois, Louisiana, Nevada, and Pennsylvania. State responses have varied from providing additional supports to students in danger of dropping out, to increasing and funding alternative pathways aimed at dropout prevention and recovery, to embedding dropout prevention more explicitly in governance and accountability structures. Legislative provisions in a number of these states provide for a range of supports and services to help struggling students stay on track to graduate from high school ready for college and work. (See box, “*State Investments to Support Struggling Students.*”)

Most states focus their literacy initiatives on lower grades. However, a few have taken steps to address the low literacy of high school students. The Alabama Reading Initiative is one of the largest statewide literacy initiatives specifically geared to secondary school students. ARI schools have made cumulative gains roughly twice the size of gains in non-ARI schools. Florida also extended reading support services to middle and high school students by making reading funds a permanent part of the public school funding formula.

Several states are investing in local cross-sector collaboratives that bring together school districts, mayor’s offices, community-based organizations, and public care agencies to focus on improving outcomes for struggling students and out-of-school youth. Pennsylvania’s Department of Labor and Industry created the Pennsylvania Youth in Transition program, which provides funding for eight regional

State Investments to Support Struggling Students

A number of states have provisions in their dropout or school reform legislation aimed at ensuring that struggling students get the supports and services they need to stay in school and graduate ready for college and work.

Through a pilot program, **Alabama** provides dropout prevention advisors to targeted schools to work with school staff, families, and public care agencies to identify students in danger of dropping out and provide the support to get them back on track to graduate high school ready for college and careers. In addition, the state’s Alabama Students for Success (PASS) Initiative offers competitive grants for districts to develop dropout prevention and intervention programs to keep students in grades 6 to 12 from leaving school prematurely.

Similarly, **Georgia** is investing \$15.4 million to allow each high school in the state to employ a full-time graduation specialist. The graduation specialist will identify likely dropouts and work with them to develop and implement a plan to get them back on track to complete high school.

Pennsylvania awarded \$2 million to the School District of Philadelphia to support efforts to keep struggling students from becoming out-of-school youth. Part of the funding has been used to place dropout prevention specialists (who are certified social workers) in the Philadelphia-area high schools with the highest dropout rates.

partnerships to develop or expand cross-system collaboration dedicated to improving opportunities and outcomes for out-of-school youth and young people aging out of foster care. The Nevada legislature provided funding through the Nevada Public Education Foundation to expand the local Las Vegas-based Ready for Life collaborative to additional communities.¹⁴ This expansion will create a network of rural and urban communities addressing shared challenges to improving outcomes for struggling students and out-of-school youth.

A Commitment to Take Action

Never have the expectations of our education system been higher. State leaders are faced with an urgent and simultaneous need to substantially improve our high school graduation rate while also raising the level of academic performance to a standard of college- and work-readiness. At a moment when states must rely on an educated workforce to fuel emerging growth industries, the cost of inaction is far too great to young people, their families and communities, the states, and the nation.

States have made steady progress in recent years in setting academic standards, in increasing the percentage of young people reaching at least the minimum benchmarks set, and in decreasing the achievement gap between different demographic groupings of students. But important work remains to be done to ensure that young people—and especially low-income and minority young people—graduate from high school and are on pathways to success in postsecondary education.

Renewed attention to the scope of the dropout problem provides a critical opportunity to address the educational needs of young people who are not on track to an on-time graduation, as well as those who are out of school altogether. By making and following through on the framework of commitments articulated in this paper, policymakers can gain traction on raising graduation rates without compromising on high standards. Now is the time for state policymakers to commit to a combination of new policies and innovative strategies to address the dropout challenge in their high schools and, at the same time, ensure that low-income and struggling students are better prepared to earn a postsecondary degree or credential.

Endnotes

¹ According to the 2007 survey, 18 states now require high school students to complete a college- and work-ready curriculum to earn a diploma. States have also achieved significant progress in making academic standards in English and mathematics reflect real-world expectations, but they have moved more slowly in developing complementary assessment systems and holding high schools accountable for the college-readiness of their students. For more information on the American Diploma Project Network and related publications, see www.achieve.org.

² For information on the states' progress in implementing the Compact, see Curran (2006).

³ The measure of college preparation used in the study is a composite measure adapted from code provided by NCES on the NELS 88/2000 data analysis system (DAS). This composite, based on the "CQCOMV2" variable from the DAS, combines information from the student survey record and high school transcript data sets. It accounts for several measures of high school performance:

- High school senior year rank in class percentage;
- Cumulative grade point average for academic courses;
- SAT combined test scores;
- ACT composite scores; and
- NELS 1992 math and reading composite test score percentiles.

Following the variable code provided by the DAS, this variable classifies students based on their overall ranking on these five criteria. The resulting composite produced five categories of student preparation for college:

- *Highly qualified*: those whose highest value on any of the five criteria would put them among the top 10 percent of college students for that criterion.
- *Very qualified*: those whose highest value on any of the five criteria would put them among the top 25 percent of college students for that criterion
- *Somewhat qualified*: those whose highest value on any of the five criteria would put them among the top 50 percent of college students for that criterion.
- *Minimally qualified*: those whose highest value on any of the five criteria would put them among the top 75 percent of college students for that criterion.
- *Not qualified*: those who had no value on any criterion that would put them among the top 75 percent of college students.

The study translates these qualification categories into "Academic Preparation" levels and combines the top two categories into the single "Very/Highly Prepared" category. Due to subtle differences between the NELS data set avail-

able on the DAS and the NELS restricted data set used for this paper, there will be slight differences between the measure of college qualification or academic preparation used here and those used by other authors who use the DAS public files to calculate this variable. For example, one of the criteria used in the CQCOMV2 variable was "Cumulative grade point average for academic courses." This variable was not available on the restricted data sets, so it was necessary to construct this average from the raw transcript data.

⁴ See, for example, Achieve (2007a); Achieve (2007b) ACT (2007); and Dougherty, Mellor, & Jian (2006).

⁵ The initial nine states that joined in this effort were Arkansas, Indiana, Kentucky, Massachusetts, New Jersey, Ohio, Pennsylvania, and Rhode Island. More recently Arizona, Hawaii, Minnesota, and Washington joined, bringing the total to thirteen.

⁶ Michele Cahill, Vice President, National Program Coordination and Director of Urban Education, Carnegie Corporation of New York, framed the invention challenge in this manner during an invitational meeting on next-generation accountability held by the Alliance for Excellent Education in Washington, DC.

⁷ For more information, see www.newschoolsproject.org.

⁸ Data presented at a statewide task force meeting on graduation rates.

⁹ Community assessment teams are comprised of a state department of education representative, parents, business and municipal government representatives, educators, and community activists.

¹⁰ States without adequate longitudinal data systems should use the Cumulative Promotion Index developed by Christopher B. Swanson, director of the Editorial Projects in Education Research Center and a noted expert on graduation data. For information on the Cumulative Promotion Index, see www.edweek.org/ew/toc/2006/06/22/index.html.

¹¹ See Endnote 10.

¹² See Jerald (2006) for an excellent summary of the recent research.

¹³ A student is considered on track at the end of ninth grade if he or she has earned at least five full-year course credits and no more than one F (based on semester marks) in a core academic course.

¹⁴ To learn more about the Las Vegas Ready for Life collaborative, see www.readyforlifenv.org.

References

- Achieve. 2007a. *Aligning Graduation Requirements with the Real World: A Road Map to States*. Washington, DC: Achieve, Inc. www.achieve.org/node/980.
- Achieve. 2007b. *Closing the Expectations Gap 2007: An Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Work*. Washington, DC: Achieve, Inc. www.achieve.org/node/844.
- Achieve & Jobs for the Future. 2007. *Moving North Carolina Forward High Standards and High Graduation Rates A Framework for Next Generation Assessment and Accountability Indicators*. Washington, DC: Achieve, Inc. and Boston, MA: Jobs for the Future.
- ACT. March 2007. *Rigor at Risk: Reaffirming Quality in the High School Curriculum*. Washington, DC: ACT. www.act.org/path/policy/reports/rigor.html.
- Adelman, Clifford. 1999. *Answers in the Toolbox: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: U.S. Department of Education.
- Allensworth, Elaine & John Q. Easton. June 2005. *The On-Track Indicator as a Predictor of High School Graduation*. Chicago, IL: Consortium on Chicago School Research.
- Almeida, Cheryl, Cassius Johnson, & Adria Steinberg. 2006. *Making Good on a Promise: What Policymakers Can Do to Support the Educational Persistence of Dropouts*. Boston, MA: Jobs for the Future.
- American Diploma Project. 2004. *Ready or Not: Creating a High School Diploma that Counts*. Washington, DC: Achieve, Inc. www.achieve.org/node/562.
- Balfanz, Robert. 2006. "Intervening in Low-Performing High Schools." Paper prepared for *Taking the Next Step – Defining a Shared Federal Agenda for High School Reform*. Third Annual High School Policy Conference, October 12-13. Washington, DC: Alliance for Excellent Education.
- Balfanz, Robert & Liza Herzog. 2005. *Keeping Middle Grades Students On Track to Graduation*. Philadelphia, PA: Presentation at the Regional Middle Grades Symposium, March 18.
- Balfanz, Robert & Nettie Legters. 2004. *Locating the Dropout Crisis – Which High Schools Produce the Nation's Dropouts? Where are They Located? Who Attends Them?* Baltimore, MD: Johns Hopkins University. www.csos.jhu.edu/pubs/power/power.htm
- Barth, Patte. 2003. "A Common Core Curriculum for the New Century." *Thinking K-16*, Volume 7, Issue 1, Winter. Washington, DC: Education Trust.
- Calkins, Andrew, William Guenther, Grace Belfiore, & Dave Lash. 2007. *The Turnaround Challenge: Why America's Best Opportunity to Dramatically Improve Student Achievement Lies in Our Worst-Performing Schools*. Boston, MA: Mass Insight Education.
- Curran, Bridget 2006. *Implementing Graduation Counts: State Progress to Date*. Washington, DC: National Governors Association.
- Dougherty, Chrys, Lynn Mellor, & Shuling Jian. 2006. "Orange Juice or Orange Drink? Ensuring that 'Advanced Courses' Live Up to Their Labels." *NCEA Policy Brief No. 1, February 2006*. www.just4kids.org/en/research_policy/college_career_readiness.
- Education Trust. 2005. *Gaining Traction, Gaining Ground: How Some High Schools are Accelerating Learning for Struggling Students*. Washington, DC: The Education Trust.
- Goldberger, Susan. 2007. "Doing the Math: What It Means to Double the Number of Low-Income College Graduates." In N. Hoffman, J. Vargas, A. Venezia, & M. Miller (Eds.), *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It* (pp. 27- 41). Cambridge, MA: Harvard Education Press.
- Jerald, Craig. 2006. *Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System*. Washington, DC: Achieve, Inc. and Boston, MA: Jobs for the Future.
- Just for the Kids. 2006. *Best Practice Studies and Institutes: Findings from 20 States*. www.just4kids.org/jftk/twenty_states.cfm.
- Kemple, James J., Corinne M. Herlihy, & Thomas J. Smith. 2005. *Making Progress Toward Graduation. Evidence from the Talent Development High School Model*. New York, NY: MDRC, Inc. www.mdrc.org/publications/408/overview.html.
- Levin, Henry, Clive Belfield, Peter Muennig, & Cecilia Rouse. 2007. *The Costs and Benefits of an Excellent Education for All of America's Children*. NYC, New York: Columbia University, Teachers College, Center for Benefit-Cost Studies of Education. www.cbcs.org.
- Lynch, Joellen. 2006. *Developing and Strengthening Schools and Programs That Lead to High School Graduation and Post-secondary Opportunities for Overage, Undercredited Youth*. Council of Chief State School Officers, Secondary School Redesign Conference, June 7, Atlanta, GA.
- National Governors Association. 2006. "Rising to the Challenge: Georgia, Indiana, and Virginia Tackle the Dropout Problem." *Honoring Progress, An Update on the NGA Center Honor States*, Volume 1(2). Washington, DC: National Governors Association: Center for Best Practice. www.nga.org/portal/site/nga/menuitem.9123e83a1f6786440ddcbeeb501010a0.

- Olson, Lynn. June 2006. "The Down Staircase." *Diplomas Count: An Essential Guide to Graduation Policy and Rates*. Washington, DC: Education Week.
- Organisation for Economic Co-operation and Development. 2007. Education at a Glance 2007. www.oecd.org/document/30/0,3343,en_2649_37455_39251550_1_1_1_37455,00.html.
- Peske, Heather & Kati Haycock. 2006. *Teaching Inequality How Poor and Minority Students Are Shortchanged on Teacher Quality*. Washington, DC: The Education Trust. www2.edtrust.org/EdTrust/Product+Catalog/recentreports.
- Quint, Janet. 2006. *Meeting Five Critical Challenges of High School Reform. Lessons from Research on Three Reform Models*. New York: MDRC, Inc.
- Roderick, Melissa. 2006. *Closing the Aspirations-Attainment Gap: Implications for High School Reform*. A paper prepared for the MDRC High School Reform Conference, "Improving High Schools: Putting Knowledge to Work," in San Diego, CA, November 16-18. www.mdrc.org/staff_publications_332.html.
- Thakur, Mala B. & Kristen Henry. 2005. *Financing Alternative Education Pathways: Profiles and Policy*. Washington, DC: National Youth Employment Coalition.
- Vargas, Joel. 2007. "Creating and Sustaining Early College High Schools: State Policies that Support 9-14 Education." *The State Education Standard*. Washington, DC: National Association of State Boards of Education.
- Ziebarth, Todd & Bryan Hassel. November, 2005. "School Restructuring Via The No Child Left Behind Act: Potential State Roles." *ECS Issue Brief*. Denver, CO: Education Commission of the States. www.ecs.org/ecsmain.asp?page=/html/educationIssues/ECSStateNotes.asp.



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