SREB

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

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Southern
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592 10th St. N.W.
Atlanta, GA 30318
(404) 875-9211
www.sreb.org

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

Foreword

"T*he 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

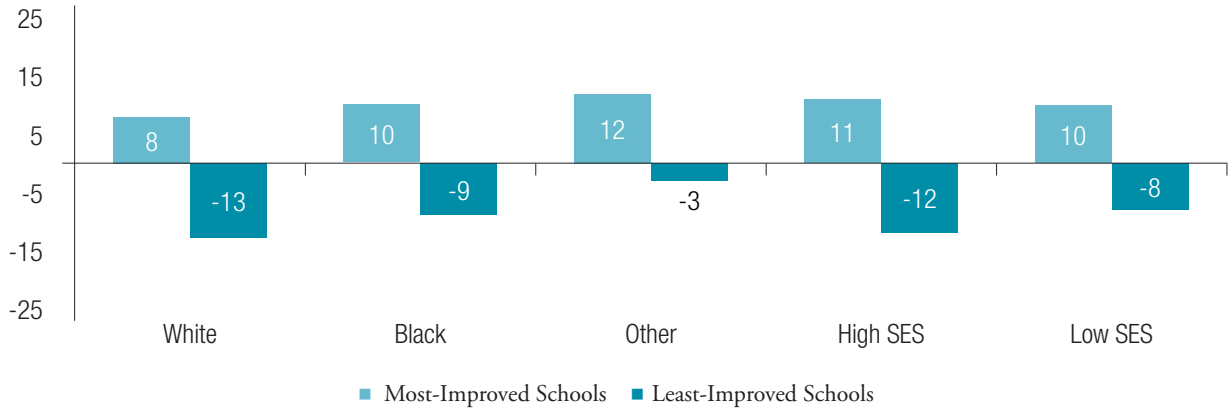
	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Mean Scores						
Reading	154	164	+10	165	154	-11
Mathematics	148	160	+12	160	149	-11
Science	138	156	+18	153	143	-10
Percentage of Students Meeting Performance Goals						
Reading	44%	60%	+16	62%	46%	-16
Mathematics	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).

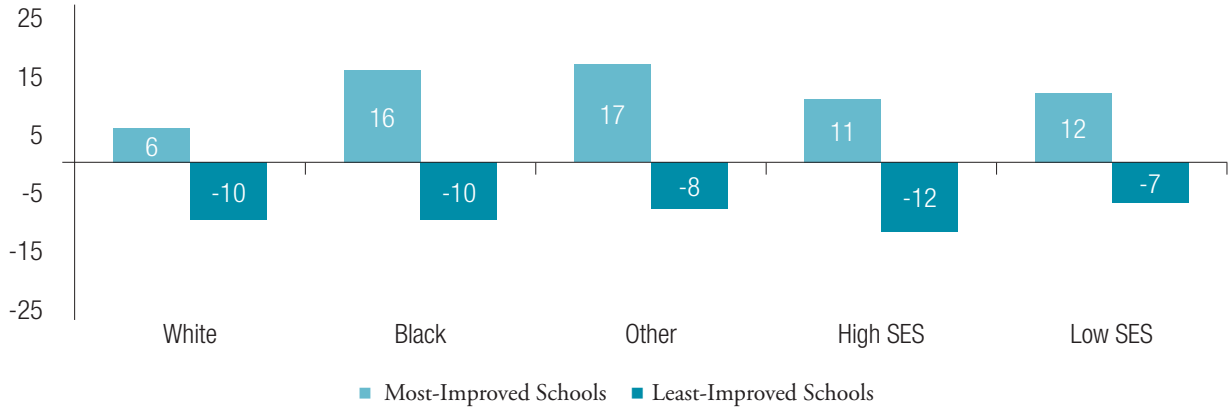
** The performance goals for the Middle Grades Assessment represent grade-level work and high school readiness. The goals are set between the Basic and Proficient cut scores for the Assessment: 160 in reading and mathematics and 161 in science.

Figure 1
Changes in Mean Reading Scores: 2006 to 2008



Source: 2006 and 2008 Middle Grades Assessments, SREB

Figure 2
Changes in Mean Mathematics Scores: 2006 to 2008



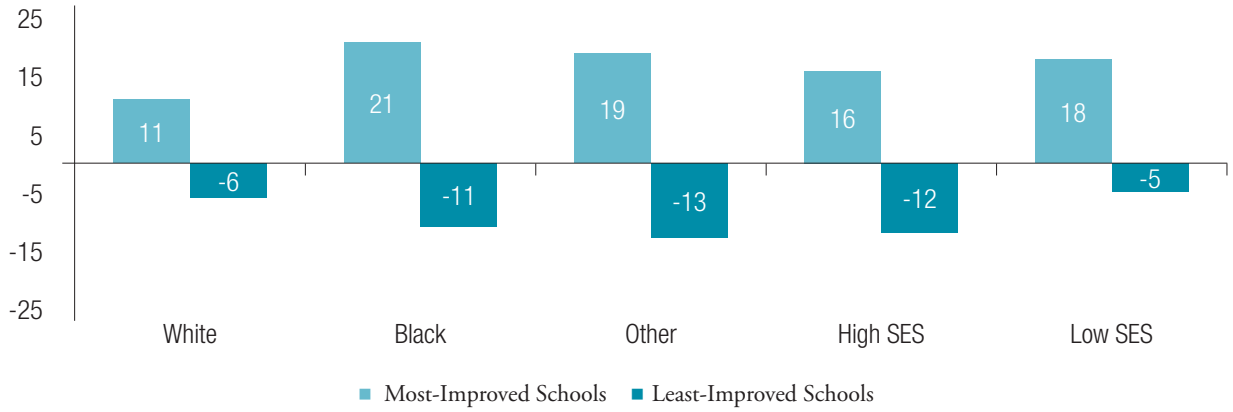
Source: 2006 and 2008 Middle Grades Assessments, SREB

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

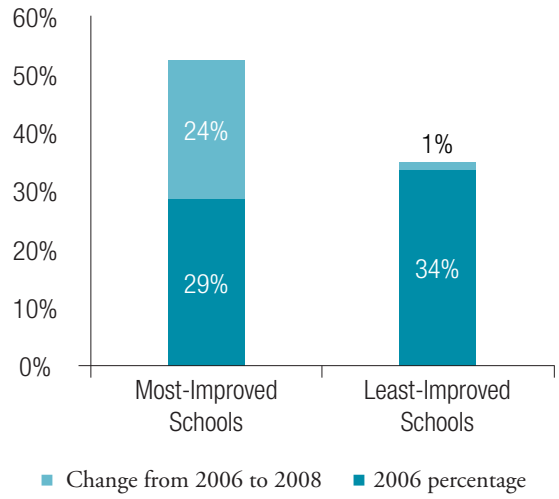
*Have a **clear mission**, with strong faculty support, to ensure that more students leave the eighth grade with the knowledge and skills needed to succeed in a college-preparatory curriculum in high school, to graduate high school prepared for postsecondary education and to become productive adults.*

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

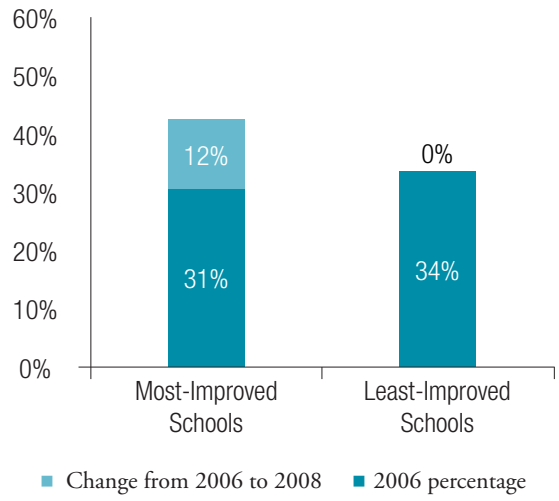
The percentage of teachers who believe each of the following goals are very important:	Most-Improved Schools			Least-Improved Schools		
	2006	2008	Change	2006	2008	Change
Prepare almost all students with the academic knowledge and skills needed in college-preparatory English/language arts, mathematics 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 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 are fully 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

	Most-Improved Schools			Least-Improved Schools		
Students reported:	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 reported experiencing 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

	Most-Improved Schools			Least-Improved Schools		
Teachers reported:	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

Students reported:	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

	Most-Improved Schools			Least-Improved Schools		
Teachers reported:	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

	Most-Improved Schools			Least-Improved Schools		
Students reported:	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.

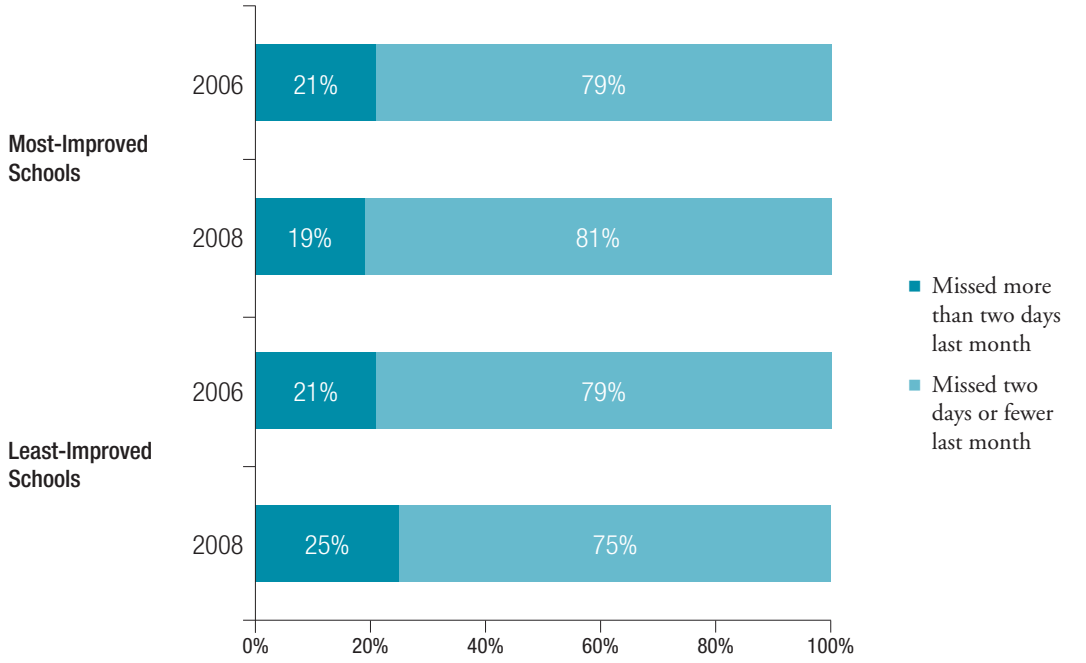
Best Practice 7: Support for At-Risk Students

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

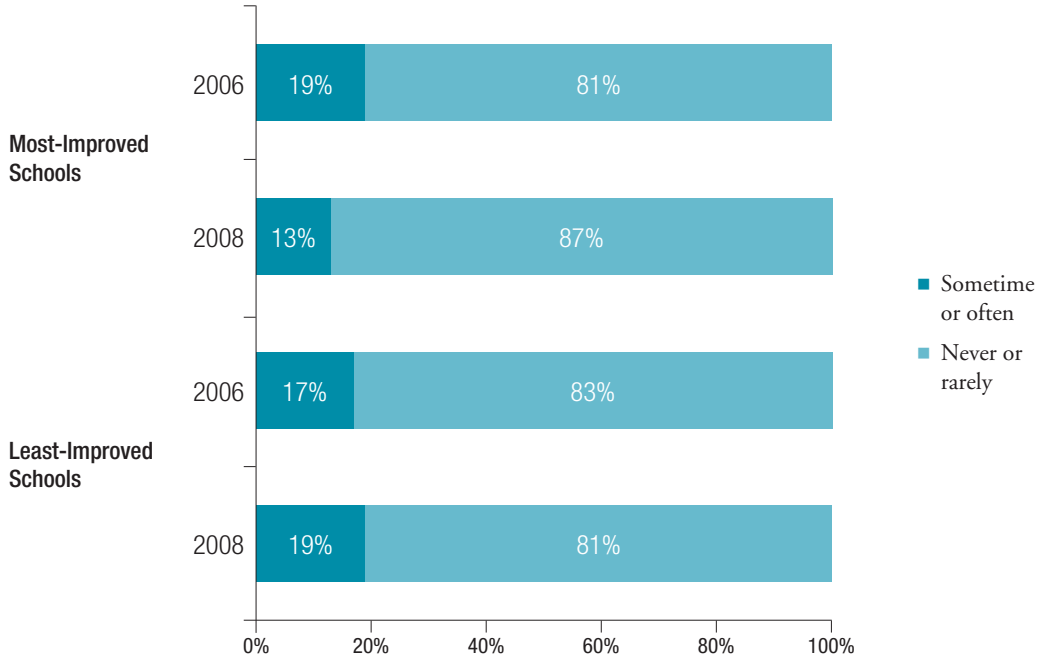
Source: 2006 and 2008 Middle Grades Assessments, SREB

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.)

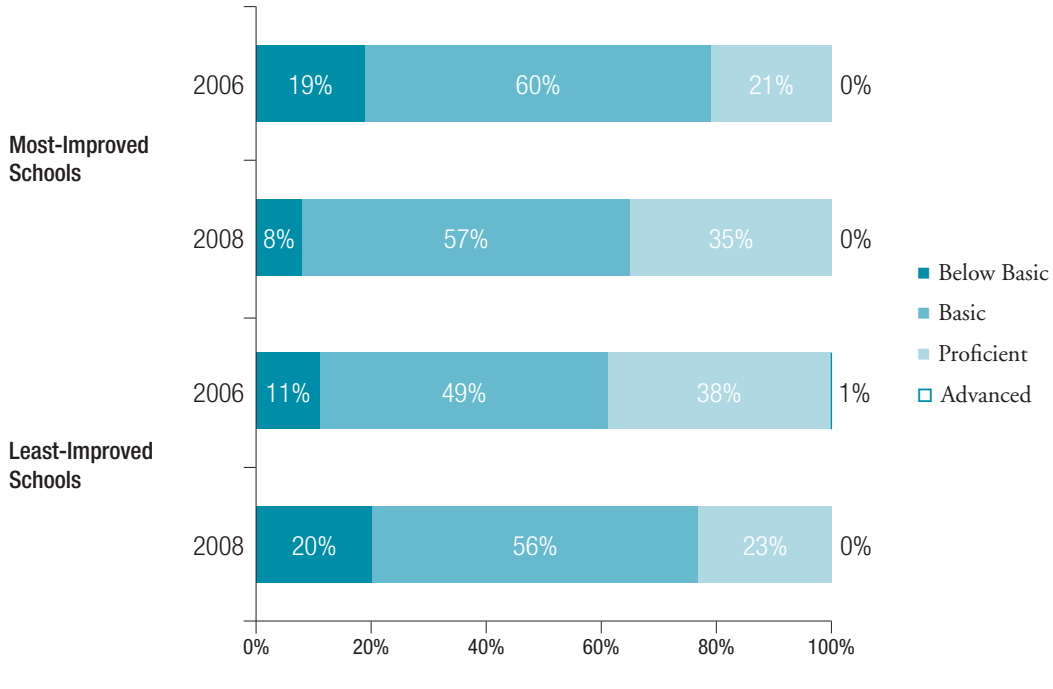
‡‡ Because SREB does not collect course failure data for students who participate in the MGA, performing below the Basic level on the MGA tests is used as a proxy for course failure. Students who perform below the Basic level lack the foundational skills to succeed in college-preparatory ninth-grade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

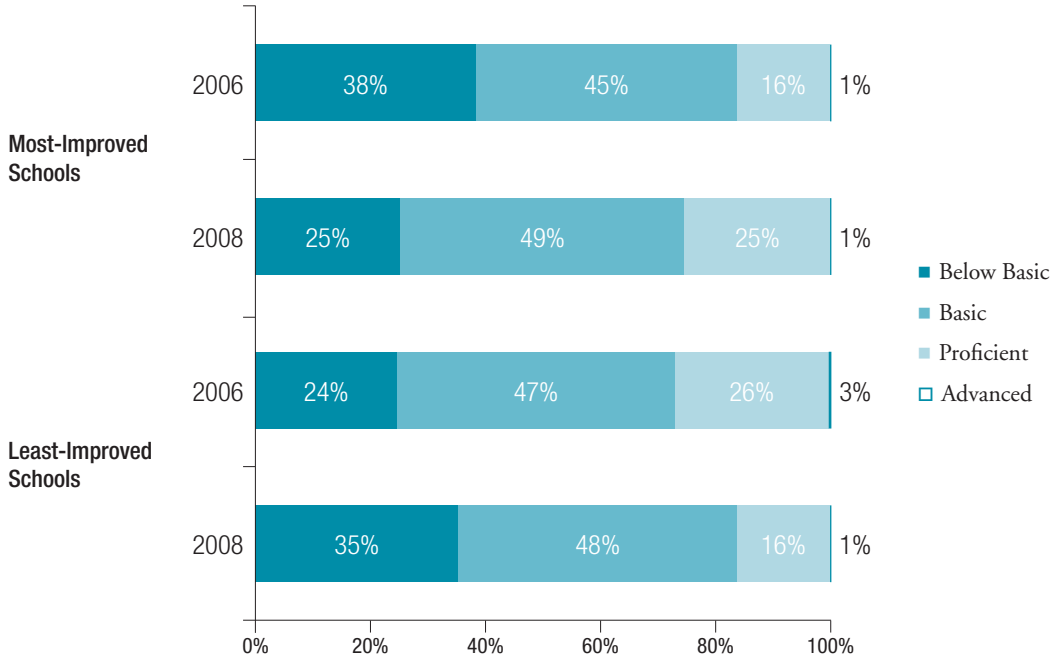
Figure 8
Student Achievement: Reading



Source: 2006 and 2008 Middle Grades Assessments, SREB

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

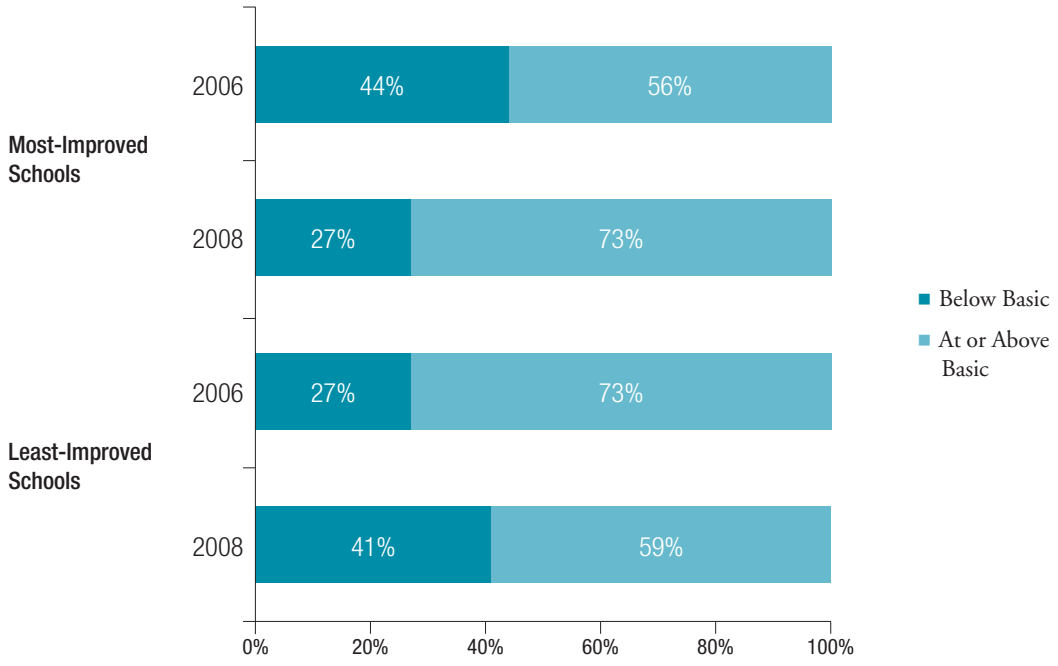
Figure 9
Student Achievement: Mathematics



Source: 2006 and 2008 Middle Grades Assessments, SREB

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

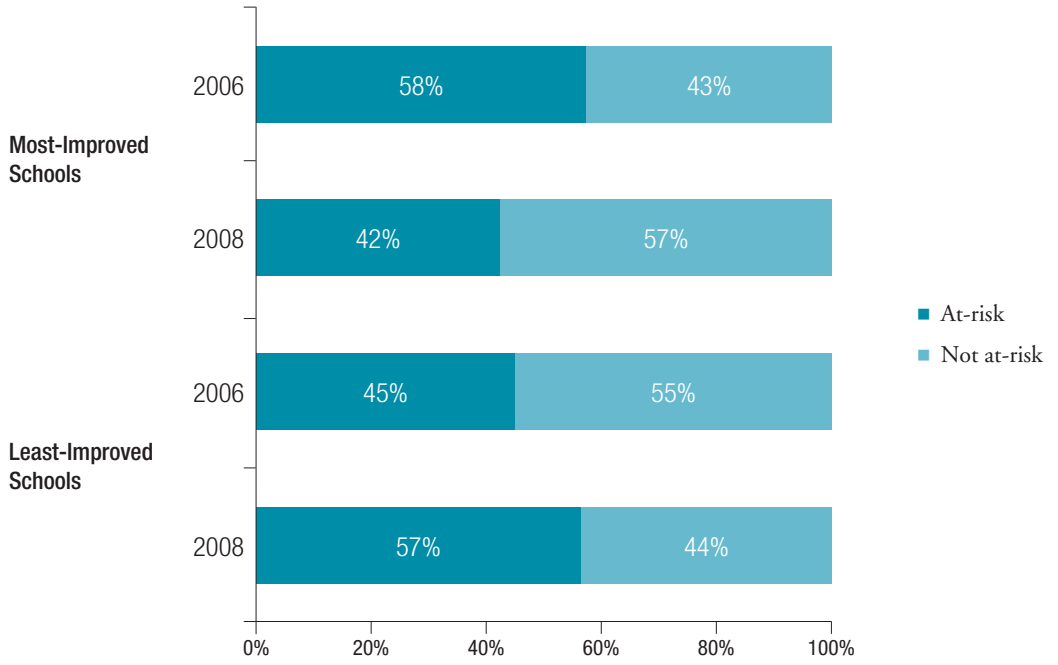
Figure 10
Students Performing Below the Basic Level in Reading or Mathematics



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.)

Figure 11
Students At Risk of Dropping Out of School*



* 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

	Most-Improved Schools			Least-Improved Schools		
Teachers reported that:	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

	Most-Improved Schools			Least-Improved Schools		
Teachers reported:	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						
	Most-Improved Schools			Least-Improved Schools		
Students reported:	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

	Most-Improved Schools			Least-Improved Schools		
Teachers reported:[1]	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

Teachers reported:	Most-Improved Schools			Least-Improved Schools		
	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

Teachers reported:	Most-Improved Schools			Least-Improved Schools		
	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

1 *The Next Generation of School Accountability: A Blueprint for Raising High School Achievement and Graduation Rates in SREB States*. Southern Regional Education Board, 2009.

2 Balfanz, Robert. *Putting Middle Grades Students on the Graduation Path: A Policy and Practice Brief*. Everyone Graduates Center and Talent Development Middle Grades Program, National Middle School Association and Johns Hopkins University, 2009.

3 *The Nation's Report Card: Reading 2011 — National Assessment of Educational Progress at Grades 4 and 8*. National Center for Education Statistics, Institute of Education Sciences. U.S. Department of Education. NCES, 2011.

4 *The Nation's Report Card: Mathematics 2011 — National Assessment of Educational Progress at Grades 4 and 8*. National Center for Education Statistics, Institute of Education Sciences. U.S. Department of Education. NCES, 2011.

5 Common Core Data, National Center for Education Statistics.

6 Unpublished SREB analysis, 2010.

7 Unpublished SREB analysis, 2010.

8 Young, John W., and Fred Cline. *Are Scores on the HSTW Assessment Related to Students' Self-Reported Educational Experiences?*. Center for Validity Research, Educational Testing Service, 2008.

9 Balfanz, Robert, Liza Herzog, and Douglas J. Mac Iver. *Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grades Schools: Early Identification and Effective Interventions*. Educational Psychologist, 42(4), 2007. 223-245.

10 *MMGW Sites: Student Engagement and Percentage of Students Meeting Performance Goals*. Presented at the *HSTW* Board Meeting, Fall 2010.

11 *A Critical Mission: Making Adolescent Reading an Immediate Priority in SREB States*. Southern Regional Education Board, 2009.

12 Bridgeland, John M., and John J. DiIulio Jr., and Karen Burke Morison. *The Silent Epidemic: Perspectives of High School Dropouts*. A report by Civic Enterprises in association with Peter D. Hart Research Associates for the Bill & Melinda Gates Foundation, 2006.

13 For a comprehensive discussion of research on student disengagement and school dropouts, see:

Mac Iver, Martha, and Douglas Mac Iver. *An Integrated School-Level Approach to Dropout Prevention*. The George Washington University Center for Equity and Excellence in Education, 2009.

14 Mac Iver, Martha, and Douglas Mac Iver. *An Integrated School-Level Approach to Dropout Prevention*. The George Washington University Center for Equity and Excellence in Education, 2009.

15 Leithwood, Kenneth. and Karen Seashore Louis, Stephen Anderson, and Kyla Wahlstrom. *Review of Research: How Leadership Influences Student Learning*. Learning from Leadership Project. The Wallace Foundation, 2004.

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