What works for diverse and special needs students

Best practices from higher-performing elementary schools

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About Know Your Schools~for NY Kids

Since its inception in 2004, one goal of NYKids has been to help schools learn from other schools whose students consistently perform well. To date the project has identified best practices in elementary school, including among critical needs students; middle school and middle school science; and high school. Results of all studies are available on line at http://knowyour-schoolsny.org and www.albany.edu/nykids. Available resources include reports, case studies, best practice frameworks, sample evidence from higher-performing schools, self-surveys, articles, and presentations.

To download a copy of this report or to learn more about the project and its other studies, go to **www.albany.edu/nykids.** In addition, a set of tools, called COMPASS (COMPare, Assess, Select levers to improve, Set goals), has been developed from this work. These tools and their associated institutes have been created to help schools put study findings to use in a continuous improvement process. For information about these tools and institutes, contact Project Directer Janet Angelis at 518-442-5023.

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Meeting Critical Needs at the Elementary Level:

The Higher-Performing Schools

Davison Avenue Malverne



LincolnMount Vernon



ColumbusNew Rochelle



Pakanasink Pine Bush



John F. Kennedy Port Chester-Rye



A 2010 Blue Ribbon

"A happy place where children know all the people" is how educators in Davison describe their school. Three classes per grade serve a diverse population of students in western Nassau County. The school boasts a long tradition of success, as evidenced by its designation as a Blue Ribbon School in 1991-2. Committed to educating the whole child, goals are set after assessing performance in terms of both achievement and climate, and goals are aligned from district to classrooms. Through differentiation of instruction, integration of a spiraling curriculum, and parent involvement, educators identify and meet the needs of every child. Ongoing professional development to make that possible is provided, in part, by on-staff reading and math specialists as well as district department chairs.

With students performing well above predicted levels, Lincoln has earned its reputation of excellence. Working within a unified curriculum, teachers strive for content learning as well as a love of learning built on a foundational love of reading. Literacy is the focus of the curriculum in all areas and is supported by literacy specialists. The structure and the culture of the school support collaboration among teachers, specialists, and administrators. Visionary leadership, a strong work ethic, and an open and trusting atmosphere contribute to Lincoln's "Formula for Success" with its diverse population. The **Westchester County** school achieved Blue Ribbon status in 2006 and educators have adopted the district motto of "Every child, every chance, every day" as their way of life.

One of six elementary schools in New Rochelle, Columbus serves the highest percentage of critical needs students in the city-78% low income and 82% Hispanic—in a neighborhood where school is the only setting in which students need to speak English. Because of this demographic, all instruction attends to language development as well as content learning, with particular attention to building vocabulary and background knowledge. Instruction features problem solving and an integrated curriculum. Believing that intelligence is not fixed, staff expect all students to be successful and constantly seek out promising practices and programs, always striving for improvement. School leaders and staff reach out to and support parents, drawing them into the school, where they are always welcome.

75 miles from New York City, Pine Bush lacks a corporate tax base. Economic decline has hit hard both families and the district budget. One of five elementary schools, Pakanasink serves the greatest percentage of lowincome students as well as students classified for special education. Budget cuts have forced the school to move away from a fully integrated inclusion model for special education to a variety of models, so that the school now has some inclusion classes and some self-contained, plus resource room support. This approach is representative of the school culture, which is to be flexible and resourceful in meeting challenges "head on." A family atmosphere with high and consistent expectations for all supports collaborative efforts to serve every student well by differentiating instruction.

School, JFK a decade earlier had been targeted by the state as in need of improvement. Now it "creates hopes and dreams." Supported by a persistent focus on both academic and social/ emotional learning, students perform well above those in similar schools—schools with poverty rates c. 75%, English language learners c. 50%, and nearly 100% ethnic minority students. Through community-building activities, a staff characterized as "a team of leaders" ensures that all 750 students are known-and taught-as individuals. With 90% of teachers holding bilingual certification, the school is able to focus on language development in students' native language, and then English, with the goal of students achieving balanced bilingualism.

To provide a fuller description of each of the higher-performing schools included in our analysis, we have published an 8-12-page case report for each. These cases are available at www.albany.edu/nykids and http://knowyourschoolsny.org, and highlights from them appear throughout this report. We invite you to explore the fuller case reports and include here a brief description of each school. Details about our sample selection and study methods can be found on page 27.

Dr. Charles T.
Lunsford School 19
Rochester



Centennial Avenue Roosevelt



Martin Luther King Jr. Utica



Maybrook Valley Central



Forest Road Valley Stream 30



Since 2002, School 19 educators have turned their school around. The key to student performance, they say, is providing the unique social and emotional support that each child needs to succeed academically. Nearly 100% of the students who attend this "little gem on the hill" in New York's third largest city qualify for free or reduced-price lunch. The foundation for the turnaround was a commitment to taking care of the School 19 "family"-those who work and study in the school as well as those in the broader community. Part of being family is actively working for the collective good through "accountable collaboration." On this foundation they then built a flexible and innovative approach to enacting the district curriculum with effective and differentiated instructional strategies.

Centennial is enrolling increasing numbers of English language learners, many of whom arrive as refugees from Central America and some of whom require not just ESL but special education services. The largest special education population in the district is served in a combination of inclusion and self-contained classrooms and a bilingual special education class. A unified curriculum for all elementary schools emphasizes literacy and is supported, in part, by a 90-minute literacy block and building-based curriculum specialists. Teachers offer small group, engaging, and technologyenriched instruction. Building-based teams collaborate, prevent and address individual student needs. Goals and performance indicators are understood by all—administrators, teachers, and students.

Due, in part, to a refugee center there, the small upstate city of Utica attracts large numbers of refugees. The result is that MLK serves students from more than 40 language groups, some of whom also have disabilities as the result of malnutrition or other trauma. The professional learning community at MLK builds a community of student learners from this diversity, reaches out to parents, and establishes a climate of high expectations and respect for all. Teachers use and interpret data to make instructional decisions and to differentiate instruction. Small group and technology-enhanced instruction helps engage students in a curriculum adapted for special needs and English learners, with a strong literacy component.

Maybrook Elementary is housed in an 80-yearold former high school whose small size and lack of accessibility mean there are no self-contained special education classrooms and only two classes per grade. Despite its location near major highways and a growing regional airport, the area is mostly rural and losing population; 42% of students qualify for free or reduced-price lunch, and nearly 40% are ethnic minorities. Maybrook educators emphasize literacy, believing that literacy forms the base for all learning. Teachers collaborate to identify each child's educational strengths and needs and to differentiate instruction, providing appropriate scaffolding for each student, often in cotaught special/regular education classrooms.

Forest Road is one of three schools in an elementary district just east of Queens and JFK Airport. It serves an old suburban enclave with a changing demographic; most students are able to walk to school. Teachers at Forest Road use a variety of data to monitor individual student progress and instructional programs that encourage teachers to be problem solvers. School-and district-level educators target resources and "blur" boundaries between special areas and regular education so that students get the right level of rigor and intervention to maximize achievement and growth. Individual teachers meet regularly with administrators to look closely at the performance of every student, flagging any who are in the "red zone," particularly in literacy development.

Demographics of the Ten Higher-Performing Schools Studied

District	School Name	Grade Span	Total Enrollment	F/R Lunch Eligible	EL	African- American	Hispanic/ Latino	White	Other	PPE*
Rochester City SD	Dr. Charles T. Lunsford School 19	K-6	309	98	2	94	3	2	1	\$18,956
Utica City SD	Dr. Martin Luther King Jr.	K-5	273	94	11	52	27	11	10	\$14,940
New Rochelle City SD	Columbus	K-5	816	78	31	8	82	8	2	\$21,959
Port Chester-Rye UFSD	John F. Kennedy	K – 5	725	78	55	10	86	3	2	\$18,413
Roosevelt UFSD	Centennial Avenue	K-5	440	66	30	54	45	0	0	\$24,585
Mount Vernon City SD	Lincoln	K-6	758	60	15	49	24	21	6	\$22,133
Pine Bush Central SD	Pakanasink	K – 5	483	51	3	25	31	36	8	\$16,758
Valley Central SD	Maybrook	K-5	235	42	3	15	20	62	3	\$15,941
Malverne UFSD	Davison Avenue	K – 4	325	34	8	37	25	30	8	\$26,127
Valley Stream 30 UFSD	Forest Road	K-6	272	17	8	39	17	6	40	\$20,483
New York State		K – 12	2,692,649	48	8	19	22	50	8	\$19,381

Unless otherwise noted, data are from 2009-10. *2008-09 district-wide total expenditures per pupil.

Background and Overview of Findings

mproving the academic performance of ethnically and linguistically diverse students and those with special needs has been the focus of national and state policy and initiatives for decades. Unfortunately, one of the greatest failures of the public school system has been the stubborn achievement gaps between white native English speakers and students from diverse backgrounds, as well as the generally low performance of students classified for special education services. Recent efforts to address these gaps include policy changes at the national and state levels, in particular legislation under which schools are held accountable for the performance of each subgroup, including African-American and Hispanic students, English learners (ELs), and special education students.

Prior Research about Effective Practices for Ethnic and Linguistic Minorities. The disparity in academic performance between whites and blacks, Hispanics, and English learners (ELs) has been attributed to a variety of factors, including high levels of poverty among minority groups, unequal allocation of resources, inadequate preparation of teachers, and unequal access to high quality curricula and instruction in highly diverse schools (Darling-Hammond, 2010). Scholars pursuing ways to address achievement gaps have investigated topics such as teacher-student relationships; instructional styles; characteristics of student behavior and competency; teacher beliefs, competencies and preparation; school leadership; school scheduling; and program design.

Studies of teacher-student relationships and instructional styles at the elementary level suggest that supportive relationships and differentiated instructional styles impact the performance of ethnically and linguistically diverse students, and those impacts are variable depending on other individual student and

teacher characteristics (Borman & Overman, 2004; Haynes, 2002; Salinas & Garr, 2009). Studies of student behaviors and competencies indicate variability of students' rsponses to social and emotional support across diverse groups, and this is correlated with differences in attention and memory (Liew, Chen, & Hughes, 2009). Along this vein of research, non-instructional staff such as school counselors and psychologists were found to have significant impacts on attention and memory, low self-esteem, and responses to substance abuse (Jackson, 2009).

Research findings regarding the impact of teacher behaviors, skills, and competencies on student achievement indicate that teachers often lack preparation in using effective approaches toward the education of ethnically and linguistically diverse students (Brown & Medway, 2007). A few studies suggest that ethnically and linguistically diverse students are more likely to experience a less effective overall classroom environment than their non-minority peers (Stuhlman & Pianta, 2009).



Studies focused on leadership and school policies, program designs, and procedures indicate the potential significant impact of before and after school time on EL achievement (Han & Bridgall, 2009). However, little of this research provides detailed accounts of the processes and procedures used to support collaboration between ESL and mainstream teachers and effective models of reaching beyond the classroom to families.

Prior Research About Effective Practices for Special

Education Students. The 2002 federal requirement that schools account for the performance of all subgroups of students accelerated a movement that had begun in the early 1990s to better address the learning needs of special education students. Research (Baker, Wang, & Walberg, 1995) had indicated that students in programs that create separate classes for those classified for special education services tended to increase rather than decrease learning gaps as well as create social and emotional difficulties for students. Despite early disagreements about the appropriateness of inclusion, evidence of its effectiveness has accumulated (Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). Since reauthorization of the 1990 Individuals with Disabilities Education Act (IDEA), which required that students with disabilities be educated in the least restrictive environment (Norwich, 2008; Stainback, 2000), more special education students have been placed in mainstream classes. A more recent and less studied development has been the rise of coteaching in those classes, where both teachers—special and regular educator share responsibility for instruction of all students. Little research has been conducted on the effects of such coteaching arrangements other than surveys that find that teachers in general favor inclusive over self-contained classrooms (Idol, 2006) and aknowledgement of the need for collaboration and communication skills

to make coteaching effective (Walther-Thomas et al., 2000). Many studies have examined various aspects of curriculum, instruction, assessment, and instructional arrangements for special needs students who are included in the mainstream. Some suggest that effective literacy instruction for special education students in the early years resembles effective instruction for all students—direct instruction embedded in the context of authentic reading and writing, with more direct skill instruction and more individual and group work for classified students (Rankin-Erickson & Pressley, 2000). Although mathematics interventions are studied less frequently than those for English literacy, some researchers fault a shallow and unfocused curriculum rather than student disabilities for poor mathematics performance (Schmidt, McKnight, & Raizen, 1997).

Under the terms of the 2004 reauthorization of IDEA, schools were encouraged to use research-based instructional practices to attempt to remediate and prevent reading difficulties before recommending a student for special education classification. Some research, especially on students with phonological processing disorders and other reading difficulties, demonstrated that early remediation coupled with effective classroom instruction could eliminate or reduce the need for instructional support later on or for classification in the special education system (Vellutino, Scanlon, Small, & Fanuele, 2006). There is also some evidence that Instructional Support Teams (ISTs) and Response to Intervention (RTI) programs (required of all schools in New York State by July 1, 2012) ("New York Codes, Rules and Regulations Title 8, Education Department," 2008) are reducing the number of special education referrals (Kovaleski & Glew, 2006; Scanlon, Anderson, & Sweeney, 2010).

Findings

The results of this study suggest that higher performance among critical needs students at the elementary level is related to the following four elements:



Close Engagement with and
Understanding of the Population



Literacy- and Technology-Enriched Instruction



Enlightened Approach to Curriculum and Data



Fluid Adaptation and
Deployment of Resources

Close Engagement with and Understanding of the Population

Our work with families is key. Our faculty and staff understand this. We all stress the notion that "We are family" with our school community. —Centennial Avenue principal

What has been traditionally on the periphery of educational practice in formal public school settings is, in this study, at the center: The focus is on students who have oftentimes been perceived as "deficient" or "disabled" in some way or another. It is appropriate, then, to begin this discussion of promising practices for ethnically and linguistically diverse and special needs students with a finding regarding the quality of close engagement with and understanding of the population. In the higher-performing schools studied, this engagement has three inter-dependent components: Communal stances and beliefs about difference; deliberate and effective outreach to parents (especially parents of English learners and special needs students); and consistent vertical collaboration between and among administrators and teachers regarding student achievement growth.

Communal Stances about Difference.

(Human learning) is best when it is participatory, proactive, communal, collaborative, and given over to constructing of meanings rather than receiving them (Bruner, 1996, p. 84).

The research literature tells us that beliefs about socioeconomic, ethnic, linguistic, mental, or physical difference matter a great deal when it comes to a child's opportunities to learn (Banks, 1997; Bruner, 1996; Ladson-Billings, 1994). We also know that beliefs and stances inform norms of behavior and help shape cultures and climates within schools. Attempting to replicate a school culture or climate, then, is no simple task and arguably may not and should not be the goal. However, by contrasting average- and higher-performing schools, some pathways to crafting a school culture that promotes academic achievement among diverse and special needs students and is adapted to the unique qualities of the community of learners it serves are evident and can be instructive.

You have to know your population and teach your population, despite the outside factors. You have to know who's in front of you. —John F. Kennedy teacher

One of the major contrasts between average-performing and higher-performing schools in the study is how academic achievement and the development of the "whole" child is understood and approached. Although educators in average-performing schools tended to show evidence of an ethic of care for students and promoted school as a place for students to "be kids," play, and learn to get along, they differed from their peers in higher-performing schools in how they envisioned their roles in maximizing academic growth among diverse and special needs students. In this regard, and referring to English learners (ELs) specifically, a Roosevelt (Centennial Avenue) administrator noted the very "true connection" teachers make with their students.

As ELs make up a fairly large percentage of the population in some schools studied (Centennial Avenue, John F. Kennedy, Columbus) and a growing part of the population in others (Martin Luther King Jr., Lincoln, Forest Road), what some have characterized as the



What we're trying to do here...is ask, "How can I, as a bus driver, help all the students on my bus? What is my role? What is my role as a secretary in helping all the students in this building do well?" The classroom teacher, nurse, guidance counselor, principal, chairperson, everybody's got a different role to fill.

-Malverne (Davison Avenue) administrator



"frog pond effect" (Goldsmith, 2011) whereby students with diverse backgrounds tend to thrive in contexts with higher numbers of demographically similar peers comes into play. As a Columbus teacher put it, "I think...one of the big things is that they [ethnically and/or linguistically diverse students] make up a majority of our students, so it's not like we have a separate group that we have to treat special. We teach everyone the same. We don't have to teach ESL skills. They are all embedded in everything we do."

In addition to a stance of shared responsibility for embedding adaptation to difference in everything they do, educators in higher-performing schools reported being supported in their belief that they share the work with the larger community, including the district and their town or city. Echoing the words of John Donne, "No man is an island, entire of itself" ("Meditation XVII," 1624), to these educators, difference means connection, adaptation, and accountability—not an excuse for low achievement—and they reported that their building principals and district administrators concur and support them.

Educators in the higher-performing schools studied do not take their culture and climate for granted, and many expressed an awareness of the work that it took to get to where they are. This work, in the words of one Port Chester (John F. Kennedy) administrator is dependent on building layers of safety: physical, emotional, and then intellectual:

The school became three things. We wanted a kid to be first of all physically safe; secondly, emotionally safe—unafraid to come to school, not feel bullied, always feel that adults care about him; and third—intellectually safe. That's more difficult. It means to be able to take risks and understanding how they learn. Once the school started to take on this feeling of being safe, secure, an oasis for lots of kids that have lots of issues, then along with that we started to use data, and the conversation of the school changed from, "Well you know, the kids are lazy. The parents don't care about them. They're immigrants. What do they know?" to "Look, these kids are bright."

We have a group for parents of students in need; we hold parent nights; we have a parent liaison. Currently we are looking for an individual to be a bilingual presence. For greater understanding, we provide a translator at board of education meetings, IST [Instructional Support Team] meetings, etc. We emphasize community outreach to increase parent involvement. We have a "Parent Compact" and we offer a parent portal for homework information and email communication. We routinely provide our families with notice of upcoming meetings in bulletins, on line, in district publications, etc. -Roosevelt (Centennial Avenue) administrator

Deliberate and Effective Outreach to Parents. Another feature of close engagement with and understanding of the population in higher-performing schools relates to approaches toward outreach to parents and other community members. Educators in these schools report consistent efforts to communicate with parents throughout the year and receive support at the school level for breaking down the boundaries between home and school.

Findings suggest that efforts at the classroom and school levels interplay in making outreach effective. In higher-performing schools, teachers are apt to lead the way toward forging strong relationships with parents, and school-level initiatives provide that extra conduit for communication to occur. With regard to teachers' roles in reaching out to parents, a Malverne (Davison Avenue) administrator praised teachers for "making that communication [with parents] throughout the year—calling home, following up with the needs of the students." Many of the administrators in the higher-performing schools see the relationships between parents and teachers as "key" and "pivotal" to students achieving their best and view this as the first and most important line of defense against students falling through the cracks.

School-level initiatives related to fostering a family-like culture provide the places and events through which the boundaries between school and community are blurred and close relationships are made. In Martin Luther King Jr., for example, a section of the library has been reconfigured as a parent library and meeting place. The principal recognizes that student achievement is a social endeavor that goes beyond school walls: "If we educate and welcome parents and make them partners in the education of their children, we have a better chance in succeeding with our academic goals. This is especially true given the mobility of our students and the number of foreign students who arrive in Utica due to the Refugee Center located here."

In addition to places to meet, events are important in higher-performing schools. In Davison, students and staff gather monthly for a "Peacemakers" assembly. At these events, nearly 100% of invited parents attend to recognize a student from each classroom who exemplifies the rules of respect, impulse control, compassion, and equity. These kinds of events, when accompanied by close ties between teachers and parents, increase the capacity of teachers and parents alike to help children achieve their best in school.

Consistent Vertical Collaboration.

Managing for sustainability...means not pushing the system to its limits but maintaining diversity and variability, leaving some slack and flexibility, and trying to optimize some parts of the system but maintaining redundancy (Folke, Colding, & Berkes, 2003).

Those who study the capacity of any system, human or natural, to survive and thrive assert that resiliency is reliant in part upon the system's ability to self-organize. In the higher-performing schools in this study, vertical collaboration, from classroom to school to district and in the reverse, is facilitated in some uniquely different ways than in average-performing schools and exemplifies qualities of self-organization.

One characteristic of collaboration in higher-performing schools is the role played by school-level administrators, teacher leaders, and teachers. It is through their interactions that important information that optimizes student performance flows consistently back and forth and is made relevant to instructional or other changes. In Forest Road, for example, any day of the week you may see the school principal and a teacher pouring over performance data in what are called "Red Zone" meetings. The goal of these meetings is to dissect what is working and what is not and for whom and to ensure that adjustments are made quickly based on the analysis. Teachers leave these meetings with action items to pursue, including different instructional approaches and using the resources available within the school (e.g. literacy specialists), knowing that follow up on progress will occur in a month. The principal also leaves these meetings with a task: To share the results with



We are able to have teachers give data to the principal and say, "Here are the kids in the red or yellow zone." The principal knows those kids individually. Principals have individual meetings with classroom teachers and the reading teacher to review progress and determine if what they are doing is working or they need to switch. –Valley Stream 30 (Forest Road) administrator

district administrators on a monthly basis to in turn inform targeting of professional development or allocation of other resources to the school.

Ensuring that this kind of collaboration is effective is in part reliant upon the qualities of the leadership. Findings from this study suggest that when the principal is seen as someone who "pushes" yet "supports," "listens" yet "gives input," teachers are more likely to show investment in this kind of collaboration. Sharing a sense that administrators work "WITH" as described by one Pakanasink teacher, marks a distinct difference between higher- and average-performing schools.

On the Continuum to Higher Performing

In sum, the element of close engagement with and understanding of the population embodies the vision that, in the words of one Columbus teacher, "the success of the school is understanding our population and our students and trying our best to meet their needs, working with our parents to help them get involved in their child's learning, and building a community within our school."

Average Performing

An ethic of care and nurture is prevalent, yet accountability for students' emotional and social growth and academic achievement is not.

Parent connections are weak and attributed to community apathy regarding schooling or language deficiencies among parents.

Dialogue (and action based on that dialogue) from teacher to school to district leadership and the reverse is infrequent and/or inconsistent and is not necessarily centered on student achievement.

Higher Performing

The school is seen as a "family" where cooperation is expected and all school employees take responsibility for children's emotional and social growth and achievement.

Forging parent relationships is enacted consistently through teachers and facilitated through school-level initiatives that recognize and celebrate diversity.

Discussions between teacher leaders and principals consistently inform instructional and other resource allocation changes from classroom to district.



Dr. Charles T. Lunsford School 19

Creating a Committed Family

School 19 is in Rochester, one of the largest districts in New York State, serving over 30,000 students in an area with a struggling economy and its share of violence and crime. While across the district, students meeting or exceeding proficiency in 2010, as measured by New York State ELA and Mathematics Assessments, hovered around 26% and 28% respectively, School 19 students achieved 47% and 79% proficiency, despite a 98% poverty level at the school.

In 2002, School 19 was identified as not meeting AYP targets among some student subgroups. Since 2003, however, it has become a place where students consistently outperform their peers. How did School 19 achieve what it has? First, the principal in 2002 promoted the idea of school as family, committed to tolerance, when needed, and always actively advancing the collective good. This "family" began to have "family" meetings centered on how to help students do better. They also hosted annual "family" picnics with school staff and community members intended to bridge the school-community divide.

Concurrently, she promoted the idea of teachers and staff being personally accountable for students—framed broadly. She explains her vision this way: "Within our school, we saw each child as everybody's child and assumed responsibility for helping that child." Helping a child meant that providing for the social and emotional support of children is essential and should be expected in a school. Implementing a Positive Behavior Intervention System (PBIS) was one of the first steps taken. She explains that "teachers, custodial staff and parents wrote the plan. They stuck to it and it worked. Once students were under control, you could teach." Helping a child also came to mean such acts as contributing to a funeral service for a child's parent or delivering food to a child's home.

Finally, as individual teacher accountability for School 19 students within a culture of a supportive family was established, the principal was able to galvanize teacher capacity to develop and implement strategic curricular and instructional changes that, in the words of the current principal, are about a "less is more" philosophy: "We don't change what's not broken. We don't keep adding what's not needed." Rather, changes are made that have the most impact on student learning and student well-being (adapted from Wilcox, 2011).

Performance of fifth graders in School 19 on the NYS Mathematics Assessment follow a similar upward trend to the highest performing set of similar schools in the state, except for 2010 when the cut scores changed*. Data are based on publically available NYS Assessment data as displayed at http://knowyourschoolsny.org. For results for additional grades and assessments, click on "Find Your School" on the website.



^{*}Top comparable schools: ten schools with similar demographics. For more information, visit the website.

2.

Literacy- and Technology-Enriched Instruction

I strongly believe that a student must know how to read before they enter Grade 3. We do everything in our power within the classroom and within AIS to reach this goal. Direct instruction, AIS, after school tutoring, as well as computer-aided instruction are the delivery systems we use to help our students read before entering Grade 3.

-Martin Luther King Jr. teacher

What does it look like when research-based practice in literacy instruction and the latest advances in computer software and hardware are used to help measure literacy development and motivate children to learn more efficiently? In this study, one of the ways higher-performing schools differ from their average-performing counterparts is in the ways they have built capacity for teachers to use a variety of programs and practices for developing literacy among diverse learners, do this early in a student's elementary years, and utilize technology in ways that help monitor literacy development and motivate students at the same time. Supports such as Academic Intervention Services (AIS) also help and will be further discussed in the final section of this report.

Literacy-Building Early, Intensively and Coherently. Although the higher-performing schools in the study use many different literacy programs, common among them is reliance upon balanced literacy strategies early in the elementary years (with the goal of all children reading at grade level by third grade) and consistency in how literacy instruction is approached from class to class and grade level to grade level.

Balanced literacy is the approach many teachers claimed to use in the early grades, and for most teachers this is understood as the integration of phonics instruction with literature/trade book study and the use of small, guided, and independent group reading. What makes such approaches particularly beneficial for diverse learners was exemplified at Lincoln. There, a teacher explained that a multi-sensory phonics program originally created for special needs students (including "sky writing, say sounds, count out sounds in words") supplements the reading program for all children in the first and second grades.

Intensive literacy instruction is the norm in the higher-performing schools. On a typical day, according to a second-grade Lincoln teacher, a student will have three periods of ELA in addition to the phonics program: One period will be for writing skills, another for shared reading, and a third for guided reading. Instruction during that time will include introducing skills, doing hands-on activities, and engaging in fantasy and realism on the floor in games such as "could this happen?" Then, this teacher recounted, "students go back to their seats and practice; I differentiate, review the skill, then close." In addition, students have two periods of hands-on math, and "then, there's science and social studies at the end of day."

In higher-performing schools, blocks of intensive literacy instruction like that described above are typically defined as at least 90 minutes. These blocks are not interrupted for pull out interventions. Just as intervention time is "sacred," in the words of a John F. Kennedy teacher, so is literacy time, and literacy instruction is expected to be differentiated to reach a broad spectrum of abilities. This skilled literacy instruction happens in part due to the assistance of literacy coaches/teacher leaders who model lessons and provide feedback on

I think we've been able to understand the dynamic between learning to read and reading to learn. We spend K through 2 giving kids the opportunity to learn to read first, but third grade starts that more important piece, which is "How do you read to learn?" We understand that that requires a whole different set of skills. –Mount Vernon (Lincoln) administrator



The dedicated 90-minute literacy block with a structured mini lesson, reader's workshop, learning centers, guided reading, and writing opportunities has been a key reform. I think it has benefited our students the most and strengthened our ELA instructional program.

-Centennial teacher

instruction (See "What It Looks Like in Maybrook, p. 17). Intensive literacy-building blocks using balanced literacy and differentiated approaches are one of the major reasons educators in higher-performing schools said their students are excelling.

However, it is not the blocks alone, nor the strategies used within them that make literacy instruction in these schools effective. It is in part due to how well they have conceptualized and made coherent literacy instruction from teacher to teacher, grade to grade, and school to school. One of the challenges in this endeavor, according to teachers, is how to seamlessly meld the best of one program with another and how to leave some flexibility for teachers to adapt instruction to students' needs and interests while ensuring that some common strategies are used across grades and schools.

How has this coherence been built while still leaving flexibility within the classroom? Educators in the higher-performing schools expressed a combination of pride and wonder at the amount of work they have done to accomplish this. School 19 provides an example: To resolve differing approaches toward literacy instruction embedded in layers of different programs they had used over several years (some mandated, others chosen), teachers at School 19 developed a school-specific model that incorporates skills blocks and workshops. According to a teacher, "We noticed that we were lacking a skills block. From there we broached [the problem] with our administrator...our input was listened to and they [administrators] let us collaborate. We took the best of a couple of different programs. We created binders with a scope and sequence and a format that followed the workshop model."

Making the literacy program "their own," adapting it to the population with whom they work, and ensuring that it is sufficiently understood by a large proportion of teachers are central to its effectiveness—and a common thread in higher-performing schools. Overall, educators in the higher-performing schools have embraced an intensive, coherent, and well-implemented approach to literacy with adaptations for English learners and special needs students embedded through differentiation techniques.

Literacy for English Learners. The specific needs of English learners, while sometimes overlapping those of struggling native speakers, are unique to their native language backgrounds, literacy experiences, and a variety of other social and emotional factors. While in average-performing schools ESL instruction is typically pullout and seen as discrete from mainstream instruction, in higher-performing schools mainstream teachers are either embedding instructional adaptations designed for ELs and/or providing native language instruction to improve literacy development among ELs.

While not all of the higher-performing school ESL teachers push in to the mainstream classroom, in those schools where a pull-out model is used, ESL teachers are in sync with the ELA curriculum, sometimes using the same materials and then utilizing small group time to differentiate by ESL level. In addition to embedding intensive balanced literacy instruction in mainstream classes or aligning pullout with mainstream instruction, hiring educators who have dual certifications in ESL or bilingual education is also a pervasive phenomenon in higher-performing schools.

In schools without dual-certified teachers, training in making all classroom experiences "language rich, with more visuals, a lot of manipulatives, and a lot of building background," as one Columbus teacher explained, has been provided to all staff and is positively impacting ELs' academic achievement. The principal of Columbus further explained that the SIOP [Sheltered Instruction Observation Protocol] program they have adopted, which was designed for ELs, "applies to everyone because it's really giving clear instructions and delivering everything clearly for everyone." Therefore, all staff have been trained in its use.

Technology-Enhanced Instruction. In many of the higher-performing schools, technology has been embraced in the effort to efficiently and effectively build literacy skills (primarily in English language arts but also in math), although in a few schools more traditional

Using the same language, making sure that if we're using an approach in second grade, that the same language in terms of strategies is used the next year. If you don't do that, then you spend the first three months teaching [students] to use your strategies. It's like they're relearning something. If they start off the new year using the same strategies, now they're building more tools for their tool box with the same language. –Malverne (Davison Avenue) special education director

I use [the same] products as the teacher uses. There's an ESL component that goes with that. I am doing the same skills, whether it's phonics skills, or reading skills, or vocabulary development, I just do it in small groups, parallel. –Maybrook ESL teacher



approaches predominate. In the schools extensively and effectively utilizing technology for literacy development, however, a few approaches are common among them: targeting specific skills directly connected to the curriculum at the level of student need, monitoring performance, supplementing teacher-led instruction for special needs students and ELs, and extending instruction to the home.

Although teachers in many of the schools in this study showed some familiarity with SMART Boards and the like, educators in the higher-performing schools more often cited using technology for more than displaying information for the whole class. The technologies they use, including one-to-one computers, take learning to the fingertips of the students themselves. For example, software connected to already in-use literacy programs provides exercises targeted directly to individual students' needs and at each student's own pace. Teachers at Centennial Avenue and Columbus, for example, commended these programs for "raising achievement levels" and starting "where students are at."

An additional bonus and another important rationale for the use of technology in the higher-performing schools is in how it is used to monitor literacy development throughout the school year. Almost immediate feedback on performance is one of the features that teachers said helps motivate students, and it also offers the additional benefit of recording the progress of each student for teacher use. In the most tech-savvy schools, a variety of programs are used, and they are used on a regular basis to inform instructional changes or other interventions in real time.

Technologies are also used to target instruction to the needs of ELs and students with Individualized Education Plans (IEPs). In several cases, teachers expressed delight that all mainstream students profit from these programs, as both specialists like ESL teachers and regular classroom teachers use them to reinforce reading and listening skills. In addition to software that individualizes instruction, at MLK non-verbal special education students also use iPads for the "Tap and Talk" program. Teachers in Columbus affirmed that a variety of technological tools help with listening and comprehension skills and are particularly helpful with special education students.

Finally, in higher-performing schools efforts are made to encourage students to use technology to develop literacy skills beyond the school day. In Forest Road the math program includes an on-line component and some teachers assign homework to be done on the computer. The program includes a Spanish tutor, and instruction is supplemented with "a lot of songs, with a karaoke version for the songs...so students can hear them in their own voices. All the songs are math related," as a teacher explained. In schools where many students do not have home computers, such as MLK, grants have been acquired to pay for them. In one MLK program, all pre-school children and their parents were provided with home computers along with a literacy program and orientation in how to use it.

It is important to note that where promising practices in technology-enhanced instruction are occurring it is due in part to professional development support. As a staff developer in Utica (Martin Luther King Jr) explained, "Our goal is to have technology integration. First, teachers need to know how to use the technology....Second, they need to be able to teach children how to use the technology. Third, they need to know how to integrate the technology into the curriculum. Fourth they need to know how to do it effectively."



[We have] well qualified bilingual teachers, not just teachers who speak Spanish but who understand how students learn English and who understand family, health, and immigration issues.

-John F. Kennedy teacher

On the Continuum to Higher Performing

Findings suggest that intensive literacy and technology-enriched instruction is one of the keys to higher performance among critical needs subgroups. Teachers in higher-performing schools typically use a variety of programs and practices for developing literacy early in a student's elementary years and utilize technology in ways that help monitor literacy development and motivate mainstream, special education, and ESL students at the same time.

Average Performing	Higher Performing
No clear and consistent approach to literacy instruction is apparent from teacher to teacher and grade level to grade level.	Balanced literacy strategies are used to build literacy intensively early in the elementary years (with the goal of all children reading by third grade), and with consistency from class to class and grade level to grade level.
ESL instruction is typically pull out and seen as discrete from mainstream instruction.	Mainstream teachers are either embedding instructional adaptations specific for ELs and/or providing native language instruction to improve literacy development among ELs.

Teachers may sing the praises of technology in captivating students' interests, but the technology is typically controlled by the teacher and not used in a strategic way to target needed literacy skills.

Technology is used to target specific skills directly connected to the curriculum and at the level and pace of student need, continually monitor performance, supplement instruction for special needs students and ELs, and extend instruction to the home.



Maybrook Elementary School

Unified Emphasis on Literacy

Every staff member echoes the Maybrook principal's statement that "the greatest priority is literacy." As she explains, "You've got to get that in place. Once that is in place, the world opens to you. You can go on and learn and read about science or anything else."

"When a child comes into my classroom [he or she is] immersed in literacy in all different ways—singing, dancing, writing—all modalities," says one teacher. Overall, teachers stress that their literacy initiative uses reading and writing to move students "from where they are" to "where we want them to be"—close to or above grade level.

"The principal is committed to literacy 100%," declares a district administrator. Through this principal's efforts, he says, Maybrook has taken the lead in a district-wide focus on reading and writing, "showing other elementary schools what can be done."

The "beauty" of Maybrook's literacy initiative is that "it meets kids where they are and they get to move individually and no one's being held back any more. You need to have those basics in place. There's no getting around it," asserts Maybrook's principal.

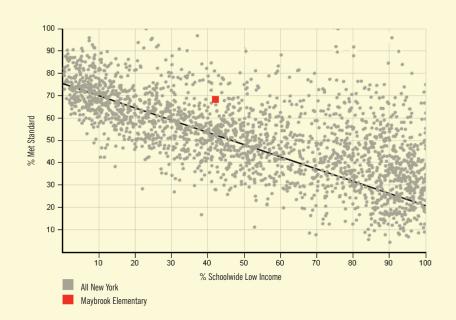
A main component of the initiative is having literacy coaches/coordinators go into classrooms to teach some of the language arts block and also work with other teachers (regular education, reading, and special education), particularly providing feedback on language arts lessons: "I make suggestions and talk with teachers about how they felt the lesson went." The process includes a pre-observation conference, the observation, and a post-observation conference.

In a first-grade classroom, the language arts block includes writing workshop, phonics, and reading. Components change somewhat as students move into the upper grades. The fifth-grade literacy program prepares students for moving to the middle school.

One long-time teacher describes herself as a "cheerleader" for the literacy initiative and calls the results of the program "mind-boggling" compared to previous accomplishments. The initiative "breaks it all down on how to" teach each child. "Every child is taken from their level to the next. For a diverse population, it exposes kids to things they are not exposed to in their families....We didn't used to have the tools to teach them. Now we do."

Teachers note the changes that the literacy initiative has fostered in students' reading and writing skills. It's a cumulative change, educators say—the longer students have been part of the initiative, the more improvement teachers see (from Baker, 2011, pp. 3, 9).

Maybrook fifth graders consistently outperform their peers in schools with similar demographics on the NYS ELA Assessment.* Data are based on publicly available NYS Assessment data for 2010 as displayed at http://knowyourschoolsny.org. For results for additional grades, years, and assessments, click on "Find Your School" on the website.



^{*}Predicted performance is represented by the diagonal line. Grey dots represent all other schools in the state that serve grade 5.

3.

Enlightened Approach to Curriculum and Data

[I attribute our success to] overall curriculum alignment, which is district wide in terms of setting clear alignment maps of what students should know and be able to do. These are consistently upheld school wide, district wide, and classroom wide.

-Valley Stream 30 (Forest Road) administrator

As discussed in the previous section regarding literacy- and technology-enriched instruction, coherence in what guides instruction from class to class and grade to grade impacts student achievement. The educators in this study asserted that the main driver of coherence is the curriculum, with its associated pacing maps and assessment systems. In higher-performing schools, a well-articulated and oftentimes electronically available K-12 curriculum helps facilitate teacher capacity to flexibly use a variety of effective instructional practices adapted to the population of students served and provides built-in feedback loops to inform needed changes. These feedback loops include rethinking what is taught and how it is taught when achievement targets are not hit. In comparison, teachers in average-performing schools tend to see the process of curriculum revision as a product-oriented endeavor rather than an ongoing revelatory process directly connected to assessment.

A second contrast between average- and higher-performing schools is in educators' level of and desire for "data literacy," characterized by the degree to which the collection and interpretation of data are understood to inform practice. A third contrast is in how the curriculum has been adapted to the needs of special education and ESL students and how these adaptations are understood and enacted in mainstream classrooms.

Curriculum Enlightenment.

[A]ny curriculum is a selection that represents what a community believes is worthwhile. The notion that a particular community can determine what is worthwhile in curriculum can seem problematic in a diverse society such as the United States. (Applebee, 1996, p. 42).

A very clear contrast between higher- and average-performing schools lies in the consistency with which conversations about curriculum and a related sense of ownership over what it encompasses are salient to teachers' work and the productivity of that work for the diverse students they teach. Teachers in average-performing schools generally spoke of their curriculum as an adopted program and conveyed a sense of frustration about materials and assessments at times not aligning well with the curriculum. The curriculum in these schools was likened to a map with a destination that is clear enough, but without a working compass or appropriate tools to get there. One teacher's frustration was expressed this way: "If you follow what you are supposed to be teaching you are all over the book. And we follow it because we have to. We can't keep up with it the way we should."

In some higher-performing schools the district curriculum has been "handed down," and "fidelity" to the curriculum is expected; however, there are a couple of ways educators approach curriculum that make its use effective. In these schools, the curriculum itself generally serves as "a starting point," in the words of one School 19 teacher and instructional coach, especially for newer teachers or interim substitutes. As a district chair in Malverne (Davison Avenue) noted, "If you take the curriculum as written, if you give that to the



teacher, the teacher will say, 'What do I do with it?' But if I incorporate it with the text book, then tell them, 'This is the strand; this is where it goes in the text, and this is how it needs to be done.' That's different." These kinds of supports in using the curriculum are not taken for granted in higher-performing schools and they are provided through both district-level and school-level specialists.

In fact, the entire enterprise of reviewing curriculum in higher-performing schools is typically a collaborative cross-level endeavor. In Valley Stream 30 (Forest Road), district administrators described a Curriculum, Instruction, and Assessment Council whose members include administrators as well as union-selected teachers. This Council reviews goals and sets measurable "smart goals" that "stretch us a bit." If the Council determines that a core curriculum change is needed, it "goes smoothly" because teachers are part of the process and get feedback from their fellow teachers before a change is implemented. For example, said an administrator, "This year we looked at phonetic scores and the second grade was still not at 80%, so we put in a program in Grade 3 and training went through quite smoothly."

Data Literacy. In higher-performing schools there is a direct link between what is articulated in the curriculum and what appears in assessments. These assessments are then used as "actionable data," as teachers, instructional coaches, and school and district administrators continually use them to inform instructional changes or use of other resources. In New Rochelle (Columbus), benchmark reports are dissected according to curriculum strands and through item analysis. In these analyses, scores are compared with scores in the region.

With all this information, administrators in higher-performing schools walk a fine line between being "data centered" and building relationships with teachers and specialists so that conversations about the data and how they inform curriculum and instruction can be productive.

One of the great benefits of building "data literacy" within and among the entire school staff is in how it "extinguished the ideas and the perceptions that kids can't learn because they just don't have it, and because they just can't do it," as a Port Chester (John F. Kennedy) administrator communicated. This perspective of "no excuses," as many teachers and administrators expressed it, is backed up by the hard data showing that teachers can do something to improve critical needs students' academic performance.

Nurturing a culture in which using student performance data is seen not as threatening but as how business is done has not come easily in many of the schools investigated in this study. Through administrative knowledge of how to manage complex systems and complex human beings, the expectation that data be collected and used has become a norm rather than a source of angst and resistance.

Adaptations for Critical Needs Students. Another distinguishing characteristic between higher- and average-performing schools regarding curriculum and data use is in adaptations made for special needs and ESL students. At the Martin Luther King Jr. School, for example, special education and ESL addenda have been added to the curriculum. A Utica district administrator described the process to develop this resource:

One thing we did do is develop a committee of our ELA and ESL teachers and included the special ed teachers. We developed an "ELA Guide of Instructional Strategies"—like an addendum. It took about a year and a half and they came up with all different kinds of strategies that could be used for ELA to teach different concepts. The handbook is not necessarily aligned to [the reading series], it's more of a supplement to it. Then what they did is rolled it out to the ESL and ELA teachers. Other core teachers heard about it, saw it, and asked for it. It's a guide of instructional strategies that will help students in the classroom. It's really for all teachers.



The curriculum is appropriately aligned to meet the needs of our kids. –Mount Vernon (Lincoln) administrator

A process such as that undertaken in Utica to revise and develop the addenda has been described by some as "tedious" and producing products that are overly prescriptive; nevertheless, both process and products are also seen as an essential component to meeting district and school goals by ensuring that teachers are supported in teaching the most essential content to ELs and special needs students. To make such a diversified curriculum come to life, the special educators and ESL specialists in higher-performing schools are fully involved in curriculum revision processes. At Lincoln, for example, a teacher attested to participating in monthly curriculum meetings along with ESL colleagues and being invited to give presentations to mainstream classroom teachers on the results of their work during these meetings.

On the Continuum to Higher Performing

The findings regarding curriculum and data relate closely to the previous element of promising practices regarding literacy and technology-enriched instruction. What is central to positively impacting critical needs achievement is coherence in what guides instruction from class to class and grade to grade. A culture in which educators' level of "data literacy" to use assessments to inform modifications to curriculum and instruction is also present in higher-performing schools, and efforts have been made to adapt the curriculum to the needs of special education and ESL students.

Average Performing	Higher Performing
Curriculum revision is seen as a product- oriented endeavor and something that is finished until scheduled for revisiting; cur- riculum may be out of sync with programs and materials.	Curriculum revision is seen as a continuing, revelatory process that includes revamping, rethinking, and retooling to deliver curricula in new ways.
Classroom performance data are seen as disconnected from what is important and therefore results are not effectively used; discussions of data between teachers and administrators are infrequent and optional.	A variety of useful performance data (often times selected with teacher input) are generated regularly, shared vertically, and then acted upon to inform instructional changes and curriculum revision.
No specific adaptations for special education and ESL students are articulated in the curriculum.	Curriculum has been adapted to the needs of special education and ESL students.



[I attribute Columbus' success with critical needs students' performance to] several things: There's a real understanding of what the achievement gap is, where the students are really underperforming, and that comes from a strong ability from the principal and assistant principal to really understand the state data.

-New Rochelle (Columbus) administrator

Centennial Avenue Elementary

Unifying the Elementary Curriculum

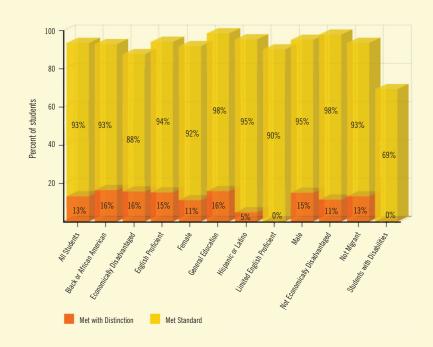
Standardizing the elementary curriculum throughout the Roosevelt District is cited by both teachers and administrators as a positive step toward academic achievement for all students. All the schools in this large, diverse district on Long Island have the same text books for reading, science, and math. Curriculum specialists are in place in all the schools, and all the special education teachers have been trained in the use of several commercial programs to meet the literacy needs of their students.

A district administrator maintains that "strong leadership is most important. We must be accountable to parents, students, and staff. We must be sure the curriculum is being implemented with fidelity in each building and that funding is in place to sustain it." And a district coordinator explains that unifying the curriculum is an important step forward because "the elementary schools used to be islands by themselves. With the mobility of our student population, we need the cohesion of all doing the same texts with discussions as a whole district. We now have a unified curriculum with a district-wide literacy team."

Some of the coordinators' efforts are directed at working together "to accommodate special ed students without watering the content down." The recent addition of curriculum specialists in English language arts, math, and science provides teachers with mentoring, model lessons, data collection and interpretation, and professional development. One of the coordinators believes the weekly grade-level meetings in each building and monthly meetings with the coordinators strengthen the implementation of the curriculum and the instructional program.

A monthly curriculum newsletter, "Curriculum News," details what is expected in a given month for English language arts, math, and science instruction for each grade level; it also includes upcoming testing dates and topics of general interest. Both ESL teachers and special education teachers report that "Curriculum News" helps them stay abreast of where they should be and the goals for the month. As one special education teacher says, "We use the same texts across the district for uniformity. The special education teachers adapt these materials. Content is taught. We know our own students and differentiate based on what we know our students need. We have worked hard to use the same curriculum with all of our students" (adapted from Nickson, 2011).

All subgroups in Centennial Avenue's fifth grade consistently perform near or above the state average on the NYS ELA Assessment. Statewide, the average percent meeting the standard was 82% in 2009. Data are based on publically available NYS Assessment data for 2009 as displayed at http://knowyourschoolsny.org. For results for additional grades, years, and assessments, click on "Find Your School" on the website.



4.

Fluid Adaptation and Deployment of Resources

I was here in the early phases of our beginnings of our inclusion program. [The former principal] was determined that we were going to teach them [special education students]. We were going to keep the bar high. As we brought on the inclusion model, we were all brought on board and enthusiastically grasped the philosophy that children with special needs should be included in the general population. That started an ingrained philosophy in this school that there was no difference. We can meet the needs of every single child. We had an enthusiastic principal and staff. Every teacher is invested in the success of every student.

-Davison Avenue teacher

Although this element of promising practices comes at the end of this report, it is not in any way less important than the other three. Rather, it may be best envisioned as the lubricant that enables the structured components undergirding teaching and learning (e.g., curriculum, instructional programs, material resources) to function effectively. The way resources are adapted and deployed to the benefit of ethnically and linguistically diverse and special needs students is related to stances toward difference (Element 1) and to the ways that literacy instruction and curriculum development are approached (Elements 2 and 3).

In contrast to their counterparts in average-performing schools, educators in the higher-performing schools show evidence of using resources so as to provide maximum levels of inclusion for EL and special needs students; using an extensive array of intervention strategies, including response to intervention (RTI); and pursuing and successfully garnering funding for extra support targeted specifically to ELs and special needs students.

Adaptability Enacted. Across the higher-performing schools educators keep a keen eye on subgroup performance, acknowledging that deploying resources to best serve critical needs populations is dynamic and results can be unpredictable. Therefore they expressed the need to take some risk, experiment, and think flexibly to do what needs to be done for their student populations. Inherently, then, what is a "promising" practice in this regard is really about adaptability and not any one approach.

This adaptability is evident in the ways the boundaries between general and special education and general and ESL education are blurred. In Forest Road, special education teachers, reading specialists, and classroom teachers collaboratively seek to provide whatever instruction each student needs to succeed and group children from different classes together by reading level. This works especially well for lower-level readers, who receive more individual and small group instruction as a result. A Columbus teacher described the mind-set that prevails in her school, which is consistent with other higher-performing schools in this study: "We look at what the child needs and figure out ways to meet those needs without feeling that we need to label. We look at what are the needs, what are the strengths; let's build on the strength. Let's meet the needs and monitor how they progress. In other schools, in order to provide these services, the child needs to be labeled. We first look at the need and the services and provide it [label or not]."

To make inclusion as it is carried out in these schools possible, a web of support for teacher capacity-building has been put into place. In many of these schools such supports have been in response to school-level needs, such as using a specialist to

[The school's level of success] is definitely a collaborative effort. We have such a large population of ELs. Before they used to get pulled out [so] a lot of children knew who the kids in ESL were....[Now], because most of the kids who are in the ESL program are in general education classes with a general education teacher and an ESL collaborating teacher, [the children do not know which of them are classified as ESL]. –Columbus administrator



We recognize the degree to which we achieve success with certain at-risk groups—children of economic disadvantage, ELs, special education—will ultimately affect the success of the district as a whole. We provide teachers with an understanding about how to be effective with these population groups.

—New Rochelle (Columbus) administrator

coteach in a classroom where students are struggling. In others, a great deal of central office planning for relevant and intensive—"not one shot deal"—professional development has helped bolster all classroom teachers' knowledge of and ability to enact inclusionary practices.

In Lincoln, an administrator described the reading teachers as "a tremendous component," able to "coteach or work with students individually, and also hav[ing] a pretty good knowledge of data. They're able to measure growth and talk about strategies to achieve growth with the rest of the teachers." Empowering specialists to use their knowledge and their time to have the greatest impact on student achievement is related to the previous elements regarding stances toward difference and how teachers interact around student performance data.

Extensive Range of Interventions. Providing an "array" of services is facilitated through the use of coteaching and inclusion models as well as Academic Intervention Services (AIS) and Response to Intervention (RTI). RTI has been largely embraced in many of the higherperforming schools, along with a variety of other interventions. Part of what makes AIS and RTI effective in the higher-performing schools is the collaborative foundation, instructional coherence, and approaches toward data analysis already in place. This collaborative foundation extends to school psychologists and social workers. At Davison Avenue and John F. Kennedy, for example, a team of these specialists as well as nurse practitioners work together to provide social, emotional, and physical supports to struggling students and their families.

In New Rochelle (Columbus), an administrator described their model for service as "a full continuum of services. To the greatest extent possible we attempt to integrate and support philosophically and morally children's rights to be integrated as appropriate, and we work hard with principals to be sure it happens. We also recognize [that we] serve a wide array of children. In addition to coteaching and inclusion we also have special classes for students with moderate to severe disabilities for the purpose of keeping them close to their community."

Beyond the interventions that are a regular part of classroom instruction or encompassed under the umbrellas of AIS and RTI, other interventions come in the form of help teachers offer "on-the-fly." In Maybrook, for example, a district administrator explained that when something is "not on an IEP...teachers will take that extra step." Those extra steps include things like offering tutoring before or after school or during lunch. A Lincoln teacher also attested to a spirit of "volunteerism" where teachers just "take the time to work with those students."

Pursuit and Targeting of Funding. All schools in this study receive varying amounts of federal and state funding to support the education of their critical needs students. However, one of the patterns among the higher-performing schools that differentiates them from average-performing schools is in how their leaders pursue and garner extra funding. This funding is targeted to the needs of their special education and EL populations and to developing teacher and administrator capacity.

Some examples of such funding and how it has been put to use include an ELA and STEM (Science, Technology, Engineering, and Mathematics) enrichment grant at Martin Luther King Jr., and at John F. Kennedy, a grant to support after-school and morning programs seen as vital to efforts to raise achievement among special needs and EL students. In other districts, administrators have used federal stimulus monies to provide professional development to build teacher capacity in using research-based instructional techniques. And in Utica (Martin Luther King Jr.), district administrators sought and received grants to offer leadership academies to support newer principals.

We also are continually willing to try things out. We're never really sure when we pilot or adopt an initiative or program—a training or approach—how effective it will be at Columbus. [We have] an unwavering desire to promote an even higher level of student achievement. We are even [willing to] take a half step backward if [a program offers] the prospect of being able to take two steps forward. –New Rochelle (Columbus) administrator

[We use an] integrated coteaching model, but with a lot more services. It allows children to be in classrooms with [a range of students, from] those not identified [but needy] to those proficient, and they benefit from having those extra teachers in the classroom. There's no specific student-teacher ratio; it's more of group instruction, based on needs. It's very amorphous, with a tremendous amount of auxiliary staff and a high allocated budget to retain those teachers.

-Pine Bush (Pakanasink) administrator

It's really all education rather than gen ed-special ed. As time has gone, we really don't need to distinguish between the two....It's not uncommon to see special ed teachers provide reading instruction for gen ed students. It's not unheard of for reading teachers on the gen ed side providing special reading instruction for special ed students.

-Valley Stream 30 (Forest Road) administrator

On the Continuum to Higher Performing

What the resource levers are and how they are pushed are qualitatively different in the higher-performing than the average-performing schools studied. This finding implies that there is an interdependent and constantly co-evolving system of actions and responses that informs the effective application of resources in schools with higher-achieving critical needs students. Human resources (e.g., ESL, special education teachers, counselors), the organization of students and staff in space and time (e.g., in classrooms and in schedules) and the tools and materials used (e.g., literacy programs and instructional practices related to them) in higher-performing schools are continually manipulated in the service of raising student achievement. The higher-performing schools demonstrate that the fluid adaptation and deployment of these resources impacts critical needs students' academic performance.

Right now, we don't have an EL director. What we are doing well is to empower teachers and put people in a position to lead in that area, so they're not being left out at all. –Mount Vernon (Lincoln) administrator

Average Performing

ESL and special education is not as inclusionary as it could be—may be in transition to more inclusionary, but struggling with scheduling and belief constraints.

The use of Response to Intervention systems is in its infancy and/or resistance to RTI is evident.

Little evidence is shown of successfully garnering grant support for extended day interventions or other special support targeted to ELs and/or special needs students.

Higher Performing

A flexible stance toward the use of specialists, instructional space, and time maximizes levels of inclusion for EL and special needs students.

An extensive array of intervention strategies is used, including effective use of Response to Intervention.

Funding for extra support targeted specifically to ELs and special needs students is pursued, successfully garnered, and well appropriated.

Even before students go through the RTI process—[teachers] have spoken to CSE [Committee on Special Education] with a great deal of assessment information. –Valley Stream 30 (Forest Road) administrator



Here at Davison, we work together as a team. If anybody's struggling here, there's so much support. Everyone really bands together. We have a really good school psychologist and social worker. Last year I had a lot of SIFE [Students with Interrupted Formal Education] students and foreclosures and kids still came to school. –Davison Avenue teacher

John F. Kennedy Magnet School

Tapping a Variety of Resources

JFK serves a large, diverse, and needy population, with more than 75% of students eligible for free or reduced-price lunch. 86% of students are Hispanic and come from Spanish-speaking homes, with 55% of students identified as English learners (ELs).

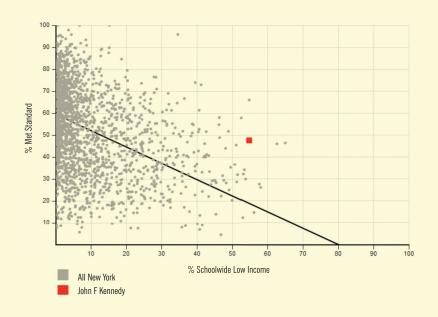
Although once a magnet school, JFK, like all schools in Port Chester-Rye, is now a neighborhood school. The principal proudly states, "We're a community school. We don't feel poor; if anything, we feel like we're rich. Our job is to give this community a school of excellence, so indeed they can be proud of their neighborhood school, proud of the education their children receive. We take this business very seriously."

Despite its relative poverty, diversity, and mix of cultures, JFK is an academic success story. For example, since 2006 its students have consistently outperformed students in similar schools on state mathematics and English language arts assessments. Recently the school began dedicating a block of time in the school day when all interventions are provided within the classroom. According to one teacher interviewed, it "is the best thing we've done....It's a sacred time every day for teacher-supported intervention."

The school also provides extensive services beyond the typical school day—before- and after-school programs (7:30 a.m. to 6:00 p.m.), an academic extended day, and summer programs for students who need them. Grant funding and partnerships with other community programs support these additional services. A clinical social worker is assigned to the school through a social services agency, and a school-based health center allows for medical and mental health coverage and provides an important network of services for students and their families.

The PTA is also a vital contributor to the school community. Its fund-raising efforts have created opportunities for child-centered events, books for the library, after-school activities, visiting authors, and educational field trips. In addition the PTA was credited with making an outreach to Hispanic families, which has resulted in increased attendance at school events and helped create a more inclusive school community. The PTA sponsors family literacy nights with teachers who model different reading strategies and do read alouds in both English and Spanish. (adapted from Tangorre, 2011).

John F. Kennedy fifth graders consistently outperform their peers in schools with similar demographics on the NYS ELA Assessment.* Data are based on publically available NYS Assessment data for 2010 as displayed at http://knowyourschoolsny.org. For results for additional grades and assessments, click on "Find Your School" on the website.



^{*} Predicted performance is represented by the diagonal line. Grey dots represent all other schools in the state serving Grade 5.

Conclusion

[A]n era of post-standardization may now be emerging in which schools, communities, and highly qualified professionals become networked in cultures of trust, cooperation, and mutual responsibility, with an inclusive mission that inspires rather than imposes engagement with diversity in order to develop more flexible and locally responsive solutions to diverse student populations (Skerrett & Hargreaves, 2008, p. 939).

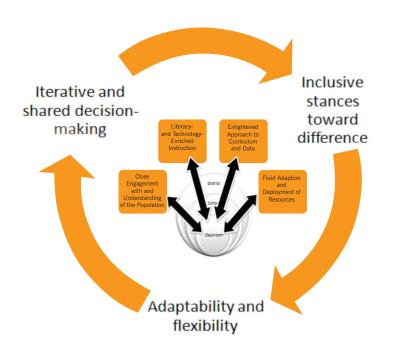
ome studies exploring what can be learned from schools that serve students facing conditions that would typically leave them at risk for school failure are informed by theories about resiliency—the ability of individuals to be successful even in the face of adversity (Borman & Overman, 2004; Elias & Haynes, 2008; Greene, Galambos, & Youjung, 2003). These theories view human social systems as complex, multi-leveled, and intertwined with the systems around them, both human and natural. In the school reform literature, cultures of trust, cooperation, mutual responsibility, and an inclusive mission have also been identified as factors associated with higher performance in diverse contexts.

From this viewpoint, to understand resilience in the complex contexts that many diverse elementary schools are, one needs to be sensitive to the relationships between individuals and the systems of which they are a part. In schools, this includes not only those who work in classrooms but also those who do instructional coaching, provide special services (e.g., ESL and special education) and manage the day-to-day operations of the school. It also includes those who provide and plan for professional development and steer district-level planning. Finally, these schools and districts are embedded in the communities that they serve and the larger national context, both of which impact perceptions of what is valued and also determine resource allocation.

The framework employed in this study views student performance through this lens of embedded and inter-dependent systems, namely classrooms, schools, and districts. As the findings reflect, these systems, when calibrated along the lines of inclusive stances toward difference, adaptable and flexible approaches toward instruction, curriculum and assessment, and a culture of iterative and shared decision-making, are able to positively impact critical needs students' academic achievement.

In sum, results from this study identify as a promising practice close engagement with and understanding of the population. This characteristic is supported by a dominant view that difference does not equate to deficiency, but rather is inherent within the fabric of a richly diverse community for which appro-

priate adaptations are made. Working with parents and fostering communication and collaboration from district to school to classroom is the norm. Findings also suggest that the element of literacy- and technology-enriched instruction is one of the keys to higher performance among critical needs students. Teachers in higher-performing schools typically use a variety of programs and practices for developing literacy early in a student's elementary years and utilize technology in ways that help monitor literacy development and motivate mainstream, special education, and ESL students at the same time. Technology also plays a role in ensuring coherence of curriculum from class to class and grade to grade and collecting data to closely monitor how well curriculum and instruction are meeting the needs of students. In the higherperforming schools in this study educators demonstrate a high level of "data literacy" in the way that they employ a variety of data to continually inform modifications to instruction and ensure interventions are in place in a timely fashion. And, finally, the finding regarding deployment of resources suggests a constant system of actions and responses that informs the way resources address the education of critical needs students. In higherperforming schools, human resources (specialists, counselors), space and time (classrooms and schedules), and tools and materials (literacy programs and instructional practices) are continually manipulated to raise achievement of all students.



Recommendations for raising achievement among critical needs students based on this study include:

- Improving dissemination of promising practices and processes for nurturing effective engagement with parents and promoting vertical collaboration from classroom to central offices.
- Increasing use of literacy- and technology-enriched, research-based programs and instructional strategies calibrated with a system of ongoing collection and use of achievement data.
- Improving teacher preparation and inservice professional development for adapting instruction to ethnically and linguistically diverse students, including ways for collaborating with ESL and special education specialists, but also non-instructional staff such as school psychologists and counselors.
- Developing and using effective coteaching and inclusion models for the fluid deployment of ESL and special education specialists.

Research Methods

This qualitative study was part of a series of best practices studies at all levels of schooling, elementary, middle, and high school (National Center for Educational Accountability, 2005; Wilcox 2009; Wilcox & Angelis, 2009, 2011). The study sought to investigate what factors promote exemplary performance among critical needs students at the elementary level. Specific questions explored five areas: How are academic goals and curriculum developed, revised, and utilized to support higher performance by these groups? What practices related to staff selection, leadership, and capacity building support higher performance? What instructional programs and practices support higher performance? How are data gathered, analyzed, and used to support higher performance? What interventions, recognitions, adjustments are used to support higher performance?

Fifteen schools were included in the study. Ten of these were identified as "higher performing" based on subgroup performance on New York State English and Mathematics Assessments for Grades 3, 4, 5, and 6 (depending on the school's grade configuration) in 2007, '08, and '09. Five of the schools were identified as "average performing" based on the same data. For this sample, study schools were chosen following regression analyses in which performance for each of five subgroups—EL, special education, economically disadvantaged, African-American, and Hispanic students—was regressed against a combination of demographic factors that included school-wide percentage of low-income students, the enrollment of the school, the percentage of EL students, stability of the student population, and the school's ethnic composition. Separate regressions were aggregated for math and ELA, then averaged for an overall school performance

measure. "Higher performers" were selected from the set with a mean of at least 1 standard deviation above the average. The average-performing sample was drawn to resemble the higher performers as closely as possible but with a mean close to the average for all schools. In addition, per-pupil expenditures in the sample schools cluster near the state average and all have open admissions policies. In 73% of the sample schools, the percentage of students qualifying for free or reduced-price lunch exceeds the state average.

Data collected include interviews and documentary evidence. Teachers and administrators were interviewed during two-day site visits by two-person research teams for 40 minutes to an hour each. Interviewees typically included two to five administrators and five to ten teachers totaling 211 individuals interviewed across all schools. Documentary evidence collected includes school and district plans, curriculum maps, pacing guides; professional development information/materials; teaching evaluation information/forms; staff selection materials; unit and lesson plans; school schedules; district, school, and classroom assessments; and AIS and RTI-related documents. Interview data were coded inductively using a constant-comparison method utilizing qualitative software. Documentary evidence was used in triangulating findings (Miles & Huberman, 1994). Individual research teams crafted case studies for each school, and crosscase analyses of all higher-performing and average-performing schools were used to identify promising practices in supporting the academic performance of critical needs students at the elementary level as discussed in this report (Yin, 2005).

References

Applebee, A. N. (1996). *Curriculum as conversation: Transforming traditions of teaching and learning*. Chicago: The University of Chicago Press.

Baker, E. T., Wang, M. C., & Walberg, H. J. (1995). Synthesis of research: The effects of inclusion on learning. *Educational Leadership*, 52(4), 33-35.

Baker, L. (2011). Maybrook Elementary School: Best practices case study: Meeting critical needs at the elementary level. Albany, NY: State University of New York.

Banks, J. A. (1997). *Educating citizens in a multicultural society*. New York: Teachers College Press.

Borman, G. D., & Overman, L. T. (2004). Academic resilience in mathematics among poor and minority students. *Elementary School Journal*, 104(3), 177-195.

Brown, K. E., & Medway, F. J. (2007). School climate and teacher beliefs in a school effectively serving poor South Carolina (USA) African-American students: A case study. *Teaching & Teacher Education*, 23(4), 529-540.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Darling-Hammond, L. (2010). The flat world and education: How America's commitment to equity will determine our future. New York: Teachers College Press.

Elias, M. J., & Haynes, N. M. (2008). Social competence, social support, and academic achievement in minority, low-income, urban elementary school children. *School Psychology Quarterly*, 23(4), 474-495.

Folke, C., Colding, J., & Berkes, F. (2003). Synthesis: Building resilience and adaptive capacity in social-ecological systems. In C. Folke, J. Colding & F. Berkes (Eds.), Navigating social-ecological systems: Building resilience for complexity and change. Cambridge: Cambridge University Press.

Goldsmith, P. R. (2011). Coleman revisited: School segregation, peers, and frog ponds. *American Educational Research Journal*, 48(3), 508-535.

Greene, R. R., Galambos, C., & Youjung, L. (2003). Resilience theory: Theoretical and professional conceptualizations. *Journal of Human Behavior in the Social Environment*, 8(4), 75-91.

Han, W. J., & Bridgall, B. L. (2009). Assessing school supports for ELL students using the ECLS-K. *Early Childhood Research Quarterly*, 24(4), 445-462.

Haynes, N. M. (2002). Addressing students' social and emotional needs: The role of mental health teams in schools. *Journal of Health & Social Policy*, 16(1/2), 109-123.

Idol, L. (2006). Toward inclusion of special education students in general education. *Remedial & Special Education*, 27(2), 77-94.

Jackson, K. F. (2009). Building cultural competence: A systematic evaluation of the effectiveness of culturally sensitive interventions with ethnic minority youth. *Children & Youth Services Review*, 31(11), 1192-1198.

Kovaleski, J. F., & Glew, M. C. (2006). Bringing instructional support teams to scale: Implications of the Pennsylvania experience. *Remedial & Special Education*, 27(1), 16-25.

Ladson-Billings, G. (1994). The dreamkeepers: Successful teachers of African American children. San Francisco: Jossey-Bass.

Liew, J., Chen, Q., & Hughes, J. N. (2009). Child effortful control, teacher-student relationships, and achievement in academically at-risk children: Additive and interactive effects. *Early Childhood Research Quarterly*, 25(1), 51-64.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis. Thousand Oaks, CA: Sage Publications.

National Center for Educational Accountability (2005). *Just for the Kids-New York: Elementary school best practice study*, 2004-05. Austin, TX: author.

New York Codes, Rules and Regulations. Title 8, Education Department, Section 200.4(j) C.F.R. (2008).

Nickson, K. (2011). Centennial Avenue Elementary School: Best practices case study: Meeting critical needs at the elementary level. Albany, NY: State University of New York.

Norwich, B. (2008). *Dilemmas of difference, inclusion, and disability: International perspectives and future directions*. New York: Routledge.

Rankin-Erickson, J. L., & Pressley, M. (2000). A survey of instructional practices of special education teachers nominated as effective teachers of literacy. *Learning Disabilities Research & Practice*, 15(4), 206-225.

Salinas, M. F., & Garr, J. (2009). Effect of learnercentered education on the academic outcomes of minority groups. *Journal of Instructional Psychology*, 36(3), 226-237.

Scanlon, D., Anderson, K. L., & Sweeney, J. M. (2010). *Early intervention for reading difficulties: The interactive strategies approach*. New York: Guilford.

Schmidt, W. H., McKnight, C. C., & Raizen, S. A. (1997). A splintered vision: An investigation of U.S. science and mathematics education. Dordrecht, The Netherlands: Kluwer Academic.

Skerrett, A., & Hargreaves, A. (2008). Student diversity and secondary school change in a context of increasingly standardized reform. *American Educational Research Journal*, 45(4), 913-945.

Stainback, S. B. (2000). The inclusion movement: A goal for restructuring special education. In M. A. Winzer & K. Mazurek (Eds.), *Special education in the 21st century: Issues of inclusion and reform.*Washington, DC.: Gallaudet University Press.

Stuhlman, M. W., & Pianta, R. C. (2009). Profiles of educational quality in first grade. *Elementary School Journal*, 109(4), 323-342.

Tangorre, S. P. (2011). John F. Kennedy Magnet School: Best practices case study: Meeting critical needs at the elementary level. Albany, NY: State University of New York.

Vellutino, F., Scanlon, D., Small, S., & Fanuele, D. P. (2006). Response to intervention as a vehicle for distinguishing between children with and without reading disabilities. *Journal of Learning Disabilities*, 39(2), 157-169.

Walther-Thomas, C., Korinek, L., McLaughlin, V.L., & Williams, B. T. (2000). *Collaboration for inclusive education: Developing successful programs*. Needham Heights, MA: Allyn and Bacon.

Wilcox, K. C. (2009). What works in middle school science: Preparing adolescents to become the next generation of scientists. Albany, NY: State University of New York.

Wilcox, K. C. (2011). Dr. Charles T. Lunsford School 19: Best practices case study: Meeting critical needs at the elementary level. Albany, NY: State University of New York.

Wilcox, K. C., & Angelis, J. I. (2009). Best practices from high-performing middle schools: How successful schools remove obstacles and create pathways to learning. New York: Teachers College Press.

Wilcox, K. C., & Angelis, J. I. (2011). Best practices from high-performing high schools: How successful schools help students stay in school and thrive. New York: Teachers College Press.

Yin, R. K. (2005). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

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