K - 12 Subcommittee

Tuesday, September 24, 2013
3:30 p.m. – 5:30 p.m.
17 HOB

Meeting Packet

Will Weatherford
Speaker

Janet H. Adkins
Chair

AGENDA

K-12 Subcommittee
September 24, 2013
3:30 p.m. – 5:30 p.m.

17 HOB

I. Call to Order/Roll Call

II. Opening Remarks

III. Introduction and comments by committee members

IV. Department of Education presentation on the implementation of provisions in SB 1076 regarding K-12 Public Education

V. Closing Remarks and Adjournment

DOE Implementation- SB 1076

House K12 Education Subcommittee
September 24, 2013

Mary Jane Tappen, Deputy Chancellor
Curriculum, Instruction and Student Support Services

Rod Duckworth, Chancellor
Career & Adult Education

Randy Hanna, Chancellor
Florida College System

Florida Department of EDUCATION

Major Topics

- Middle Grades Promotion
- Digital Materials
- High School Graduation Requirements
- High School Diploma Designations
- Academically Challenging Curriculum to Enhance Learning (ACCEL) Options
- Remediation
- Industry Certifications Requirements

Florida Department of EDUCATION

Middle Grades Promotion

Requirement:

To be promoted to grade 9, successful completion of:

- Beginning in 2012-2013, one course must be at least a one-semester civics education course
  - Beginning in 2013-2014, a student must take the Civics End-of- Course assessment and 30% of the student's final course grade must include results

If students are enrolled in high school Geometry or Biology beginning in 2012-2013 they must take the End-of-Course assessment

- 30% of the student's final course grade must include results
- Passing the course to earn high school credit

Implementation:

Frequently Asked Questions Guidance provided to School Districts- 8/9/13 and 9/11/13

Florida Department of EDUCATION

Middle Grades Promotion

Requirement:

One course in career and education planning now must include:

- Course must be Internet-based
- Customizable to each student
- Research-based to assist students to identify educational and career options and goals
- Must emphasize the importance of entrepreneurship skills
- Provide diploma designation options details
- Include information from the Department of Economic Opportunity's economic security report as described in s. 445.07, F.S.

Implementation:

FAQ Guidance provided to School Districts- 8/9/13 and 9/11/13

Florida Department of EDUCATION

NEW

Digital Materials

Requirement:

- Each district school board shall make available digital materials for students in prekindergarten through grade 12.
  - Integrated into subject area curricula
  - Offered as a separate course
  - Made available through open-access options, or
  - Deployed through online or digital computer applications.
- For students with disabilities, the district must make available digital and instructional materials, including software applications.

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High School Graduation Requirements

Requirements:

- 24 Credits
  - May be earned through applied, integrated and career education courses, including work-related internships
    - 4 credits English/Language Arts
    - 4 credits Mathematics (including Algebra 1 and Geometry)
    - 3 credits Science (including Biology)
    - 3 credits Social Studies (including US History, World History, Economics, US Government)
    - 1 credit Fine arts
    - Physical Education - 1 credit
    - Electives - 8 credits
    - One of these courses must be taken through online learning
- Industry Certification courses that lead to college credit may substitute for two math credits and up to one science credit.
- Beginning the 2013-14 school year Economics must include financial literacy
  - Cost analysis for stand alone course- Report due October 1, 2013
- No longer required: Algebra II, Chemistry or Physics

Implementation:

Frequently Asked Questions Guidance provided to School Districts- 8/9/13 and 9/11/13

Florida Department of EDUCATION

NEW Standard High School Diploma Designations Requirements:

Scholar Designation

- Earn 1 credit in Algebra II
- Earn 1 credit in statistics or an equally rigorous mathematics course
- Earn 1 credit in chemistry or physics and 1 credit in a course equally rigorous to chemistry or physics
- Earn 2 credits in the same world language
- Earn 1 credit in Advanced Placement, Advanced International Certificate of Education Program, International Baccalaureate Program , or a dual enrollment course (any subject area)
- Pass the Biology I End-of-Course Assessment
- Pass the United States History End-of-Course Assessment

Merit Designation

- Attain 1 or more industry certifications listed on the industry certification funding list pursuant to s. 1003.492, F.S.
- Link to Industry Certification funding list: http://www.fldoe.org/workforce/fcpea/pdf/1314icfl.pdf

Implementation:

Frequently Asked Questions Guidance provided to School Districts- 8/9/13 and 9/11/13

Revise Rule: 6A-1.0995 Form of High School Diplomas and Certificates of Completion

Timeline: Rule Revisions Submitted for approval – Finalized no later than January

Florida Department of EDUCATION

Academically Challenging Curriculum to Enhance Learning (ACCEL)

Requirement:

- Options may included rigorous industry certifications that articulate to college credit; Work related internships or apprenticeships
- Award of a standard diploma per s. 1003.4282(3)(a)-(e), F.S.

NEW

— Identical to the 24-credit program option *except*

1 credit Physical Education not required

3 electives instead of 8

18 total credits (student may earn additional credits)

Implementation:

Frequently Asked Questions Guidance provided to School Districts-8/9/13 and 9/11/13

Florida Department of EDUCATION

Remediation Requirement

Requirement:

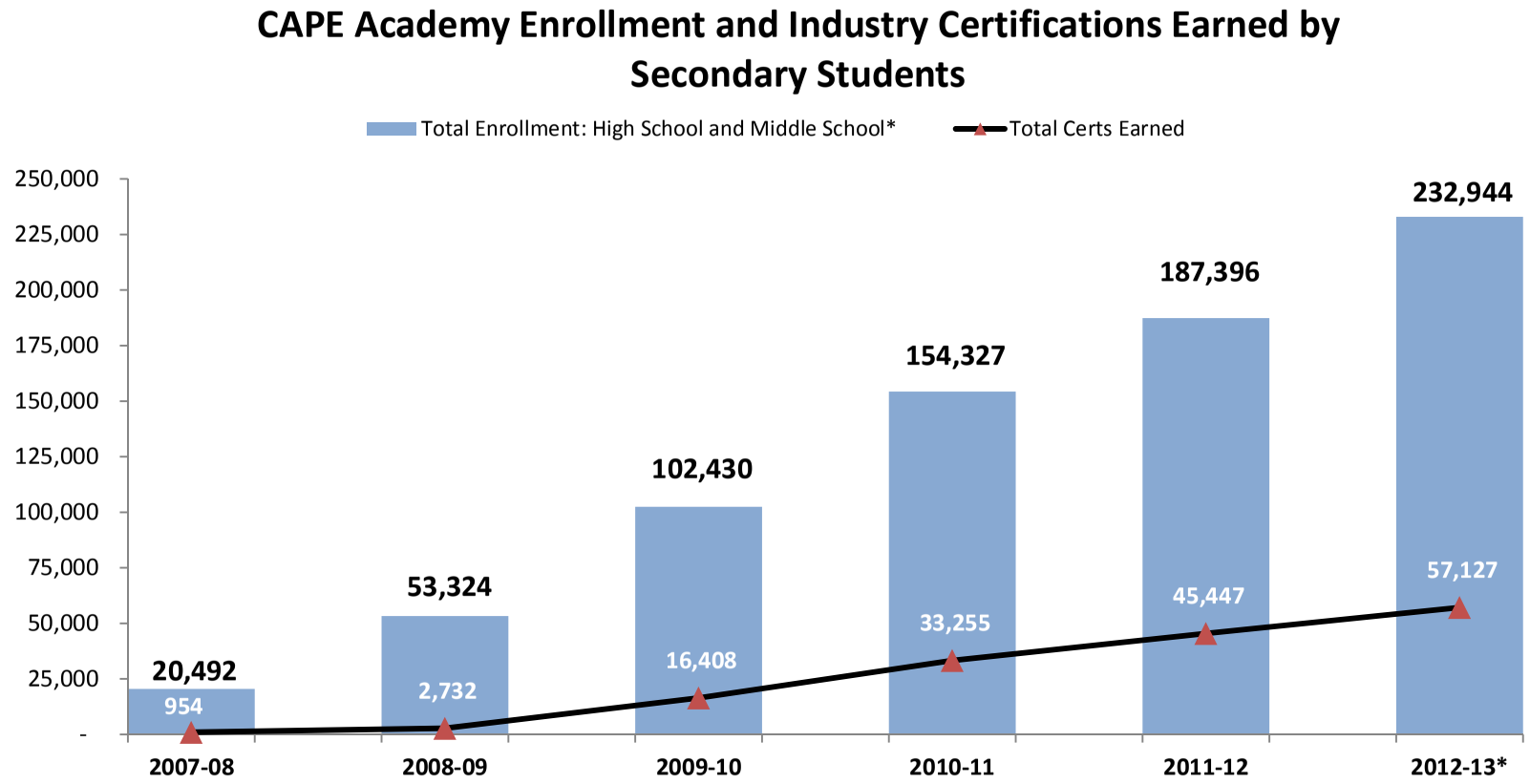
- Students who score Levels 1 or 2 on the Florida Comprehensive Assessment Test in Reading, the following year must be enrolled in and complete a remedial course or a content area course in which remediation strategies are incorporated into course content delivery.
- Students who score Levels 1 or 2 on Florida Comprehensive Assessment Test in Mathematics or the Algebra 1 End-of-Course assessment, the following year must be enrolled in and complete a remedial course or a content area course in which remediation strategies are incorporated into course content delivery.

Implementation:

Frequently Asked Questions Guidance provided to School Districts-8/9/13 and 9/11/13

Florida Department of EDUCATION

CAPE Academy Enrollment and Industry Certifications Earned by Secondary Students



* Unduplicated count of students enrolled in at least one CAPE academy based on preliminary Survey 5 data reported as of Sept 8, 2013 . (Source: Career and Professional Academy Enrollment and Performance Report and EIAS)

Florida Department of EDUCATION

Industry Certification and Articulation Agreements

- Gold Standard Industry Certification Articulation Agreements (Gold Standard Agreements) are maintained by the Florida Department of Education (FDOE) as a means for students to receive college credit for successfully earning a nationally recognized industry certification that is aligned with an associate in applied science (AAS) or associate in science (AS) degree.
- The process involves faculty from the 28 Florida College System institutions who map industry certifications to specific AS or AAS degrees.
  - Faculty make recommendations on the number of credits that should be awarded at the degree level.
  - Consensus on the number of college credits to be awarded for each industry certification is facilitated by the Department in conjunction with the Occupational Education Standing Committee (OESC).
  - Draft articulation agreements are then submitted to the Council for Instructional Affairs (CIA) for review and approval, then sent to the Articulation Coordinating Committee (ACC) for review and approval and then sent to the State Board of Education for approval.

Florida Department of EDUCATION

Industry Certification and Articulation Agreements

- Since 2009, 117 Gold Standard Career Pathways Articulation Agreements have been established and incorporated in State Board of Education Rule 6A-10.0401.
  - 92 certifications
  - 109 Agreements allow students to earn between 3 to 9 hours of college credit depending on the certification and program
  - 8 Agreements allow students to earn 10 to 36 hours of college credit depending on the certification and program

Florida Department of EDUCATION

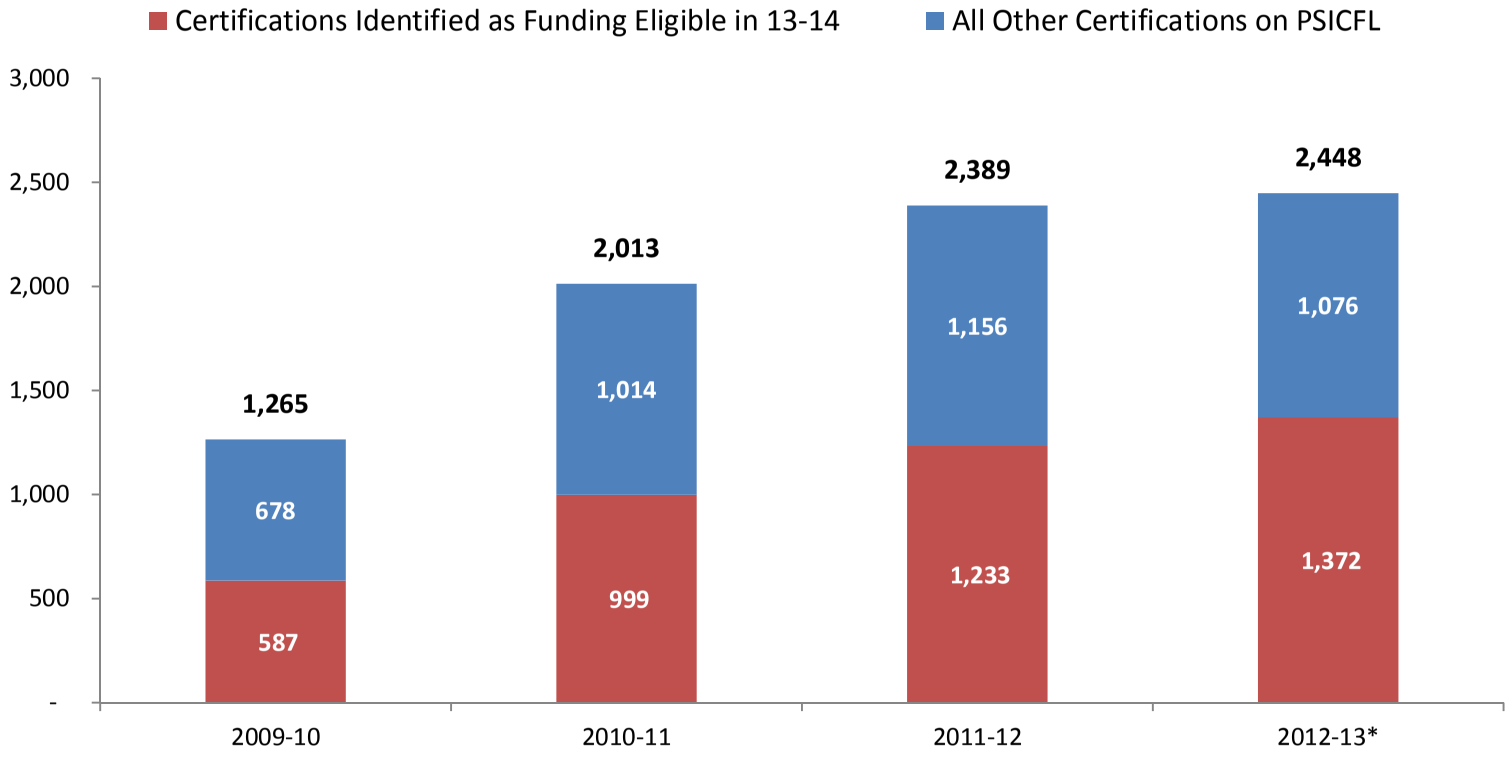
Postsecondary Industry Certification Funding List

- Includes certifications eligible for funding, as well as additional certifications that can be earned through dual enrollment programs
- The Chancellors of the Division of Career and Adult Education and the Florida College System are identifying certifications eligible for funding in the targeted occupational areas identified in the 13-14 General Appropriations Act
- Planning for an initial list to be adopted by the State Board of Education by the November 2013 meeting

Florida Department of EDUCATION

Postsecondary Industry Certifications Earned in School District Technical Centers

Industry certifications earned in 2009-10 to 2012-13 that have been identified on the recommended Postsecondary Industry Certification Funding List (PSICFL)

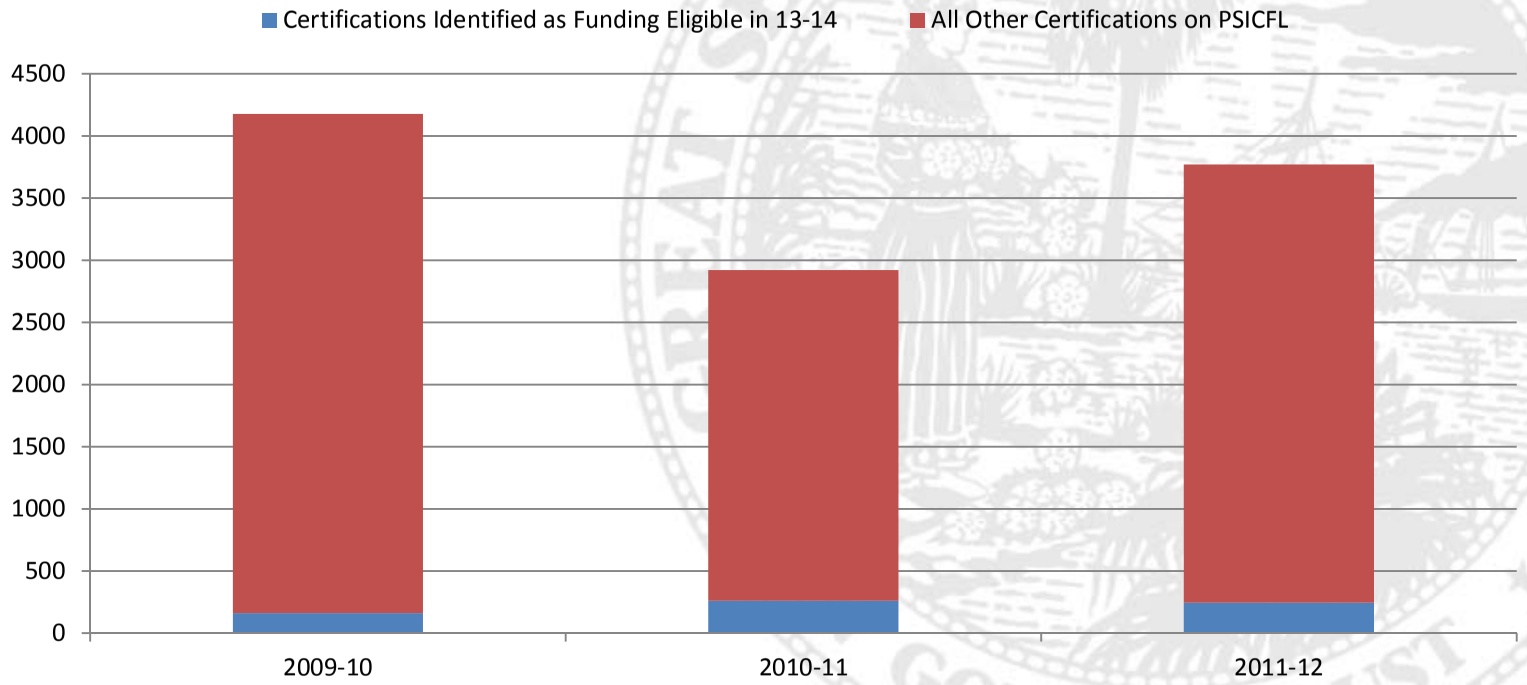


* Based on industry certifications reported as of Aug 13, 2013

Florida Department of EDUCATION

Postsecondary Industry Certifications Earned by Florida College System Students

Industry certifications earned in 2009-10 to 2011-12 that have been identified on the recommended Postsecondary Industry Certification Funding List (PSICFL)



Florida Department of EDUCATION

Middle Grades
Reform Research

Putting Middle Grades Students on the Graduation Path

A Policy and Practice Brief

Robert Balfanz
Everyone Graduates Center and Talent Development Middle Grades Program

National Middle School Association

June 2009

JOHNS HOPKINS
UNIVERSITY

About Everyone Graduates Center

The Everyone Graduates Center (EGC) is located at the Center for Social Organization of Schools at Johns Hopkins University, one of the nation's leading research universities. The mission of the Everyone Graduates Center is to develop and disseminate the know-how required to enable all students to graduate from high school prepared for college, career, and civic life. Through a systematic and comprehensive approach, EGC combines analysis of the causes, location, and consequences of the nation's dropout crisis with the development of tools and models designed to keep all students on the path to high school graduation, and capacity building efforts to enable states, communities, school districts, and schools to provide all students with the supports they need to succeed.

About Philadelphia Education Fund

The mission of the Philadelphia Education Fund is to improve the quality of public education for underserved youth throughout the Philadelphia region. Working closely with school districts, schools, businesses, universities, nonprofit organizations, community stakeholders, and other partners, the Philadelphia Education Fund aims to create high-performing secondary schools (grades 6 – 12) where public school diplomas are synonymous with rigorous and high quality education that leads to post-secondary success; provide all students with access to postsecondary education opportunities and the assurance that they can complete appropriate and rigorous classes to allow them to succeed in college and career; and create strategic alliances to support student success from pre-K through college.

The Philadelphia Education Fund's portfolio of programs and initiatives focus on enhancing teaching and learning, conducting research studies that fuel its work and that of others, directly assisting students to access and succeed in postsecondary education, convening public education stakeholders in support of school reform policy and practice, and informing and engaging citizens as public school advocates.

NMSA.

About National Middle School Association

Since its inception in 1973, National Middle School Association (NMSA) has been a voice for those committed to the educational and developmental needs of young adolescents. With nearly 30,000 members representing principals, teachers, central office personnel, professors, college students, parents, community leaders, and educational consultants across the United States, Canada, and 46 other countries, NMSA welcomes and provides support to anyone interested in the health and education of young adolescents. In addition, NMSA has a network of 58 affiliate organizations in the United States, Canada, Europe, and Australia that strengthens our outreach to the regional, state, provincial, and local levels.

Through the release of our landmark position paper, *This We Believe: Successful Schools for Young Adolescents,* NMSA has been a key resource to middle level educators looking to develop more effective schools. Our message is for schools to be academically excellent, developmentally responsive, and socially equitable for every young adolescent.

A Policy and Practice Brief

Putting Middle Grades Students on the Graduation Path

Robert Balfanz
Everyone Graduates Center and Talent Development Middle Grades Program

The middle grades will play a pivotal role in enabling the nation to reach President Obama's goal of graduating all students from high school prepared for college or advanced career training. In high-poverty neighborhoods, in particular, our research and school improvement work indicate that students' middle grades experiences have tremendous impact on the extent to which they will close achievement gaps, graduate from high school, and be prepared for college. Consequently, there is a need to reconceptualize the role the middle grades play in the public education system. The middle grades, broadly defined as fifth through eighth grade, need to be seen as the launching pad for a secondary and post-secondary education system that enables all students to obtain the schooling and/or career training they will need to fully experience the opportunities of 21st century America.

This brief, drawing on our research and field work, illuminates key policy and practice implications of the middle grades playing a stronger role in achieving our national goal of graduating all students from high school prepared for college or career and civic life. The brief is based on more than a decade of research and development work at the Center for the Social Organization of Schools at Johns Hopkins University. It also draws on direct field experience in more than 30 middle schools implementing comprehensive reform and a longstanding collaboration with the Philadelphia Education Fund.

Major Research Findings

We first highlight our major research findings in two critical areas—the role of the middle grades in determining the likelihood that a student will graduate from high school and their role in closing achievement gaps.

Role of Middle Grades in Determining the Odds of High School Graduation

Our fundamental finding is that in high-poverty environments a student's middle grades experience strongly impacts the odds of graduating from high school.

Initial Findings from Philadelphia

Working with the Philadelphia Education Fund, we followed several cohorts of Philadelphia students from sixth grade through one year past on-time graduation. Our central question was: How early in the middle

grades could we see clear signals that students had fallen off the path to high school graduation? Our goal was to find high-yield indicators that shared two critical features: Identifying students who, absent intervention, would have low odds of graduating (25% or lower graduation rates) and collectively identifying a significant number (at least 25%) of future nongraduates or dropouts. In short, we looked for indicators that were not only accurate, but also had practical application.

We found that sixth graders who failed math or English/reading, or attended school less than 80% of the time, or received an unsatisfactory behavior grade in a core course had only a 10% to 20% chance of graduating on time. Less than 1 of every 4 students with at least one off-track indicator graduated within one extra year of on-time graduation.

Although these numbers are shocking initially, upon reflection they are understandable. Once a sixth grader has demonstrated that he or she lacks either the knowledge to pass tests in math or English or the ability to complete assignments, absent successful intervention, this is unlikely to change on its own. This may be especially true in high-poverty environments, where home and community resources can be limited.

As a result, the student continues to fail courses and may not achieve on-time promotion to the next grade. The student then enters high school, overage for the grade with a history of course failure. Lacking the skills, knowledge, and self-confidence to succeed in high school and feeling distanced from his or her peers, the student continues to fail, does not earn promotion to the 10th grade, and, at this point, may well have reached the legal age for dropping out. Similar trajectories can be seen for 11- and 12-year-olds who miss one or two or more months of school or who receive poor behavior ratings from their teachers. Both clearly signal lack of engagement and participation in school. Absent successful intervention, these behaviors do not typically self-correct over time and lead to course failure, non-promotion, and ultimately, dropping out.

Findings from Replications and Extensions in Additional School Districts

We have subsequently replicated the Philadelphia study in five school districts. These replications confirm the core findings of the Philadelphia study and collectively indicate that, at least in high-poverty environments, it is possible to identify in the middle grades up to half, and sometimes even more, of eventual dropouts. The replications also provide some important nuances.

- **Critical attendance thresholds varied by school district.** In some districts, students who missed a month or more of school (roughly, 90% attendance rates or less) had greatly diminished graduation odds. In other districts, like Philadelphia, students needed to miss two or more months (roughly, attendance of 80% or less) to achieve similar outcomes. This suggests that both the number of days a student misses and how his or her attendance compares with that of peers signal that a student is not fully engaged and is in danger of falling off the graduation path.

- **Mild but sustained misbehavior appears to have an independent effect on graduation odds.** In other words, not paying attention in class, acting out, and not getting along with teachers in sustained fashion signal disengagement. Left unaddressed, behaviors that typically might generate a low mark for conduct or multiple behavior referrals knock students off the graduation path. Thus, schools and districts that do not have data that capture these interactions in a systematic and cumulative fashion ultimately miss some students who are clearly signaling they are off track.

- **Students who fall off track in the sixth grade tend to have one or two off-track indicators.** Relatively few sixth graders have three or four indicators, that is, failing math and English and having low attendance and poor behavior (a pattern, by comparison, that is common in high school). The most common combination was for students to be failing either math or English (not both) and to

have either an attendance or a behavior indicator. A significant subset of students, however, had just one indicator—failing a single class, not attending school regularly, or misbehaving. This suggests that students, at least in the sixth grade, are falling off the graduation path from different avenues. The avenues, moreover, appear to follow basic human reactions to uncomfortable environments. The students are fleeing (not coming to school), pushing back (acting out), or withdrawing (coming to school and behaving, but not paying attention or engaging).

- **The earlier students develop off-track indicators, the lower their graduation odds appear to be.** The first year of the middle grades (typically the sixth grade year), much like ninth grade, appears to be a make-or-break year. Across the school districts we examined, most middle grades students developed their off-track indicators in sixth grade. Moreover, students who signaled that they were falling off the graduation path in the sixth grade had worse outcomes than students who did not begin to develop off-track indicators until at least the seventh grade.

- **Students who exhibit off-track indicators in the middle grades are resilient.** Sixth graders who signaled they were falling off the graduation path typically remained in school for at least five more years. This indicates there is substantial time to intervene and that, despite years of struggle, students, perhaps with diminishing motivation, continue to attempt to participate and succeed in their schooling.

- **Different measures of academic outcomes are often highly correlated, but some are still better indicators than others.** Across the districts, we found that course grades were better indicators; they were both more reliable and had a higher yield (predicted a greater percentage of dropouts) than standardized test scores. Only very low test scores—scores below the 15th percentile on a nationally normed test—had predictive power and useful yields. It was only when course grades were not entered into the analysis that test scores, in general, showed predictive power. This was because, in general, though not always, students with poor grades also had low test scores. Upon reflection, it is not that surprising that grades predict better than test scores. Grades will, on average, be more sensitive to students' attendance and effort over time. Thus, receiving a failing grade for an entire year likely signals substantial and sustained disengagement as well as skill and knowledge gaps. Moreover, passing courses in high school is key to earning the required credits to graduate. Even states with graduation or exit exams require students to pass their courses to graduate. Thus, middle grades students who have difficulty passing their courses are directly signaling difficulty with the most salient factor in determining whether they will graduate.

- **Ds seem important, too.** In Philadelphia we found that focusing on math and English grades only provided strong predictive power, while in other districts we saw that any course failure and even overall GPA were also effective indicators. How much course performance information is used becomes a judgment call balancing predictive power and yield (the likelihood a student will graduate versus how many future nongraduates are identified). This tension can clearly be seen in the question of Ds. Across the districts we found course failure—typically defined as receiving an F or a grade below 60% or 65%— was more predictive than receiving the grade just above failing, typically a D. Students who received Ds, however, still had considerably lower graduation odds than students with C averages or higher. Also, Ds tended to be predictive of Fs. So, here is the judgment call: Does it make sense to include students who receive Ds in an early warning system to signal that, absent successful intervention, these students likely will not graduate, even if it means that a greater proportion of the students who receive additional supports may not have needed them? In the case of Ds, we believe the answer is yes, but we highlight this question to show the importance of using local judgment as well as solid empirical analysis in establishing the set of on- and off-track indicators a school, district, or state will use.

- **Students who come every day, behave, and get good grades graduate in high numbers.** Across the districts we examined, middle grades students who had 95% or better attendance, B averages or better, and no record of misbehavior graduated in relatively large numbers, even when they attended low-performing schools in high-poverty districts.

- **Similar schools serving similar student populations had different percentages of students with off- and on-track indicators.** This indicates that schools can have a powerful influence on shaping student behavior. This provides a clear goal to schools and districts: Drive down the number of students exhibiting off-track indicators and drive up the number of students exhibiting on-track indicators.

- **Middle grades schools within districts also often have unequal distributions of off-track students.** In every school district we examined, every middle school had some students exhibiting off-track indicators. In some this amounted to a small percentage of students, and in others, it amounted to half or more of all students. This suggests that while all schools can employ these indicators and benefit, some schools will need substantially more resources than others to respond effectively.

Role of the Middle Grades in Closing Achievement Gaps

Efforts to keep students on the graduation path should be paired with efforts to close achievement gaps. It is during the middle grades, particularly in lower-performing schools that serve high-poverty populations, that achievement gaps often become achievement chasms. To achieve the nation's goal of graduating all its high school students ready for college and career, it will be essential for students to enter high school with at least close-to-grade-level skills and knowledge. Many high schools have been able to provide additional supports for succeeding in high standards environments if their students enter with skill and knowledge levels equal to those of average seventh or eighth graders. However, the number of programs able to achieve similar results with students entering with upper elementary level skills—those typical of fifth and sixth graders—is much smaller. Yet in high-poverty environments, nonselective high schools often educate primarily students who enter with the skill levels of typical fifth or sixth graders. In short, these are students who lack a solid middle grades education.

Moreover, while it is arguable that a long-term solution involves better pre-K through elementary instruction so that nearly all students enter the middle grades having mastered elementary skills, middle grades schools must find ways to accelerate student learning and close rather than widen achievement gaps.

Core Findings from Philadelphia

To date, the research we have conducted on closing achievement gaps has been limited to Philadelphia and has focused primarily on mathematics. Specifically, we examined the 23 middle grades schools in Philadelphia serving student bodies that were at least 80% minority with at least 80% of students qualifying for free and reduced-price lunch. Thus, our results are illustrative rather than definitive.

The fundamental questions we explored were: What factors enable middle school students to make large, gap-closing achievement gains? What factors constrain middle school students from making those gains? In these investigations we defined large gains as increases of 10 percentile points or greater on standardized tests. Thus, if a student started sixth grade scoring at the 30th percentile on a nationally- or state-normed test and left the eighth grade at the 40th percentile, we would classify this as a large and gap-closing achievement gain. The student's achievement gap was not fully closed. He or she was still below the 50th percentile but left the middle grades much closer to it than when entering.

Achievement Gap Closing Within and Between Middle Grades Schools

Middle grades students in these 23 schools either significantly closed their achievement gaps or fell further behind. Within each of the schools, two sets of students were having very different experiences.

While some students were making impressive gains, others were leaving the middle grades further behind than when they entered. Within each school, roughly a quarter to a third of students made very large gains, while the majority of students lost ground. In a few schools, only 10% to 15% of students made gains, but in a few others more than 40 percent did. This indicates that with relatively similar populations in the same city, some schools witnessed three times as many students making gap-closing gains as other schools did. In no school, however, did half or more of the students experience large achievement gains.

Across the 23 middle grades schools, average achievement gains for the school could lead to false impressions. When the outcomes of the gap-closing and gap-increasing students are averaged at the school level, it creates the illusion of either small school-wide improvements or declines. In truth, what distinguished one school from the next was not whether they were making small improvements for all students but how widespread an opportunity they were creating for students to make large achievement gains.

Enablers and Constraints of Achievement Gap Closing

1. **In line with prior research, we found that teachers had the strongest impact on whether or not a student would close or widen achievement gaps during the middle grades.** If, for two of the three years, students were in classrooms in which the average student witnessed more than a year's growth in a year's time, all were considerably more likely to close their achievement gaps.

2. **Attendance, behavior, and effort all had independent and additive impacts on the likelihood that a student would close achievement gaps.** This indicates that to close achievement gaps, students needed not only strong teachers, they also had to show up, behave in class, and try hard to learn. Research shows school actions can positively impact all of these behaviors. This reinforces the point that schools need to pay attention to shaping both learning opportunities and student motivations.

3. **For large numbers of students to close their achievement gaps, all of these factors must operate in concert.** When students were in a high-gain classroom for at least two years, came to school 95% of the time, on average had excellent behavior marks, and put forth greater-than-average effort in math class, a remarkable 77% closed their achievement gaps during the middle grades. However, across the three representative middle grades schools we studied intensely, only 20% of the students experienced these conditions and exhibited these behaviors.

Implications for Policy and Practice

What do these research findings on the role of the middle grades in determining high school graduation and in closing achievement gaps, particularly in schools that serve high- poverty populations, imply for policy and practice in a college-and-career-readiness-for-all era?

First and foremost, the research demonstrates that the middle grades matter—tremendously. During the middle grades, students in high-poverty environments are either launched on the path to high school graduation or knocked off-track. It is a time when they can close achievement gaps and enter high school ready or at least close to ready for standards-based instruction that leads to college readiness. Alternatively, it is a time when students' achievement gaps widen, forcing them to enter high school still in need of a good middle grades education.

These findings also demonstrate why reform is difficult, as no single reform stands out as the major action required. Using our combined Philadelphia data from our achievement gap and staying on the graduation path studies, we were able to model explicitly the contributions of major school reform elements. Essentially, we found that everything one might think matters, does so, but modestly at best. This included parental involvement, academic press, teacher support, and the perceived relevance of what was being taught and its intrinsic interest to students. Some of these

factors influenced attendance, others influenced behavior or effort, and they either indirectly or directly impacted course performance, achievement gains, and graduation outcomes. It was only when all the elements were combined in a well-functioning system that major gains were observed.

The ABCs of Putting Middle Grades Students on the Graduation Path

The research, development, and school improvement work we have done on the factors that throw middle grades students off the graduation path and the actions that lead to large achievement gains in the middle grades tell us much the same thing. This is fortunate because it enables the formation of a unified middle grades improvement strategy that will lead to both increased academic achievement and higher graduation rates. When combined with good middle grades practices such as those detailed in publications such as *This We Believe: Successful Schools for Young Adolescents, This We Believe in Action: Implementing Successful Middle Level Schools, Success in the Middle: A Policymaker's Guide to Achieving Quality Middle Level Education, Making Middle Grades Work,* and *Breaking Ranks in the Middle;* curricula and instructional practices linked to college and career readiness; and enhanced teacher quality, our research and experience suggest that the following actions and practices can accelerate and magnify the impact of the middle grades on student success.

Attendance

School districts with low graduation rates usually have significant—and often unrecognized —chronic absenteeism in the middle grades. It is in the middle grades that students learn they can miss first a few and then a growing number of school days with few or no repercussions. It is also during the middle grades, especially in urban areas, that students start taking mass transportation to school—municipal buses and subways—sometimes involving a transfer. This provides them the opportunity to set off for school but not quite get there or to leave during the school day. In some cities we have examined, the majority of middle grades students in some schools and neighborhoods miss 20 or more days (a month or more) of school. In one large city, we tracked students over time and found that 40% of students missed a year or more of school cumulatively over a five-year period beginning with sixth grade. This indicates that one source of the growing achievement gaps in the middle grades, in some locations and for some students, is the simple fact that they are not in school enough to keep up. Consequently, middle schools must monitor attendance more carefully and make strong efforts to prevent students from developing poor attendance habits.

Schools must

- **Measure attendance in informative and actionable manners.** At a policy level this will involve recording not simply average attendance in a school, but keeping track of how many students have very good attendance, i.e., miss 5 or fewer days a year; are moderately absent, missing between 10 and 19 days; are chronically absent, missing 20 or more days; or extremely chronically absent, missing 40 or more days.

- **Take measures to increase the number of students with very good attendance and decrease the number who are chronically absent.** This means that every absence needs to elicit a response. At first this can be simple outreach to let students know they are missed and to solve any problems standing in their way of attending school. If the absenteeism persists, more structured responses are required. For better or worse, acknowledge that middle grades students are starting to make independent decisions about their level of school engagement. As important as parents are, the extent to which schools encourage good attendance and help problem solve attendance issues, matters.

- **Recognize good attendance regularly through public acknowledgement and social rewards (i.e., earning privileges).** Positive peer pressure can also be activated by recognizing not only good individual attendance but collective success as well (i.e., homeroom or classroom and grade level attendance).

- **Separate attendance from course performance.** Student grades should not be administratively affected by poor attendance (e.g., lowering grades if students miss a certain number of days). Rather, give students a structure for making up missed assignments. Then address the source of the student's absenteeism, whether disengagement or issues in school, at home, or in the community. Similarly, students who are chronically absent should not be suspended. Having students miss more school because they missed too much school has not proven to be an effective response. This does not mean that students should not be held responsible for their own attendance, as it is clear that at least some students are making a choice not to attend on a given day. But the consequences need to be modulated so that they lead to improved attendance behaviors and do not knock students off the graduation path.

- **Be and be perceived as safe and engaging places.** Schools should regularly survey students on the reasons they miss school, their perceptions of school safety and climate, and their levels of engagement. Surveys should be analyzed by whatever units the school uses to organize students (homerooms, core groups, pods) to help identify clusters of students whose micro-experience differs in negative ways from that of their classmates. A group of disaffected or uneasy students may encourage and enable each other to miss school.

Belief, Behavior, and Effort

Central to increasing the positive impact of the middle grades on the nation's graduation rate is engaging students in the quest. Middle grades students need to believe that hard work will bring life success, that positive behavior is recognized and desired, and that they need to invest their personal agency and apply effort to succeed. In many low-performing middle schools, however, what students learn is that rules and rewards are applied capriciously (i.e., each teacher has different rules), that school is something to be endured, that negative behavior gets attention, and that doing just enough to get by and pass is acceptable. Policies and practices that promote good behavior, engagement, and effort and build upon student assets include:

- **High engagement electives that provide avenues for short-term success and positively recognize asymmetrical skills levels.** Students who enter the middle grades with poor preparation require time to build up their formal academic skills to the point where they feel successful and are recognized as such. This is too long to wait for most adults, let alone young adolescents. Thus, students need other educational experiences that provide avenues for short-term success. Experiences like debate and drama in which students with strong verbal skills but weaker writing skills can show their talents or robotics and chess in which students with good engineering or logic abilities but limited formal mathematics skills can demonstrate strengths are essential.

- **Activities that honor and use middle grades students' desire for adventure and camaraderie.** Some students cut class or act out for the sheer thrill, or because they want to belong to the group of students who earn social recognition from their peers for such behaviors. Students need positive alternatives that allow them to work collectively on activities that are meaningful to them. Group rather than individual service learning projects, for example, encourage students to put their collective energy to use solving problems and helping others.

- **Recognition at both the individual and group level for positive behavior.** Make students responsible for managing part of the effort. Have them work with teachers to develop short and common lists of positive behaviors and recognize individuals, classes, and groups that achieve them.

- **Teaching organizational and self-management skills.** In moving to college and career readiness for all, we must now teach some skills formerly learned by students on their own. All students need lessons and modeling of study and work skills like time and task management, note taking, and assignment

completion strategies as well as social skills like working cooperatively with others and resolving conflict. Equally important is modeling the level of effort needed for adult success and building upon and expanding students' resilience.

Course Performance

The most critical challenge is finding ways to improve the quality of middle grades coursework and course performance. Students who receive high-quality instruction and course assignments will learn and advance and, ultimately, graduate college-ready. Those who do not, will not. To meet this challenge, progress and improvements in several areas will likely be required. Some reconceptualization of what constitutes student achievement in the middle grades may also be needed.

- **Encouraging quality coursework may require new forms of assessment.** Benchmark testing, which provides teachers formative assessments of students' progress toward mastering skills and standards, can play an important role. Its primary focus, though, is usually identifying the subset of skills in a topic or concept that a student has or has not mastered. Focusing only on discrete skills or knowledge, however, misses a key component of quality coursework: the ability to integrate a series of skills and a set of knowledge to produce an intellectual product such as a persuasive essay, a substantive science experiment; an equation, table, or graph that helps solve a problem; or analysis of a historical event that provides insight. If these are the desired outcomes—and analysis of emerging concepts of college readiness argue that they are—we will need to develop formative and summative assessments that focus effort and support on them.

- **Accept and acknowledge the implications of course grades being more predictive of eventual success than test scores.** Course grades capture effort, engagement, and even attendance over time as well as knowledge and skill levels. Yet, inherently, we often recoil from the implications of this finding because we fear grade inflation and easy ways to game the system. The result is that the dominant focus of our academic improvement efforts becomes raising student test scores rather than improving course performance. A more productive strategy is to fix the potential limitation of grades by creating common rubrics across subjects, grades, and classrooms within schools and by employing common final exams to check consistency of grades.

- **Create developmentally appropriate high school/college readiness indicators that are meaningful and engaging to middle grades students and understood by parents.** One way to conceptualize this is to consider creating the academic equivalent of merit badges. Students could be recognized for demonstrating mastery of meaningful chunks of knowledge or intellectual skills in ways such as successfully arguing a case in moot court, writing an effective op-ed, statistically illuminating a public policy challenge, or creating a logic model of the spread of disease.

- **Get extra help right.** Fundamental in effecting broad-based improvement in the quality of middle grades course work will be developing extra help and support systems that are integrated with class activities assignments and provided when the need arises, not long after it is needed. Currently, too much extra help is offered through after-school programs and is disconnected from students' day-to-day classroom needs. Students struggling in math may receive extra help, but it is often designed to build their general skill level or address a skill deficiency that is tested. If students get extra help in fractions, but their test on Friday covers integers, they are not getting the support they need to succeed in class.

Early Warning and Intervention Systems

Early warning and intervention systems provide the necessary means to unify, focus, and target efforts to improve attendance, behavior, and course performance. Their fundamental purpose is to get the right intervention to the right student at the right time. To achieve this, consider the following:

- **Focus on effective intervention, not just identification.** As our research and that of others has shown, it is possible to identify as early as

sixth grade large numbers of students who, absent successful intervention, likely will not graduate. Identifying students as they are just beginning to fall off the graduation path enables schools to target resources effectively and move from a reactive to a proactive intervention strategy. Simply identifying students, however, will have no significant impact unless it leads to the students receiving the additional supports they need to get back on track. As identification is relatively easy and effective intervention can be hard, the temptation may be to focus on the first and not the second. Or, districts and states may see their role as setting up the early warning system, then leaving it to the schools to figure out how to use the data and build an intervention system. What will likely be required, however, for early warning and intervention systems to fulfill their promise, is collaboration among states, districts, and schools to design, implement, and staff multitiered intervention systems. In the areas of attendance, behavior/effort, and course performance, these intervention systems will need to provide research-based and practice-validated, whole-school prevention strategies; targeted supports for students who need more; and intensive supports for students for whom whole-school and targeted approaches are not enough. It does not make sense for every school to have to invent, validate, implement, and resource this intervention system on their own.

- **Recognize and build on student strengths.** It is also vitally important that early warning and intervention systems are not built around deficit models. Student strengths, as well as areas of struggle, need to be recorded, recognized, analyzed, and used to help build and deliver effective interventions.

- **Provide time, training, and support to teachers for implementing early warning and intervention systems.** For early warning and intervention systems to work, interdisciplinary teams of teachers (pairs, triads, four- to six-person teams can all work) must share a common set of students and have common planning time to monitor student progress, evaluate the effectiveness of interventions, and adapt strategies as needed to make sure that the right intervention is getting to the right student at the right time. Teachers will need technical assistance on how to run and operate early warning and intervention systems as well as ongoing support and facilitation to help them establish effective teaming and intervention practices.

- **Match resources to student needs but practice intervention discipline.** For early warning and intervention systems to work, schools will need access to the resources required to respond to their students' needs. Often, this will be a question of scale. A high-poverty middle school with 800 to 1,000 students could have 200 students needing daily targeted supports of moderate intensity. These students may need someone to call their homes when they do not show up at school, make sure they have completed their homework and school assignments, help them understand what they need to do or how to do it, remind them to behave in class, check on their progress in fulfilling a behavior contract, and invite them to an engaging after-school activity. Serving 200 students with these needs, however, far outstrips the typical capacity of a sole attendance monitor, social worker, guidance counselor, or dean. In this case, there is a need to recruit and support additional adults from the community or national service organizations or older students involved in service learning to act as shepherds for these students. Because intervention support is expensive, administrators must establish criteria for prioritizing who receives it. This intervention discipline must be exercised to make resource acquisition feasible. In some high-poverty middle schools, it could well be true that most students would benefit from a social worker or counselor and a tutor. Social workers, counselors, and tutoring programs, however, are usually scaled for tens of students, not hundreds. High-quality one-on-one or small-group support is also expensive. So these supports need to be preserved for the students for whom nothing else works, not employed as the first line of intervention for all students showing signs of falling off track.

- **Evaluate the effectiveness of interventions.** Because so many different interventions can be going on at one time in a school, it is difficult to determine which intervention methods are effective for which problems. If an important outcome like achievement goes up, then every intervention in the school is deemed successful. Likewise, if achievement goes down, everything is viewed as ineffective. The truth, however, is likely to be much more mixed, with some interventions working in both circumstances. Simple tools enabling teachers to track which intervention is used with which student and how well the student responded to the intervention are needed along with the time to analyze the impact of the interventions. For example, if only two of the ten students assigned mentors improved their attendance, there is evidence that mentoring might not be the best frontline strategy, at least for certain types of students. Over time, this micro-evaluation of interventions is what will enable schools to successfully target the right intervention to the right student at the right time.

- **Teachers and administrators can get started with just the data currently available in their schools.** Although, ultimately, state and district data systems will enable early warning and intervention systems to realize their full power, all of the key data needed to begin is already available in schools. Grades, daily attendance, and behavior referrals and consequences are recorded routinely and regularly in schools. Thus, it is not necessary to wait for the district or the state to build early warning data systems. Teams of teachers sharing common sets of students can share the key early warning data among themselves, and principals, deans, and counselors can organize, model, and support the use of these school-based data.

Challenges

There are three major challenges to acting effectively on the insights generated by our research and fieldwork.

- **Getting the ratio of skilled adults to students in need right.** One of the fundamental drivers of the nation's graduation rate crisis is the concentration of our neediest students in a subset of largely under-resourced schools. Customarily, middle schools are designed with the assumption that, perhaps, 15% of students might need various forms of extra help to succeed, with similar numbers ready for acceleration, and the vast majority of students able to make it through on their own. These assumptions, for example, are what determine ratios of one counselor or assistant principal to hundreds of students and class sizes of 25 or more. In the high-poverty middle schools feeding the high schools that produce most of the nation's dropouts, up to half, and sometimes more, of the students need extra supports to succeed. In these schools, there simply are not enough skilled adults to help the students in need. The result is triage, burnout, and high mobility among administrators, teachers, and staff members. This, in turn, makes the situation worse, as reforms are unable to take hold amidst constantly shifting sets of adults. These, then, are the schools that will require an infusion of skilled and committed adults from the community, local colleges and universities via work study programs, and, perhaps most promisingly, through national service programs. Recent federal legislation has greatly expanded the funding available to national service programs and has targeted them more closely to solve urgent national priorities. Schools and districts can expand the role of national service organizations with proven track records, such as Experience Corps and City Year. At the same time, the federal government, states, and districts need to work together to increase the skill, longevity, and, in many cases, the number of teachers, administrators, and support staff in middle schools with large numbers and percentages of students needing extra supports to stay on the graduation path.

- **Getting teacher buy-in and support for the mission of keeping middle grades students on the graduation path.** Asking teachers not only

to focus on getting students to succeed in their coursework but also to pay attention to their long-term educational trajectory is a new mission. It is a mission that teachers will willingly embrace if they have been given sufficient information about the impact of attendance, behavior/effort, and course performance on students' odds of long-term success, and when they believe a support system exists to enable adults to effectively collaborate to help students. This allows them to see it as more than just one more demand on their already full schedule.

- **Strengthening the family-student-teacher support triangle.** Ideally, middle grades students are strongly supported by their parents/families and their teachers, with the teachers and parents supporting each other. In practice, often as the result of miscommunication or lack of communication, one or more of these relationships breaks down or is not sufficiently strong. Moreover, as the nation raises its goal to college and career readiness for all, the need for parents, teachers, and students to be on the same page increases. Take, for example, student effort. Teachers need to be able to expect that students will complete assignments in acceptable fashion. But parents need good information on what those assignments are and how they can help. Students may or may not convey this well on their own. Students also need to know that when they face a real impediment to completing an assignment—whether they do not understand the material or a family situation distracts them—that teachers will take them at their word and find ways to help them finish it. In these situations, teachers need to be able to double check the details with parents. Although his seems straightforward, more often than not, it does not occur without effort. Thus, active and evidence-based strategies need to be in place to increase family-student-teacher partnerships.

Conclusion

Two thousand high schools produce half the nation's dropouts and more than two-thirds of its minority dropouts. The nation's dropout crisis is driven by these high schools and their feeder middle grades schools. Until we transform these high schools and the middle grades schools in which large numbers of students are falling off the path to graduation, the nation will not achieve its goal of graduating all its students from high school prepared for college, career, and civic life.

As our research, experience, and the work of many others have shown, particularly in high-poverty environments, a student's middle grades experience is critical to his or her life's chances. It is during the middle grades that students either launch toward achievement and attainment, or slide off track and placed on a path of frustration, failure, and, ultimately, early exit from the only secure path to adult success. This essential path is leaving high school prepared for post-secondary education and career training.

Our research, experience, and the work of many others, however, also shows that there is hope and considerable knowledge and know-how regarding how the middle grades can be transformed to enable all students to stay on the graduation path. Our challenge is to use this knowledge and know-how where it is needed most and in ways tailored to local circumstances.

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Education Outlook

Gaining Ground in the Middle Grades

By Trish Williams, Matthew Rosin, and Michael W. Kirst

Educators and policymakers have debated in recent years how best to improve academic performance in the middle grades. In the absence of outcomes-based research about what works, school districts have reshuffled grade configurations, bolstered their focus on "academic rigor," and worked to ensure that students are engaged in school as they go through the turbulence of puberty. To find out what district and school policies and practices are linked to higher student performance in the middle grades, a team of researchers from EdSource, Stanford University, and American Institutes for Research spent eighteen months conducting the most extensive empirical study of this grade level to date. The study, Gaining Ground in the Middle Grades, *was released in 2010. This* Outlook *highlights what policymakers can do to support the middle grades.*

As expectations for a highly educated American citizenry rise, what happens in the middle grades matters now more than ever. Success at this level is a prerequisite for entering high school prepared for a college- and career-ready path. The middle grades are the last best chance to identify students at risk of academic failure and get them back on track for high school success.

Educators widely accept that much of the difference in student outcomes among schools is directly related to student background. Less widely acknowledged is the great variation in student performance even among schools serving similar student populations.

Indeed, some schools do much better than others at raising the academic achievement of middle grades students, including among schools serving high numbers of minority, English language learner (ELL), and low-income students. In California, schools serving similar middle grades students vary widely on the state's Academic Performance Index and in student outcomes on standards-based exams. This variation is striking—and offers a reason for hope. It suggests that policies and practices matter.

Our report, *Gaining Ground in the Middle Grades*, was designed to identify school and

Key points in this *Outlook*:

- High-performing middle schools align instruction with state standards and use student data to improve student learning.
- States should align education spending with clear priorities to make the best use of scarce resources.
- Competitive grant initiatives sponsored by the US Department of Education should emphasize the importance of rigorous standards and quality assessments and the use of student data to improve teaching and learning.

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district practices and policies that set apart higher-performing schools from lower-performing ones, as measured by standards-based tests in English language arts and math. During the 2008–2009 school year, we surveyed the principals of 303 middle grades schools in California, 3,752 English language arts and math teachers in grades six through eight in these schools, and 157 district superintendents and charter management organization leaders who oversee them. The schools included one group serving predominantly low-income students and another serving predominantly middle-income students. The schools also included all major middle grades configurations—K–8, 7–8, and 6–8—and both charter and traditional public schools.

We asked these educators about concrete practices and policies in their schools, based on extensive review of middle grades research and policy literature. We then analyzed the schools' reported practices against their achievement on the California Standards Tests in English language arts and math in grades six, seven, and eight during that year, controlling for student background and other school differences. We considered schools' achievement outcomes both for the single school year and in light of students' past achievement on state tests.

What We Learned

The major contribution of our study is a set of specific practices that middle grades educators and leaders can implement. Taken together, these form a coherent and compelling picture of higher-performing middle grades schools.

Foremost, an intense, schoolwide focus on improving students' academic outcomes distinguished higher-performing schools. Educators reported that they prioritized and set measurable goals for improved student outcomes on standards-based tests and benchmarks, informed by clear district priorities for student achievement. They saw improving student outcomes as their personal and shared responsibility, and they expected students and parents to share in this mission.

As part of this mission, a strong focus on the future set apart higher-performing schools. Principals and teachers in these schools saw their curriculum and instruction as explicitly designed to enable students to leave the middle grades "high school–ready"—with strong foundational skills, on track to pass California's high school exit exam, and ready to enter college-preparatory courses. Educators also took steps to help students (and their parents) see how the middle grades relate to their future in high school and beyond.

Evaluation of superintendents and principals based, in part, on students' academic outcomes also distinguished schools with higher performance. Achievement was higher in schools where teachers saw their evaluations as substantive and helpful to their practice—and in schools where evaluation of teachers was based, in part, on student progress and achievement data (among schools serving predominantly lower-income students).

Principals and teachers in higher-performing schools saw their curriculum and instruction as explicitly designed to enable students to leave the middle grades "high school–ready."

The following areas of practice and policy also distinguished higher-performing schools and provided the framework and tools through which this intense focus on student outcomes was achieved:

Close Alignment of Curricula and Instruction with State Academic Content Standards. The district played a lead role in curriculum adoption and emphasized alignment with standards. Teachers used the adopted curriculum daily and emphasized key standards in each grade and subject. They also reported collaborating frequently around common pacing and benchmarks and "breaking down" the state content standards to identify prerequisite student skills. Principals allocated a considerable amount of time for common planning.

Extensive Use of Assessment and Other Student Data to Improve Student Learning and Teacher Practice. The district played a strong leadership role by providing timely student data, an accessible and user-friendly data system, and the training needed to use the system effectively at the school site. Principals met frequently with teachers to review student data and used these data to examine teacher practice and content knowledge and determine professional development needs. Teachers reported using data routinely to improve their own instruction and set measurable goals for student achievement.

Early Identification of Students Needing Additional Support and Proactive Intervention. Educators reported

that the district emphasized the early identification of such students, addressed the needs of students two or more years behind grade level, and developed policies and resources to serve ELL students, with an emphasis on English language development and subject-matter learning. A comprehensive range of required and voluntary strategies for intervening on behalf of students far below grade level or at risk of failing also set apart higher-performing schools, including meetings in which school staff and parents developed individual intervention plans. Schools made time for interventions and academic support during or outside the school day.

Evaluating superintendents, principals, and teachers *in part* on improvements in student outcomes was associated with higher school performance on standards-based exams.

Extensive Review of the Incoming Records of Students Entering the Middle Grades. This finding resonates with recent research and policy discussion regarding early predictors of student success or failure. In addition to reviewing data on students' past achievement on state standards-based exams, grades in English language arts and math, and English language proficiency, middle grades educators also reviewed students' attendance and behavior records and communicated with elementary teachers about any students whose data raised concerns.

One area of practice not as strongly correlated with higher school achievement was a positive, safe, and engaging school environment. This important middle grades focus may be a necessary foundation for effective schools, rather than an area of practice that always relates directly to improved academic outcomes. That said, some practices related to a safe and engaging school environment set apart higher-performing schools. For example, educators reported that the principal ensured a clean, safe, and disciplined school environment and that the school publicly recognized positive behavior and attendance and communicated the importance of attendance to students and parents. In addition, a high proportion of students participated in electives and extracurricular activities.

Finally, neither school grade configuration nor the organization of classroom instruction (for example, self-contained versus departmentalized) was clearly associated with higher school performance on standards-based tests. Although there may be many good reasons for a district to decide on a particular grade configuration (such as enrollment trends or availability of facilities), no single grade configuration was consistently associated with higher school achievement after accounting for other practices. Moreover, the practices that *did* distinguish higher performance can be implemented with any grade configuration or organization of instruction.

Implications for Districts and Schools

Local educators can use the findings of this study to learn more about what is working in some higher-performing schools and for staff discussions about ways to improve student outcomes in their own schools.

Superintendents and district boards should pay explicit attention to academic improvement in the middle grades. This study underscores the important leadership role of district superintendents and boards in communicating the importance of middle grades student outcomes. So important are these outcomes that some districts make them a consideration in superintendent and principal evaluations.

Districts should examine the extent to which their middle grades curricula and assessments provide a clear framework for aligning instruction and common planning with state academic standards. Questions include: Does teacher professional development help teachers map key state standards by grade and subject to instruction? Does the district provide standards-based benchmark tests for the middle grades and return results quickly? Do teachers work collectively and know how to respond to test results? Do teachers use diagnostic tests and assessment data to determine why a student is struggling? Is there support to help teachers address students' instructional needs?

Districts and schools should consider making improvements in middle grades student outcomes a part of educator performance evaluations. Consistent with much of the national conversation around educator effectiveness, this study found that evaluating superintendents, principals, and teachers *in part* on improvements in student outcomes was associated with higher school performance on standards-based exams. This practice should be part of a comprehensive strategy that includes ready

availability of timely student data, meaningful professional development for teachers and principals, and a complete portfolio of student intervention strategies.

Principals should engage their staff and teachers in conversations about their mission for the middle grades. Educators in the middle grades have long believed that responsiveness to early adolescent developmental issues and strong adult-student relationships are a central part of the middle grades imperative. They are, but so is academic learning. Educators from higher-performing schools in this study did provide a safe and positive environment, report wide participation in extracurricular activities, and frequently reach out to students and parents. But they also focused their collective time and energy on strategies—such as extensive review and use of data, proactive student interventions, and standards-based instruction—that can most directly drive improvement in student learning.

In particular, middle grades educators are key to enabling more students to become high school–ready—and later, college- and career-ready. Student achievement in the middle grades—such as on state and district standards-based exams in English language arts and math—is only one step along a path that later includes a state high school exit exam and, ideally, a rigorous high school curriculum that prepares students for further study and the world of work. If the school views improved student achievement as a priority because students benefit beyond the middle grades, then the school's mission and instructional practices will reflect that belief.

Implications for State Policy

States that wish to strengthen the kind of instructional improvement described above must plan accordingly to ensure that the necessary resources are available. The fiscal forecast continues to be bleak for schools, so district and school leaders will need to find existing dollars to fund improvement, which will require schools to set clear priorities.

Despite California having fewer resources than many other states, many middle grades schools there are improving student outcomes. Key practices associated with higher-performing schools—for example, frequent and adequate time for common planning, a comprehensive array of student intervention strategies and extracurricular classes, access to timely assessment data, and the computer software and training to effectively use it—each require resources that are increasingly difficult to find. State policymakers can examine the extent to which current policies strengthen or inhibit local educators' abilities to carry out the practices this study found to be significant. The study findings can also help inform the process of setting state priorities and aligning expenditures with them.

States should be thoughtful when implementing Common Core State Standards. The study underscores the importance of state policy for schools' abilities to improve student outcomes effectively. More than a decade after the state's initial adoption of state academic content standards, California's standards-based reforms are taking hold and are reflected in higher-performing schools regardless of the socioeconomic background of their students. These schools and their districts leveraged the state's standards and adopted curriculum programs to support their efforts to improve student outcomes and prepare students for high school.

As most states move to implement the Common Core State Standards, including the development of new curriculum frameworks and assessments, state leaders will need to make sure that appropriate professional development and student-data systems are in place so middle grades schools can effectively implement and teach to the new standards. Local educators will also need to understand the timeline and steps required for implementing them.

Student-data systems—and support to help districts effectively access and use data to benefit schools—must remain a high priority for states. Effective use of data can make a difference in student outcomes, but the ability to access and use data varies widely. For example, although California and its school districts have been developing data capacity for years, criticism lingers that the state has not invested enough to make this a reality for its nearly one thousand school districts.

Implications for Federal Policy

The ability of middle grades schools to get more students high school–ready is an essential step in ensuring that students graduate from high school college- and work-ready.

Reauthorization of the Elementary and Secondary Education Act should emphasize the need to strengthen the nation's middle grades student achievement. The

findings from this study can help inform the reauthorization of the Elementary and Secondary Education Act. New legislation should take into account the following:

- The term "college ready" does not apply only to what happens in high schools. This study makes clear that higher-performing middle grades schools think about and plan for a rigorous high school curriculum as a foundation for later college- and career-readiness.

- The early identification of struggling students and appropriate interventions are clear priorities for higher-performing middle grades schools.

Future competitive grant initiatives sponsored by the Department of Education should heed these study findings. In particular, attention should be given to the importance of rigorous standards and quality assessments and the use of student data to improve teaching and learning.

- The higher-performing middle grades schools in our study exemplify the importance of quality standards and assessments as the foundation for a continually improving instructional program, guided by a strong future orientation.

- These schools are also using data and data systems to guide instruction, identify student needs, and improve teacher practices as envisioned by these competitive grant programs.

The study findings also highlight potential leverage points and key considerations related to two other priorities of these competitive grant programs: turning around low-performing schools and distributing high-quality teachers and leaders in equitable ways. For example, higher school performance was associated with districts that provided useful professional development to teachers and gave principals the opportunity to reconstitute leadership teams, and with principals who assigned teachers so that students with the greatest need were served well.

Key practices associated with higher-performing schools require resources that are increasingly difficult to find.

Looking Ahead

In California and across the country, some schools are doing much better than others at raising the academic success of middle grades students. We believe that *Gaining Ground in the Middle Grades* makes an important contribution by identifying concrete policies and practices that set apart higher-performing schools from lower-performing ones serving similar students.

This study's findings can help local, state, and federal policymakers craft policies that strengthen and mutually reinforce the work of middle grades educators to improve student outcomes. Educators and policymakers can use this rich collection of findings to evaluate their own practices and inform discussions about school reform.

The *Gaining Ground* research team continues to analyze the study's data. Over the past year, we have conducted follow-up analyses related to student achievement in math, including analyses of students' grade-eight course placements. The findings from this closer look at middle grades math practice and policy will be released in early 2011 and will, we hope, further inform educators and policymakers as they consider ways to improve student achievement.

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Improved Middle Grades Schools for Improved High School Readiness: Ten Best Practices in the Middle Grades

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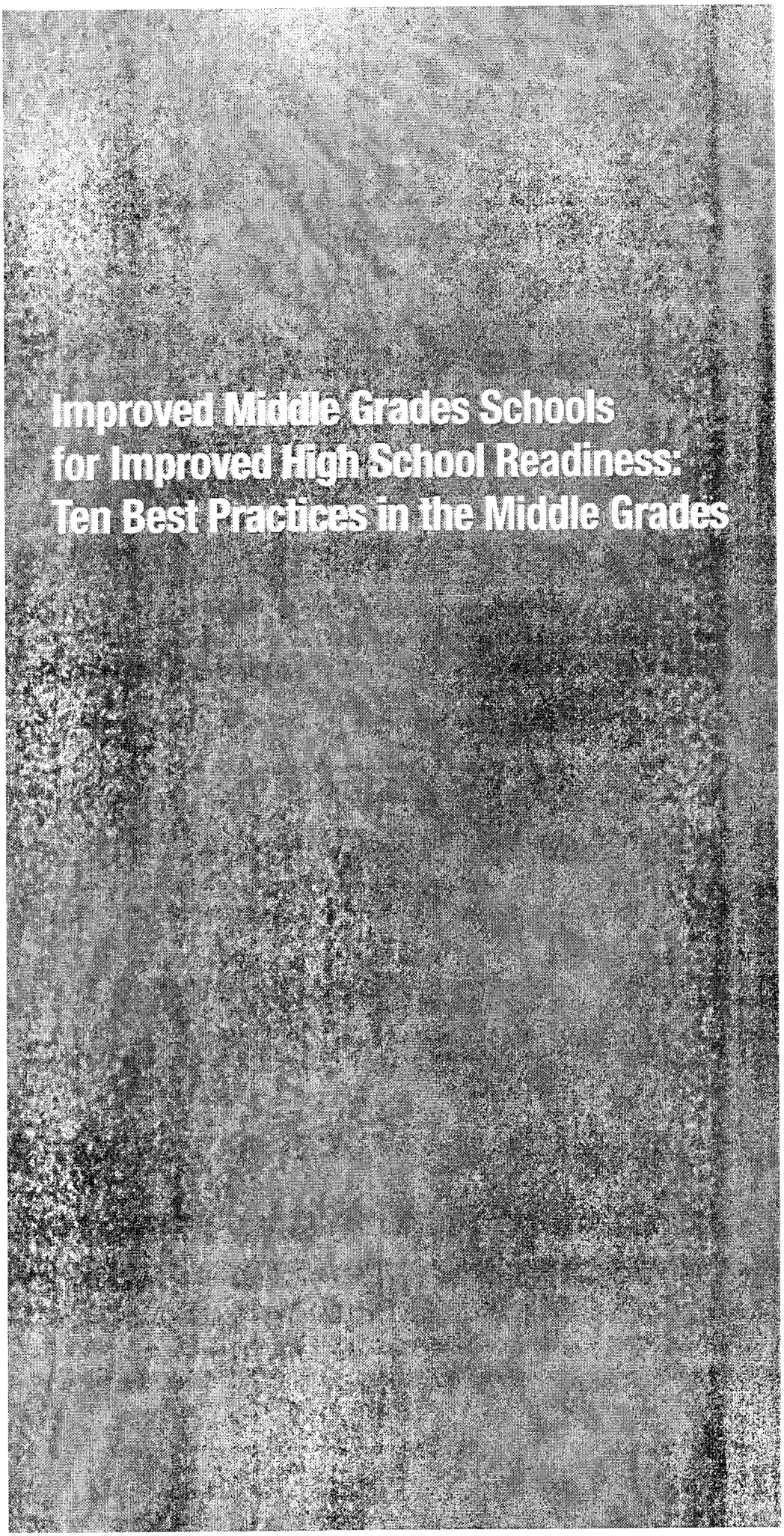

This report was developed by Gene Bottoms, SREB senior vice president and Allison Timberlake, former director of High School and Middle Grades Assessment.

The Southern Regional Education Board is a nonprofit and nonpartisan organization based in Atlanta, Georgia that works with state leaders and educators to improve education. SREB was created in 1948 by southern governors and legislatures to help leaders in education and government work cooperatively to advance education and improve the social and economic life of the region. SREB has 16 member states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. Each is represented by its governor and four gubernatorial appointees. For more information, visit www.sreb.org.

Foreword

"*The Middle Grades are where we need to begin to plant the idea that school is connected to each student's future.*"

No one enjoys the prospect of being "caught in the middle" — yet that's the very risk many middle grades students are exposed to today. The Middle Grades Commission report of the Southern Regional Education Board (SREB) notes 25 of every 100 rising ninth-graders in the SREB region fail to graduate with their peers, and the percentages of ninth-graders entering college by age 19 is less than 50 percent.

The middle grades are entrusted with the vital mission of ensuring students master the skills needed for success in further studies and careers. This message is succinctly framed in the opening statement of the Middle Grades Commission report: **Middle grades schools must have a new mission: to prepare more students for success in rigorous high school courses — and, ultimately, for most students to graduate and proceed to college or technical training. Otherwise, students — and state economies — cannot meet the expectations of a changing, more competitive world.**

Making Middle Grades Work (*MMGW*) has taken up the mantle of helping middle grades schools, teachers and leaders succeed in this mission. A key element of achieving success for middle grades schools is implementation of *MMGW*'s 10 Best Practices. This report, *Improved Middle Grades Schools for Improved High School Readiness: Ten Best Practices in the Middle Grades*, presents data demonstrating how following the Best Practices results in better outcomes for middle grades students. The report compares student achievement, as measured by the Middle Grades Assessment, of 10 most –improved schools and 10 other schools with declining achievement from 2006 to 2008.

As the report notes, "*The results of this study indicate that the most improved schools committed to creating a culture of continuous improvement, while the least-improved schools did not make this commitment.*"

As educators, it is incumbent on all of us to ensure the middle grades achieve their mission of preparing students for high school, postsecondary studies and careers. We must not let our students get caught in the middle.

Gene Bottoms
SREB Senior Vice President

Introduction

In 2009, the Southern Regional Education Board (SREB) Committee to Improve High School Graduation Rates and Achievement, led by then-Governor Sonny Perdue of Georgia, released a report of 10 key recommendations for ensuring more students graduate from high school, and they graduate ready for college and careers.[1] Among these 10 recommendations was this directive for the middle grades: "**Strengthen middle grades students' transition into high school and reduce ninth-grade failure rates.**"

As the Committee acknowledged, **increasing graduation rates and producing college- and career-ready graduates cannot be accomplished without greater focus on the middle grades.** Ninth-graders' lack of preparation for rigorous high school courses is a significant contributor to high drop-out rates — and it cannot be solved entirely by even the best high school interventions. Research shows that dropping out of school is a gradual process that often begins as early the middle grades with low and declining achievement and attendance.[2]

Results from the 2011 National Assessment of Educational Progress (NAEP) reading test[3] show that, nationally, 25 percent of eighth-grade students perform below the Basic level, indicating they are not ready to succeed in college-preparatory courses in high school. Even a high proportion of the 43 percent of students performing at the Basic level are likely underprepared for high school, as the Basic level denotes only partial mastery of prerequisite knowledge and skills that are fundamental for proficient work in the eighth grade. National NAEP mathematics results from 2011 show a similar trend — 28 percent of eighth-grade students perform below the Basic level and 38 percent perform only at the Basic level.[4]

This lack of readiness for high school is evident in ninth-grade enrollment numbers. In 2008-2009, ninth-grade enrollment was 10 percent higher than eighth-grade enrollment in the previous school year, indicating that many students did not get promoted from the ninth grade to the 10th grade on time.[5] Students who fail early in high school have an extremely low probability of graduating.

Despite the important role of the middle grades in improving graduation rates and students' readiness for the future, many states have not placed a major focus on the middle grades. A recent study of SREB state policies and initiatives for the middle grades[6] revealed that many states lack a comprehensive vision and a clear set of initiatives focused on getting more students to leave grade eight ready for challenging high school studies. The findings revealed:

- Most states do not have an office or team that is charged specifically to improve middle grades education and readiness for high school.
- While most states have standards, few have adequately described the level and quality of work required for success in high school reading, writing, mathematics and science. States' adoption of the national Common Core State Standards or other rigorous standards, however, offer promise for addressing this missing element. Most states do not have a policy to identify students who will not meet high school readiness standards without experiencing an accelerated curriculum and intensive support beginning early in the middle grades. States with targeted interventions are making more progress in getting students ready for high school studies.
- States that are making the most progress on NAEP reading and mathematics exams have gone beyond providing standards and statewide assessments to support a sustained, targeted curriculum and instructional intervention for middle grades improvement.

Another recent SREB review[7] of eight states' Race to the Top proposals revealed the absence of a comprehensive vision of school and classroom practices that would result in more students being ready for challenging high school studies. In the main, the Race to the Top proposals are strong on higher standards and more assessment but short on leadership initiatives to implement proven practices that motivate and engage students in making the effort to meet high school readiness standards.

To help states, districts and schools determine what actions are needed to ensure more students leave the middle grades ready for challenging high school studies, SREB studied school practices and student achievement in schools from across its *Making Middle Grades Work* (*MMGW*) network. This study compared 10 middle grades schools that made significant progress in improving reading, mathematics and science achievement ("most-improved schools") with 10 middle grades schools that failed to make progress over a two-year period ("least-improved schools") in order to discern what actions resulted in greater improvement. From this study, **SREB has identified 10 best practices that have important implications for states and schools in their efforts to meet the goal of graduating more students and graduating them prepared for college and careers.**

Study Design

Among the 136 *MMGW* schools that participated in both the 2006 and 2008 Middle Grades Assessments (MGA),* 25 schools increased their mean scores in all three subjects (reading, mathematics and science) from 2006 to 2008, while 45 schools decreased their mean scores in all three subjects. From the set of 25 improving schools, 10 also showed considerable progress in their state reading and mathematics assessment results.† Ten demographically-similar schools — matched by levels of race/ethnicity, socioeconomic status (SES)‡ and geographic location — were selected from the group of 45 schools with decreasing achievement for comparison with the most-improved schools.§ (See Table 1.) In addition to analyzing MGA results for these schools, SREB conducted interviews with the principals of the 10 most-improved schools.

Table 1
Demographic Comparison

	Most-Improved Schools		Least-Improved Schools	
	2006	2008	2006	2008
Race/Ethnicity				
White	45%	55%	55%	55%
Black	36	28	29	31
Other	18	18	15	13
Socioeconomic Status[1]				
High	54	56	59	53
Low	46	44	41	47
Geographic Location[2]				
Rural	--	30	--	40
Town	--	20	--	10
Suburb	--	40	--	30
City	--	10	--	20

Source: 2006 and 2008 Middle Grades Assessments, SREB

1 A high socioeconomic status is defined as a student with at least one parent having at least some education beyond high school. A low level indicates neither parent had any education beyond high school.

2 National Center for Education Statistics (NCES) locale codes were used. The following three codes were collapsed into one "rural" category: Rural, Remote; Rural, Distant; and Rural, Fringe. Three codes were collapsed into the "town" category: Town, Remote; Town, Distant; and Town, Fringe. Three codes were collapsed into the "suburb" category: Suburb, Small; Suburb, Midsize; and Suburb, Large. Three codes were collapsed into the "city" category: City, Small; City, Midsize; and City, Large.

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* The Middle Grades Assessment is an eighth-grade NAEP-like assessment of reading, mathematics and science, accompanied by a student survey and teacher survey.

† Nine schools increased both their state reading and mathematics scores from 2006 to 2008 and one school increased its state mathematics score during that time.

‡ Parent education level is used as a proxy for socioeconomic status (SES). A high socioeconomic status is defined as a student with at least one parent having at least some education beyond high school. A low level indicates neither parent had any education beyond high school.

§ At the 10 most-improved schools, 649 students and 323 teachers participated in the 2006 MGA and 590 students and 314 teachers participated in the 2008 MGA. At the 10 least-improved schools, 678 students and 316 teachers participated in the 2006 MGA and 596 students and 313 teachers participated in the 2008 MGA.

Student Achievement at the Most- and Least-Improved Schools

The 10 most-improved schools increased their mean MGA scores from 2006 to 2008 by 10 points in reading, 12 points in mathematics and 18 points in science. The 10 least-improved schools not only failed to make any gains in achievement but actually experienced a decline in all three subject areas. Additionally, the percentage of students meeting performance goals** at the most-improved schools increased dramatically from 2006 to 2008, while that percentage decreased among the least-improved schools. (See Table 2.) Students who meet these goals likely are prepared for challenging academic courses in grade nine.

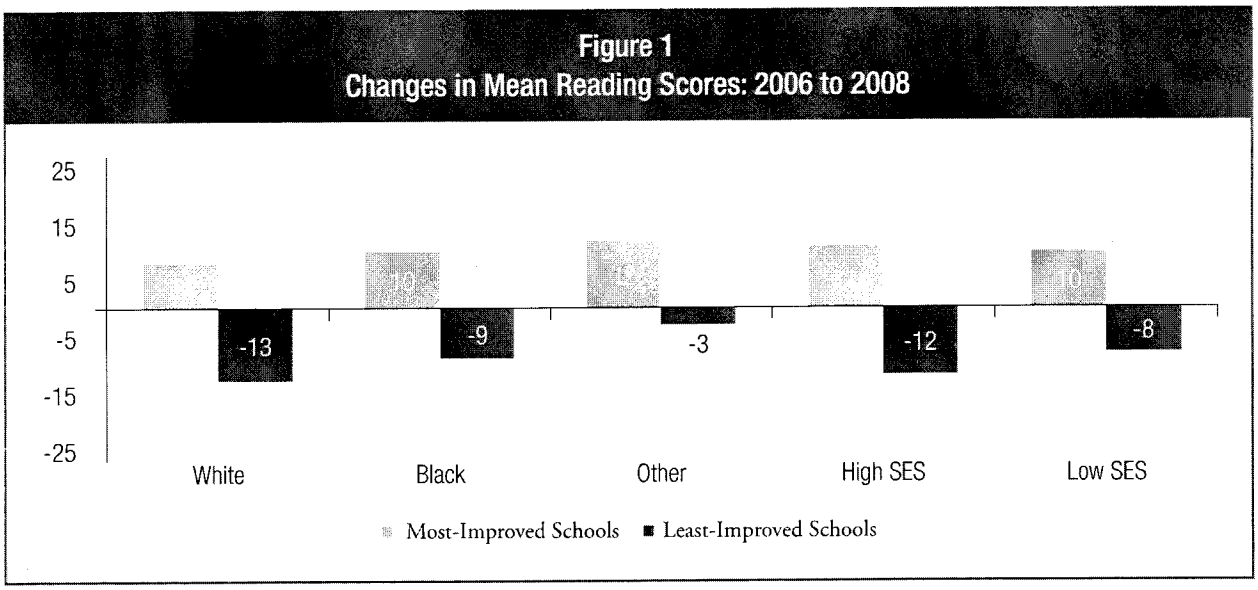
Table 2
Changes in Achievement

	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Mean Scores						
Reading	154	164	+10	165	154	-11
Mathematics	148	160	+12	160	149	-11
Science	138	156	+18	153	143	-10
Percentage of Students Meeting Performance Goals						
Reading	44%	60%	+16	62%	46%	-16
Mathematics	37	54	+17	56	40	-16
Science	30	50	+20	44	35	-9

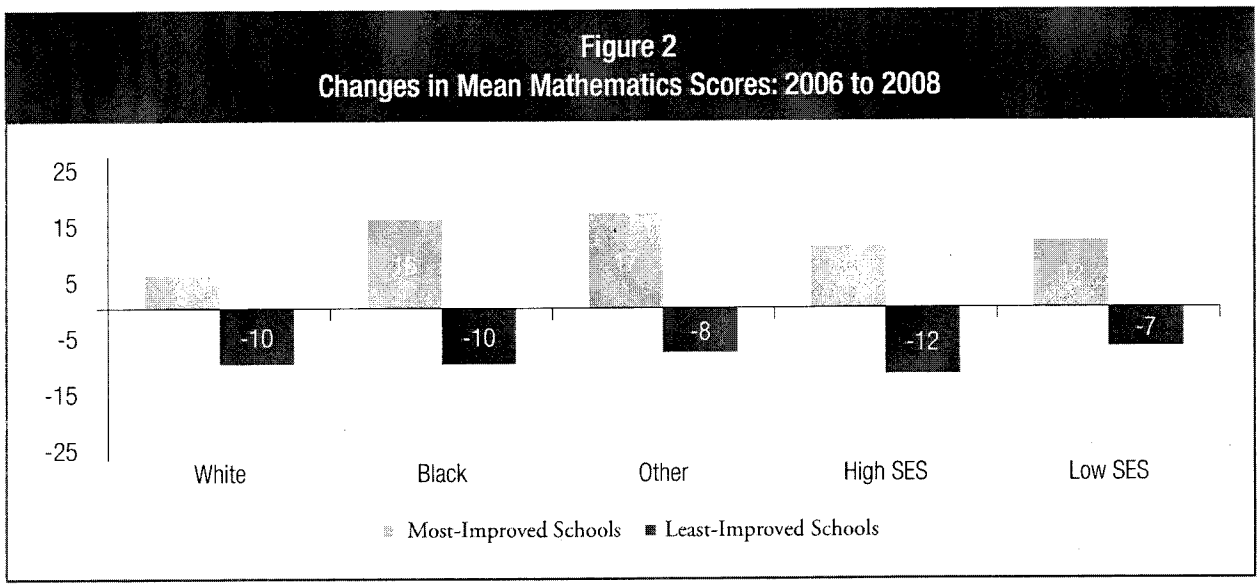
Source: 2006 and 2008 Middle Grades Assessments, SREB

A critical characteristic of the most-improved schools is that they did not just increase student achievement in aggregate; **they increased the achievement of all student groups**. Furthermore, historically underperforming groups — minority students and low-SES students — experienced greater increases in achievement than traditionally higher-performing groups, meaning the most-improved schools reduced achievement gaps while improving overall student achievement as well. (See Figures 1 through 3).

** The performance goals for the Middle Grades Assessment represent grade-level work and high school readiness. The goals are set between the Basic and Proficient cut scores for the Assessment: 160 in reading and mathematics and 161 in science.



Source: 2006 and 2008 Middle Grades Assessments, SREB



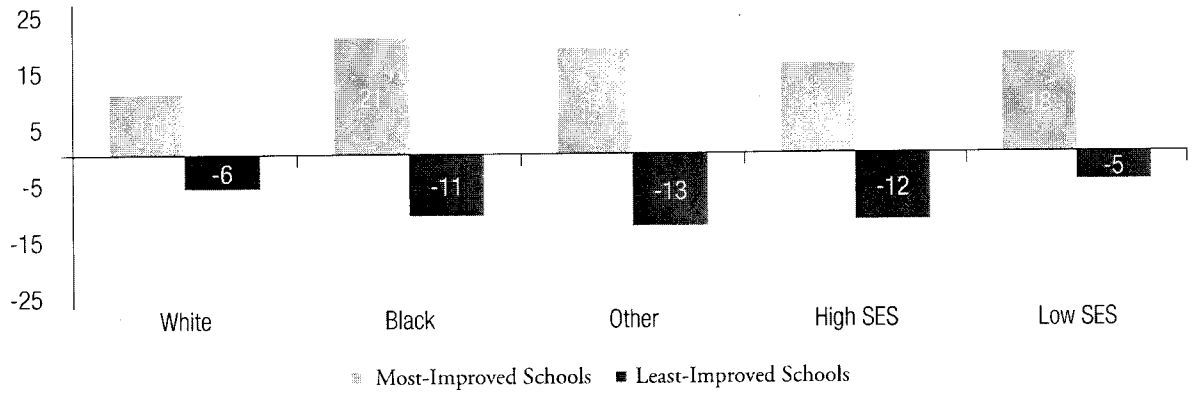
Source: 2006 and 2008 Middle Grades Assessments, SREB

Ten Best Practices

In the effort to explore why the most-improved schools made improvements in student achievement, this report also sheds light on why the least-improved schools experienced a decline in achievement. *The results of this study indicate that* ***the most-improved schools committed to creating a culture of continuous improvement while the least-improved schools did not make this commitment. As a result, the least-improved schools not only failed to experience increases in achievement but failed even to hold achievement constant.***

School achievement data and interviews with the principals of the 10 most-improved middle grades schools revealed **10 practices** associated with dramatic increases in student achievement by all groups of students.

Figure 3
Changes in Mean Science Scores: 2006 to 2008



Source: 2006 and 2008 Middle Grades Assessments, SREB

Ten Best Practices in the Middle Grades

1. Have a **clear mission**, with strong faculty support, to ensure that more students leave the eighth grade with the knowledge and skills needed to succeed in a college-preparatory curriculum in high school, to graduate high school prepared for postsecondary education and to become productive adults.
2. Have strong, collaborative **district support** for the school's mission, for implementation of proven and promising practices, for professional development, and for adjustments to master schedules to provide teachers with common planning time.
3. Enroll more students in an **accelerated curriculum** that is benchmarked with ninth-grade college-preparatory standards and emphasizes teachers working together to plan and share classroom learning, student assignments and classroom assessments that reflect high school readiness standards in English/reading, mathematics and science.
4. **Engage students in learning** — intellectually, emotionally, socially and behaviorally — by making greater use of authentic problems, project-based learning, cooperative learning and technology.
5. Focus on improving students' **reading and writing** skills by giving reading and writing assignments that engage students in reading grade-level materials specific to each content area — English, math, science and social studies.
6. Strive to achieve **success for every student** by maintaining high expectations for all students and supporting them through reteaching, tutoring, extra help and extra time to relearn and redo work until it meets standards.
7. **Identify at-risk students** as early as grade six and provide them with additional instruction and support to help more of them meet grade-level standards and get on track to enter high school prepared for the ninth grade.
8. Ensure students receive high-quality **guidance and advisement** by providing students with a personal connection with an adult in the building, involving parents in discussions about their child's performance and readiness for high school, and helping students develop a six-year plan for high school and post-high school studies.
9. Provide extensive **professional development** to staff, aligned with the school's mission and improvement plan, with emphasis on implementation of new strategies learned.
10. Have a strong **principal and school leadership team** that work collaboratively with the school community to keep them focused on the school's mission, to ensure students are engaged in a rigorous curriculum, and to review and use data to engage in ongoing school improvement efforts.

Best Practice 1: A Clear Mission

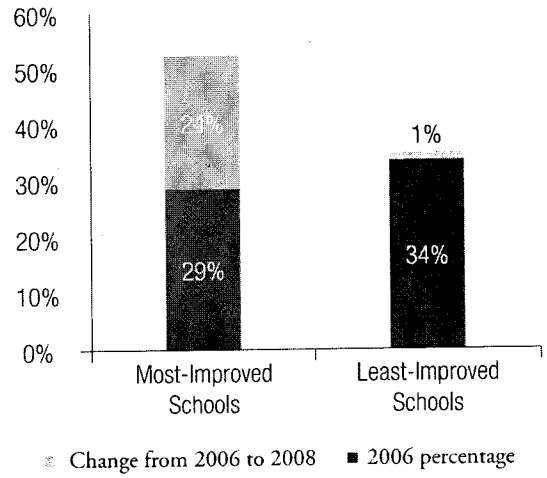
*Have a **clear mission**, with strong faculty support, to ensure that more students leave the eighth grade with the knowledge and skills needed to succeed in a college-preparatory curriculum in high school, to graduate high school prepared for postsecondary education and to become productive adults.*

Every venture needs a clear mission if it is to be successful. The middle grades are no different. Without a clear mission, the school community — leaders, teachers, parents and students — does not know the goal it is trying to achieve and can become fragmented units heading in different directions. A clear mission reduces or removes such fragmentation. It allows the entire school community to come together and set clear goals, identify specific actions and head in the same direction as one unit.

The leaders of the most-improved schools recognize the importance of a clear mission. Five of the 10 most-improved schools participated in SREB's 2009 *MMGW* Principal Survey. All five reported not only that their school has a mission statement but also that they examine their school's policies and practices at least once a year to determine whether they are aligned with that mission statement.

Having a clear mission is just the first step; it also must be the right mission. If the purpose of the middle grades is to prepare students to be successful in a college-preparatory high school curriculum, to graduate high school prepared for postsecondary education, and to become productive adults, then that must be the school's mission. Teachers at the most- and least-improved schools were asked the extent to which they agree or disagree that the primary mission for their school is to make sure that all students leave the eighth grade with the knowledge and skills to be successful without remediation in a college-preparatory curriculum in the ninth grade. It is evident that more faculty members at the improved schools came together to define and work toward this mission. (See Figure 4.)

Figure 4
Teachers Strongly Agree That the School's Mission is to Make Sure Students Leave Eighth Grade Ready for a College-Preparatory High School Curriculum



Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Between 2006 and 2008, the most-improved schools increased the percentage of teachers who strongly agreed that this is the primary mission of the school by 24 percentage points. In contrast, the least-improved schools experienced virtually no change in the percentage of teachers supporting such a mission. In 2008, approximately one-third of teachers at the least-improved schools strongly agreed that their school has this as its primary mission, compared with more than half of teachers at the most-improved schools.

The most-improved schools' dedication to this mission is reflected in teachers' views of various goals. (See Table 3.) Increasing percentages of teachers believe it is very important to prepare students to succeed academically in college-preparatory high school courses, to help students master content, to help students in their social development, to encourage the use of high-level academic content to solve real-world problems, to help students complete an education and career plan, and to develop students' ability to think critically. The least-improved schools, however, saw almost no change — or a decrease, in some cases — in the percentage of teachers viewing these goals as very important.

Table 3
Teacher Beliefs About School Goals

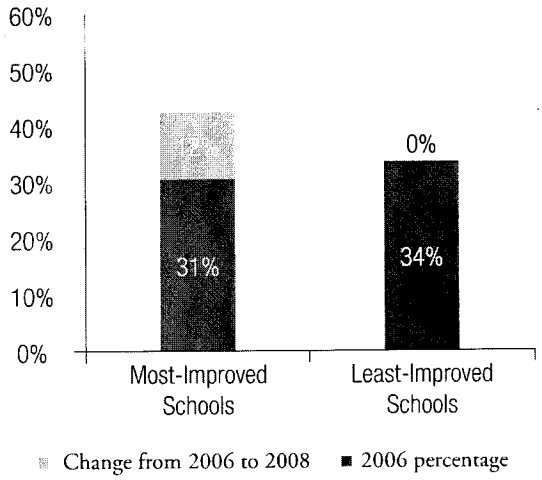
The percentage of teachers who believe each of the following goals are very important	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Prepare almost all students with the academic knowledge and skills needed in college-preparatory English/language arts, mathematics and science courses in high school.	43%	58%	+15	53%	56%	+3
Help all students master the minimum content needed in English/language arts, mathematics, reading and science courses to pass the eighth grade.	64	74	+10	74	72	-2
Help students in their social development by stressing the ability to get along with and understand all people.	45	55	+10	45	44	-1
Encourage students' use of high-level academic content in reading/language arts, mathematics and science in solving real-world problems.	46	53	+7	59	59	0
Help students complete an educational and career plan for high school and beyond.	36	42	+6	40	35	-5
Develop students' abilities to solve problems and think critically.	54	61	+6	61	60	-1

Source: 2006 and 2008 Middle Grades Assessments, SREB

Teachers at the most-improved schools not only embrace the school's mission to prepare students for challenging courses in high school but also believe they share responsibility in achieving that mission. Between 2006 and 2008, the most-improved schools experienced an increase in the percentage of teachers who somewhat or strongly *disagree* that students' success or failure in school is due to factors beyond them. (See Figure 5.)

The most-improved schools were able to make gains in student achievement because they made a concerted effort to define the right mission for their school, to take responsibility for the mission and to take action to realize their goals. In the least-improved schools, fewer faculty members embraced a clear mission to prepare students for success.

Figure 5
Teachers Disagree That Students' Success or Failure in School is Due Largely to Factors Beyond Them



Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Best Practice 2: Strong District Support

*Have strong, collaborative **district support** for the school's mission, for implementation of proven and promising practices, for adjustments to master schedules to provide teachers with common planning time and for professional development.*

District support is a critical component of any school improvement strategy. But that support must come not only in the forms of district guidance and funding but also in the form of giving the principal and faculty greater autonomy to make necessary changes for school improvement and to take ownership of those changes.

Principals at the most-improved schools reported having greater autonomy to make decisions for their schools than principals at the least-improved schools. The majority of principals at the most-improved schools who participated in a 2008 principal survey[††] reported that they or someone in their school (other administrators, teachers or teacher/administrator committees), and not the district, have primary responsibility for hiring teachers, determining what courses to offer, establishing homework policies, and establishing policies and practices for grading and student evaluation. The majority of principals at the least-improved schools, however, reported that the district has primary responsibility for these activities.

In general, principals at the most-improved schools reported having greater control in making school-based decisions (e.g., implementing a new grading policy, hiring a literacy coach, placing teaching staff) than principals at the least-improved schools. Sixty percent of principals at the most-improved schools reported having a high degree of control, while no principals at the least-improved schools report having a high degree of control and 50 percent reported having no control at all.

Providing schools with autonomy does not mean districts must take a hands-off approach. Instead, districts with the most-improved schools are a partner in school improvement efforts. Principals at the most-improved schools report that many people — the district, school administration and teachers — influence the type of professional development that teachers receive. (See Table 4.) At the least-improved schools, however, the district primarily dictates what professional development teachers received. That professional development may or may not be aligned with the school's needs and improvement plans. In addition to collaboration over what

†† Principals from five most-improved and six least-improved schools participated in the 2008 *MMGW* Principal Survey.

professional development opportunities are provided, principals at the most-improved schools report that professional development is accompanied with the resources necessary — release time, funding, availability of substitute teachers — to make changes in the classroom. (See Table 4.) No principals at the least-improved reported that professional development resources are adequate.

Four elements of district support are essential:

- Resources for extensive staff development aligned with a school improvement plan
- Strong instructional-focused school principals in each middle grades school
- Collaborative support to enable the school principal and teacher leaders to take ownership of problems and to implement proven solutions
- A system for holding the principal accountable by giving the principal sufficient autonomy to do the job within a district improvement framework

Table 4
District Support of Professional Development

Principals reported:	Most-Improved Schools	Least-Improved Schools
The district has **a lot** of influence on the type of professional development that teachers at their school receive.	100%	75%
The principal has **a lot** of influence on the type of professional development teachers at their school receive.	75	50
Teachers have **a lot** of influence on the type of professional development that teachers at their school receive.	50	25
Professional development is accompanied by the resources that teachers need (e.g., time, materials) to make changes in the classroom, **a great deal**.	50	25
Thinking about the resources necessary to facilitate professional development opportunities, release time is **adequate or more than adequate**.	50	0
Thinking about the resources necessary to facilitate professional development opportunities, funding is **adequate or more than adequate**.	50	0
Thinking about the resources necessary to facilitate professional development opportunities, the ability to find substitute teachers is **adequate or more than adequate**.	75	0

Source: 2008 *MMGW* Principal Survey, SREB

Best Practice 3: An Accelerated Curriculum

*Enroll more students in an **accelerated curriculum** that is benchmarked with ninth-grade college-preparatory standards and emphasizes teachers working together to plan and share classroom learning, student assignments and classroom assessments that reflect high school readiness standards in English/reading, mathematics and science.*

Completion of an accelerated curriculum is one of the best predictors of student achievement.[8] Schools that embrace a mission of preparing students for college-preparatory high school courses also provide students with a rigorous middle grades curriculum in order to meet that mission. The most-improved schools increased the percentage of students who completed an accelerated curriculum in English/language arts, mathematics and science by 9, 12 and 4 percentage points, respectively, from 2006 to 2008. (See Table 5.)

Table 5
Completion of an Accelerated Curriculum

	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
English/language arts[1]	21%	30%	+9	25%	25%	0
Mathematics[2]	37	49	+12	33	37	+4
Science[3]	12	16	+4	10	8	-2

Source: 2006 and 2008 Middle Grades Assessment, SREB

1 A rigorous English/language arts curriculum is defined as experiencing three or four of the following: taking advanced or honors ELA classes; writing a major research paper (with footnotes and works cited/bibliography) on a subject students chose once a year or once a semester; completing short writing assignments of one to three pages and receiving a grade in English classes at least monthly; reading 11 or more books this year both in and out of school.

2 A rigorous mathematics curriculum is defined as completing Algebra I or higher.

3 A rigorous science curriculum is defined as experiencing eight to 10 of the following: completing hands-on projects with living things; completing hands-on projects with chemistry; completing hands-on projects with simple machines; completing hands-on projects with the environment; using math skills to solve problems in science at least monthly; choosing a topic for investigation once a semester or once a year; designing an experiment about that topic once a semester or once a year; preparing a written report of the lab results once a semester or once a year; talking to the class about the lab results once a semester or once a year; taking integrated science.

Getting more students ready for high school requires the alignment of middle grades curricula to high school readiness standards, utilizing the Common Core State (or other rigorous) Standards. Middle grades and high school leaders and teachers will need to work together to achieve such alignment. The most-improved schools increased by 19 points the percentage of teachers who reported that they met with high school teachers to discuss expectations, content knowledge and performance standards for students — compared with a decline of 10 percentage points at the least-improved schools. Additionally, there was an increase of 30 points in the percentage of eighth-grade teachers at the most-improved schools who thought that more than 60 percent of their students were ready to succeed in high school courses, compared with 16-point increase at least-improved schools. (See Table 6.) At the least-improved schools, teachers' perceptions of student readiness were not based on a recent meeting with high school faculty.

Table 6
Curriculum Alignment

	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They meet with teachers from the high schools to which their school sends students to discuss expectations, content knowledge and performance standards for students leaving their middle grades school **at least annually**.	47	66	+19	54	44	-10
They think **61 percent or more** of students will enter the ninth grade ready to do well in college-preparatory academic courses.[1]	19	49	+30	30	46	+16

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

1 This question was asked of eighth-grade teachers.

The most-improved schools also dramatically increased the percentage of teachers who reported support for teaching an accelerated curriculum, demonstrating substantial growth in the percentage who strongly agree that they are encouraged to teach more rigorous content and the percentage who strongly agree that teachers maintain a demanding yet supportive environment. (See Table 7.)

Table 7
Supporting an Accelerated Curriculum

	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They **strongly agree** that they are encouraged to revise their lesson plans to teach their courses to grade-level standards and above for all students.[1]	32%	58%	+26	46%	59%	+13
They **strongly agree** that teachers in this school maintain a demanding yet supportive environment that pushes students to do their best.	42	54	+12	47	48	+1

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

1 The wording of this question changed from 2006 to 2008. The 2006 statement read: "They are encouraged to revise their lesson plans so that they teach more rigorous content in their course(s) to all students."

More principals at the most-improved schools than at the least-improved schools reported that they do not experience challenges in implementing and supporting an accelerated curriculum. (See Table 8.) Additionally, more principals at the most-improved schools report that interdisciplinary teacher teams are fully implemented and there is strong communication with their feeder-pattern high schools.

Table 8
Implementing and Supporting an Accelerated Curriculum

Principals reported that the following issues are not a challenge or are only a minor challenge:	Most-Improved Schools	Least-Improved Schools
Integrating high standards into curriculum and instruction	80%	33%
Teachers' beliefs that some students cannot meet high standards	60	34
Teachers' access to high-quality professional development	80	83
Creating time for teachers to work together to share ideas or to plan interdisciplinary activities	80	50
Principals reported that the following practices are implemented:		
Interdisciplinary teacher teams or interdisciplinary projects are established	80%	33%
Strong communication with feeder-pattern high schools is maintained to improve student transitions	60	33

Source: 2008 *MMGW* Principal Survey, SREB

Significant changes in student learning and achievement occur when teachers focus on teaching an accelerated curriculum, work with other teachers to share best practices and plan interdisciplinary activities, and utilize assignments and assessments benchmarked to high school readiness standards.

Best Practice 4: Student Engagement

***Engage students in learning** — intellectually, emotionally, socially and behaviorally — by making greater use of authentic problems, project-based learning, cooperative learning and technology.*

Student disengagement is one of the most commonly cited causes for dropping out of school.[9] Utilizing engaging instructional practices is crucial not only for keeping students in school but also for improving student motivation and achievement. SREB research shows that middle grades students who are engaged intellectually, emotionally, socially and behaviorally have significantly higher achievement and are better prepared for high school than students who are disengaged.[10]

To be engaged **intellectually**, students should be asked to work with new concepts, explain their reasoning, defend their conclusions and explore alternative strategies. Students who are engaged intellectually have confidence in their ability to succeed and know that academic success is important for future goals.

To be engaged **emotionally**, students should have opportunities to choose projects or areas of further study related to their interests and goals. Students who are engaged emotionally are able to relate what they are learning to their own life.

Students are engaged **socially** when they work in teams in class, participate in extracurricular activities, have friends at school, feel a sense of loyalty and belonging to the school, and believe in the legitimacy of school.

Students who are engaged **behaviorally** go to class prepared, actively participate in class, seek assistance when needed, and take challenging classes.

Between 2006 and 2008, the most-improved schools improved the percentages of students who reported engaging experiences. In 2008, more students at the most-improved schools reported that their courses never or rarely repeated things they had already learned, that their courses were exciting and challenging, and that their teachers made their subject interesting and useful. (See Table 9.) Furthermore, the most-improved schools increased the percentage of students who experienced an intensive emphasis on literacy across the curriculum, on reasoning and understanding in mathematics, and on inquiry-based science practices.

Table 9
Students Experiencing Engaging Practices

Students Reported	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Their courses **rarely or never** repeat things that they have already learned.	19%	26%	+7	23%	26%	+3
Their courses **often** are exciting and challenging.	12	16	+4	12	9	-2
Their teachers **often** know their subject and can make it interesting and useful.	35	42	+7	36	35	-1
They experience an **intensive** emphasis on literacy across the curriculum.[1]	22	37	+15	32	31	-1
They experience an **intensive** emphasis on reasoning and understanding in mathematics.[1]	21	32	+11	25	26	+1
They experience an intensive emphasis on inquiry-based science practices.[1]	22	32	+10	26	25	-1

Source: 2006 and 2008 Middle Grades Assessment, SREB

1 Reported percentages are the percentage of students who experienced most of a series of indicators relating to each topic.

The most-improved schools' increase in engaging instructional practices may be attributed to an increased emphasis on professional development related to engaging instruction. From 2006 to 2008, these schools substantially increased the percentage of teachers who experienced more than 20 hours of professional development on student engagement topics such as student-centered instruction, applied learning, real-world applications, interdisciplinary units, project-based learning and cooperative learning. (See Table 10.)

Table 10
Professional Development Focused on Student Engagement

Teachers reporting they experienced 21+ hours of professional development in these student engagement topics:	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Using student-centered instruction to motivate and deepen student learning	12%	26%	+14	15%	16%	+1
Establishing a classroom environment that actively involves students in the learning process	20	32	+12	23	21	-2
Getting students to achieve higher standards through applied learning	13	25	+12	16	14	-2
Teaching content through real-world applications	12	23	+11	19	14	-5
Adapting teaching methods to the learning styles of different students	20	30	+10	21	22	+1
Using interdisciplinary themes or units	12	21	+9	13	14	+1
Using project-based learning to deepen understanding of content	12	21	+9	14	15	+1
Teaching students to interact and cooperate with each other during the learning process	15	23	+8	18	17	-1

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Integrating technology into instruction is an effective method of engaging students in learning. More principals at the most-improved schools not only reported that their teachers use technology in instruction regularly but also described their teachers as having a high ability to integrate technology into instruction. (See Table 11.)

Table 11
Integrating Technology Into Instruction

Principals reported:	Most-Improved Schools	Least-Improved Schools
At least **50 percent** of teachers in their school regularly use technology (e.g., projector, tablet) in instruction	75%	50%
They would describe teachers' current ability to effectively integrate technology into instructional practices as **high**	50	25

Source: 2008 *MMGW* Principal Survey, SREB

The most-improved schools experienced a greater shift in student engagement from 2006 to 2008 than the least-improved schools, creating a stable environment in which to implement curriculum-wide engagement practices. Middle grades students are explorers. At this stage in their development, they begin to discover their interests, discern their talents and develop their aspirations and goals. A middle grades environment that encourages this exploration through a spectrum of hands-on, real-world assignments that relate to students' interests and talents and allow for social interaction contribute to improved achievement.

Best Practice 5: A Focus on Reading and Writing

*Focus on improving students' **reading and writing** skills by giving reading and writing assignments that engage students in reading grade-level materials specific to each content area — English, math, science and social studies.*

In 2009, the SREB Committee to Improve Reading and Writing in Middle and High Schools, chaired by then-Governor Timothy M. Kaine of Virginia, released a report calling for states to make adolescent reading a priority.[11] The committee concluded that "developing students' reading comprehension skills should be the first priority for the middle grades and high school. Reading with comprehension defines learning in every subject — including mathematics and the sciences." To address this priority, all teachers — not just language arts teachers — must be responsible for engaging students in reading and writing assignments that deepen their reading comprehension as well as their understanding of subject matter content.

The most-improved schools focused on giving reading and writing assignments in all subject areas. These schools experienced substantial increases in the percentage of teachers who reported that they utilized literacy strategies in their classroom, such as requiring students to read books and other materials, to give oral presentations, to write short papers and to use word processing software. (See Table 12.)

Table 12
Emphasis on Literacy by All Teachers

Teachers reported	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Other than textbooks, they require students to read (on average) **three or more** books or their equivalent (i.e., journal, magazine, internet and newspaper articles).	31%	47%	+16	30%	36%	+6
They require students to stand before class to make an oral presentation on a project or assignment to meet specific requirements **at least monthly**.	65	78	+13	77	69	-8
During a typical month, they assign **three or more** writing assignments of at least one page to their students.	35	42	+7	34	37	+3
They require students to use a journal, notebook or laptop computer to write about things they learned **at least monthly**.	55	62	+7	54	56	+2
They require students to use word processing to complete assignments **at least monthly**.	30	35	+5	41	38	-3

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

These changes in instruction were effective. The most-improved schools increased the percentage of students who reported experiencing an intensive emphasis on literacy across the curriculum by 15 points from 2006 to 2008, while the least-improved schools experienced a decline. (See Table 13.)

Table 13
Emphasis on Literacy Across the Curriculum

	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They experience an **intensive** emphasis on literacy across the curriculum (five to eight indicators).	22%	37%	+15	32%	31%	-1
They are given samples of high-quality work to use as models for their own work **at least monthly**.	31	44	+13	40	49	+9
They use word-processing or presentation software to complete assignments in English/language arts classes **at least monthly**.	32	45	+13	40	44	+4
They spend **one hour or more** reading outside of school in a typical day.	33	44	+11	42	41	-1
They **often** have to develop and analyze tables, charts and/or graphs in their schoolwork.	27	38	+11	33	33	0
They **often** use the Internet to find information for completing assignments.	50	59	+9	51	48	-3
They stand before the class and make an oral presentation on a project or assignment to meet specific quality requirements in English/language arts classes **once a semester or monthly**.	46	53	+7	61	58	-3
They read **11 or more** books this year both in and out of school.	34	40	+6	38	31	-7
They use a computer at school for schoolwork **monthly or weekly**.	53	57	+4	57	57	0

Source: 2006 and 2008 Middle Grades Assessments, SREB

The SREB Committee to Improve Reading and Writing in Middle and High Schools highlighted six actions that states, districts and schools could take to improve students' literacy:

- Align curriculum and instruction to grade-level literacy standards for all public middle grades schools in key academic subjects.
- Increase the amount of time students spend in reading instruction, and ensure that students are engaged in reading instruction in all subjects in ways that advance both reading skills and subject matter achievement.
- Provide explicit reading instruction in vocabulary development, reading fluency, comprehension and writing in all subjects.
- Ensure that students who read below grade level receive the help they need, including help outside the regular classroom to read and comprehend grade-level materials.
- Require more professional development in reading for aspiring and practicing teachers and school leaders.
- Analyze a wide variety of data on literacy achievement and practices to inform future changes in state policy and classroom practices.

The most-improved schools, with the support of their district, focused on literacy in all subjects, increased the amount of instructional time devoted to reading instruction, provided extra help for struggling readers and provided teachers with professional development to emphasize literacy in their subject area. The most-improved schools made reading and writing in each core academic area a continuing foundation of their schoolwide improvement efforts, rather than implementing one or two practices in select classrooms and eventually abandoning the effort.

Best Practice 6: Success for Every Student

Strive to achieve **success for every student** by maintaining high expectations for all students and supporting them through reteaching, tutoring, extra help and extra time to relearn and redo work until it meets standards.

To put it simply, "success for every student" means that schools do not allow students to fail. The concept, however, is more complicated than that. It does not mean just passing students on or teaching students to lower standards. Rather, it means redesigning the school's conditions — instruction and curriculum — so that students are successful in meeting or exceeding grade-level standards. To successfully achieve success for every student, schools must hold high expectations for all students, clearly define standards, require students to redo work until it meets those standards, and, most importantly, provide students with the extra help (i.e., extra time, tutoring, reteaching) they need to meet those standards.

Implementing a schoolwide effort to achieve success for every student can be a challenge. In 2009, SREB surveyed schools in the *High Schools That Work*, *Technology Centers That Work* and *MMGW* networks about their views and implementation of "success for every student" practices. Ninety-nine middle grades schools participated in the survey. More than half (54 percent) of middle grades schools implementing such practices reported that teacher resistance was a challenge, and just under half (47 percent) reported that student resistance was a challenge. However, only 11 percent reported parent resistance was a challenge, 1 percent reported school leadership resistance was a challenge and 2 percent reported district resistance was a challenge. Schools that were able to overcome the challenges reaped great rewards: The majority of middle grades schools reported decreased course failure rates (58 percent) and increased student grades (84 percent), student effort (79 percent), student motivation (76 percent) and parent satisfaction (62 percent).

The most-improved schools were able to overcome these challenges, creating an environment in which students are expected to succeed. From 2006 to 2008, the most-improved schools increased the percentage of teachers who believed they played a role in their students' ability to learn, provided guidelines for expectations on student work and received professional development on implementing grading policies in which students are required to redo work. (See Table 14.)

Table 14
Teachers' Emphasis on Success for Every Student

Teachers reported:	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They **strongly disagree** that there is little they can do to ensure that all of their students learn at or above grade level.	43%	59%	+16	44%	54%	+10
They provide written guidelines on what students must do to earn an A or a B on assignments **at least monthly**.	73	80	+3	75	76	+1
They had 21+ hours of professional development in the past three years on implementing a grading policy in which students are required to redo work not meeting agreed-upon grade-level standards at the A, B or C level.[1]	11	17	+6	14	10	-4

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

1 The wording of this question changed from 2006 to 2008. In 2006, the statement read: "They had 21+ hours of professional development in the past three years on having students assess and revise their own work to meet standards."

These changes in instructional practices resulted in more students learning in a supportive environment where they are held to higher expectations. (See Table 15.) From 2006 to 2008, the most-improved schools increased the percentage of students who reported that their teachers set high standards and help them meet those standards and that their teachers will not let them get by without doing their work. Additionally, more students reported working hard to meet high standards and trying to do their best work in school. The most-improved schools also increased the percentage of students who never or rarely fail to complete or turn in assignments.

Table 15
Emphasis on Redoing Work and Meeting High Standards

Students reported:	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Their teachers **often** set high standards for them and are willing to help them meet them.	44%	48%	+4	43%	42%	+1
Their teachers **often** care about them enough that they will not let them get by without doing the work.	38	44	+6	43	43	0
They **often** work hard to meet high standards on assignments.	41	51	+10	47	48	+1
They **often** try to do their best work in school.	62	70	+8	66	67	+1
They **never or rarely** fail to complete or turn in assignments.	59	65	+6	64	59	-5

Source: 2006 and 2008 Middle Grades Assessments, SREB

Achieving success for every student is a manifestation of the most-improved schools' mission focused on preparing students to succeed in challenging high school courses and to graduate college- and career-ready. The most-improved schools defined this as their mission and are committed to ensuring students achieve at the levels necessary to be prepared to succeed when they leave the middle grades.

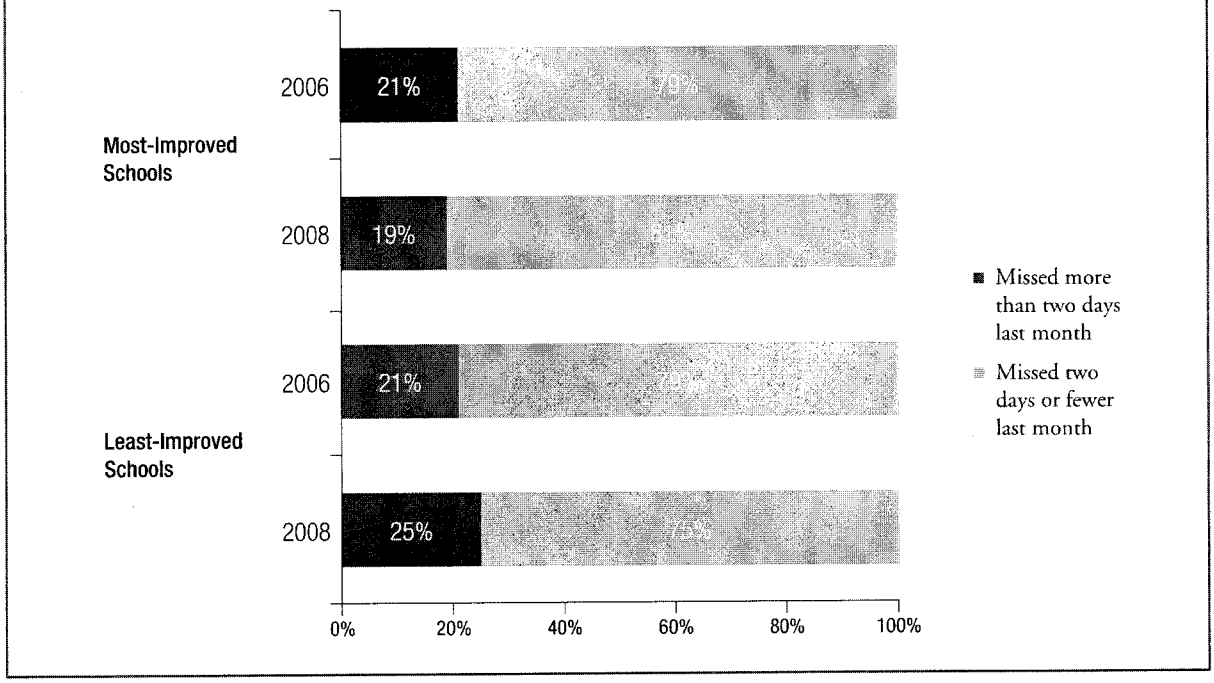
Best Practice 7: Support for At-Risk Students

***Identify at-risk students** as early as grade six and provide them with additional instruction and support to help more of them meet grade-level standards and get on track to enter high school prepared for the ninth grade.*

While the ultimate act of dropping out of school happens in a single moment — typically an understated moment in which a student leaves the school building for the last time maybe not even realizing he or she will not return — the process leading to that act is gradual.[12] The path to dropping out of school and its warning signs often begin in the middle grades. While the reasons are varied and numerous, the primary cause focuses on disengagement.[13] Best Practice 4 shows how the most-improved schools changed their instructional methods to engage students intellectually, emotionally, socially and behaviorally. These changes are an important step in decreasing dropout rates. **Research has identified other early warning indicators that students are at risk of dropping out of school, with the three most predictive indicators being low attendance, poor behavior and course failure.**[14]

When students are not engaged in instruction and do not understand the importance of school, they begin to skip classes and miss school altogether. When students are absent from school frequently, they have considerable difficulty catching up. Eventually, some students become so overwhelmed with the amount of effort required to catch up that they simply drop out, even if they had desired to graduate. Middle grades students who miss more than two days of school per month are at risk of dropping out of high school. The most-improved schools decreased the percentage of students missing more than two days of school per month from 21 percent in 2006 to 19 percent in 2008. Additionally, they increased the percentage of students with perfect attendance from 42 percent in 2006 to 49 percent in 2008. The least-improved schools, however, experienced an increase in the percentage of students missing more than two days of school per month. (See Figure 6.)

Figure 6
Student Absenteeism*



* As reported by students

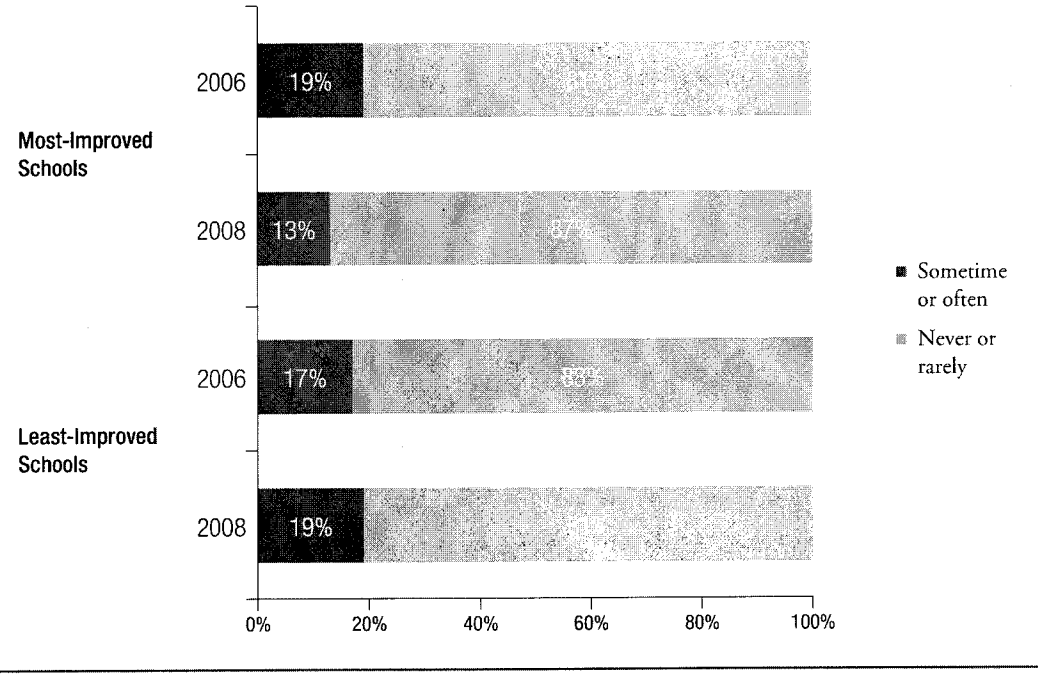
Source: 2006 and 2008 Middle Grades Assessments, SREB

Discipline and behavior problems are another early warning indicator of at-risk students, for many of the same reasons as absenteeism. Students often act out as a result of not being engaged in the classroom. Furthermore, time spent being disciplined is time spent out of the classroom, missing important instruction and interaction with teachers and students. Middle grades students receiving an unsatisfactory behavior grade or suspension are at risk of dropping out of school. The most-improved middle grades schools decreased the percentage of students who sometimes or often were sent to the office or had to stay after school because they misbehaved. Furthermore, they increased the percentage of students who were never sent to the office. The least-improved schools, however, increased the percentage of students who sometimes or often were sent to the office.

Perhaps the most powerful predictor of dropping out of school is course failure. Middle grades students who are failing mathematics or reading/language arts are at risk of dropping out of school. Students who do not successfully complete courses in the middle grades are not prepared for college-preparatory high school courses (or even non-college-preparatory high school courses). Furthermore, they will have to recover credits in order to be promoted to high school or to earn enough credits to graduate from high school — a daunting task for many students. The most-improved schools decreased the percentage of students performing below the Basic level on the MGA from 2006 to 2008 in reading and in mathematics, while the least-improved schools increased that percentage in both subject areas.‡‡ (See Figures 8 through 10.)

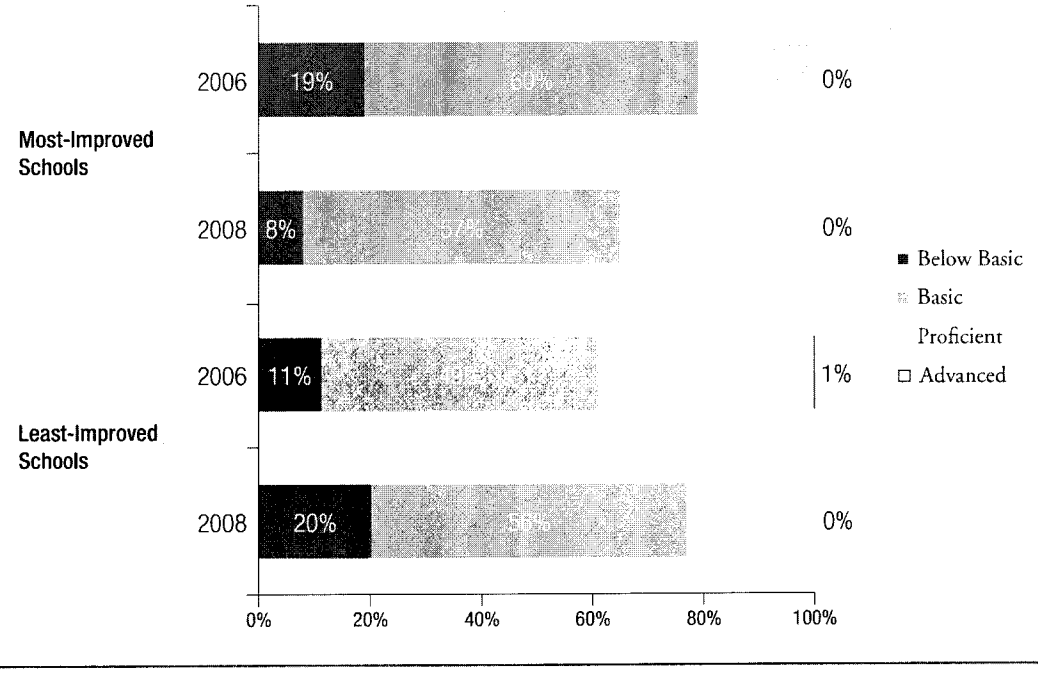
‡‡ Because SREB does not collect course failure data for students who participate in the MGA, performing below the Basic level on the MGA tests is used as a proxy for course failure. Students who perform below the Basic level lack the foundational skills to succeed in college-preparatory ninth-grade courses.

Figure 7
Student Behavior: Students Reporting They Are Sent to the Office or Have to Stay After School Because They Misbehaved



Source: 2006 and 2008 Middle Grades Assessments, SREB

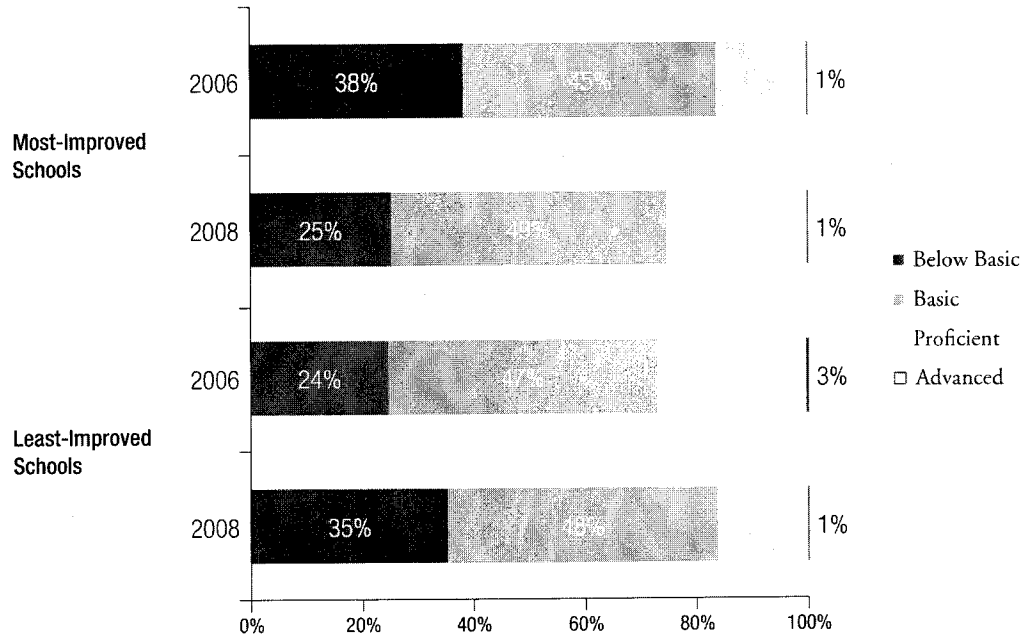
Figure 8
Student Achievement: Reading



Source: 2006 and 2008 Middle Grades Assessments, SREB

Note: Totals may not equal sum of entries due to rounding.

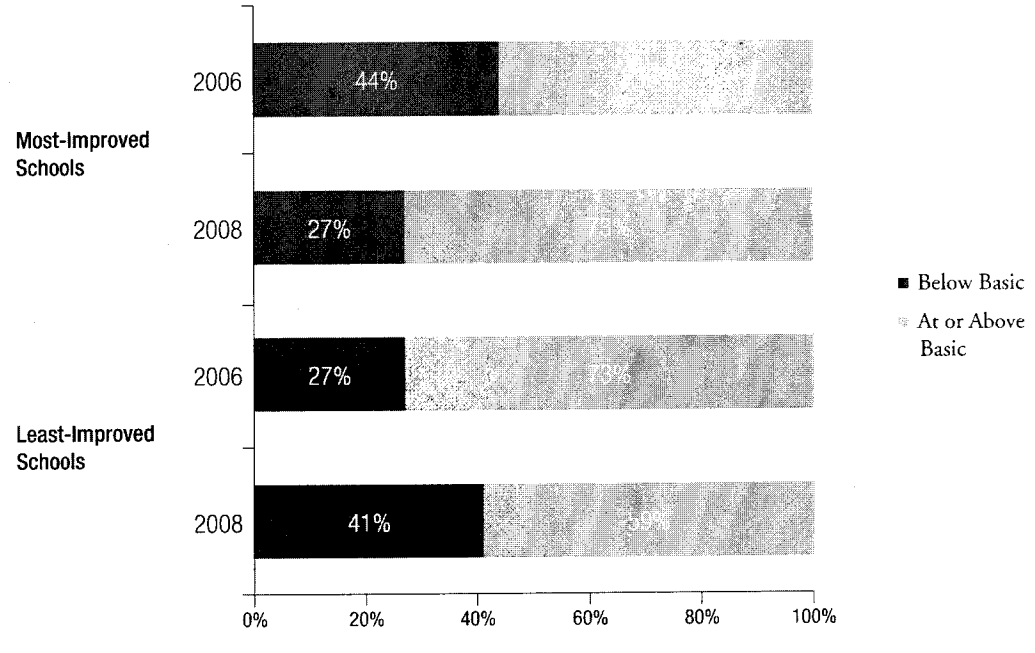
Figure 9
Student Achievement: Mathematics



Source: 2006 and 2008 Middle Grades Assessments, SREB

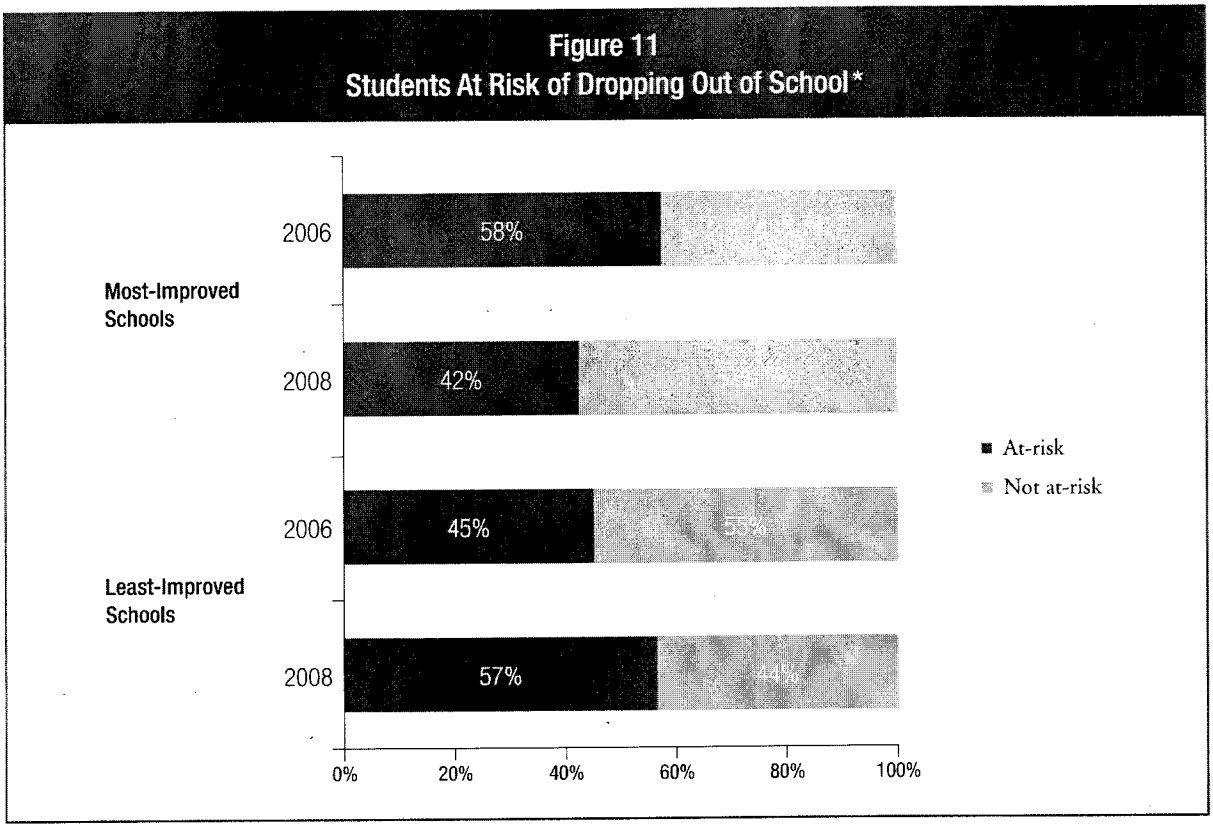
Note: Totals may not equal sum of entries due to rounding.

Figure 10
Students Performing Below the Basic Level in Reading or Mathematics



Source: 2006 and 2008 Middle Grades Assessments, SREB

Middle grades students who experience at least one of these indicators outlined in the figures above — absenteeism, behavioral problems and course failures — are at risk for dropping out of school. By decreasing the percentages of students exhibiting these indicators, the most-improved schools decreased the percentage of at-risk students from 2006 to 2008 while the least-improved schools increased that percentage. (See Figure 11.)



* Students were identified as "at-risk" if they met one or more of the three early warning indicators. Student-reported absenteeism, student-reported discipline referrals and MGA test scores were used as proxies for the three early warning indicators presented.

Source: 2006 and 2008 Middle Grades Assessments, SREB

Note: Totals may not equal sum of entries due to rounding.

Targeted intervention programs are a primary reason why the most-improved schools were able to decrease the percentage of students exhibiting early warning indicators and, therefore, their population of at-risk students. From 2006 to 2008, more teachers at the most-improved schools reported that their school implemented interventions such as providing extra help and extra time for struggling students, whereas fewer teachers at the least-improved schools reported that their school utilized such interventions. Furthermore, the most-improved schools provided more teachers with professional development specific to getting at-risk students to master complex content. (See Table 16.)

The most-improved schools are putting into practices a comprehensive set of mechanisms — such as an accelerated curriculum, support and targeted interventions — to focus on keeping at-risk students in school and preparing them for high school. The least-improved schools made no progress in identifying and supporting at-risk students.

Table 16
Implementation of Targeted Intervention Programs

Teachers reported that:	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Their school uses a summer bridge program in reading and mathematics to prepare selected 8th graders for high school.	25%	47%	+22	57%	45%	-12
Their school uses a schedule that allows extra periods in the regular school day in reading and mathematics for students who need extra help to be ready for high school.	32	49	+17	64	69	+5
Their school uses extra help and extra time for every 7th grader performing below grade level outside of the regular school day.	61	74	+13	81	79	+2
Their school uses extra help and extra time for every 8th grader performing below grade level outside of the regular school day.	62	74	+12	84	78	-6
Their school uses extra help and extra time provided during the school day for every student performing below grade level.	53	65	+12	62	66	+4
They had 21+ hours of professional development in the past three years on getting at-risk students to master complex content.	13	21	+8	15	15	0

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Best Practice 8: Guidance and Advisement

Ensure students receive high-quality ***guidance and advisement*** *by providing students with a personal connection with an adult in the building, involving parents in discussions about their child's performance and readiness for high school, and helping students develop a six-year plan for high school and post-high school studies.*

High student achievement alone is not sufficient to graduate more students and graduate them prepared for college and careers. Students need a goal to complete high school and a postsecondary goal — a broad or specific career goal in an area in which they have an interest and aptitude. Without this, they will not understand the importance of school and may lack motivation to succeed. Guidance and advisement is critical to increasing graduation rates and college- and career-readiness. Strong guidance and advisement systems help students select goals, show students what is required to meet those goals and support them in their efforts. More specifically, guidance systems should assist each student and his or her parents in selecting a program of study that connects high school, college and advanced training options.

The most-improved schools, much more than the least-improved schools, emphasized creating or improving existing guidance and advisement systems, increasing the percentage of teachers who reported being part of a structured guidance/advisory program from 2006 to 2008. (See Table 17.) Additionally, more teachers reported assisting students in developing a plan of study, and more reported having a core group of students whom they advise. **Being assigned to specific students as a mentor establishes a relationship between the teacher and those students. It gives students an adult in the school building whom they trust and can go to for help.** This relationship can serve an important role in keeping students on track to graduate from high school prepared to achieve their goals.

Table 17
Teachers as Advisors

Teachers Reporting That	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They are part of a structured guidance/advisory program in their school.	36%	49%	+13	33%	37%	+4
They assist students and their parents in developing an educational plan of study for the middle grades and high school.	41	48	+7	40	40	0
They have a core group of students that they advise.	36	50	+14	32	36	+4
They meet with their group of students **more than once a semester**.	53	70	+17	47	58	+11
They inform parents and students about the student's readiness to do challenging high school studies **at least once a semester**.	28	38	+10	31	32	+1
They work with students and their parents **at least once a semester** on ways to address gaps in academic achievement.	38	47	+9	38	40	+2

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Teachers' focus on providing guidance is evident in student-reported guidance experiences. The percentage of students experiencing an intensive emphasis on guidance increased by eight points from 2006 to 2008 at the most-improved schools, while the least-improved schools experienced a decrease of six points. (See Table 18.) More students were encouraged to take challenging courses, had a plan for high school, developed that plan with parents and someone at school, and knew what to expect in the ninth-grade. These students were equipped with the knowledge they needed to be prepared for high school.

Table 18
Emphasis on Guidance and Advisement

Students reported	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
They experienced an intensive emphasis on guidance (four to six indicators).	41%	49%	+8	41%	35%	-6
They were encouraged by a counselor or teacher to take Algebra in seventh or eighth grade.	37	40	+3	32	29	-3
They have a written plan for the courses they will take in high school.	54	58	+4	56	41	-15
Their parents and someone at school helped them write their plan for courses they will take in high school.	43	49	+6	48	36	-12
They expect to take notes from a lecture in ninth-grade English **at least weekly**.	54	66	+12	56	59	+3
They expect to use mathematics to solve real-world problems in ninth-grade mathematics **at least weekly**.	46	56	+10	47	51	+4
They have talked with teachers or other adults at school about what they will need to know and be able to do in ninth grade.	79	82	+3	86	78	-8

Source: 2006 and 2008 Middle Grades Assessment, SREB

The most-improved schools, when compared with the least-improved schools, had a more purposeful effort to create a college- and career-oriented awareness among students and parents. They focused on helping students understand the importance of the middle grades and high school to their future.

Best Practice 9: Professional Development

Provide extensive **professional development** to staff, aligned with the school's mission and improvement plan, with emphasis on implementation of strategies learned.

Many people — legislators, policymakers, superintendents, principals, researchers — play an important role in improving the educational experiences and achievement of students. However, teachers are the ones who actually work with students on a day-to-day basis and have primary responsibility for preparing students for high school and beyond. Other stakeholders can do their part; but unless teachers are equipped to implement best practices, diagnose student deficiencies, engage students in learning, and teach them the habits that will allow them to become responsible and successful, those efforts will be fruitless.

Investing in teachers is necessary to achieve the middle grades' mission. The most-improved schools made this investment by increasing the professional development they provided to teachers from 2006 to 2008. (See Table 19.) They substantially increased in percentages of teachers who reported receiving professional development in various topics, including working with students as an adviser, utilizing student research projects, using project-based learning, using hands-on learning strategies and using a system of extra help. The least-improved schools, however, experienced either no change or even a decrease in the amount of professional development provided to their teachers in most cases.

Table 19
Professional Development for Teachers

Teachers reported receiving professional development on these topics	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Working with a group of students as a mentor and advisor through the eighth grade	37	56	+19	39	39	0
Having students design and conduct research investigations	45	61	+16	52	51	-1
Using project-based learning to deepen understanding of content	57	73	+16	62	61	-1
Using applied, hands-on strategies to teach Algebra or Pre-Algebra (math teachers only)	70	85	+15	72	64	-8
Using a system of extra help to improve the achievement of all students	54	69	+15	69	66	-3
Getting all students to master complex content in algebra (math teachers only)	62	75	+13	71	60	-11
Using interdisciplinary themes or units	60	71	+11	65	60	-5
Getting students to achieve higher standards through applied learning	62	73	+11	67	65	-2
Using research-based teaching practices to improve student performance	73	83	+10	80	79	-1
Using student-centered instruction to motivate and deepen student learning	64	73	+9	68	69	+1
Getting students to elaborate on their understanding, explanations or conclusions through extended writing	68	77	+9	76	68	-8
Additional study to gain greater depth in content areas	80	88	+8	84	81	-3
Studying samples of student work	63	71	+8	72	67	-5
Teaching science in an applied context (science teachers only)	68	76	+8	69	81	+12
Getting at-risk students to master complex content	64	72	+8	67	68	+1
Teaching students to interact and cooperate with each other during the learning process	66	74	+8	67	66	-1
Using performance assessments (e.g., presentations, writing and projects)	70	77	+7	76	71	-5
Establishing a classroom environment that actively involves students in the learning process	79	86	+7	84	81	-3
Teaching content through real world applications	65	71	+6	66	65	-1
Adapting teaching methods to the learning styles of different students	85	91	+6	87	89	+2
Raising expectations for student achievement	77	83	+6	80	81	0
Developing rubrics in academic content areas	73	78	+5	73	71	-3
Using reading and writing for learning in the content area and across curriculum	82	87	+4	85	85	0

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Teachers were provided not only with training but also with the support they needed. The most-improved schools increased the percentage of teachers who reported that staff development programs are sustained over time, that there are incentives that encourage them to participate in staff development and that they are expected to reflect on what they learned in staff development and apply it in the classroom. The least-improved schools, however, experienced a decrease in teachers reporting that staff development was emphasized. (See Table 20.)

Table 20
Support for Professional Development

Teachers reported[1]	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Staff development programs are sustained over time, with ample follow-up activities that include an observation of their teaching that gives them ideas for refining instruction to get higher achievement from their students.	18%	30%	+12	26%	14%	-12
There are incentives that encourage them to participate in staff development (release time, substitute pay, certificate renewal credit, stipends).	23	38	+15	26	26	0
They are expected to reflect on what they learn in staff development programs and apply it in the classroom.	37	52	+15	45	39	-6

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

1 Percentages reported are the percentages of teachers who responded "a great deal."

These investments in professional development paved the way for many of the other best practices highlighted in this report. As described in Best Practice 2, the most-improved schools not only had the autonomy they needed to make decisions regarding professional development, but they also had the district's support to provide and support that development. It was the combination of this training and support that enabled teachers to implement the other best practices described in this report. **Purposeful, in-depth professional development linked to proven practices and provided in combination with an established structure that allows teachers to reflect on what they've learned and refine classroom instruction enables ordinary teachers to become extraordinary.**

Best Practice 10: A Strong Principal and Leadership Team

*Have a strong **principal and school leadership team** that work collaboratively with the school community to keep them focused on the school's mission, to ensure students are engaged in a rigorous curriculum, and to review and use data to engage in ongoing school improvement efforts.*

The most-improved schools created structures through which the principal and the leadership team worked together to set the tone of the school and keep the community focused on the school's mission — structures though which they can collaborate with and support teachers to implement best practices. The most-improved schools increased the percentage of teachers who strongly agreed that the principal consults with staff members by 20 points from 2006 to 2008, while the least-improved schools increased that percentage by only one point. Furthermore, almost half of teachers at the most-improved schools strongly agree with this statement, compared with less than one-third of teachers at the least-improved schools. (See Table 21.)

Table 21 Collaboration Between Principals and Teachers						
	Most-Improved Schools			Least-Improved Schools		
Teachers reported:	2006	2008	Change	2006	2008	Change
They **strongly agree** that the principal consults with staff members before making decisions that affect them.	28%	48%	+20	27%	28%	+1

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Continuous improvement is a priority at the most-improved schools, much more so than at the least-improved schools. These schools experienced a substantial increase from 2006 to 2008 in the percentage of teachers who reported that their school has an intensive emphasis on continuous improvement. More teachers at the most-improved schools reported that teachers are always learning and seeking new ideas, that the staff uses data to evaluate the school, that teachers and administrators work as a team, that the school's goals and priorities are clear and that teachers maintain a demanding yet supportive environment.

Table 22 Teachers' Perceptions on Continuous School Improvement						
	Most-Improved Schools			Least-Improved Schools		
Teachers reported:	2006	2008	Change	2006	2008	Change
They experienced an intensive emphasis on continuous school improvement (four to five indicators).	29%	50%	+21	29%	36%	+7
They **strongly agree** that teachers in their school are always learning and seeking new ideas on how to improve students' achievement.	52	69	+17	57	57	0
They **strongly agree** that the staff uses data to continuously evaluate the school's academic and technical programs and activities.	43	61	+18	51	55	+4
They **strongly agree** that teachers and school administrators work as a team to improve the achievement of students in this school.	40	63	+23	47	44	+3
They **strongly agree** that goals and priorities for their school are clear.	43	62	+19	47	43	-4
They **strongly agree** that teachers in their school maintain a demanding yet supportive environment that pushes students to do their best.	42	54	+12	47	48	+1

Source: 2006 and 2008 *MMGW* Teacher Surveys, SREB

Often, the largest hurdle in implementing improvement strategies is teacher support. However, **leaders at the most-improved schools have gained teacher support for improvement efforts and work with them as partners to take ownership of school problems, identify proven strategies and implement them effectively**. More principals at the most-improved schools report that teacher moral is high, teachers are able to motivate students, student morale is high and students place a high priority on learning. Furthermore, all principals at the most-improved schools reported that they strongly agree that goals and priorities for their school are clear, while only half of principals at the least-improved schools reported the same. Half of principals at the most-improved schools reported that they strongly agree that the surrounding community actively supports their school's instructional goals, whereas no principals at the least-improved schools reported strongly agreed with that statement.

The Wallace Foundation's research on the influence of leadership on student learning has yielded two important claims: 1) "Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school." 2) "Leadership effects are usually largest where and when they are needed most." These claims are evident at the most-improved schools, where leadership played a significant role in improving achievement. Because these schools had initial achievement levels below those of the least-improved schools in 2006, the effect of strong leadership was more significant for these schools. **While many actions and conditions contributed to the most-improved schools' gains in student achievement, leadership was the catalyst.**

Conclusion

These 10 most-improved middle grades schools are making progress toward fulfilling their role in graduating more students and graduating them prepared for college and careers. By implementing a framework of best practices, they are sending students to high school better prepared to succeed in college-preparatory courses. It was not simply one action that resulted in increased achievement and readiness for high school, but rather a framework of best practices that worked together to create an environment where increased student learning could occur. In the most-improved schools, all members of the school community came together — led by a strong principal and leadership team — to embrace a mission of preparing students for high school, to acknowledge their role in achieving that mission, to focus on efforts to achieve that mission and to implement best practices for school improvement.

Actions to Improve the Middle Grades Experience

The improvements made by the most-improved schools are replicable on a much larger scale — but such improvements require action from districts and schools. Each must come together to create an environment in which principals are instructional leaders, teachers utilize engaging and rigorous instructional techniques, and students have the opportunity to learn.

District Actions:

- Communicate and clarify the mission to middle grades schools.
- Focus the middle grades curriculum on Literacy and STEM disciplines.
- Create tools that can assist middle grades schools to identify students likely to drop out of school, and give schools the flexibility to use resources and provide interventions, including increased learning time to help students meet grade-level standards.
- Give schools flexibility to adjust their schedules in ways that promote teaching and learning.
- Support professional development that is aligned to school improvement plans. Make professional development a continuous process and not a one-time event. Embrace schools' use of teacher learning teams and provide timely professional development related to addressing the challenges identified by teachers.
- Give school leaders autonomy to make decisions that will support their school's improvement plan. Provide them with leeway in determining what courses to offer, selecting instructional practices, establishing homework policies, establishing policies and practices for grading and student evaluation, determining student grouping for instruction, establishing discipline policies, establishing community relationships, and communicating school priorities to parents.
- Work with school leaders as partners. Support their efforts to improve the learning opportunities available to all students.
- Hold middle grades principals and teachers accountable for meeting the middle grades mission.

School Actions:

- Ensure the school not only has a mission, but that its mission is to prepare students to succeed in challenging high school courses, to graduate from high school prepared for postsecondary education and to become independent, productive adults. Faculty and community support for this mission are critical.
- Enroll more students in an accelerated curriculum designed to prepare them for college-preparatory courses in the ninth grade.
- Encourage and support teacher implementation of instructional techniques that engage students; relate to their interests, talents and postsecondary aspirations; and allow them to develop higher-order cognitive skills. Utilize authentic problems, project-based learning, cooperative learning and technology in instruction.
- Create a guidance and advisement system that provides students with a set of experiences to enable them, with the help of their parents, to complete an individual academic and career plan before leaving grade eight.
- Develop all core academic and elective teachers' ability to make reading and writing assignments that engage students in reading grade-level materials or above and in demonstrating understanding of the materials through a coherent, written paper.
- Create a comprehensive support system in which high expectations are held for all students, reteaching is utilized to get more students to meet standards through regular classroom instruction, and tutoring and extra help programs are available to struggling students.
- Develop an early warning intervention system to identify and support at-risk students. Teach them to grade-level standards using classroom intervention where necessary, extended time and other structures to meet grade-level standards.
- Create a comprehensive guidance and advisement system that connects each student to an adult in the building, involves parents in discussions about their child's performance, and helps students develop plans for high school and post-high school studies.
- Develop teacher learning teams in which groups of teachers meet regularly to identify instructional challenges, identify possible causes of those challenges, set goals, select strategies to address the challenges, implement those strategies and evaluate results.

Endnotes

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