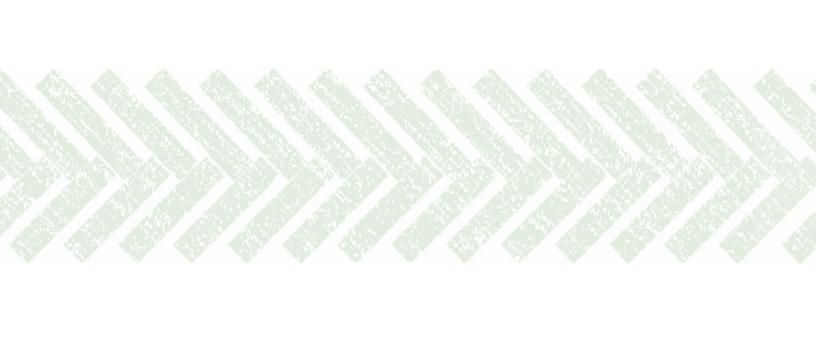# Gaining Traction, Gaining Ground:

How Some High Schools Accelerate Learning for Struggling Students
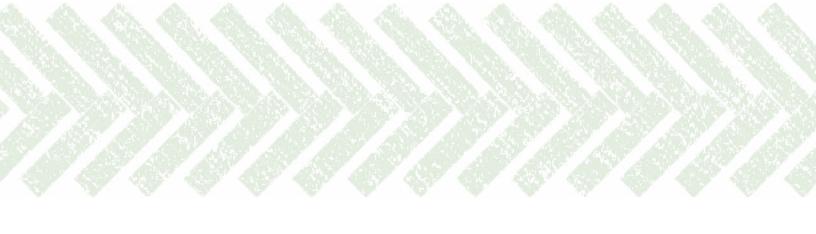
Gaining Traction, Gaining Ground:

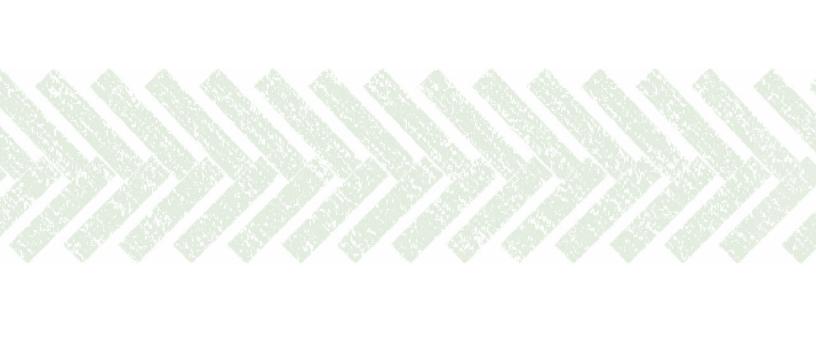## How Some High Schools Accelerate Learning for Struggling Students

The Education Trust

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Foreword

Our staff at the Education Trust – which includes many former public school teachers and administrators – spends a lot of time working with educators in schools and classrooms all over the country. Because our focus as an organization is on closing the achievement gap that separates low-income students and students of color from other young Americans, much of the work of our "Practice Team" takes place in schools serving concentrations of such students. In the course of that experience we see a lot of practices that seem to represent the very best of American education – powerful teaching that results in powerful student learning. But we also see a lot of practices that concern us deeply.

Inside the Education Trust, though, we have another team – our "Data Team" – that has a rather different window into the nation's schools – the window provided by close analysis of student and school-performance data. Every year, our analysts collect and analyze data from almost every public school in America, looking for patterns and identifying schools that break those patterns. We've been especially focused on schools that serve concentrations of poor children and children of color and produce unusually high student performance.

Last year, we had a first chance to work across those two teams: to start with data on school performance, then look systematically at the practices in a set of high schools characterized by unusually high performance on the ACT. Conducted jointly with the staff at ACT, this study – *On Course for Success* – taught us a lot about instruction in schools at the highest ends of student performance. But it didn't allow us to even begin to answer the question we find most on the minds of conscientious high school educators today: "What shall we do to help the kids who arrive furthest behind?"

So we are enormously grateful to the Bill & Melinda Gates Foundation for giving us this opportunity to look closely, over the course of nearly a full academic year, at the practices in four public high schools that do an unusually good job of "growing" the performance of students who enter behind, and compare these to three demographically similar schools that get more average results.

INTRODUCTION

The National Governors Association earlier this year sponsored a National Education Summit on High Schools that highlighted the urgent need to improve American high schools. U.S. Secretary of Education Margaret Spellings laid out the sad facts:

"Improving the quality of high school education is an urgent challenge that can only be solved by working together, in a bipartisan fashion. Getting every child to graduate high school with a meaningful diploma in their hands is one of the biggest challenges our country faces. Today only 68 out of 100 entering ninth-graders will graduate from high school on schedule. Fewer than 20 will graduate on time from college. Meanwhile, 80 percent of the fastest-growing jobs will require some postsecondary education."

While policymakers continue to exert pressure and pour resources into K-8 improvement, few realize that better-prepared primary school students don't necessarily translate into more – or more successful – high school graduates. In fact, available evidence suggests that even as better-prepared students are moving into high schools, academic growth in our high schools is declining.

We know what the problem is, but solutions are harder to come by. Information about high school achievement and closing the achievement gaps between demographic groups is an emerging field in which we have very limited information, with more questions than answers.

This study is meant not to answer all possible questions, but to help answer one of the most frequent questions we get from high school staffs: What do we know about the characteristics and practices of schools that are especially effective at improving the academic performance of previously low-performing students?

The high-impact schools that we studied are by no means good at all things. For example, they are not yet among the highest-performing schools in their respective states or even where their staffs hope they will soon be in terms of student proficiency. In fact, most still have a long way to go. But they *have* been able to make greater-than-expected gains with previously underperforming students, something that still eludes most American high schools. Because of this focus, we believe that this study will be of particular interest to schools that receive large numbers of below-grade level students and want to accelerate their learning.

The research design used in this study was developed in the belief that schools that are making greater-than-expected gains will have characteristics and practices that differ from demographically similar schools that make only expected gains. Sometimes the differences we found were subtle – more so, certainly, than if we had compared high-impact schools with low- (rather than average-) impact schools.   But we did find important differences in the orientation and practices of these two sets of schools, and have done our best to describe them in ways that will be helpful to those on the front-lines of high school reform.

Study overview

This study examined seven public high schools. Four were "high-impact" – that is, they produced unusually large growth among students who entered significantly behind. We compared these high-impact schools with three average-impact schools with similar demographics. By looking at both sets of schools, we hoped to find out what the high-impact schools do differently than the average-impact schools.

In order to find schools that were *high-impact*, we developed a set of criteria that a school needed to meet to be considered[1]:

- It had to have greater-than-expected growth over three years;
- It had to have at least average performance on the state assessments in reading and/or math (While these schools did not have to be high-performing, they did have to be within the achievement average of the state);
- Its achievement gaps had to be smaller than the state average;
- It had to have a Promoting Power Index[2] at or above the state average; and
- It had to serve 60 percent or more low-income students. If that criterion was not met, the school enrollment had to be 50 percent or more non-White and at least 20 percent – but less than 60 percent – low-income.

Once these schools were selected, we chose three demographically similar schools that produce average growth.

Over the course of a year, we collected a good deal of data and material from both sets of schools, including schedules, student transcripts, assignments and the like. We subsequently surveyed administrators, teachers and students. Members of our "practice team" also conducted multi-day site visits, including extensive classroom observations, as well as student and teacher focus groups.

Upon analyzing the data, we found that high-impact schools have many characteristics in common with average-impact schools. But they also differ in significant ways. Each practice described may not be evident at every high-impact school or every average-impact school. But we found that high-impact schools shared a common range of practices, as did average-impact schools.

The schools that were identified as high-impact schools are Jack Britt High School, Fayetteville, NC; Los Altos High School, Hacienda Heights, CA; East Montgomery High School, Biscoe, NC; and Farmville Central High School, Farmville, NC. We hope that other schools will be able to learn from them. The schools identified as average-impact, although not named, were critical to this study, and the Education Trust is grateful for their participation. (For profiles of each school, see Appendix B, School Profiles.)

Following are our major findings, organized in five "spheres" that the Education Trust research tells us influence school practice.

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[1] For a more detailed discussion of the selection criteria and process, please see the Methodology section of this report.

[2] The Promoting Power Index, developed by researchers at Johns Hopkins University, is used to approximate a school's high school graduation rate. For more detail, see the Methodology section of this report.

Sphere 1: Culture

- Though both sets of schools serve many low-income students who arrive far behind other students, high-impact high schools are clearly focused on preparing students for life beyond high school—specifically, college and careers. By contrast, average-impact high schools are more focused on preparing students for graduation.

- In official policy documents, the clear focus in high-impact schools is on academics. Average-impact schools focus on rules.

- In high-impact high schools, teachers and administrators express consistent views about achievement-related school goals. In average-impact schools, there are administrators and teachers with very high expectations, but much less consistency in the school as a whole.

- In high-impact schools, teachers embrace external standards and assessments; in courses where such standards and assessments are unavailable, they create them. In average-impact schools, teachers simply tolerate these things.

Sphere 2: Academic Core

- High-impact schools have consistently higher expectations for all students, regardless of students' prior academic performance; and principals, teachers, and counselors take responsibility for helping students succeed.

- In high-impact schools, barriers to high-level course-taking are removed. Students are encouraged to take on academic challenges. In average-impact schools, there are hurdles to gain access to the most challenging courses.

- Assessment data is used by high-impact schools for future planning, such as improving curriculum or making teacher assignments. Average-impact schools tend to use data primarily to measure past student performance.

Sphere 3: Support

- In both high- and average-impact schools, students who arrive behind get extra instructional time in English and math. But high-impact schools provide help in a way that keeps students on track with college-preparatory requirements. Average-impact schools provide the extra help in a way that delays entry into grade-level courses, making it harder for students to complete college-prep requirements.

- In high-impact schools, administrators and teachers take responsibility for ensuring that struggling students get the additional help that they need. At high-impact schools, little is left to chance. Average-impact schools generally offer extra help to students, but make it optional.

- High-impact schools have in place early warning systems to identify students who need help before it's too late. Average-impact schools are more likely to provide remedial help after students have faltered.

- Counselors in all schools are involved in scheduling, but counselors in high-impact schools are considered members of the academic teams and are responsible for actively monitoring student

performance and for arranging help when needed. Counselors in average-impact schools are more likely to get involved with students through referrals.

- High-impact and average-impact schools both have partnerships with businesses and colleges, but high-impact schools use those partnerships to aid in student preparation for postsecondary opportunities, while average-impact schools tend to use their partnerships for dropout and drug-abuse prevention.
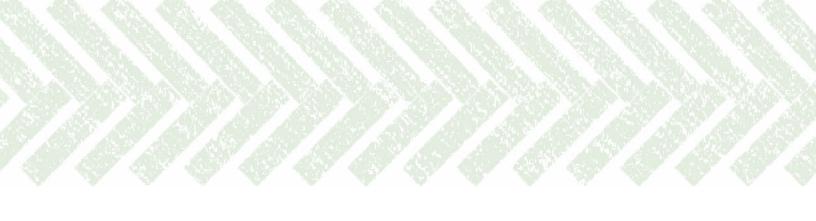
Sphere 4: Teachers

- High-impact schools use more criteria than teacher preference to make teaching assignments, looking at factors such as past student performance and the teacher's area of study. Teacher assignments are made to meet the needs of the students, rather than the desires of the teachers. In average-impact schools, teaching assignments are more likely to be determined by staff seniority and teacher preference.

- School-sponsored support for new teachers in high-impact schools is focused on instruction and curriculum. Average-impact schools provide support for new teachers, but it is more personal and social in nature.

- Administrators at high-impact high schools adjust class sizes to provide more attention for struggling students and are not averse to larger student-teacher ratios for students who are able to work more independently. Class sizes in average-impact schools are relatively uniform.

- Principals at high-impact high schools exert more control over who joins their staff than those at average-impact schools.

Sphere 5: Time and Other Resources

- High-impact schools are more deliberate about the use of instructional time, arranging available time to help "catch up" students who arrive behind.

- Students who enter ninth grade behind in high-impact schools spend more time in courses with substantial reading and/or reading instruction than do their counterparts in average-impact schools.

- Overall, the amount of time that students spend in "academic" classes is about the same in both high- and average-impact schools. But in high-impact schools, a larger fraction of that time is spent in grade-level or "college-prep" courses, while students in average-impact schools spend more time in "support" or "remedial" courses.

- All of the schools in the study say they protect academic time, but high-impact schools have more strategies to efficiently use time and are stricter about enforcement.

- For students in both high- and average- impact schools, the senior year has fewer academic challenges than any other year. The only exceptions to this finding are students in high-impact schools who enter ninth grade behind and proficient students in average-impact schools. These students spend a slightly higher percentage of time their senior year in academic courses than they do in their freshman year, but less than in their sophomore and junior years.

One final note. Just as this report does not describe the characteristics of low-performing schools, it also does not address the characteristics of *high-performing* schools – that is, schools at which students from all demographic groups are testing at proficient or advanced levels; where graduation rates are high for all students; and all students are challenged by a rigorous curriculum that prepares them for postsecondary options. Rather, the findings about these high-impact schools point to the necessary – but not nearly sufficient – steps schools can take toward higher performance.

Methodology

In order to study *high-impact* high schools, the Education Trust first had to define criteria for "high impact." Essentially, we chose and applied four consecutive filters:

- We started with schools that had significant populations of students of color (African American, Latino, and Native American) and/or economically disadvantaged students.

- We then identified which of those schools had proficiency levels on state math and/or reading assessments greater than state average levels of proficiency.

- Once those criteria were met, we looked for schools that had achieved greater-than-expected academic growth with previously low-performing students, using the state-specific growth models described below.

- Schools that met all three of these criteria then had to also demonstrate at least average ability to keep students in school, as well as average, smaller than average or declining gaps between their minority/economically disadvantaged groups and their White/non-economically disadvantaged groups.

The final step was to select comparison schools that matched the high-impact schools demographically but had made only average gains. Because they had the available data, we chose high schools from North Carolina and California[3].

Demographic Criteria

Schools first had to have a significant population of students of color and/or economically disadvantaged students. The "non-White" group is a composite of African-American, Latino, and Native-American students; economically disadvantaged students are those in the school receiving free and reduced-price meals. For a school to meet our demographic criteria, its enrollment had to be at least 60 percent economically disadvantaged students. If that was not the case, minorities had to account for at least half of the enrollment, and at least 20 percent, but less than 60 percent, of students had to come from low-income families.

Achievement Criteria

Schools with significant non-White/economically disadvantaged enrollments also had to exhibit at least average performance on their state math and reading assessments. Using 2003 assessment data in math and reading, each school had to have an average overall score in one subject that was at or above the state average and an overall score near the state average for the other subject. The schools also had to meet the same criteria for each of the subgroups (African American, Latino, Native American, and economically disadvantaged).

North Carolina schools were measured on the state's 10th-grade math and reading exams in 2003. In California, the high school math exit exam was utilized to determine if a school's students were performing at or

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[3] We also had originally selected schools from Oklahoma to participate in the study. However, after several attempts to secure a commitment from a limited pool of average-impact schools that met the necessary performance criteria, we were forced to exclude Oklahoma from the qualitative analysis. The first wave of quantitative data we collected from the high-impact Oklahoma school, however, was used in the preliminary analysis to identify trends in high-impact schools.

above the state average in math, although we did not have data for each of the subgroups for 2003. We did, however, have the 2003 11th-grade reading overall and subgroup data which were used to determine if schools and their subgroups scored at or above their respective state averages.

Growth Criteria

The third step in selecting high-impact schools was to determine which of the schools that had met the above criteria were making greater-than-expected gains. We used growth statistics created by each of the two states to determine if a school was high impact, average impact, or neither.

North Carolina

In North Carolina, the growth criteria were based on state-developed growth calculations that are heavily weighted with reading and math scores. Under North Carolina's ABC accountability system, each high school is determined to have 'Met Expected Growth' or 'Met High Growth' if their *Weighted Expected Growth Composite* is at or above what would be expected based on their students' prior achievement and preparation.

The calculation's first step is to determine how the school performed in the current year by creating what is called an actual average for 11 academic components. The actual averages for each high school are calculated using the state's End Of Course Exam (EOC) results (Algebra I, Algebra II, Biology, Chemistry, English I, Geometry, Physical Science, and Physics), College/University Prep/College Tech Prep (CUP/CTP), the 10th-grade Competency Exam, and the school's dropout rate for the current school year. The next step is to adjust the actual averages to create an expected average based on prior student achievement on state assessments (eighth-grade reading and math exams, eighth-grade competency exam, and prerequisite EOC Exams) and the percentage of students the school is preparing for postsecondary education (Percent CUP/CTP), while taking into account the percent of students dropping out of the school. The differences between the students' actual performances and their expected performances in each of the 11 components are then standardized and weighted to more accurately reflect each component's influence on a school's growth. The 11 weighted standard expected-growth statistics are then summed to create the weighted expected-growth composite. After completing the calculations for both these steps it can be determined if a school that met each of the criteria above had 'Met Expected Growth.' Schools that 'Met High Growth' have expected performance on each of the eight EOC Exams approximately 3 percent higher than those that are designated 'Met Expected Growth.' If the weighted standard expected-growth composite is at or greater than zero the school has 'Met Expected Growth' or 'Met High Growth' depending on which calculation is being used. For this study each of the high- impact schools 'Met High Growth,' while the average-impact schools only 'Met Expected Growth.'

> *We looked for schools that were making greater than expected gains.*

California

For California, growth was determined using the state's Academic Performance Index (API). It is a measure of how well a school is moving toward and beyond the statewide target score of 800. The API measures the growth a school makes from one year to the next by setting target growth scores which are 5 percent higher than the previous year's API. The API is calculated using assessments in the state's Standardized Testing and Reporting (STAR) program as well as the California High School Exit Examination (CAHSEE). These assessments include: ELA Standards Test, Mathematics Standards Test, History/Social Science Standards Test, CAHSEE, the California Achievement Test, Sixth Edition Survey (CAT/6), and the California Science Standards Test. Schools that made greater then average growth in the API from 1999-2003 were considered high-impact schools. Schools that made at or just below average API growth were considered average-impact schools.

We checked to make sure that schools were not making gains by pushing students out.

Promoting Power Criteria

As a check to make sure that schools were not making gains by pushing students out (or simply failing to hold on to them), schools that met the demographic, achievement and growth criteria also had to have a Promoting Power Index (PPI) at or above their state averages. The PPI is used to approximate a school's graduation rate. The promoting power indicator is a straightforward ratio of the number of 12th-graders enrolled in a school to the number of ninth-graders (or 10th-graders if the school has a 10-12 grade span, or if an unusually small ninth-grade enrollment indicated the recent addition of a ninth grade to the school).

Gap Criteria

We also required schools to have small achievement gaps as another check to ensure schools are teaching all students. Any school with at least 25 percent White enrollment and at least 25 percent enrollment of African-American, Latino, and Native-American students had to show an achievement gap between one of their three non-White groups and the White group's scores on math and reading assessments that was at or below the state average. If their gaps were not below average, then they had to show evidence of being on track to close achievement gaps using available data.

Comparison Schools

The high-impact schools were matched with average-impact schools for comparison purposes. The average-impact match schools had to be in the same demographic quartiles as the high-impact schools, while only meeting expected or average growth using the corresponding growth measure. Once those criteria were met, the average-impact schools had to fall one standard deviation below their matched high-impact school in proficiency on the state assessment in reading and math, as well as being near the state average for promoting power.

Data Considerations

The high-impact high school selection criteria are by no means problem-free. In addition to the small pool of states with growth data, we encountered issues such as a lack of reported data to ensure performance levels were accurately represented. Moreover, because true individual student growth can only be determined using student-level data, which we do not have, we have inferred student growth using cohort data. Although this is a methodologically sound inference, it still is not without issue.

In addition, there are factors we were unable to control for in the design of the study. For example, all matched sets of schools are geographically in the same state. However, we were not able to identify matched schools in the same district that met the required set of performance criteria. Therefore, differences in the characteristics of the school district may also influence differences in academic growth. Also keep in mind that just because a school was identified as high impact didn't mean that vast numbers of students met state proficiency standards. In fact, using our criteria, average-impact schools could have a higher proportion of proficient students than high-impact schools. Although possible, that was generally not the case. We found that most schools that had greater-than-expected growth also had a higher percentage of students meeting proficiency standards.

Data Collection

In the first wave of data collection, we requested that each school send us a set of artifacts that included student-enrollment figures, staff information, official school schedule and school calendar, student handbook, master schedule, list of external partners, student transcripts, a professional development plan, and a three-week lesson plan with syllabi and sample assignments. We also administered surveys to administrators (principals, assistant principals, and department chairs), teachers, and counselors. We collected information on teacher experience and background, counseling programs, administrator practices, instructional practices, course information, texts, materials and other resources, and school beliefs and practices regarding student performance and academic-support programs. Our course information data collection focused only on ninth- and 11th-grade teachers and math and English courses.

The second wave of data collection was done during site visits to the schools.

The second wave of data collection was done during site visits to the schools. While at the schools, we conducted follow-up interviews with administrators (principals, assistant principals, and department chairs), teachers, and counselors. We also performed both school and classroom observations, and conducted student and teacher focus groups. Classroom observations focused on ninth- and 11th -grade math and English classes, and we requested that only previously low-performing 11th-graders participate in the student focus group. All survey and interview protocols are provided in the attached appendices.

Research Design and Analysis

The design of the study focused on key spheres of influence prominent in research on high schools.[4] Our research team, which included current and former high school teachers and administrators, formulated research questions pertaining to each sphere of influence. (For more detail, see Appendix A, Framework Foundation.) The research protocols were designed to allow for triangulation of data from each set of research questions, some of which had been used in the joint ACT/Education Trust study.

We began by analyzing all of the quantitative survey data from the first wave of data collection[5]. We looked for differences and similarities between high- and average-impact schools. We then analyzed each set of follow-up qualitative interview data from the second wave of data collection by school. We compared each set of matched schools to identify whether differences found from the first wave of data were confirmed by the qualitative analysis. Evidence from the artifacts and lesson plans were also used to confirm findings from the preliminary analysis.

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[4] We originally had a "Policies" sphere designed to identify whether the existence of formal academic policies influenced the application and implementation of school practices and procedures. However, because of the lack of explicit formal policies in both high- and average-impact schools, we excluded "Policies" as a separate sphere in this study.

[5] In some areas of analysis, only qualitative data was used to inform research questions because the quantitative data did not lend itself easily to the questions asked.

FINDINGS

Sphere 1: School Culture

The term "school culture" is often used to describe the overall orientation of a school – its sense of purpose and mission, and especially the overriding commitments it makes and messages it sends to its students. In this sphere, we wanted to understand how those things might play a role in the relative successes of these two sets of schools.

We looked for evidence of a school mission and whether it addressed student achievement. But we also wanted to know whether that mission extended beyond a piece of paper or wall plaque, so we looked particularly at whether and how the mission was communicated to both the internal and external school community.

In both formal and informal policies and practices, we searched for evidence of what school staff and students valued and believed possible with regard to student achievement. Obviously, the expression of these beliefs by staff and students can greatly influence the ways in which schools operate. When members of a school community consistently express common beliefs and values, it is likely that staff will be more able to work together toward a common goal. Conversely, when beliefs and values regarding the same topic vary across staff, it is likely to be more difficult for staff to work together.

> ### Key Findings: School Culture
>
> High-impact high schools are clearly focused on preparing students for life beyond high school. Average-impact high schools are more focused on preparing students for graduation.
>
> In official policy documents, the clear focus in high-impact schools is on academics. Average-impact schools focus on rules.
>
> In high-impact high schools, teachers and administrators express consistent views about achievement-related school goals. In average-impact schools, there is much less consistency.
>
> In high-impact schools, teachers embrace external standards and assessments. In average-impact schools, teachers simply tolerate these things.

Similarities

Official school missions, it turns out, didn't tell us much. In both sets of schools, the official school mission statements are often vague and quite general. For example, the mission of one average-impact school is "to actively involve the entire school community in creating a school environment that develops confident, self-directed, and responsible students." Similarly, a high-impact school's mission is "to provide a safe environment where students are prepared to become members of a highly competitive and culturally diverse society. Our students will be challenged to develop the necessary tools to help them become responsible citizens."

Clearly, we had to look deeper at both school policies and at the practices and beliefs of adults and students.

Differences

Beyond High School

Though both sets of schools serve many low-income students who arrive far behind other students, high-impact high schools are clearly focused on preparing students for life beyond high school—specifically, college

and careers. By contrast, average-impact high schools are more focused on preparing students for graduation.

In schools serving high concentrations of low-income and minority young people – especially in communities where dropout rates have historically been quite high – it is easy for administrators and teachers to aim straight at high-school graduation. Yet, regardless of whether we were looking at policies, attitudes or actions, the high-impact schools pretty consistently pointed toward life beyond graduation. There is a lot of emphasis on steadily increasing rigor to better prepare students for college. In three high-impact schools, staff consistently described the administrator's goal of increasing student enrollment in AP course.

In official policy documents, clear focus in high-impact schools is on academics.

In high-impact schools, more principals talk about the importance of getting students into tougher classes to ready them for postsecondary choices, and their actions reinforce that goal.

Administrators and teachers in the average-impact schools also are working hard. But, by contrast, they are pointed primarily toward graduation. In average-impact schools we found principals working on systems and strategies to prevent dropouts and to ensure students obtained enough credits to graduate. They place less emphasis on the rigor of coursework for students.

Academics vs. Rules

In official policy documents, the clear focus in high-impact schools is on academics. Average-impact schools focus on rules.

Most of the schools in our sample do not have many official policy documents—or at least not many that were not generated by their school districts. All do, however, have some form of student handbook.

Student handbooks signal to students, parents, and teachers what is valued by a school. In our review of student handbooks, we found that those in high-impact schools first focus on the academic programs in the school. They provide a thorough description of academic requirements and the academic supports available for students. Handbooks in average-impact schools tend to focus on rules first, with brief mention of the academic requirements.

Consistency

In high-impact high schools, teachers and administrators express consistent views about achievement-related school goals. In average-impact schools, there are administrators and teachers with very high expectations, but much less consistency in the school as a whole.

High-impact faculty members and administrators speak more consistently about working toward common goals than their counterparts in average-impact schools. The evidence suggests more agreement – among administrators, among teachers and between teachers and administrators – on important academic issues

In average-impact schools, by contrast, there are often very different views—even among administrators who work closely together—on very important matters. Two administrators at one average-impact school

illustrate this point. In our interview, the principal at this school talked extensively about the importance of having a system that prepares all students for college. But the assistant principal expressed a very different set of beliefs. She said, "A lot of time I find parents have these high aspirations for their kids and the kid just isn't there. You know we all want our children to go to college; we all want them to have a profession… that's going to make a lot of money. But, that's just not always the case. College isn't for everybody."

Standards

In high-impact schools, teachers embrace external standards and assessments; in courses where such standards and assessments are unavailable, they create them. In average-impact schools, teachers simply tolerate these things.

In both high- and average-impact schools, teachers use state standards to help frame their teaching. But the way teachers in the two types of schools deal with assessment data and benchmarking is quite different.

In high-impact schools, teachers unsolicited bring up the value of benchmarking and talk about how standards have helped their teaching. In one high-impact school, where there was no state end-of-course assessment for certain classes, the teachers voluntarily launched an effort to benchmark those classes. This suggests that standards have not just been accepted but embraced.

Sphere 2: Academic Core

The research in this sphere focused on students' course-taking patterns; the content of those courses; and the quality and methods of instruction. Our examination was restricted to English/ language arts and mathematics.

Our researchers wanted to learn more about how schools placed all students – from the high-performers to those struggling with high school work – into courses. We also examined what actually was taught in those courses and how schools ensured that course content was consistent across sections.

In both states examined, state standards govern what is taught at each grade level in these key academic subjects, and students take state-level assessments that gauge how well they meet standards. But how were standards used? And how were assessment results communicated through the school building and used to inform instruction?

> ## Key Findings: Academic Core
>
> High-impact schools have consistently higher expectations for all students, regardless of students' prior academic performance.
>
> In high-impact schools, students are encouraged to take on academic challenges. In average-impact schools, there are hurdles to gain access to the most challenging courses.
>
> Assessment data is used by high-impact schools for future planning, such as making curriculum improvements or making teacher assignments. Average-impact schools tend to use data primarily to measure past student performance.

We also looked into teacher and administrator expectations of students, how they were communicated, and whether those expectations made a difference in the actions of teachers, principals, and counselors.

Similarities

In many important ways, high- and average-impact high schools are similar. For example, all teachers say they use state standards and most show some evidence of actually doing so. Both sets of schools share some approaches to placing incoming students in ninth-grade courses – weighing factors such as students' eighth-grade test scores; teacher and counselor recommendations; and the preferences of parents and students themselves. All schools in the study had multiple courses of study – such as college prep, general high school graduation, technical and career prep. And finally, the schools all relied on fairly traditional methods of instruction, using textbooks, lectures, and worksheets in their classrooms.

Differences

High expectations; hands-on adults

One big difference centered on expectations for students and how schools helped students meet them. High-impact schools have high expectations for all students, not just those who enter high school as top performers. In addition, the adults in the building – principals, teachers, and counselors – view it as their responsibility to help students succeed academically.

At one high-impact school, for instance, the principal is so committed to ensuring that students take the right classes that he personally reviews and approves the course-registration forms for each of the 1,700 students who attend his school – even when that means carting the forms and

student transcripts home to pore over them in the summer.

We heard time and again from principals and teachers at high-impact high schools that the role of the school was to prepare students for success after high school – whether that was college, postsecondary technical education, or work. And they believed that the responsibility fell to them to ensure students had the opportunity to succeed.

"What we need to do is put them in a position where they can be successful, where they can make choices, rather than having to go to a community college or having to go into the Army," said the principal who reviews mountains of schedules each summer. "We have put them in a position where they can make choices. And the only way you can do that is identify them early, give them the needed help and hope they do the best they can, hope they achieve.

"Because if they don't achieve," he said, "they are not going to make it."

This hands-on approach extends to counseling. While counselors help with course placement at both high- and average-impact schools, counselors at most high-impact schools go a step further: They meet one-on-one with rising eighth-graders to discuss goals and help with course selection and placement. At most average-impact schools, counselors forego the individual meetings with students.

"What we need to do is put them in a position where they can make choices, rather than having to go to a community college or into the Army."

Door is open to rigorous classes

Historically, most American high schools have made advanced coursework – especially, but not exclusively, Advanced Placement courses – available only to students with high prior achievement and teacher recommendations. That has begun to change. But the change appears far more advanced in our high-impact high schools than the average-impact schools.

Three of four high-impact schools offer open enrollment in honors and Advanced Placement courses, without regard to students' grade-point average or teacher recommendations, provided students can maintain a C average in the class.

At one high-impact school where more than 37 percent of juniors and seniors were enrolled in AP classes, the principal insisted that the number of AP classes bore no relation to the number of "smart kids" at his school. Instead, he argued, "I have a lot of AP courses because kids are taking that chance and taking some of those classes."

Average-impact schools, by contrast, place more barriers to student admission in these challenging courses. At most average-impact schools, students must have a strong academic record in the subject area and a teacher recommendation to enter an honors or AP class.

Data drives decisions

While assessment data are available at all the schools studied, administrators in high-impact schools tend to communicate test-score

information more formally than their peers in average-impact schools and make more of an effort to use the information to improve future curriculum and instruction.

A principal in a high-impact school, for instance, meets with department chairs whenever results become available to discuss patterns in the data and requires that they sit down with each member of the department and discuss individual classroom patterns in the data. Each teacher must spell out in writing how they plan to address any student weaknesses that emerge from the test scores. The exercise helps teachers not only to look at what did and did not get taught last year or semester, but to determine what content and skills need to be focused on in the coming year or semester.

At another high-impact school, the school-improvement team, made up mostly of teachers and parents, examines the data and uses the results to allocate resources, such as offering extra tutoring for students struggling with math, in the coming year.

Each teacher must spell out in writing how they plan to address any student weaknesses that emerge from the test scores.

On the other hand, a principal in an average-impact school reports that she copies the data for the staff, puts it in their mailboxes, and asks departments to examine the data, but does not sit down face-to-face with teachers and department chairs to analyze the data. And although this principal said she expects the teachers to use the results of the data to plan, a written plan is not required.

Differences in course content

While methods of instruction were similar across all schools – we observed very traditional lectures in most classes – we found significant differences in the content of assignments given to students.

 An analysis of math assignments shows that the math skills taught and required in high-impact schools were on grade level about 74 percent of the time, while in average-impact schools this was true only 50 percent of the time. Similarly, the math content in math courses at high-impact schools was on grade level about 57 percent of the time, but only 23 percent of the time for average-impact schools. We defined math skills as the knowledge of algorithms and math content as the application of algorithms to model real-world situations.

Another big difference is in attention to reading. Roughly three in four students at high-impact schools report reading books in their English classes, while only 62.2 percent of students in average-impact schools reported doing so. We also found (see "Time" below) that below-grade level students in high-impact schools spent more instructional time in reading-heavy courses. Surveys of the teachers themselves showed a similar pattern. Nearly 71 percent of English teachers at high-impact high schools reported that they assigned students to read every day. That compares to roughly 59 percent of English teachers at average-impact schools.

The extent of classroom discussion as an instructional tool also differed.

Nearly three in four students surveyed at high-impact high schools say they participate in class discussions, compared to about half of students in average-impact schools.

Interestingly, teachers in high-impact schools were less likely to report tailoring their instruction to the academic level of their students. At average-impact schools, for instance, nearly four in 10 teachers said they matched their teaching styles to student learning styles; closer to two in 10 teachers reported doing so at high-impact schools.

This may seem counterintuitive because the practice of altering teaching styles sounds good on the surface. But our research shows how this can result in lowering academic expectations for some students. Just consider how one ninth-grade English teacher at an average-impact school described what it means to meld her teaching style to the learning styles of her students. "We use visuals," she said. "We have our students make collages, draw pictures that show your understanding of a poem, for example."

To be sure, some examples of this sort of instruction also were found in high-impact schools. But, in high-impact schools, classroom assignments were more likely to be related to helping students master the state standards in English and math than in average-impact schools.

Sphere 3: Support for Students

Students who enter the ninth grade behind academically need support so that they can catch up and enter the academic pipeline, and they need that support sooner rather than later. The transition from middle to high school is critical, and support is crucial at this point in a student's academic journey.

In this sphere, we focused on finding out whether specific policies and practices of student support seemed to ease the transition from middle to high school. We wanted to learn more about various support strategies, to determine how and when students are identified for support, who provides the support, and how students know about and get the support they need.

Similarities

All schools in the study reported some form of eighth-grade orientation in which high school staff visited feeder middle schools. All schools in the study use previous examination data to identify and target struggling students for placement into courses designed to provide needed support. All counselors are involved in some way in ninth-grade transition.

Differences

Early warning systems

High-impact schools have in place early warning systems to identify students who need help before it's too late. Average-impact schools are more likely to provide remedial help after students have failed.

At one high-impact school, students are placed in a freshmen academy if they are identified by middle school teachers as likely to struggle in high school. In the academy, they attend classes with as few as nine students and are assigned an academic adviser who monitors their performance on a weekly basis. Another high-impact school requires summer school for students who receive a low score on an eighth-grade competency test.

Another high-impact school in the study developed a "recovery" program for Algebra I in which students who fail a unit of the course go immediately into the after-school recovery program for that unit. This is especially important in math because one unit builds upon another and if the student fails to learn the material in a unit, he is likely to have difficulty with the following units. This program also allows students a chance to better their grade. If the student learns the material, their grade for that unit is changed to a C-minus.

Key Findings: Support

High-impact schools provide help in a way that keeps students on track with college-preparatory requirements. Average-impact schools provide extra help in a way that delays entry into grade-level courses.

Faculty in high-impact schools take responsibility for ensuring that struggling students get the additional help that they need. Average-impact schools generally offer extra help to students, but make it optional.

High-impact schools have in place early warning systems to identify students who need help before it's too late. Average-impact schools are more likely to provide remedial help after students have faltered.

Counselors in high-impact schools are considered members of the academic teams and are responsible for actively monitoring student performance. Counselors in average-impact schools are more likely to get involved with students through referrals.

High-impact schools use business and college partnerships to prepare students for postsecondary opportunities, while average-impact schools tend to use their partnerships for dropout and drug prevention.

Counselors at one high-impact school take stock of the achievement of their incoming students months before they enter their school. The counselors visit the feeder middle school to analyze the students' seventh-grade math scores to determine which students are in jeopardy of not passing the district-mandated eighth-grade Algebra course. (They used the students' seventh-grade scores because the eighth-grade scores came too late in the game to catch the students who really needed help.) Summer school is mandatory for the students who need help. Parents are contacted, counselors meet with students, summer schedules organized and students are slotted into the summer school program.

The summer school program represents a preemptive strike against student failure. In this school, the principal said these efforts are designed to close the cracks before the students fall through, providing support before they enter ninth grade. The earlier in their high school career that these students get help, the more time they will have to continue the academic course trajectory that will place them in a position to make a successful transition to college or work.

In high-impact schools, adminstrators and teachers take responsibility for ensuring that struggling students get the additional help they need.

Sense of responsibility

In high-impact schools, administrators and teachers take responsibility for ensuring that struggling students get the additional help they need, whether that means altering bus schedules or mandating summer school. At high-impact schools little is left to chance. Average-impact schools generally offer extra help to students but make it optional.

Support systems at high-impact schools tend to be more formal than at average-impact schools. Although average-impact teachers reported that they themselves provide tutoring more often than their high-impact counterparts (76.7 percent vs. 67.1 percent), high-impact teachers reported more varied support systems. High-impact schools are more aggressive in providing information about support. For example, one high-impact school posts a matrix outside the office that shows when tutorials are available and which teachers will be providing them. Administrators at this school recognize that a student who is struggling in a class may not necessarily want to work with the teacher of that class and make alternatives available.

Deliberate help

High-impact schools possess a sense of deliberateness and a focus on practices that guarantee student success beyond ninth grade. Average-impact schools seem to succumb to the lack of time, while high-impact schools find ways to extend time for struggling students through outside vendors, Saturday school, and guaranteeing transportation.

One matched set of schools provides an example. The high-impact school not only makes after-school tutoring available, but also makes it mandatory for students in jeopardy of failing. It also provides transportation, taking the responsibility to get students who ride the bus home. At the matched average-impact school, tutoring is available, but

optional, and administrators admit that students who work or who are not within walking distance might not be able to take advantage of the help.

Two out of the four high-impact schools have some form of Saturday tutorial. One high-impact school begins a Saturday tutorial a few weeks before end-of-course examinations. The other high-impact school with a Saturday tutorial offers it 12 weeks into the course. High-impact schools made use of every available time for support—before school, after school, at lunch, etc.

At one high-impact school, for instance, when you walk through the counseling office at lunch time, you see the counselors crowded around a small table, eating lunch in the career center. Although all of them have individual offices, it is counseling department policy for counselors to be available to students during students' most flexible time of the day: lunch.

Adults bend their own schedules to do what they believe is best for students.

The director of the counseling department said the school has "an open door policy with our students.

"We never schedule appointments during lunch simply because we don't want to be tied down," she said. "Students can come in during lunch and just say, without an appointment, 'I need to see a counselor.'"

Adults at this school bend their own schedules to do what they believe is best for the students, rather than asking the students to adjust to the demands of the adults' schedules. First and foremost, these counselors say, they are there to support students.

Staying on pace

High-impact schools are more likely to provide extra help to students in a way that allows students to stay on pace in a college-preparatory curriculum. At some high-impact schools, struggling students receive a double dose of instruction, studying Algebra I with their peers, for instance, while taking a second block of supplemental instruction in the same subject. Average-impact schools tend to slow course-taking for struggling students.

High-impact schools with a block schedule place low-performing students in the appropriate grade-level class in math and/or English as well as a support class. In a 4 x 4 block schedule this might involve a student taking Algebra IA (first semester) then Algebra IB (second semester). At the end of Algebra IB the student takes the Algebra I end-of-course exam. With this structure, the student can complete Algebra I in the ninth grade and enter geometry in 10th grade. As a result, the student remains on pace to complete a college-prep course of study. (The student does have to give up an elective to gain the extra time needed.)

In the high-impact school that has a traditional six-period schedule, administrators provide struggling students with two math (or English) classes, one at grade-level and another to support that class. These support classes provide help to students who entered ninth grade under-prepared.

Slowing down student course-taking, which is what two of the three average-impact schools are more likely to do, may be an intuitive response to helping struggling students, but it limits their ability to continue in the college-prep course of study and keeps them from catching up. For example, one average-impact school puts low-performing students in a remedial or support class before they are allowed to access grade-level courses. In this school, low-performing ninth-grade students, as identified by their scores on their eighth-grade tests, take tech math before taking Algebra I, bumping Algebra I to later in their high school career. This makes it significantly harder for these students to have the time to complete the college-prep course of study.

Counselor involvement

Counselors in all schools are involved in scheduling, but counselors in high-impact schools are considered members of the academic teams and are responsible for actively monitoring student performance and for arranging help when needed. Counselors in average-impact schools are more likely to get involved with students after they are referred by a teacher.

Counselors at high-impact schools report that they are involved in devising four-year plans for students twice as often as counselors at average-impact schools. Far more counselors at high-impact schools reported that they refer students for tutoring or summer school than counselors at average-impact schools. They consistently talk about student academic needs being central to their work and that they encourage students to take tougher classes.

Counselors in high-impact schools are considered part of the academic team.

At one high-impact high school, the lead counselor is a member of the principal's administrative team, which places her in the center of the decision- making body of the school. Students are referred to the team for a variety of reasons, usually to do with lack of academic performance. The team develops a plan with specific recommendations for addressing the student's needs and a counselor is charged with monitoring the implementation of the plan.

Partnerships

High-impact and average-impact schools both have partnerships with businesses and colleges, but high-impact schools use those partnerships to support students' preparation for postsecondary opportunities, while average-impact schools tend to use their partnerships for dropout and drug prevention.

We found that average-impact schools had more partnerships with community organizations that targeted at-risk youth and parents. But high-impact schools had partnerships with local businesses that allowed students to have hands-on experience working in their field of choice. For instance, three of the high-impact schools had partnerships with hospitals and businesses that allowed students to gain clinical experience by working in various departments.

Sphere 4: Teachers

This sphere investigates the variations in teacher characteristics in the study schools, starting with their qualifications, such as their academic preparation, fields of study, and experience. We also examined schools' hiring and firing policies; how teachers are evaluated and assigned to students; and how new and struggling teachers are supported.

Similarities

Teachers in both the high-impact and average-impact high schools have similar qualifications and years of experience. All have earned bachelor's degrees, and some have master's degrees. But there were no identifiable differences in the distribution over high- and average-impact schools. Teachers in both types of schools have been teaching an average of about six years, though teachers in average-impact schools have a greater range of years of experience.

> ### Key Findings: Teachers
>
> High-impact schools use more criteria than teacher preference to make teaching assignments, looking at factors such as past student performance and the teacher's area of study. In average-impact schools, teaching assignments are more likely to be determined by staff seniority and teacher preference.
>
> School-sponsored support for new teachers in high-impact schools is focused on instruction and curriculum. Average-impact schools provide support for new teachers, but it is more personal and social in nature.
>
> Administrators at high-impact high schools adjust class sizes to provide more attention for struggling students. Class sizes in average-impact schools are relatively uniform.
>
> Principals at high-impact high schools exert more control over who joins their staff than those at average-impact schools.

Both sets of schools use formal and informal mechanisms to evaluate teachers. The formal evaluation procedures include observation as outlined by the collective bargaining agreement or state policy. The informal evaluation includes teacher visits, talking with students, studying teacher rapport and the teacher being available to students. We observed no differences in the way high- and average-impact schools use student assessment data to evaluate teachers or to keep track of teacher effectiveness. A majority of the administrators report that they use assessment data to examine teacher performance.

Differences

Teacher assignments linked to student need

We found that high-impact administrators are more likely than their peers at average-impact schools to take teacher qualifications and performance into account in assigning teachers. Three high-impact school administrators reported assigning teachers based on criteria such as qualifications, subject-matter expertise and performance as measured by student test scores. One high-impact school administrator said decisions about teaching assignments are made using test scores in tandem with observations. "We then place our teachers where we feel like our kids are going to be most successful," he said. (See page 44 for a look at how one school handles teacher assignments.)

In average-impact schools, teacher assignment is based largely on seniority and teacher preference.

Assigning teachers on the basis of student need is no easy task. When one high-impact school principal assigned a veteran department

chair to teach struggling ninth-graders, the teacher felt he was being punished rather than being recognized as a skilled professional needed by this group of students. Another high-impact school administrator reported that by taking into account what students need in making teacher assignments, he is changing the culture of the school. Teachers assigned to work with struggling students, he said, "need to wear that like a badge of honor."

Smaller classes for struggling students

This deliberate approach to assigning teachers also shows up in the choices high-impact administrators make about class size. These administrators report a conscious effort to keep ninth-grade classes smaller for struggling and average-performing students. We saw evidence of this in English classes. The average size of a regular ninth-grade English class in high-impact schools is 19 students, while the average class size in an honors English class at the same grade level is 24.

"I think if you have 30 kids in a class, it's tough to teach, especially if you're teaching some at risk kids," said one high-impact principal who decided to lower class sizes in English classes to help faltering students. To make that happen, administrators decided to bump up the size of advanced classes.

"There's no reason why we can't spend more time with those kids at risk to help them get to that next level."

"With that commitment and those classes larger, we are able to make the other classes much smaller," he said. "There's no reason why we can't spend more time with those at risk kids to help them to get to that next level."

In average-impact schools, the difference in English class sizes is negligible. And our study found no discernable difference in the math class sizes at either average- or high-impact schools.

Bigger role in professional development

Teachers in high-impact schools are more likely to have a say in the content of professional development than their peers at average-impact schools. Three in 10 teachers in high-impact schools report that teacher committees make such decisions while one in 10 teachers in average-impact schools report committee decisions about professional development.

Twice as many teachers in the high-impact than average-impact schools reported that staff input is used to decide the type of professional development offered.

Focus on curriculum and instruction for new teachers

Support for new teachers in high-impact schools is focused on instruction and curriculum. One high-impact school principal, for instance, actively encourages a culture in which both veteran and new teachers visit each others' classrooms to observe specific teachers who demonstrate success at teaching a particular concept or skill. High-impact schools also encourage "walk-throughs" during which teachers observe other teachers' instructional practices and then assist each other with

instruction. (See page 39 for details on how one school helps new teachers.)

Average-impact schools tended to provide what could be described as more personal support for teachers. For example, a principal at one average-impact school had what he called "fireside chats" with his new teachers. These meetings were not focused on content or pedagogy, but rather on getting to know the teachers and smoothing their way administratively.

Recruiting Teachers

Although the district hiring policies in all schools in the study are, for the most part, similar, principals at high-impact high schools exert more control over who joins their staff. Principals in high-impact schools tend to work the system to obtain the teachers they need. They will aggressively recruit teachers, making sure that the teachers they want to hire are in the pool of qualified candidates that district officials will send to the principals to interview. They also raid other principal's teachers, asking teachers to request a transfer to their school. "I have a reputation for bird-dogging other people's teachers," one principal noted. "But it's what I need to do to build my school."

On the other hand, principals in average-impact schools tend to rely more on the district to send qualified candidates for them to interview when they have an opening. They make their choices based on who they believe is the best of the bunch, rather than who would be the best teacher for the students they have. "We will get a district list of several names. The timing is everything…." one principal of an average-impact high school said, "The principal may only recommend [to the district] to hire."

Sphere 5: Organizing Instruction: Time and Resources

In this sphere, we wanted to understand whether there were significant differences between high- and average-impact high schools in the amount or organization of instructional time, in the academic focus of that time, or in the availability of instructional materials. We were particularly interested in finding out what proportions of students' days were spent in academic learning and whether there was additional instructional time for students who were below grade level.

Both research and our own experiences in schools tell us that instructional time and materials are by no means all important. Obviously, it depends on how they are used. That said, we also know that without sufficient time and materials, quality teaching is much harder.

Similarities

On the whole, we didn't find big differences between high- and average-impact schools in the availability of instructional materials. Teachers in both kinds of schools reported having access to a wide range of materials, although often not enough to go around. High-impact schools were more likely to have enough reference materials (e.g. dictionaries) for each student to have a copy; teachers in average-impact schools were more likely to have audiovisual equipment. But the differences were in no case large.

The same was true for instructional time. The length of the school year in both sets of schools is the same – 180 days – as is the length of the school day – seven-hour days. Also, both high- and average-impact schools work hard to minimize disruptions to the instructional day.

We didn't find significant differences in the major structures for organizing time, either. Some high-impact schools used traditional six- or seven-period day calendars, while others used the newer "block" schedules; the same was true of average-impact schools.

Differences

The important differences, it turns out, revolve around how time is used.

More deliberate about time

In our work with low-performing high schools, we often find that students who arrive substantially behind, especially in reading, are not asked to read much. Indeed, they are routinely aimed toward courses that don't require much if any reading at all – increasing, rather than narrowing, gaps between groups.

> ## Key Findings: Time & Resources
>
> High-impact schools are more deliberate about the use of instructional time.
>
> Students who enter ninth grade behind in high-impact schools spend more time in courses with substantial reading and/or reading instruction than do their counterparts in average-impact schools.
>
> In high-impact schools, a larger fraction of academic time is spent
>
> in grade level or "college prep" courses, while students in average-impact schools spend more time in "support" or "remedial" courses.
>
> All of the schools in the study say they protect academic time, but high-impact schools have more strategies to efficiently use time and are stricter about enforcement.
>
> For students in both high- and average-impact schools, the senior year has fewer academic challenges than any other year.

While the average-impact schools in this study do a better job placing students who arrive behind in courses that will develop their reading skills, they are not sufficiently aggressive to interrupt the normal trend. In these schools, like their lower-achieving counterparts, students who arrive behind are in fewer reading-heavy courses than students who arrive on grade level, who are, in turn, in fewer such courses than those who are advanced on arrival.

This is not true in the high-impact schools we studied. In these schools, students who arrived behind spent more time in courses with substantial reading or reading instruction than did proficient students and about the same time as did advanced students. The percentage differences are displayed in the table on the following page. While the percentages may, at first, seem small, they are by no means insignificant. A difference of even 1 percentage point over an academic year translates into a difference of at least nine instructional hours.

Percent of Instructional Time Aligned to Reading Assessment				
	All Students	*Behind* Students	*Proficient* Students	*Advanced* Students
School Code				
Average-Impact 1	29%	24%	29%	35%
Average-Impact 2	31%	32%	30%	32%
Average-Impact 3	35%	38%	35%	35%
High-Impact 1	33%	33%	33%	29%
High-Impact 2	39%	38%	39%	39%
High-Impact 3	32%	33%	30%	35%
High-Impact 4	36%	37%	31%	41%
Level of Impact				
All Average-Impact	31%	28%	30%	33%
All High-Impact	34%	35%	33%	35%

More Time Building Literacy Skills

In high-impact high schools, students at all levels spend more time in reading-heavy courses – with the differences biggest for students who enter ninth grade behind. For example, students who enter ninth grade behind in high-impact schools spend 25 percent more time over four years in courses with substantial reading and/or reading instruction. This translates into at least 60 additional instructional hours per year that are focused on literacy acquisition, or 240 additional instructional hours over four years.

In high-impact schools, students who were proficient on arrival spent 33 percent of their instructional time in ninth grade in literacy-aligned courses, while their counterparts in average-impact schools spent 30 percent of their time in literacy-aligned courses. This translates to at least 27 additional instructional hours per year that are focused on reading and reading support. Advanced students in high-impact schools also spent more of their time in reading-heavy courses (35 percent and 33 percent, respectively).

Efficient use of time

All of the schools in the study say they protect academic time, but high-impact schools have more strategies to efficiently use time and are stricter about enforcement.

High-impact administrators ask teachers to monitor halls during transitions; insist that teachers use the entire class period, bell to bell, for instruction; and visit classrooms throughout the school year – increasing those visits at the beginning and end of the school year – to make sure instructional time is used well.

"We go in the classrooms enough that we see what they're doing," said a principal from a high-impact school. "Those little drop-ins that we do weekly, we're able to pick up, during that minute, what is the teacher doing, what are the students doing. In 90 minutes, we want there to be 90 minutes of instruction. You can't lose a minute or two at the beginning and a minute or two at the end. I'm not saying we don't have teachers that maybe close up with a minute but we better not be in there or walking by their classroom seeing students packing up with two or three minutes to go."

"In 90 minutes, we want there to be 90 minutes of instruction. You can't lose a minute or two at the beginning and a minute or two at the end."

One principal at an average-impact school insists on the protection of instructional time, particularly in courses for which there are end-of-course, or EOC, exams, but other statements suggests that academic time still is sacrificed.

"Oh, I guard it religiously," the principal said. "I don't let anybody pull any kid out of an EOC ever unless like today they have got a golf match. But then principals were e mailing back and forth now; we don't want them to leave early for a golf match. They need to work that out. But some things are out of our control."

More rigor for struggling students

In both high- and average-impact high schools, all students spend about the same proportion of their time (approximately 58 percent) in academic classes – that is, classes that focus on academic subject matter and that are either remedial, on grade level, college preparatory or Advanced Placement. However, in high-impact schools, students who are behind spend 10 percent more time in academic courses than their counterparts in average-impact schools. By contrast, students in average-impact schools who are behind take a slightly higher proportion of "support" classes – those designed to help prepare students for college-prep offerings.

SCHOOL PRACTICES AT A GLANCE

School Practices at a Glance		
Subject	**High Impact**	**Average Impact**
Teacher Placement	Principals are more likely to consider student achievement data to determine which classes teachers will be assigned. They review and analyze achievement data, observe teachers' strengths and weakness to ensure struggling students get the teachers who can best accelerate learning.	Principals are more likely to assign teachers to classes based on teacher preference and seniority. For example, department heads often teach only honors and AP classes, while struggling students are taught by less experienced teachers.
Support for New Teachers	Support for new teachers is structured and focuses on curriculum and instruction. New teachers are given model lesson plans, are paired with veteran teachers who teach the same class, and given opportunities to observe master teachers.	Support for new teachers tends to focus on personal support. For example, new teachers meet with administrators to chat about how things are going. The focus is on teacher motivation, rather than helping teachers to develop skills to better serve their students.
Hiring Practices	Principals work within the district system, but aggressively and proactively identify and recruit highly qualified teachers. They may conduct informal interviews and urge good candidates to apply through the district. They may even raid other school faculties, looking for good teachers who will support the school's culture.	Principals tend to feel constrained by district procedures and do not feel empowered to work creatively with it. They tend to take the list of candidates provided by the district and choose the "best of the bunch" from among them, seldom recruiting teachers that they think might be a good fit.
Support for Students	Student support programs tend to be mandatory and are triggered by assessments that signal the student is struggling – participation in the programs is not an option.	Student support programs tend to be voluntary –students and parents are notified of availability of help, but the decision to participate is generally left up to them.
Early Warning System	Schools have "early warning" systems to catch students before they fail. Counselors analyze seventh- and eighth-grade student test scores for entering ninth-graders to identify students who are struggling. Identified students are assigned to a variety of supports, including mandatory summer school, freshman academy classes, or after-school tutoring.	Schools tend to offer support after students have failed a course – e.g. getting an "F" in a course may result in participation in a computerized skill-acquisition course
Grade-level Support	If possible, academic support programs for students are not remedial, but support concurrent grade-level courses, which allows students sufficient time over four years to complete the college-preparatory sequence of courses.	Academic support services for students tend to be remedial in nature. Struggling ninth-graders are placed in remedial courses, delaying access to grade-level work, thus limiting the time available to students to take the necessary sequence of college-preparatory courses.

School Practices At a Glance (continued)		
Subject	**High Impact**	**Average Impact**
Use of Time	Students who arrive behind in ninth grade spend more time in courses with substantial reading than do students who are proficient. Administrators also act vigorously to protect time by limiting announcements over the PA system to emergencies, prohibiting students from being pulled from class except for emergencies, and requiring instruction to be "bell to bell."	Administrators tend to consent to intrusions into academic time, such as announcements calling students to the office and early release for athletes.
Use of Data	Principals tend to be hands-on when it comes to analyzing data. They use data to actively supervise and oversee teacher and student performance. Principals institute formal methods of analyzing data with teachers to determine course content, strengths and weaknesses. Principals may review each student's transcripts to ensure correct placement or to recognize students who have improved performance.	Principals tend to rely on teachers and departments to use data to monitor student performance and are not as involved in the analysis. At one school, for instance, the principal copied data for teachers and asked them to analyze it, but did not work directly with departments to sort out the reasons behind student achievement or how to improve results.
Class Sizes	Administrators tend to make class sizes smaller for struggling students, even if this means larger class sizes for honors and AP classes.	Class sizes are relatively uniform, with no proficiency level having smaller classes than another.
Consistency	Teachers collaborate to ensure that course content is consistent no matter who is teaching.	Teachers work on their own to determine class content.
Standards	Teachers use standards and assessments to monitor their teaching. In courses that have no external standards and assessments, teachers may create them to ensure that students are getting the instruction they need.	Teachers use standards and assessments minimally.

FINDINGS IN PRACTICE

What teachers and administrators clamor for is practical applications that work to help students achieve, rather than abstract theories. In an effort to meet that need, we have provided some descriptions of what practice looks like in some of the high-impact schools studied.

Supporting New Teachers

High-impact schools provide instructional and curriculum support to new teachers in three critical ways:

- They emphasize collaboration.
- They deliberately share curriculum and instructional practices that work.
- They offer specific, structured support for new teachers focused on instruction.

Collaboration

In one high-impact school, a teacher and department chair seemed puzzled by our question about collaboration: "We do it a lot, but we're not told, 'You must collaborate'. Our staff does it." Another teacher in the same school echoed that sentiment: "We've found that teachers who do collaborate have had better success than those [who] don't." Collaboration is not a mandated burden here; rather, collaboration among teachers and between teachers and administrators is an accepted part of the way that the work gets accomplished. "It is just a team effort. Our teachers make the difference here. Absolutely," said a high-impact high school principal.

Although the collaboration was part of the school culture in the school, it was not happenstance. Teachers had regular, set-aside time during which they worked together on curriculum and instruction. One teacher reported that the principal "requires his teachers to work together by department and subject level." She believes that this requirement – for all teachers across all subjects – "has made a difference [in] that people here know that they are going to get support." Further, she said, there are consequences for those teachers who do not collaborate: "People here know that they are expected to…[work together] and if they don't do that, they know that they are not going to stay here."

Teachers had regular, set-aside time during which they worked on curriculum and instruction

Another administrator in this school emphasized the powerful combination of collaboration and commitment to the goal of improving student learning. Administrators review student data and then the principal meets with teachers individually to go over achievement data for their students. If data show that a teacher is having difficulty, the principal will suggest that a teacher meet with a teacher who is finding success. "In order for us to make some improvements, I need you to be willing to go to this teacher and find out what she is doing so that you guys can basically pull each other up" is what the teacher might be told, said the administrator.

Collaboration is viewed as the critical element to improving teachers'

instruction. Instructional practice is not private; rather, it is a shared enterprise with a specific goal: to improve student learning.

Deliberately Sharing Curriculum and Instructional Practices that Work

Teachers in the high-impact high schools worked together on curriculum and instruction, relying on each other as experts in teaching a specific concept or a particular student. For example, in one school, teachers provided one another with extensive support in sharing curricular materials and ideas. One department chair reported, "If we find an activity that we think is wonderful, we stick it in everybody's box and…share."

In this school, teachers are expected to teach the same content in the same order and timing, so that teachers can work together on the curriculum and content. Further, administrators assign new teachers and veteran teachers the same courses, so that new and veteran teachers are both delivering the same content to their students. This facilitates sharing of curricular materials, especially those materials that have proved to have been successful in promoting student achievement.

The principal explained that after a new teacher is hired "we provide them with the support" by providing them with lesson plans that have been shown to work in the past. "That new teacher comes and they are teaching an Algebra I class. They don't have to sit down and do lesson plans. We give them the lesson plans. They have them. And as somebody who was visiting our school a couple of months ago asked one of my new teachers, 'Well, how do you know [the lesson plans] work?' Well, we are at 93 percent proficient in Algebra I. They work."

Structured Support for New Teachers Focused on Instruction

This high-impact school also offered specific programs for new teachers, such as an in-school instructional "coach" for all the new teachers. The coach was a retired teacher who visited the school and the new teachers' classrooms several times per week, depending upon the needs that administrators or the new teachers identified.

The coach works with the new teachers across content areas on "classroom management and things that they should do."

 "If they have trouble finding sources, then I find those sources for them and get it to them," she said. If it's like rubrics for the courses that they teach or lesson plans…I give them some sources."

The coach made use of her extensive contacts with master teachers across the county with whom she would link the new teachers at the school. "If I am in a science class and I have a science teacher that is having problems, then I either go to someone in the county … I have taught here for 35 years so that I know who is a good teacher," she said. "It is kind of more like an intensive care program."

Other high-impact schools offered other forms of instructional support for new teachers such as observation. It was common practice for administrators to walk in and out of teachers' classrooms – new teachers' and veteran teachers' – in order to offer support, evaluate new teachers' progress, and serve as a conduit between the new and veteran teachers in the department and school. In other instances, teachers

themselves did their own "walk-throughs" of their colleagues' classrooms to learn by observing teachers in action. In one high-impact school, struggling new teachers were given release days from teaching in order to observe master teachers in their subject areas. In another school, content specialists were hired to work with new teachers to sharpen their skills in delivering content in a particular discipline.

Using Common Assessments

While the standards and assessment movement has meant more end-of-course exams in high schools than ever before, the majority of high school courses still wrap up each year without a single test that measures how well students perform against the state standards in that subject. In many cases, teachers in these classes are left to their own devices to teach what and how they want.

So how does a school ensure that their students continue their academic growth and remain on track to meet standards even when no state test is looming at the end of the year?

First thing – don't wait for the state.

One principal of a high-impact school in North Carolina has begun to require all his teachers of non-assessed courses to develop common tests that are aligned to state standards. This effort began last year with the 11th grade English teachers, who are not governed by a state-level end-of-course (EOC) exam. "By the end of this year [2005-2006], we will have done them all [the non-EOC courses]. I promise," the principal said.

Teachers at this school have long embraced standards as a tool to raise student achievement and to keep their instruction focused. And teachers discovered that they "spent more time planning and developing on their non-EOC courses because they do not have the guidance there," the principal said.

Rather than railing against the push to align their teaching to state standards, more teachers at this high-impact school are signing on to "benchmark" courses to state standards.

Presenting the common-assessment initiative as a plan to help new teachers, the principal knew that it would benefit all. "When you present it as a way to make their jobs easier, teachers are very cooperative," he said.

The 11th-grade English teachers developed the model used by other teams. Beginning with the state standards for their course, they decided what needed to be taught in each unit of study. They agreed on the texts they would use and the skills they would teach for each unit throughout the year. The team also detailed the types of writing assignments students would complete and even developed sample writing prompts. But most important, they developed a common test for each unit.

Rather than railing against the push to align their teaching to state standards, more teachers at this high-impact school are signing on to "benchmark" courses to state standards.

In an interview with an Ed Trust researcher, one teacher said the benchmarking makes him and his colleagues ask important questions.

"'The Scarlet Letter,' for example, in [my] class and [your] class, how did they score?" he asked. "They had the same test. What do we need to

improve on? What do we need as teachers to say? Are we teaching too much to our strength, our weaknesses? How come this class got it and this other class didn't?"

In some schools, this sort of change could have met with resistance from teachers who viewed it as a threat to their autonomy. However, in this school the teachers saw the benefit of developing common assessments and took on the task as their own. "We realized …that students do struggle and have struggled," one teacher said. "And that's why we're trying to centralize our curriculum among the English 3 [11th grade] teachers…. And if we kind of centralize it, we'll be able to benchmark and try and locate problems. And then, as a collective group, say, 'What can we do better as teachers?'"

After the common assessments are administered, teams of teachers analyze the results to determine what they need to focus on, which teachers seem to have figured out instruction in certain areas, and which teachers are struggling in certain areas. This information about their students' achievement provides them with information that will inform their instruction and help their students to improve academically.

The principal requires that each team submit their common curricular plans and assessments, and he follows up after each unit assessment to see how they plan to address student weaknesses. The efforts are paying off. Today, the school has more than 90 percent of students meeting state standards, while continuing to have a strong track record accelerating the learning of students who enter ninth grade behind academically.

Reassigning Teachers

How do you get the best teachers in front of the students who need them the most? One high-impact school principal has worked to do just that. In recent years, he has bucked the traditional system in which seniority and tenure policies dictate who teaches whom and has assigned some 13 of his most talented teachers to "team teach" in classes that serve struggling ninth-graders and students in special education.

This principal credits this strategy as a key tool in boosting the academic performance of low-performing ninth-graders, who were targeted for extra help based on their performance in eighth-grade Algebra I classes. But it was by no means easy to change long-standing teacher-assignment practices.

He began with the data. In meetings with his staff, the principal pointed out some of the glaring inequities at the school, citing, for instance, the fact that 70 percent of the student body was Latino, yet only 15 percent were enrolled in Advanced Placement classes. The principal also dug out data on schools that serve high-minority populations, but were having far more academic success, and used this information to engage the staff in discussions about why these other, very similar schools were making progress.

And he made the process absolutely transparent, sharing the data and his reassignment plan with both union representatives and his bosses at the central office to preempt any pushback.

He also learned that he needed to be flexible. The principal said he created schedules that allowed his strong teachers to continue teaching some of the advanced class they had always taught, while tackling the new assignments. And in one case, he changed his mind about a teacher he had already reassigned after he observed her negative attitude about the students.

The principal also said he thought the change was possible because of the relationships he's built with the staff during his seven-year tenure at the school and the student-centered culture that pervades the campus. Teachers and administrators are encouraged to read education journals; they routinely talk about the practices that support student achievement, and they attend conferences and other professional meetings that are focused on issues like gap-closing.

Teachers did not embrace the move across the board. One teacher, who had taught mostly honors and advanced placement classes, initially resisted, telling the principal he viewed his new assignment to work with struggling students as a demotion.

The principal said he used a medical analogy to sway the teacher: We expect that the very best doctors will treat the most grievously ill patients, he argued. It should be no different in education. Great teachers have the skills to help the students who struggle the most.

"Teachers sometimes feel that they deserve a certain schedule and to teach a certain group of kids," the principal told an Education Trust interviewer. "The research leads us to something very contrary to that – that the most skillful teachers need to be with the most reluctant learners. And we have begun to do this. And this is not for the faint hearted."

Improving the high school transition

For many students, the transition to high school is not an easy one. Schools have recognized this for some time and have established "freshman academies" to create separate educational experiences for ninth-graders. But in too many cases, these academies keep students apart from their peers, branding them as underachievers and adding to transition problems.

At one high-impact high school, administrators have strived to create a freshman academy in which the line between the students in the academy and their peers is nearly invisible. Students are exposed to a high-level curriculum but are also given additional support. Together with an emphasis on early intervention, teacher quality and support, small class sizes and close relationships between teachers and students, school leaders believe their approach is key to helping low-performing ninth-graders make significant academic strides.

Students are exposed to a high-level curriculum but are also given additional support.

The process begins before ninth-graders even enter the school. Teachers and counselors at the middle school that "feeds" into the high school identify students who would be good candidates for the academy based on several criteria, including academic performance, attendance, their socioeconomic status, and discipline history. Their goal is straightforward: Find the students who will need extra support in the ninth grade in order to participate in the college-preparatory course sequence in high school and give them the help they need.

Only a fraction of ninth-graders attend the academy. During the school year studied, 45 of the 270 students in the ninth-grade class participated. (The maximum number of students in the academy is 60, but the number fluctuates year-to-year because enrollment is based on need.)

Academy students attend classes in the same building as other young people, and they take their elective courses with the general population of ninth-graders. "The students and their parents never know they are in the academy," said the principal, who said he takes specific care to ensure these students do not feel stigmatized as low achievers.

But their core academic courses are taught by academy teachers in classes no larger than 15 students. Moreover, their teachers, who also teach regular classes, are assigned to keep track of a group of academy students, following up on absences, helping student cope with pressures from home and from peers and the like. The academy teachers become informal mentors for students even after they leave the ninth grade.

Teachers report that there are enormous rewards in helping students who struggle academically succeed. Among the examples cited by one teacher: Witnessing a former academy student who became pregnant while still in middle school earn an award as a high school sophomore for maintaining at least a 3.0 grade-point average. Helping a former academy student – now a high school junior – who still seeks her out for advice. Seeing four former academy students write a proposal that persuaded the principal to start a precision dance "step" team at the school.

The teachers also speak of a tight-knit community among the staff who work with these students. Recently, when an academy teacher struggled with his classes, he spent time observing the chairwoman of the English department to shore up his skills. The principal and teachers say this sort of peer modeling happens regularly. For some teachers, teaching in the academy is considered as important, if not more so, than teaching honors classes. For example, the high school's English department chairwoman gave up teaching honors classes in order to teach in the academy, saying that these struggling ninth-graders needed her more.

Conclusion

In recent years, a consensus has emerged on the need to improve America's high schools, especially for students who struggle academically. At every level – from the federal government to the local school board – policymakers are proposing new initiatives to raise standards while helping more students graduate with the knowledge and skills needed for success in college, work, and life.

In this study, we focused our attention on the place where these good intentions and policy initiatives will either succeed or fail: at the school level. We did not study the highest-performing high schools, nor did we compare high-impact high schools to schools near the bottom in terms of student achievement. We purposely chose to compare schools that are much closer to average, in part so that this initial study would have the broadest applicability.

We looked at high schools that are similar – in terms of demographics, and in terms of serving a high percentage of students who struggled academically before entering high school. Generally, such students tend to leave high school even further behind their peers. By looking at high-impact high schools, we sought to find the distinctions, sometimes subtle, between schools that deliver only average academic results and those schools that have been more successful at helping struggling students to catch up.

In practically every area studied – school culture, the academic core, teaching, etc. – we found significant differences in the way high-impact schools operate. But in still other areas, we learned that some potentially powerful reform strategies have yet to take hold in high schools, even in schools that are getting better-than-expected growth for students.

More research is urgently needed. But we hope that by highlighting the practices of high school educators who are making a difference for struggling students, this report offers some guidance to others seeking to improve high school results.

Postscript

Schools were selected based on 2003-04 performance data, and our researchers conducted site visits during the 2004-05 school year. In the months since those visits, new achievement results have been released, and the status of two schools has changed.

One high-impact school improved on the state system of measuring academic growth. It went from being a 'high-growth" School of Distinction to an Honor School of Excellence, which means that the school must maintain high growth and meet AYP (at least 90 percent of students are proficient on state standards). For the 2004-05 academic year, the school also ranked among the 10 most improved high schools in the state.

Another high-impact school was not able to maintain its status. It was a "high-growth" school in 2003-04 under the state's system of measuring academic growth of students but slipped to expected-growth status in 2004-05 because its student body performed no better than expected. (The state determined each school's expected growth by taking into consideration each student's past academic performance and making a prediction of future growth. High-growth schools get better-than-expected growth for their students.)

The school has witnessed high staff turnover in recent years, which may have contributed to the decline in performance. The school has had a new principal for each of the past three years. And it is a small, rural school that finds it hard to recruit and retain teachers. Three teachers in core academic areas left at the end of the 2003-2004 school year. Some of these staff departures were critical. One was an English teacher who oversaw a guided reading-support program for ninth-graders who entered the school below grade level – a crucial component in the school's push to boost the performance of struggling freshmen.

Appendices

Appendix A

Framework Foundation

Since its inception in 1992, the Education Trust has had a substantial "Practice Team", composed of former teachers and administrators with long experience in high-poverty and high-minority schools and districts. Every week, this team is out in schools and classrooms helping local educators in their efforts to improve achievement and close gaps between groups.

Over time, our on-the-ground team has become very clear about the policies and practices that serve to depress student achievement, especially among low-income students and students of color. But we have also seen policies and practices that push in the opposite direction, serving to elevate the achievement of all students. This study is part of our effort to understand those practices in more detail.

In designing the study, we started by looking hard at the literature, and cross-walking the major findings with our own experiences to develop a framework for the collection and analysis of data. Our aim in developing this framework was to take those existing bodies of knowledge and our own expertise and apply it to a set of schools from which there is much to learn about how high schools can help students who enter high school behind.

Our framework has five elements of study: the academic core, including course sequence, course content and instruction; teachers and staff; student supports; time, resources and materials; and culture. Although there are many other aspects of a school community that may directly or indirectly influence academic achievement, like parent and community involvement and district and state policies, it was our intent to focus specifically on what schools can do to improve student academic achievement regardless of external influences outside of the schools' control.

Spheres of Influence

Academic Core

Access to high-level courses and rigorous curriculum and instruction are at the heart of what is needed for all students to achieve at high levels and ultimately be successful in life after high school. The change in market demands remind us that workforce and college preparation are becoming one and the same, and thus there must be an alignment between what is learned in high school and what is required by four-year college institutions and the global job market (Cohen, 2001). Moreover, research tells us that access to high-level coursework and a rigorous curriculum in high school is the best predictor of completion of a four-year college degree and that students needing remediation in college are much less likely to complete a four-year degree (Adelman, 1999). Successful high schools acknowledge the importance of course-taking patterns, course content, and instruction as three distinctive areas that directly impact student success both in school and beyond.

Some of the questions we sought to answer were: How are students placed into courses? Is there a mechanism in place to ensure that course content is covered consistently across different sections of the same courses? Who decides course content and how?

Teachers and Staff

We know from our own research ("Good Teaching Matters; The Real Value of Teachers") and the research of others (Sanders and Rivers, 1998; Sanders and Jordan, 2000) that the quality and effectiveness of teachers is one of the biggest predictors of student academic success. In fact, research tells us that a great deal of learning can be recovered or lost depending on the quality of the teacher (Hanushek, 1992). Many studies of successful schools aim to understand the strategies and practices of schools with regard to recruiting, retaining and supporting quality teachers. According to a study on strategies for closing the achievement gap, effective professional development is one key to developing and supporting good teaching. Arranging for school-day professional development related to course content, as well as scheduling common planning time for departments are two frequently mentioned strategies (Thompson, 2002). Another study showed that successful schools developed support structures like team teaching and allowed teachers to be experimental (Little, 1995). Given the critical relationship between teacher quality and student success, selecting, retaining, and supporting effective teachers could greatly improve districts and schools around the country.

Research questions included: How are decisions made about hiring, reassigning and removing teachers? How are decisions made about teacher/class/student assignments? How are teachers evaluated? Are there policies and processes in place at the school level to aid new teachers or struggling teachers?

Supports for Students

There are a number of psychosocial and emotional supports schools can provide for students. However, unless there are also strong academic supports in place, students who struggle academically have no recourse. Mining the research on high school programs revealed a pattern of successful support strategies being used. For example, research on Achievement for Latinos through Academic Success (ALAS), a program aimed at keeping Latino students in the academic pipeline, discusses the importance of providing a range of support for students that go beyond meeting the psychosocial needs and extend to academic deficiencies (Larson, 1998). The Talent Development model designed to help students placed at risk has also considered the various types of supports students need to gain access to the academic pipeline. Likewise, research conducted on High Schools That Work suggests that in schools where there is a guidance system pushing students towards more challenging courses more students are in the college going pipeline and report having a reason to be in school and working harder (Bottoms, 2003). It is becoming more and more obvious that a range of academic supports are needed to get students on track and keep them in the pipeline toward academic success.

Research questions included: Are there specific policies or practices to ease the transition to high school? How and when are students identified and/or targeted for extra support and using what data? What kinds of supports (e.g. reading specialist, writing center, tutoring) are available to students?

Time, Resources, and Materials

Also becoming more apparent in the literature is that the effective use of time, resources, and materials directly influences student achievement by virtue of creating more opportunities for high-quality teaching and learning. Some educators believe that poor use of time can present major challenges to teaching and learning when the time allotted for teaching a concept only allows for breadth, but not depth, or obstructs opportunities to problem solve (Visher, Emanuel, & Teitelbaum, 1999). More high schools are beginning to use strategies like school-day or year extension to add more time for students to learn (Murphy, Beck, et al., 2001). Also, more administrators are beginning to think creatively about how to use teachers, building space, community partners, and time to improve student achievement (Crawford & Dougherty, 2003). It is our sense that the most successful schools consider all opportunities to improve the quality of teaching and learning in their schools.

What percentage of time during the school day is academic learning time? Is extra academic learning time provided for students who enter ninth grade below grade level?

Culture

A significant amount of literature has also surfaced regarding things like beliefs, motivation, engagement, and shared responsibility among students and teachers, and about how they affect student achievement. What we know from our own experiences in high-achieving schools is that where there is a culture of high expectations for all students beginning with the leadership and echoed by teachers and students, students achieve at higher levels. Many studies have also made connections between expressing high expectations for students and teachers and student achievement. For example, Louis & Miles (1990) describe a healthy school community as one with "common values" while Lee and Smith (1996) stress the importance of collective responsibility among teachers focused on student achievement. And many educators write about the connection between expectations around behavior and academics suggesting that, in schools where students are not confronted about poor attendance or low grades, achievement lags (Crawford & Dougherty, 2003; Visher et al, 1999; Haycock, 1993).

Our main research question in this sphere: What evidence is there that the official mission, values, and beliefs are acted on by the faculty and staff?

APPENDIX B

School Profiles

Jack Britt High School
Fayetteville, NC

School Characteristics[6]

Jack Britt High School is located in Fayetteville, NC and has a total of 1,820 students enrolled, about half of whom are African American. It contains grades nine through 12 and has a student-teacher ratio of 17.2 students to one teacher. Jack Britt did not make Adequate Yearly Progress in 2003 in reading for economically disadvantaged students. In 2004, Jack Britt did make AYP.

According to the school's Web site, Jack Britt's mission is "to provide students with a vast array of educational opportunities essential for academic and social success. The skills we instill, with special emphasis on the ever-changing world of engineering and technology, will prepare them for the work force as well as the academic rigors of a higher education."

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups[7]			
	This School	*District*	*State*
Black	46.3%	50.7%	33.3%
White	43.7%	40.7%	57.6%
Latino	6.5%	5.5%	5.9%
Asian/Pacific Islander	2.1%	1.4%	1.7%
American Indian/Alaska Native	1.3%	1.7%	1.6%

[6] National Center for Educational Statistics, Common Core of Data

[7] National Center for Educational Statistics, Common Core of Data

2003 Enrollment of Students with Special Needs			
	This School	*District*	*State*
Economically Disadvantages[8]	26.5%	54.8%	42.9%
English Language Learners[9]	N/A	1.0%	3.4%
Students with Disabilities[10] [11]	7.8%	13.4%	14.1%

2003 Enrollment Distribution by Gender[12]			
	This School	*District*	*State*
Female	48.1%	48.1%	48.9%
Male	51.9%	51.8%	51.1%

2003 Grade Distribution

2003 Promoting Power[13]		
	This School	*State*
All Students	N/A[14]	63%

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8   National Center for Educational Statistics, Common Core of Data

9   http://www.schoolmatters.com

10   This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

11   http://www.schoolmatters.com

12   National Center for Educational Statistics, Common Core of Data

13   Center for Social Organization of Schools, Johns Hopkins University
     Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier. If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier. The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

14   Jack Britt is a newer school and does not have complete enrollment data for 2000-01; therefore, an official Promoting Power could not be calculated. However, we were able to calculate a Promoting Power using only two years of data—72% for 2001-02 and 78% for 2002-2003—revealing that Jack Britt was not pushing students out in order to make their gains.

Grade 10 Reading Proficiency—2003

Grade 10 Reading Proficiency bar chart comparing Jack Britt HS and State:
- All: 70.6% / 57.4%
- White: 79.4% / 69.5%
- Black: 62.8% / 41.5%
- Latino: 65.7% / 45.9%
- Asian/Pacific Islander: 90.0% / 63.8%
- Low-Income: 49.5% / 43.0%
- Disabled: 30.5% / 19.5%

Legend: Jack Britt HS, State

Grade 10 Math Proficiency—2003

Grade 10 Math Proficiency bar chart comparing Jack Britt HS and State:
- All: 77.2% / 71.7%
- White: 81.3% / 80.9%
- Black: 64.3% / 51.5%
- Latino: 65.7% / 56.5%
- Asian/Pacific Islander: 90.0% / 83.0%
- Economically Disadvantaged: 70.1% / 54.5%
- Students with Disabilities: 27.0% / 32.6%

Legend: Jack Britt HS, State

Academic Growth Over Time[15]
2003-met expected gains
2004-met high gains

North Carolina Department of Public Instruction

Los Altos High School
Hacienda Heights, CA

School Characteristics[16]

Los Altos High School is located on the fringe of Los Angeles. It has grades 9-12, with a total enrollment of 1,883. A majority of the students are Latino. The school's mission includes expecting school-wide results, teaching respect and accountability and to create a sense of unity. Los Altos High School made AYP in 2003.

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups			
	This School	*District*	*State*
White	13.9%	8.1%	39.0%
Black	1.9%	2.7%	8.0%
Latino	56.6%	72.3%	40.5%
Asian	27.3%	16.2%	9.8%
American Indian/Alaska Native	0.3%	0.4%	1.7%

2003 Enrollment of Students with Special Needs			
	This School	*District*	*State*
Economically Disadvantages	35.8%	69.5%	45.4%
English Language Learners	11.0%	1.0%	25.6%
Students with Disabilities [17]	Not Reported	Not Reported	10.65%

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[16] http://nces.ed.gov

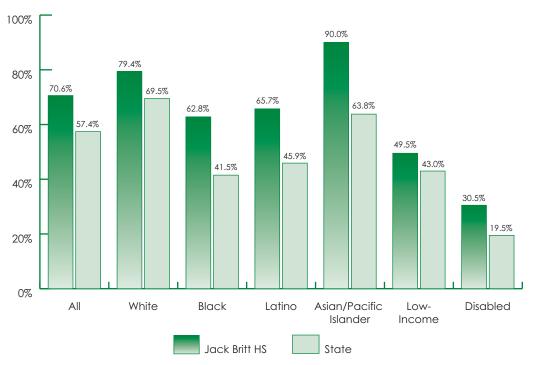[17] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

2003 Enrollment Distribution by Gender			
	This School	*District*	*State*
Female	47.4%	46.0%	46.5%
Male	52.6%	51.6%	52.4%

2003 Grade Distribution

2003 Promoting Power[18]		
	This School	*State*
All Students	91%	75%

[18] Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) The data are drawn from the U.S. Department of Education's Common Core of Data. Only school level grade-by-grade enrollment data are available for all public schools in the U.S. At the present time, there is no data source that reports the number of graduates from each high school in the U.S. This is why 9th-grade enrollments are not being compared to the number of graduates.

If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier.

If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier.

The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

Center for Social Organization of Schools, Johns Hopkins University

Grade 11 English Language Arts Proficiency—2003

Bar chart showing Grade 11 English Language Arts Proficiency—2003, comparing Los Altos HS and State:

Category	Los Altos HS	State
All	23%	37.4%
White	40.0%	56.0%
Black	25.0%	24.6%
Latino	20.0%	22.2%
Asian/Pacific Islander	64.0%	59.3%
Low-Income	30%	22%
ELL	7.0%	17.9%

California High School Exit Exam Math Proficiency—2003

Bar chart showing California High School Exit Exam Math Proficiency—2003, comparing Los Altos HS and State:

Category	Los Altos HS	State
All	60.2%	40.2%
White	68.8%	55.0%
Black		23.0%
Latino	46.6%	27.3%
Asian/Pacific Islander	91.1%	68.9%
Low-Income	42.7%	27.7%
ELL	52.5%	26.9%

2003 API Growth		
	This School	*State*
All Students	119	87

*2003 Math data from SchoolData.org. No disaggregated data available for the California High School Exit Exam. 2004 math data from SchoolMatters.org

East Montgomery High School
Biscoe, NC

School Characteristics[19]

East Montgomery High School is a small, rural high school with grades 9-12 in the geographic center of North Carolina. It has a total enrollment of 567. A little more than half of the students are White. The rest of the enrollment is almost evenly divided between Black and Latino students. Almost half of the students are economically disadvantaged. The school has a student-teacher ratio of 12.9 students to one teacher.

East Montgomery, according to its Web site, is committed to providing a safe environment where students are prepared to become members of a highly technological society. Each student will be encouraged to develop skills to help him/her become a productive citizen who exhibits confidence, high self-esteem, and the ability to become a life-long learner.

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups[20]			
	This School	*District*	*State*
White	54.1%	53.1%	57.6%
Black	23.3%	29.3%	33.3%
Latino	22.0%	15.0%	5.9%
Asian/Pacific Islander	0.0%	2.5%	1.7%
American Indian/Alaska Native	0.0%	0.1%	1.4%

2003 Enrollment of Students with Special Needs			
	This School	*District*	*State*
Economically Disadvantages[21]	46.2%	52.9%	37.5%
English Language Learners[22]	11.7%	13.2%	3.4%
Students with Disabilities [23] [24]	10.5%	13.0%	14.1%

National Center for Educational Statistics, Common Core of Data
National Center for Educational Statistics, Common Core of Data

2003 Enrollment Distribution by Gender[25]			
	This School	*District*	*State*
Female	48.1%	45.4%	51.9%
Male	51.3%	54.6%	48.0%

2003 Grade Distribution

2003 Promoting Power[26]		
	This School	*State*
All Students	66%	63%

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[21] National Center for Educational Statistics, Common Core of Data

[22] http://www.schoolmatters.com

[23] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

[24] http://www.schoolmatters.com

[25] National Center for Educational Statistics, Common Core of Data

[26] Center for Social Organization of Schools, Johns Hopkins University
Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier. If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier. The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

Grade 10 Reading Proficiency—2003

All: East Montgomery HS 66.5%, District 57.4%
White: East Montgomery HS 70.4%, District 69.5%
Black: East Montgomery HS 41.1%, District 41.5%
Latino: East Montgomery HS 78.5%, District 45.9%
Low-Income: East Montgomery HS 68.3%, District 43.0%
ELL: East Montgomery HS 63.2%, District 26.0%
Disabled: East Montgomery HS 11.8%, District 19.7%

Legend: East Montgomery HS | District

Grade 10 Math Proficiency—2003

All: East Montgomery HS 66.6%, State 57.7%
White: East Montgomery HS 69.1%, State 74.0%
Black: East Montgomery HS 55.9%, State 47.6%
Latino: East Montgomery HS 69.8%, State 54.6%
Low-Income: East Montgomery HS 64.7%, State 50.3%
ELL: East Montgomery HS 63.1%, State 41.6%
Disabled: East Montgomery HS 11.8%, State 25.4%

Legend: East Montgomery HS | State

Academic Growth Over Time[27]
2003-met expected gains
2004-met high gains

North Carolina Department of Public Instruction

Farmville Central High School
Farmville, NC

School Characteristics[28]

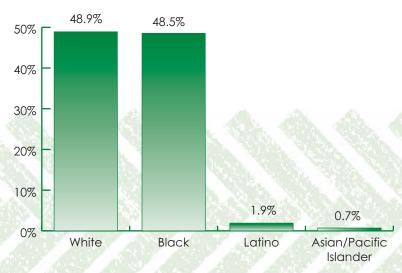Farmville Central High School is located in eastern North Carolina, on the urban fringe of Greenville. It has 742 students in grades nine through 12 and has a student-to-teacher ration of 13.5.

The mission of Farmville Central High School is to "educate our students through excellence in teaching and setting high standards in a safe, orderly environment. It is our desire to prepare our students for a multi-culturally diverse and technical global society in which they can be successful and contribute to making our world a more compassionate and productive place to live."[29] Farmville Central did not make Adequate Yearly Progress in 2003 for Black or economically disadvantaged students. It did make AYP in 2004.

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups[30]			
	This School	*District*	*State*
White	48.9%	40.6%	57.6%
Black	48.5%	54.0%	33.3%
Latino	1.9%	4.1%	5.9%
Asian/Pacific Islander	0.7%	1.2%	1.7%
American Indian/Alaska Native	0.0%	0.1%	1.6%

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[28] National Center for Educational Statistics, Common Core of Data

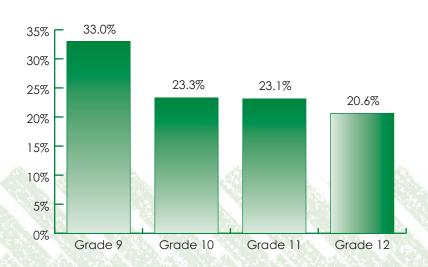[29] School web site

[30] National Center for Educational Statistics, Common Core of Data

2003 Enrollment of Students with Special Needs			
	This School	*District*	*State*
Economically Disadvantages[31]	32.1%	50.2%	37.5%
English Language Learners[32]	N/A	1.6%	3.4%
Students with Disabilities [33] [34]	11.8%	14.0%	14.1%

2003 Enrollment Distribution by Gender[35]			
	This School	*District*	*State*
Female	47.3%	48.1%	51.9%
Male	52.7%	51.9%	48.0%

2003 Grade Distribution

Grade	Percent
Grade 9	33.0%
Grade 10	23.3%
Grade 11	23.1%
Grade 12	20.6%

2003 Promoting Power[36]		
	This School	*State*
All Students	60%	63%

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[31] National Center for Educational Statistics, Common Core of Data

[32] http://www.schoolmatters.com

[33] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

[34] http://www.schoolmatters.com

[35] National Center for Educational Statistics, Common Core of Data

[36] Center for Social Organization of Schools, Johns Hopkins University
      Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier. If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier. The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

Academic Achievement [37]

Grade 10 Reading Proficiency—2003

100%

80%

60%

40%

20%

0%

68.5% 57.4% 80.9% 69.5% 53.8% 41.5% 73.2% 65.2% 64.0% 53.5% 66.7% 43.0% 31.6% 19.7%

All   White   Black   Female   Male   Low-Income   Disabilities

■ Farmville Central HS   ☐ State

Grade 10 Math Proficiency—2003

80%

70%

60%

50%

40%

30%

20%

10%

0%

62.4% 62.7% 77.0% 74.0% 45.5% 47.6% 62.2% 67.8% 62.7% 61.6% 52.1% 50.3% 15.8% 24.4%

All   White   Black   Female   Male   Low-Income   Disabilities

■ Farmville Central HS   ☐ State

Academic Growth Over Time [38]
2003-met expected gains
2004-met high gains

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[37] American Institutes of Research

[38] North Carolina Department of Public Instruction

School A1 Data Profile

School Characteristics[39]

School A1 is a rural school in a southern state. It has 969 students in grades eight through 12 and has a student-to-teacher ratio of 14.5:1. The mission of School A1 is to graduate student who possess the attitudes, knowledge, and skills necessary to achieve their potential and become productive and responsible citizens in a changing world.[40] School H5 failed to make Adequate Yearly Progress for Black and economically disadvantaged students.

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups[41]			
	A1	*District*	*State*
White	55.3%	43.8%	57.6%
Black	37.1%	45.9%	33.3%
Latino	2.8%	5.2%	5.9%
Asian/Pacific Islander	3.9%	4.4%	1.7%
American Indian/Alaska Native	0.9%	0.7%	1.6%

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[39] National Center for Educational Statistics, Common Core of Data

[40] School web site

[41] National Center for Educational Statistics, Common Core of Data

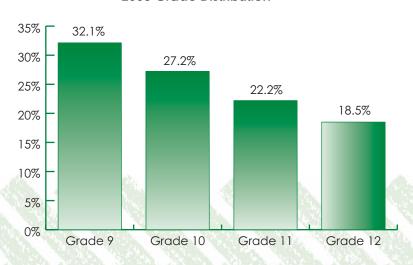| 2003 Enrollment of Students with Special Needs			
	A1	*District*	*State*
Economically Disadvantages[42]	45.6%	49.2%	37.5%
English Language Learners[43]	1.6%	3.8%	3.4%
Students with Disabilities [44] [45]	13.5%	17.3%	14.1%

2003 Enrollment Distribution by Gender[46]			
	A1	*District*	*State*
Female	49.5%	48.6%	51.9%
Male	50.5%	51.4%	48.0%

2003 Grade Distribution

2003 Promoting Power[47]		
	A1	*State*
All Students	58%	63%

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[42] National Center for Educational Statistics, Common Core of Data

[43] http://www.schoolmatters.com

[44] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

[45] http://www.schoolmatters.com

[46] National Center for Educational Statistics, Common Core of Data

[47] Center for Social Organization of Schools, Johns Hopkins University
Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier. If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier. The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

Academic Achievement [48]

Grade 10 Reading Proficiency—2003

Legend: A1 | State

Category	A1	State
All	54.8%	57.4%
White	71.3%	69.5%
Black	31.8%	41.5%
Latino	33.3%	45.9%
Asian/Pacific Islander	25.0%	63.8%
Female	59.5%	65.2%
Male	49.6%	53.5%
Economically Disadvantaged	36.0%	43.0%
Non-Disadvantaged	65.4%	66.4%
Students with Disabilities	17.2%	19.7%
Non-Disabled Students	60.0%	63.2%

Grade 10 Math Proficiency—2003

Legend: A1 | State

Category	A1	State
All	54.8%	62.7%
White	74.8%	74.0%
Black	35.7%	54.6%
Latino	33.3%	76.7%
Asian/Pacific Islander	37.5%	76.7%
Female	59.5%	76.7%
Male	55.8%	61.1%
Economically Disadvantaged	40.0%	50.3%
Non-Disadvantaged	69.1%	71.4%
Students with Disabilities	27.6%	25.4%
Non-Disabled Students	63.0%	68.7%

Academic Growth Over Time[49]
2003-met expected gains

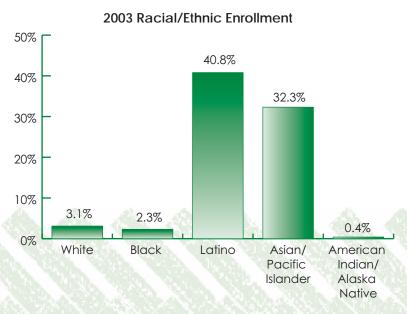---

[48] American Institutes of Research

[49] North Carolina Department of Public Instruction

School A2 Data Profile

School Characteristics[50]

School A5 is a high school in a large city on the West Coast. It has an enrollment of 1,700 students in grades nine through 12. It has a student-to-teacher ratio of 20 to 1. It has a magnet school within the larger school. School A2 prepares students through rigorous coursework for the tech and global opportunities of the 21st century. The themes of literacy, high achievement, and technology are interwoven throughout the students' day. School H5 did make Adequate Yearly Progress in 2003.

Demographic Breakdown[51]

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups			
	A2	*District*	*State*
White	3.1%	12.7%	39.0%
Black	2.3%	4.3%	8.0%
Latino	40.8%	57.8%	40.5%
Asian/Pacific Islander	32.3%	24.7%	9.8%
American Indian/Alaska Native	0.4%	0.5%	0.7%

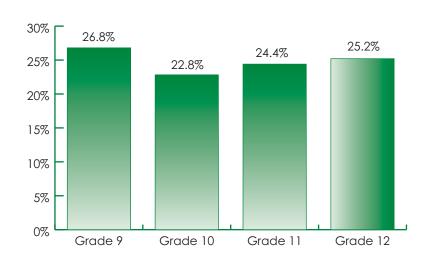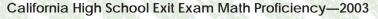| 2003 Enrollment of Students with Special Needs			
	A2	*District*	*State*
Economically Disadvantages	38.5%	30.8%	45.4%
English Language Learners	37.9%	24.7%	25.6%
Students with Disabilities [52]	Not Reported	Not Reported	10.6%

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[50] http://nces.ed.gov

[51] http://www.schoolmatters.com

[52] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

2003 Enrollment Distribution by Gender			
	A2	*District*	*State*
Female	45.4%	46.9%	46.5%
Male	54.6%	52.9%	52.4%

2003 Grade Distribution

California High School Exit Exam Math Proficiency—2003

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[53] Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) The data are drawn from the U.S. Department of Education's Common Core of Data. Only school level grade-by-grade enrollment data are available for all public schools in the U.S.

Grade 11 English Language Arts Proficiency—2003

Bar chart showing proficiency percentages by group (A2 = solid green, State = light green):

Group	A2	State
All	19.0%	37.4%
White	36.0%	56.0%
Black		24.6%
Latino	11.0%	22.2%
Asian/Pacific Islander	27.0%	59.3%
American Indian/Alaska Native		32.4%
Economically Disadvantaged	16.0%	22.0%
ELL	1.0%	17.9%
Students with Disabilities	3.0%	14.7%

Legend: ■ A2   ☐ State

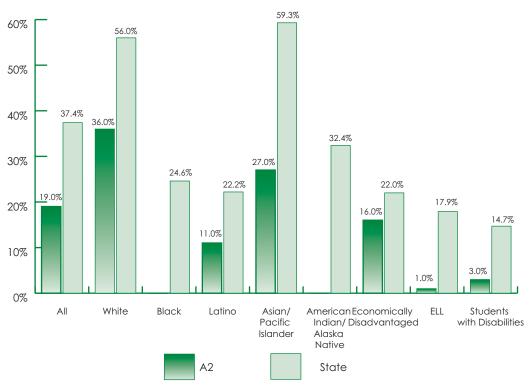| 2003 Promoting Power[53]		
	A2	*State*
All Students	72%	75%

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[53] Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) The data are drawn from the U.S. Department of Education's Common Core of Data. Only school level grade-by-grade enrollment data are available for all public schools in the U.S.

At the present time, there is no data source that reports the number of graduates from each high school in the U.S. This is why 9th-grade enrollments are not being compared to the number of graduates.

If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier.

If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier.

The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.
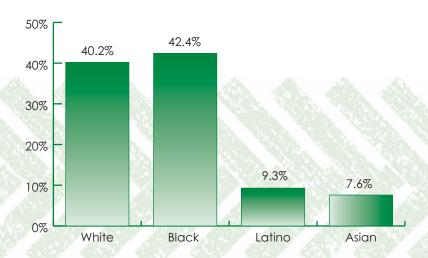
School A3 Data Profile

School Characteristics[54]

School A3 is located on the fringe of a large city in a southern state. It has an enrollment of 1,201 students in grades nine through 12. It has a student-to-teacher ratio of 13:1. There is a small magnet school inside the school. According the school's Web site, school A3 is committed to academic excellence. Students are strongly encouraged to take advanced, Academically Gifted and Advanced Placement courses. Staff members participate in ongoing in-service programs that equip them with highly specialized content knowledge and the most innovative creative teaching techniques. School A3's Technology Program affords students the unique opportunity to obtain the necessary networking skills for post-school employment.[55]   School A3 failed to make Adequate Yearly Progress in 2003 for black and economically disadvantaged students.

Demographic Breakdown

2003 Racial/Ethnic Enrollment

2003 Enrollment of Racial/Ethnic Groups[56]			
	A3	*District*	*State*
White	40.2%	37.7%	57.6%
Black	42.4%	48.8%	33.3%
Latino	9.3%	8.8%	5.9%
Asian/Pacific Islander	7.6%	4.1%	1.7%
American Indian/Alaska Native	0.05%	0.7%	1.6%

National Center for Educational Statistics, Common Core of Data

School Web site

National Center for Educational Statistics, Common Core of Data

2003 Enrollment of Students with Special Needs			
	A3	*District*	*State*
Economically Disadvantages[57]	25.6%	48.4%	37.5%
English Language Learners[58]	12.7%	6.3%	3.4%
Students with Disabilities [59] [60]	12.1	12.1	14.1%

2003 Enrollment Distribution by Gender[61]			
	A3	*District*	*State*
Female	46.9%	48.6%	51.9%
Male	53.7%	51.3%	48.0%

2003 Grade Distribution

	Grade 9	Grade 10	Grade 11	Grade 12
	35.6%	27.4%	21.1%	16.0%

2003 Promoting Power[62]		
	A3	*State*
All Students	55%	63%

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[57] National Center for Educational Statistics, Common Core of Data
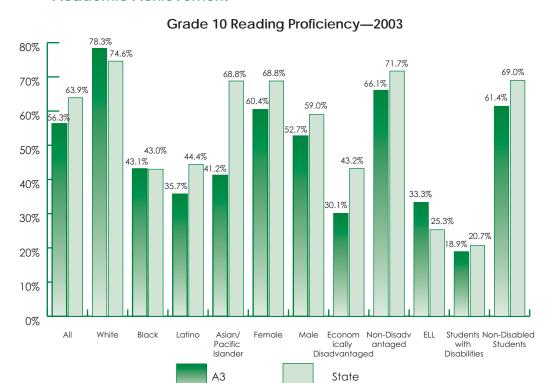
[58] http://www.schoolmatters.com

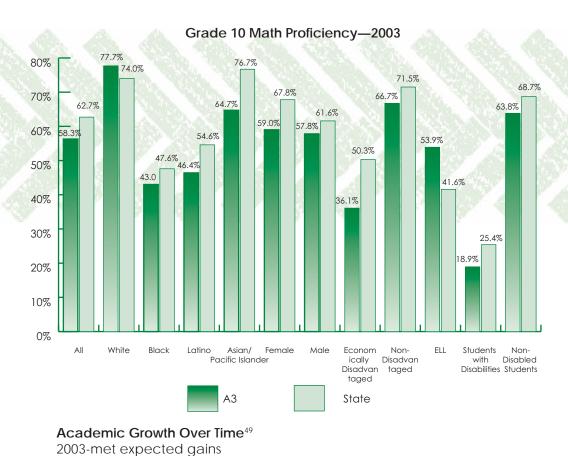[59] This category includes a wide range of disabilities, from severe mental retardation, to dyslexia, to blindness.

[60] http://www.schoolmatters.com

[61] National Center for Educational Statistics, Common Core of Data

[62] Center for Social Organization of Schools, Johns Hopkins University
Promoting Power compares the number of 12th-graders to the number of 9th-graders enrolled in a school four years earlier (in 10-12 schools the comparison is between 12th grade and 10th grade three years earlier.) If a school has promoting power of 90% or more, it means that the number of 12th-graders is at least 90% of the number of 9th-graders four years earlier. If a school has promoting power of 60% or less, it means that the number of 12th-graders is 60% or less of the number of 9th-graders four years earlier. The promoting power percents reported in the tables and graphs are three-year averages for the classes of 2000, 2001, and 2002. This is the most recent data available.

Academic Achievement [63]

Grade 10 Reading Proficiency—2003

Values by category (A3, State):
- All: 56.3%, 63.9%
- White: 78.3%, 74.6%
- Black: 43.1%, 43.0%
- Latino: 35.7%, 44.4%
- Asian/Pacific Islander: 41.2%, 68.8%
- Female: 60.4%, 68.8%
- Male: 52.7%, 59.0%
- Economically Disadvantaged: 30.1%, 43.2%
- Non-Disadvantaged: 66.1%, 71.7%
- ELL: 33.3%, 25.3%
- Students with Disabilities: 18.9%, 20.7%
- Non-Disabled Students: 61.4%, 69.0%

Legend: A3 | State

Grade 10 Math Proficiency—2003

Values by category (A3, State):
- All: 58.3%, 62.7%
- White: 77.7%, 74.0%
- Black: 43.0, 47.6%
- Latino: 46.4%, 54.6%
- Asian/Pacific Islander: 64.7%, 76.7%
- Female: 59.0%, 67.8%
- Male: 57.8%, 61.6%
- Economically Disadvantaged: 36.1%, 50.3%
- Non-Disadvantaged: 66.7%, 71.5%
- ELL: 53.9%, 41.6%
- Students with Disabilities: 18.9%, 25.4%
- Non-Disabled Students: 63.8%, 68.7%

Legend: A3 | State

Academic Growth Over Time[49]
2003-met expected gains

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[63] American Institutes of Research

HIGH IMPACT HIGH SCHOOL STUDY TEAM

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About the Education Trust

The Education Trust, Inc. was created to promote high academic achievement for all students, at all levels – pre-kindergarten through college. While we know that all schools and colleges could better serve their students, our work focuses on the schools and colleges most often left behind in plans to improve education: those serving African-American, Latino, Native American and low-income students.

The Education Trust works side-by-side with policymakers, parents, education professionals, community and business leaders – in cities and towns across the country – who are trying to transform their schools and colleges into institutions that genuinely serve all students. We also bring lessons learned in local communities back to Washington to help inform national policy debates.

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