

Linking Research and Resources for Better High Schools

Report on Key Practices and Policies of Consistently Higher Performing High Schools





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EXECUTIVE SUMMARY

Much has been written recently about the ways many high schools are failing students, including that at least one in four students in the United States fails to complete high school at all.¹ Nearly 40 percent of those who do graduate say they feel inadequately prepared for college or the workplace.² Only 38 percent of 12th graders can read at a proficient level, and only three-fifths can understand moderately complex math.³

Much less has been written about the ways successful high schools manage to maintain standards of excellence for all students, pursuing high academic standards while still closing the achievement gap.

This report focuses on successful high schools, highlighting the ways in which many superintendents, principals, teachers, and students are setting and meeting high expectations for all students. While these evidence-based practices can inform high schools across the country, this report has been developed specifically with state-level leaders in mind, providing them with suggestions on how they may support initiatives that are linked with accelerated learning.

An overarching thematic framework emerged as the National Center for Educational Accountability (NCEA) took a close look at the practices that distinguished higher performing schools from average performing schools.⁴ While the details of each school's approaches sometimes varied, the common areas of focus did not. While there is no one-size-fits-all approach that these schools and their districts have taken, they share a set of basic elements comprising a higher performing high school framework:

- They set explicit academic goals that are aligned with and often exceed state standards.
- Their focused professional development activities support a culture of collaboration.
- Educators embrace broader learning objectives than just their own subject matter and use differentiation strategies
 to reach students at all levels.
- Teachers interpret student achievement data to make decisions about teaching.
- Schools recognize student and teacher achievement within a context of support.

State leaders must play a critical role in ensuring that the basic components of this framework for higher performing high schools exist in the school systems that their respective departments of education have targeted for improvement. State-level initiatives can include providing explicit details regarding:

- setting academic standards;
- coordinating states' policy regarding teacher quality and taking an active role in guiding and supporting professional development for high school teachers;
- administering access to adolescent literacy coaches and supporting technology enhancement; and
- guiding educators on how to collect, analyze and report data so that they are comparable across the state.

These are just a few of the ways states can consider supporting higher performing high schools whenever feasible. While it is a reality that states face resource constraints, it is imperative that high school improvement efforts be made a priority.

In the following report, we describe the methodology; the key overarching elements of higher performing high schools; take-aways for state leaders interested in supporting higher performing high schools; specific evidence-based practices at the district, school and classroom levels; and conclusions drawn from the data.

METHODOLOGY

Using a case study methodology, NCEA visited 74 average and higher performing high schools in 10 states to identify the fundamental teaching and learning practices shared across higher performing high schools.

These practices are widely applicable, as the diversity of the schools studied has been exceptionally broad: NCEA studied schools with populations ranging from 260 to 4,600 students; with populations of at-risk students and gifted students; schools that were almost entirely African American or Hispanic or White or up to 66% Asian, and a variety of compositions in between; as well as schools with as many as 62% English learners, and up to 96% economically disadvantaged students. These include rural, suburban, and urban schools, and all have sustained remarkably higher performance.

NCEA identified high schools to visit and study through an examination of student achievement data that are publicly available from each state's department of education. For this report, NCEA looked for those high schools that consistently outperformed other schools with similar demographics in reading or mathematics in the 2001-02, 2002-03, and 2003-04 school years. NCEA visited both average and higher performing schools to ensure the findings represent what distinguishes higher performers from others. While some average performers may implement some of the practices included in this report, the higher performing high schools implemented key practices within each of the five themes of the NCEA framework at the classroom, school, and district levels.

Schools were selected for site visits on the basis of common criteria:

- Achievement among both poorly prepared and well-prepared students: Whenever possible, NCEA used longitudinal data to divide students into two groups based on their achievement prior to entering high school: those whose eighth-grade assessment scores were below the states' proficiency standard, and those whose eighth-grade scores met or exceeded that standard. Student data were disaggregated in this way because addressing the needs of poorly prepared students presents a different challenge than does educating those who are well prepared. NCEA chose to study high schools that were demonstrating success with both groups.⁵
- Performance in relation to demographically comparable schools: Each school was ranked against the high schools in the rest of the state for each grade, subject, year, and prior achievement group. For example, a school whose previously "below standard" students had a "performance relative to predicted" higher than their counterparts in 95 percent of the schools in 10th-grade reading in 2004 would receive a percentile rank of 95 for that subject, grade, year, and prior achievement group. These ranks were averaged separately for reading and mathematics across the measured years, grades, and two prior-achievement groups to produce an overall average performance rank by subject. To be selected as higher performing for the purposes of this study, schools had to have overall average percentile ranks above 66.6 (that is, be in the top third of schools in the state) in either reading or mathematics.⁶

Site visits and interviews with school personnel were guided by standardized observation and interview protocols.



ELEMENTS SHARED AMONG CONSISTENTLY HIGHER PERFORMING HIGH SCHOOLS

The following is a more detailed description of the characteristics of the higher performing high schools:

Curriculum and Academic Goals

Equipped with state standards that had been clarified and specified in the district's written curriculum, teachers in the higher performing schools carefully studied, further detailed and effectively implemented those standards using tools such as curriculum maps, pacing guides, aligned instructional programs and materials, and formative benchmark assessments. Higher performing schools deeply integrated the state standards into their written curriculum, but viewed state standards as the floor for student achievement, not the target. Educators did not see those standards as a digression from the real curriculum, but as the foundation of the curriculum. With a focus on core learning skills, grade-level and vertical teams continually reviewed and revised the curriculum. That curriculum communicated high expectations for all students, not just the academically advanced.

Staff Selection, Leadership, and Capacity Building

While the selection and development of strong instructional leaders—both administrative and teacher leaders—continued to be seen as critical to increased student achievement, the key aspect within this theme was in the area of teacher collaboration. Teachers expected and found it normal for other teachers to visit their classes and to engage in dialogue about what was and was not working in terms of instruction. An integral part of that dialogue was discussion of student performance data. Higher performing schools incorporated time within the school day for teachers to collaborate on ways to address needs indicated by data and classroom observations. Systemic and focused professional development activities supported the new culture and ensured that teachers and leaders developed a deep understanding of the curriculum and the strategies needed to deliver it.

Instructional Programs, Practices, and Arrangements

Educators focused on broader learning objectives than just their own subject matter. Master schedules gave all levels of students access to the most experienced and successful teachers, and all teachers taught struggling students. Teachers used carefully selected instructional strategies and practices—especially instructional differentiation and effective use of technology—to ensure that instruction was not watered down. Systems were in place to support the greater numbers of students who were encouraged to attempt Advanced Placement coursework.

Monitoring: Compilation, Analysis, and Use of Data

Educators were able to determine the most effective use of scarce resources by collecting, disaggregating, and interpreting student performance data. Monitoring of student performance was varied and continuous, and personnel at all levels of the system viewed frequent assessments as integral to improved performance. Data were organized and available, and teachers were both highly dependent on and skilled at using data to make informed decisions about teaching and learning.

Recognition, Intervention, and Adjustment

Recognition of students' and teachers' achievements was specific and substantial. Students and teachers understood the specific behaviors or accomplishments for which they were being recognized, and those behaviors or accomplishments centered on academics. The most significant factor in providing appropriate interventions for students was the development of layers of support. Systems of support specifically addressed the needs of students who were "stretching" to take more rigorous coursework. For example, extra time was provided by all schools, either during or after the school day, to help students recover credit for previously attempted courses.

TAKE-AWAYS FOR STATE LEADERS

States can play a critical role in ensuring that the basic components of this framework for higher performing high schools are in place in high schools across their states.

- Setting standards: Curriculum and academic goals

 State standards are used to set minimum district and school goals, develop supporting curriculum materials, and create common assessments, all of which relate to what every student is expected to know and do in each subject at each grade level. When states provide explicit detail regarding academic standards, as well as guidance to districts on ways they can interpret and align with state standards, districts are more likely to meet and exceed those standards.
- Building capacity for high school improvement and ensuring quality teachers: Staff selection, leadership, and capacity building As states develop their policy framework around teacher quality, it is important they ensure all personnel policies work together toward the same outcome: providing every high school classroom a quality teacher who knows what to teach and how to teach it to high school students. States should develop coordinated policies regarding teacher recruitment, preparation, and evaluation. These policies must be linked to student standards, with a focus on incentives to attract, train, and retain the highest quality educators in all of its high schools.
 - States throughout the nation continue to experience greater demands on limited resources. However, wherever fiscally feasible, states should consider various possibilities for providing technical assistance to educators throughout the state. One example would be establishing and funding a system of regional service centers in order to deliver professional development to local school systems, specifically including activities that emphasize instructional approaches that are demonstrably most effective in high schools.
- Reaching more students: Instructional programs, practices, and arrangements

 Higher performing high schools show an ability to provide differentiated instructional approaches to meet a wide variety of student learning needs. They accomplish this without watering down standards, and therefore help more students meet high academic expectations. States must facilitate using evidence-based instructional materials that are designed to connect with a variety of learning styles and needs within the traditional classroom, employing technology to reach students for course recovery work, and permitting flexibility in school schedules to maximize time for instruction.

 Innovative state-level initiatives such as pilot programs involving funding for adolescent literacy coaches or technology grants for online learning are a few of the many options for states to provide leadership on this front.
- Facilitating informed decision-making: Monitoring: Compilation, analysis, and use of data

 Even the best teachers using the most rigorous curriculum need user-friendly data systems to focus their efforts as efficiently and effectively as possible. When states collect the most relevant data and are able to match individual student records over time, they can answer questions that are at the core of educational effectiveness. Longitudinal data—data gathered on the same student from year to year—make it possible to determine the value-added of specific schools and programs by following individual students' academic growth; identify consistently high-performing schools, so educators and the public can learn from best practices; evaluate the impact of teacher preparation and training programs on student achievement; and focus school systems on preparing a higher percentage of students to succeed in rigorous high school courses, college, and challenging jobs. States seeking to improve the quality of the data they collect and use can benefit from organizations devoted to help them do that. For instance, the Data Quality Campaign (DQC) is a national collaborative that provides practical guidelines for implementing statewide longitudinal data systems.⁸
- Supporting data-responsive action: Recognition, intervention, and adjustment
 When students fail to master the identified academic milestones, higher performing high schools provide pyramids of intervention that provide immediate and intense support at multiple levels. Bringing all students to desired performance levels requires evidence-based prevention and intervention models and programs. States must provide resources for these interventions, the need for which is indicated by the objective interpretation of student performance data.



KEY PRACTICES AND POLICIES OF CONSISTENTLY HIGHER PERFORMING HIGH SCHOOLS

The interview structure and protocol used by NCEA researchers in identifying best practices for higher performing high schools drew district leaders, school administrators, and teachers into focused peer discussions. The following section of the report uses the structure of the framework for organizing and describing specific examples of the critical attributes associated with higher performing high schools.

Curriculum and Academic Goals

The following table includes some detailed examples of how higher performing districts, schools, and classrooms implement practices relative to curriculum and academic goals that have contributed to their students' success. It is to be understood that all of the following examples exist within a context in which there are already explicit state standards in place.

Curriculum and Academic Goals

District School Classroom

Districts expand state standards and are explicit about their curriculum expectations. Many districts with high-performing schools provide support and time to ensure curriculum is clear and delivered consistently.

Districts with higher performing high schools expect all students to meet high standards. Action steps for implementing "measurable solutions" better equip all teachers to help students reach this goal.

Schools see embracing and surpassing district standards as being integral to their mission. Schools strive toward higher graduation rates, college entrance rates, and dualenrollment and Advanced Placement participation at many schools. Some higher performing schools require every student to take at least one Advanced Placement course.

Schools expect all students to meet high standards. One school adopted college preparatory minimum requirements: all students must take the subject requirement courses certified by the state university systems to meet minimum freshman admission requirements. A slate of additional course offerings provides each student the option to graduate with an Associate of Arts degree. Industry standards for various fields targeted by special school programs provide additional performance skills.

Teachers embrace district standards as being integral to their work. While there is some faculty and administrator discomfort about the attention being given to student performance on high-stakes tests, educators at most higher performing high schools see the content of those tests as a valid and significant body of knowledge that is important for students to master.

Teachers expect all students to meet high standards. Students in all academic courses expect homework assignments that require approximately two hours of time each day to complete at one school.

Curriculum and Academic Goals (continued)

District School Classroom

Districts define specific academic objectives linked to standards. For many higher performing high schools, their districts define specific academic objectives by grade and also by subject. One superintendent explained, "We introduced a process for each of the sites to look at essential standards, identify how you would pace those, and how you would align the textbook materials to that pacing to create a standards-based curriculum."

Schools stay focused on academic objectives linked to standards.

Administrators, instructional leaders, and/or coaches at some school

ers, and/or coaches at some schools attend grade-level and vertical team planning meetings and review unit plans to ensure alignment with standards.

Teachers stay focused on academic objectives linked to standards.

Teachers ensure that the teaching content is based on specified academic objectives linked to stated standards. District curriculum coordinators worked with representative teachers to develop teacher curriculum guides at some schools. These guides contain Grade Level Expectations, lists of acceptable evidence of student learning (classroom evidence and assessment measures), and aligned instructional materials.

Additional Key Practices Regarding Curriculum and Academic Goals

District

- A key strategy that helps one district remain anchored in standards and in the district's common work is the development that occurs in the district's Articulation Committee, a body designed to build cross-school "power standards," course outlines, pacing guides, and formative assessments.
- Graduation requirements have been increased in one district. A key graduation requirement is now at least a 2.0 cumulative grade point average; students must have not lower than a C average overall to graduate. The strategies used to make sure students and teachers can meet these new requirements include common standards-aligned courses, pacing guides, common assessments, standards-aligned instructional programs, and support systems to ensure accelerated learning of students in the bottom quartile.

School

- One school has high expectations for all students and aggressively seeks to enroll low-achieving and/or middleachieving students in more advanced courses.
- One principal said, "Our pacing guide is somewhat different from the pacing guide that is in the county because ... we modify it to meet the needs of our students, to meet how our students have responded to instruction over the years. After the curriculum has been taught, we build in that instructional time to go back and re-teach and to build some maintenance there with our kids."
- Schools align coursework to standards at higher performing high schools. Priorities in advancing one school's learning goals include continuously strengthening course alignment to standards and to each other and increasing the emphasis on common benchmarks so that all teachers are teaching the agreed-upon curriculum.

Classroom

Teachers share curriculum in an effort to maintain alignment with standards and to implement timelines. Teachers look at
the year's schedule and create a timeline for teaching the academic content of the standards. Based on the needs of the students, teachers use the flexibility built into the timeline to differentiate and review as needed, while still staying on track.



objectives.

Staff Selection, Leadership, and Capacity Building

The following table includes some detailed examples of how higher performing districts, high schools, and classrooms are implementing effective practices in the area of staff selection, leadership, and capacity building.

Staff Selection, Leadership, and Capacity Building

District School Classroom

Districts keep the focus on student learning by assisting principals in becoming instructional leaders able to make data-based decisions. In one district, staff coordinate curriculum training and introduce new instructional programs to the principals. In addition, monthly principal conferences focus on teaching and learning issues, such as data-based decision-making. One district requires assistant principals to complete a three-year training program.

Districts help ensure highly qualified teachers are in every classroom. In one district, a Teacher on Special Assignment (TOSA) program is a boundary-spanning role that increases the flow of deep, fresh knowledge about curriculum and instruction across the schools and at the district office. Teachers take turns training for expertise in specific fields and serving as coaches throughout the district. After this limited period of service, they resume their roles as classroom teachers.

Schools keep the focus on student learning by building teachers' capacity to address individual student needs with data-based instruction. Teacher teams meet formally to discuss how units and lessons address both standards and student needs at most higher performing high schools. Data review informs these efforts.

Schools help ensure highly qualified teachers are in every classroom. Students have equitable access to elite teachers at many higher performing high schools. It is common for elite teachers in mathematics and language arts—those who traditionally would teach the higher grades and the most advanced students—to also have classes on their schedule for entry-level, struggling students.

Teachers keep the focus on student learning. By using data such as student test scores as a diagnostic tool to inform and shape instructional choices, teachers provide students with customized attention at higher performing high schools. Teachers may change student grouping arrangements for specific objectives, direct the student to applicable modules in computer-based tutorials, or focus after-school tutoring on targeted

Teachers assume responsibility for improving their knowledge and skills in order to strengthen their teaching. At one school, administrators and teachers from at least two departments meet, and one staff member shares a lesson based on a "focus standard." Teams discuss instructional strategies and materials to enhance the lesson. The focus lesson is delivered to at least one of each participating staff member's classes. An assessment is given after the lesson, and the results are used to further improve the lesson.

Staff Selection, Leadership, and Capacity Building (continued)

District School Classroom

Districts provide training around standards. Districts with higher performing high schools ensure that school administrators and teachers receive professional development linked to standards and are trained in the use of data systems and analysis as a tool in meeting standards.

Districts ensure professional development materials are aligned with standards and that they promote strategies for long-term improvement. The district has pared down professional development offerings so it can address areas of need and still allow time for teachers to collaborate about how to integrate the new practices into their classes in one district. The result, according to a district administrator, is that teachers are more likely to incorporate the new learning into their daily practices. Core area directors visit the schools to monitor implementation and model new learning for those needing additional follow-up.

Districts fund site visits to ensure fresh perspectives. Every school in one district has a visitation fund used to allow teachers to visit other classrooms, either within the building, in another school in the district, or outside the district.

Schools reinforce training around standards and supplant lower level classes. One higher performing school eradicated lower level mathematics classes (often called technical mathematics). The school prepares teachers in the instructional methods necessary to reach all students in these classes.

Schools ensure professional development materials are aligned with standards and used effectively. Teachers are trained in the productive use of professional development materials long after the training session is over at most higher performing high schools. Principals attend training sessions with their staff so they can understand the practices and strategies being implemented across the various departments. Principals then build on these training opportunities by modeling teaching strategies for teachers, monitoring their implementation, and working one-on-one with their staff to improve instruction.

Schools respond to teacher-led initiatives and the cross-fertilization of new ideas and skills. According to one science teacher, the science department decided to pursue training in reading: "We felt that we were not that qualified to teach reading and writing."

Teachers collaborate to develop common course outlines as a result of training around standards. Teachers in one school look at their units to see which units they can all agree to teach. In one school's social studies department, each teacher brings his/her "favorite" unit(s)—aligned with the standards—to review.

Teachers ensure professional development materials are linked to and informed by classroom practice. Teachers at one school have developed their own practice-based modules for guiding other teachers. Modules describe the school-wide philosophy behind teaching mathematics, science and reading, as well as for student behavior management.

Teachers conduct classroom visits to glean new ideas from other teachers. One school has established common times for teachers to visit other classrooms. Some newer teachers open their classrooms to demonstrate model lessons based on the state's Standards for the Teaching Profession. This allows more experienced faculty to see these new standards presented by teachers fresh from extensive training in the standards.



Additional Key Practices Regarding Staff Selection, Leadership, and Capacity Building

District

- As in nested professional learning communities, all levels of one school system are aligned for the purpose of improving instruction. Teachers work collaboratively to improve practice, principals learn to provide instructional support for teachers, and district staff learn to improve their ability to provide support for schools.
- One district requires assistant principals to complete a three-year training program. As part of that program, each assistant principal completes a special project based on his or her school's improvement plan.
- One assistant superintendent explained, "We separate out all operational issues and have just instructional issues for
 principals to discuss. The agendas are built around the notion that curriculum development and improving student
 outcomes will come through the leadership of principals and teachers."
- According to one principal, "Every secondary school in [the district] sent a team of eight teachers who were paid
 for all of the [professional development] sessions on integration. It shows nonreading teachers how their content
 does allow for reading to be taught. We're all responsible for reading."

School

- One principal seeks collaborative, reform-minded teachers who will contribute to a school culture of inclusion, trust, and respect. Doing so maintains a staff dynamic that is conducive to consensus decision-making.
- In one school, collaboration time aimed at improving instruction, monitoring student achievement, and revising assessments and curricula is built into the school's master schedule.
- School-level professional development activities supplement those provided by the district at many higher performing high schools and focus on the needs of individual teachers or needs based on specific student populations at many higher performing high schools.

Classroom

- Professional development mirrors one school's philosophy that teachers are knowledgeable resources with valuable strengths. The focus is not on more traditional forms of professional development—workshops and conferences but on collaboration.
- At many higher performing high schools, teachers meet with colleagues to review assessment results, discuss student
 needs, and modify instruction. When a staff member at one school showed that many students were not reaching
 particular standards in mathematics, the teachers investigated the reason. Based on their findings, they added a supplemental program.

Instructional Programs, Practices, and Arrangements

The following table includes some detailed examples of how higher performing districts, high schools and their classrooms implement demonstrably fruitful practices in the area of instructional programs and practices.

Instructional Programs, Practices, and Arrangements

District School Classroom

Districts use evidence-based programs. Districts with higher performing high schools provide scientifically based, evidence-based instructional programs. One district narrowed a list of candidate programs by using criteria provided in a Department of Education Non-Regulatory Guidance circular. Other districts send selection committees to similar districts piloting prospective programs to conduct interviews and get educators' perspectives on the efficacy of those programs.

Districts ensure instructional methods and materials are aligned with state standards. During the last textbook adoption cycle in one district, teams of stakeholders reviewed the products' sequencing, comprehensiveness, scope, alignment with the state's standards, and applicability to the specific needs of the community's students. It is understood that adopted textbooks may not always adequately address a standard, so supporting materials and services may be necessary. According to educators at all levels in most of the studied systems, the textbook is not the curriculum.

Schools use evidence-based programs. Teachers are trained in the use of selected programs and practices, and administrators spend a portion of every day visiting classrooms and monitoring data to ensure that these programs and practices are being implemented properly at many higher performing schools. Many successful schools increased the numbers of Advanced Placement students, reaching out to borderline students through aggressive enrollment efforts.

Schools ensure instructional methods and materials are aligned with state and district standards, and they are able to demonstrate success via student performance data. While many higher performing high schools extend some measure of flexibility to teachers in how they teach the curriculum, it is only within the context of meeting explicit standards. A mathematics teacher stated, "You have to cover the core curriculum. What reading, writing, and thinking skills do we want students to be proficient in? But you have the freedom to decide what the best way is to develop these skills."

Teachers use evidence-based practices. Teachers use scientifically based, evidence-based instructional practices to address specific student needs at higher performing high schools. Students are held accountable to classroom procedures in groupwork, self-management and evaluation of their own and their peers' works-in-progress. All such procedures and associated tools are derived from evidence-based programs, instructional guides, and professional development activities.

Teachers ensure instructional methods and materials are aligned with state and district standards. At many higher performing high schools, teachers collaborate through both grade-level teams and subject-level teams to ensure that materials are aligned with standards. In one school, teachers collaborate every other Friday from 12:50 to 3:30 p.m., with a focus on curriculum development. The products of these meetings are then tested, with feedback being used in subsequent meetings. In this way, classroom practice informs ongoing curriculum planning and professional development.



Instructional Programs, Practices, and Arrangements (continued)

District

School

Classroom

Districts focus on strategies that ensure academic rigor, particularly in core content areas. Instructional imperatives emphasize using higher order thinking skills in the core content areas. Districts support the development of these learning skills across the academic disciplines, and then coursework reinforces the mastery of those skills with subject-specific content.

Districts support the development and use of teaching guides. One district focuses on curricular alignment through close collaboration of departmental and site leaders at the high schools. Elsewhere, district curriculum coordinators work with representative teachers to develop teacher curriculum guides. These guides contain Grade Level Expectations, lists of acceptable evidence of student learning (classroom evidence and assessment

measures), and aligned instructional

materials.

Schools focus on strategies that ensure academic rigor, particularly in core content areas. Teachers at one school discuss course material selection in teams, with an emphasis on choosing supplemental materials that are research-based, standards-aligned, and responsive to a data-based analysis of the needs of their widely diverse student body. Textbook adoptions, like that for English language development, are supplemented with materials necessary to meet the instructional needs of the students, primarily to increase rigor.

Schools support the use of teaching guides. Reaching improvement goals is seen as a collective, ongoing endeavor, and time and resources are allocated to support it. Time is set aside at many higher performing high schools to look at the standards that need to be met by the end of each grade in order to prepare students for the next course and for life after high school.

Teachers focus on strategies that ensure academic rigor, particularly in core content areas. Teachers are willing to adopt new practices and styles, as well as assimilate technology into their classrooms to help students catch up and prepare them for more rigorous coursework. Computer-based tutorials allow students to assess their own learning and pursue further information on particularly challenging or interesting objectives at one school.

Teachers use guides to stay on track to ensure their students are meeting grade-level expectations and are covering material aligned with standards. Rather than letting textbooks guide the instructional process, the process at one school begins by aligning courses to standards, with a focus on essential standards for ninth graders. The English department opted for depth over breath. Instead of hitting every standard once, the teachers decided to use the instructional materials to hit each of five essential standards twice. They felt students would be better prepared for later grades by doing so.

Instructional Programs, Practices, and Arrangements (continued)

District School Classroom

Districts support interdepartmental collaboration in an effort to maintain rigor. For example, many districts offer reading and writing across the curriculum, culminating in the creation of a common writing, language, and reading methodology for high schools.

Schools expect all courses across all departments to contribute to a school-wide culture of academic rigor. One school has been leading efforts to align, rather than abandon, vocational courses, which may in fact prepare all students to enter the college or career they choose upon graduation. For example, teams are reformatting Auto Technology courses to align with both industry standards and college entrance requirements.

Teachers collaborate in interdepartmental teams in order to provide students a coordinated, rigorous curriculum. Students in the Integrated Studies Program at one school have a coordinated curriculum, with major projects pulling knowledge from the core subject courses. Vocational courses at another school parallel core content courses and require students to apply higher-order thinking skills.

Additional Key Practices Regarding Instructional Programs, Practices, and Arrangements

District

• In one case, district curriculum directors regularly spend time in schools, talking with teacher groups about student progress and the instructional strategies the teachers will implement in the coming weeks.

School

- Longer blocks of time in the school schedule support "lots of interaction between teachers and students"; instructional assistants offer direct help in classrooms; and a senior culminating project provides "application of knowledge" and "connections to real world issues and problems" at one higher performing high school.
- Through tight structures, instructional resources, and multiple assessments used in each course, instruction is not
 watered down, even as an increasing number of students are encouraged to take advantage of one school's rich
 Advanced Placement offerings. Counselors encourage students to enroll, and students themselves encourage peers—
 telling them what support is available and how they themselves might help with peer mentoring.
- All curricular areas at one school have a reading and writing focus for which teachers have divided accountability: social studies teachers work on expository writing, English teachers on persuasive writing, and vocational education teachers on technical writing.
- One school's "Compass Lab" has been designed so that students can use computers to work on remediation or course recovery, replacing prior unsatisfactory work.
- In a number of schools, special programs for remediation and differentiation are being introduced school-wide because, as school leaders at one site explained, "all students can learn from [them]." Some programs that are usually labeled as interventions are considered best practices and good teaching at these schools.



Classroom

• Because students aren't grouped by ability, differentiated instruction is a key strategy for helping all students achieve at many higher performing schools. Teachers adjust how they teach a subject—not what they teach—depending on the learning needs of their students. This ensures that students at all levels receive a challenging curriculum.

Monitoring: Compilation, Analysis, and Use of Data

The following table includes some detailed examples of how higher performing districts, schools, and classrooms implement practices—particularly those related to using data to monitor progress—that have demonstrably contributed to higher student performance.

Monitoring: Compilation, Analysis, and Use of Data

District School Classroom

Districts support higher performing schools by developing and using effective student and teacher monitoring systems. Principals have access to their students' data and are trained to interpret those data at many higher performing high schools. Educators receive timely feedback from district assessment programs. Data are disaggregated by school, teacher, gender, ethnicity, or any other significant grouping. Data provide enough information to trigger needed interventions.

Districts supplement the statemandated reporting system with district benchmark assessments to better assess their students' progress. In one case, the English Language Development plan written at the district level offers a comprehensive program with benchmark assessments that are totally aligned to the state's English Language Arts assessments. Schools use effective data monitoring systems. Many higher performing schools monitor teacher performance using data systems. Data are used to identify instructional weakness that indicate areas of need for professional development activities.

Assessments which include benchmarking are used to track teacher as well as student performance, and are aligned with curriculum and written collaboratively in departments. At one school, the Instructional Leadership Team meets biweekly to look at test scores and student work, plan interventions for specific students, and make recommendations for intervention materials.

Teachers use effective data monitoring systems. Teachers look to district data reports to support and assist them at some higher performing high schools. Teachers use the data for instructional decision-making. At one school, English, science, and mathematics teachers all state that access to the data allows them to intervene much earlier when students need additional assistance.

Teachers use benchmarks to review individual student performance with each student as part of an effective assessment strategy. Student transcripts and test results are given to students for structured and unstructured reflection. Teachers meet with students at least once a semester to discuss their performance against established benchmarks and analyze their progress toward accomplishing school-wide learning expectations at some schools.

Monitoring: Compilation, Analysis, and Use of Data (continued)

District School Classroom

Districts develop test banks to help establish standardized assessments. Using the district's data system, the social science department at one high school is developing a test bank of items to be used in formative assessments and benchmark assessments. Those test bank items are linked to specific lesson units and to the rubrics for research papers.

School administrators review classroom practice using standardized models for classroom visits. When observations yield data about student learning, engagement, and classroom environment, administrators are better able to gauge teacher performance. Extending the concept of standardsbased assessment to the evaluation of teachers helps administrators identify professional development needs for teachers, just as standardsbased assessments help educators choose interventions for individual students.

Districts track individual student progress. Many districts collect all student and school data in a district-wide data system. This enables teachers to access all of the scores for an individual student as he or she moves through the school system. The district provides teachers with prior performance data on their current students.

Schools track individual student progress. At one higher performing high school, the principal looks at every student's scores to see where he or she has improved and/or is struggling. He then sends each student a letter, writing, for example, "You did a great job in English. You moved from the 20th to the 40th percentile."

Teachers use standardized assessment strategies to review student work and teach students how to use standard rubrics. Teachers also equip students to assess their own work through rubrics and benchmarks of academic success at many higher performing schools. Students know what they need to do to earn a high grade. They have reference points for the grade they are trying to earn and can monitor their progress toward that grade. Students own their learning goals and are trained alongside site leaders and teachers to understand, discuss, and track their own achievement at some higher performing high schools.

Teachers track individual student progress. Teachers at one higher performing high school review the performance data for each new student prior to the start of the school year. Teacher teams discuss strategies for addressing the needs of incoming students. At many higher performing high schools, teachers share specific student progress with the principal and parents in writing, by phone, and in conferences.



Additional Key Practices Regarding Monitoring: Compilation, Analysis, and Use of Data

District

- One district hired an assessment director to analyze student performance data. This director provides onsite consulting services, talks with faculty about school data, and trains staff to translate their data into action. The assessment director is particularly skilled in analyzing and sharing data in an understandable way.
- In one district, assessments are administered quarterly and scored electronically. Each week, district and school leaders review and analyze data to determine whether the tests need to be revised or whether an individual teacher's instruction needs to be modified. The district uses an online benchmark development/grading system to manage data and is training "key early adopters," who then teach it to their more reluctant peers.

School

- Schools develop effective training for teachers in how to use data as an instructional diagnostic strategy with a
 focus on benchmarking.
- Schools provide access to teachers on school-wide data and assessments.

Classroom

- Teachers use district data reports for instructional decision-making. English, science, and mathematics teachers at
 one higher performing high school all state that access to the data has led to the opportunity to intervene much
 earlier when students need additional assistance.
- In one English department, students are given the opportunity to have their work edited by their peers and to
 revise and improve it until they reach the highest score on the rubric. This "highest" standard is considered to be
 within reach for all students.

Recognition, Intervention, and Adjustment

The following table includes some detailed examples of how higher performing districts, high schools, and class-rooms are implementing best practices in the area of recognition, intervention and adjustment.

Recognition, Intervention, and Adjustment

District School Classroom

Districts act in response to school performance. Districts offer monetary and other incentives to higher performing educators in order to recognize, reward, and retain them.

Schools act in response to teacher performance and student achievement. One school celebrates teacher achievements by displaying the teachers' photos in the main hallway. Another school gives academic letters—like athletic letters—for academic success. Student achievements are published in the school newsletter and televised during the morning announcements.

Teachers act in response to student achievement. At one higher performing high school, the principal and teacher leaders meet weekly to identify and monitor struggling students and to discuss interventions. Teachers modify instructional approaches, and tutors work with students in after-school study groups three days per week.

Recognition, Intervention, and Adjustment (continued)

District School Classroom

Districts support online learning. Students have access to an evening program of high school credit courses based largely on online learning processes in one district. This is an alternative for students struggling with regular high school learning approaches.

Schools provide multiple forms of intervention, including online learning opportunities. At one successful high school, students with credit deficiencies are placed in an academic alternatives program to help them retrieve credit. The school has a computer network, through which students can work individually to retrieve credit. At one higher performing high school, two double blocks of time are scheduled each day for students who need additional instructional time in reading and writing.

Teachers screen for need to provide more intensive interventions, such as tutoring and online learning opportunities. Though many interventions exist on the schoolwide level, the first line of intervention is always in the classroom.

Districts offer targeted interventions, such as alternative school credit-recovery programs. One district offers a credit-recovery program that provides an intensive semester of instruction in reading and mathematics to a limited number of students.

Schools require targeted interventions, such as after-school tutorials. At one high school, all ninth and 10th graders earning below a 2.0 grade point average attend a mandatory after-school tutorial for an entire grading period. Saturday School is offered for students who need additional assistance, but is also open to students earning above a 2.0 GPA who want extra help. Another higher performing high school created a course specifically to help struggling gifted and honors kids.

Teachers target interventions with the goal that students are challenged. Based on their knowledge of what students need and what content-specific courses offer, teachers and counselors at higher performing high schools spend extensive time making sure students are in the right course. The emphasis is on getting students into the most challenging course possible. When interventions are necessary, teachers develop an informed plan of action designed to meet the individual student's needs.



Additional Key Practices Regarding Recognition, Intervention, and Adjustment

District

- One district reacted to the unique needs of students ready for more intense challenges by creating an Advanced Placement Institute that helps students accelerate their academic progress.
- District leaders develop and train school leaders to use a menu of intervention programs designed to move all students into mainstream instruction marked by rigor and relevance.

School

- In one school, a student advisory program provides a support system for every single student. This program consists of multiage groups of 15 students that meet at least once a week with an advisor who remains with the group throughout high school.
- Staff at one school state that the very structure of their school was designed to minimize the need for interventions. They seek constantly to adjust so they can prevent the need for interventions.
- According to the faculty at one school, presentations, exhibitions, and portfolios are evaluated through carefully developed rubrics. This makes the school "one large intervention and recognition system."

Classroom

- According to teachers at one school, the primary "intervention" is improving the quality of regular classroom instruction, but other strategies have been designed to "intervene early" and "act fast" when students fall behind.
- Teachers from one school reported that they send postcards home to parents recognizing students' academic accomplishments.

CONCLUSION

While there is no blanket approach to high school improvement, it is possible to identify some common themes and sets of practices that are routinely observed in high schools that consistently outperform comparable schools. These practices fit into a useful framework from which lessons can be learned on the basis of real examples from exemplary schools and districts. In particular, higher performing high schools tend to set explicit academic goals; support a culture of collaboration; provide teachers with the tools that will help them meet those goals, such as evidence-based programs and the flexibility to differentiate strategies; provide relevant data and accessible data systems; and provide targeted interventions, as well as appropriate recognition of both teachers and students. High schools in need of improvement that adopt locally appropriate practices associated with these strategies may find encouraging gains in performance and fulfill the promise of a quality education for all students. States must provide critical and active leadership to ensure that components of this research-based framework are firmly in place in the districts, high schools, and classrooms in which they hope to see such necessary, inspiring, and entirely possible progress.

END NOTES

- The completion rate for the 2003-2004 school year was 74.3 percent, as cited in Seastrom, M., Hoffman, L., Chapman, C., & Stillwell, R. (2006). The averaged freshman graduation rate for public high schools from the Common Core of Data: School years 2002-03 and 2003-04 (p. 2). (NCES Publication No. 2006–606rev).
 U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office.
- 2. Achieve, Inc. (2005). *Rising to the Challenge: Are High School Graduates Prepared for College and Work?* Washington, DC: Peter Hart and Associates.
- 3. Perie, M., Moran, R., & Lutkus, A. D. (2005). *NAEP 2004 Trends in Academic Progress: Three Decades of Student Performance in Reading and Mathematics* (pp. 15, 23). (NCES Publication No. 2005–464). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office.
- 4. For more information about the NCEA framework, visit: http://www.just4kids.org/bestpractice/theme_explanation.cfm?sub=framework.
- 5. Normally, NCEA prefers to take students' prior year test scores and length of enrollment in the same school into account in the school selection process, but that longitudinal information was not available in California. NCEA did have access to longitudinal data from Florida, Texas, and Washington; schools in those states were therefore evaluated based on students who were continuously enrolled beginning in the ninth grade. The data also allowed NCEA to divide the students into two groups based on their achievement prior to entering high school: those whose eighthgrade assessment scores were below the states' proficiency standard and those whose eighth-grade scores met or exceeded that standard.
- 6. For more information about NCEA's Best Practice Study methodology, please visit the NCEA Web site: http://www.just4kids.org/bestpractice/research_methodology.cfm?sub=methodology.
- 7. Whisenant, S. E. (2004). *State best practice study, 2004-2005: Interviews.* Unpublished manuscript. Austin, TX: National Center for Educational Accountability.
- 8. For more information about the Data Quality Campaign, visit: http://www.dataqualitycampaign.org.