In preparing to teach a history lesson on the 1971 desegregation of Virginia’s public schools, Sarah Bell knew that her fourth-grade students, most of them the children of recent immigrants, would not understand the vocabulary needed to learn the lesson. As Principal Molly Bensinger-Lacy of Graham Road Elementary School says, “We have almost no kids who will get it if we haven’t taught it to them.”

So Bell spends a class period preparing them for the next day’s lesson. She first defines the words “segregation,” “desegregation,” and “integration,” but she knows that defining words is not enough. She reminds the students of what she called a “sad memory” for the class when it learned the word “discrimination.” In that case, the class divided into two groups—girls and boys—and girls received special privileges.

To make sure her students understand the new vocabulary words, she has them go to separate corners where signs are posted—Hispanic, Asian, African, and White. The largest group is in the Hispanic corner, the next largest in the Asian corner, and two recent immigrants in the African corner. There are no white students, so Bell and Principal Bensinger-Lacy, both white, stand in the white corner.

Bensinger-Lacy, who attended segregated schools as a child in Texas, tells about some of the things that were common then—for example, when white students were finished with textbooks, the old books were sent to schools for African-American and Hispanic children. While white students had nice school buildings, African-American and Hispanic students attended shacks with no cafeterias.

The children are visibly shocked. One boy in the Hispanic corner crosses his arms, throws up his head, and says with mock defiance, “Well, I wouldn’t care.”

To illustrate desegregation, the teacher brings all groups into the center of the room so that they are no longer apart but still in their groups. To illustrate integration she has everyone mingle, shake hands, and throw their arms around one another’s shoulders. She posts the words with symbols illustrating the three different qualities, and has them repeat the process of segregation, desegregation, and integration.

Bell then asks the students how a segregated country could convince people to integrate. One student suggests holding a meeting for representatives of different groups. Another suggests making speeches. A third suggests threatening to cry.

“Tomorrow,” Bell says, “we’ll start talking about the real events and how Virginians reacted.”

The day’s lesson illustrates the careful attention faculty members at Graham Road Elementary School pay to every aspect of learning, to ensure their students achieve at high levels: They make sure they teach what their students are expected to know—
in this case, a piece of Virginia history the state has said fourth-graders should understand. They ensure that their students develop the vocabulary and background knowledge necessary to understand the lessons. And not incidentally, they build lessons that allow students to move around and actively engage the material.

But that’s just a small piece of what there is to know about Graham Road Elementary, one of the highest achieving—and lowest income—schools in Fairfax County, Virginia. Located in well-to-do suburban Washington, D.C., the Fairfax schools are widely considered among the highest performing in the country. Its students achieve high SAT scores and attend top colleges and universities. But its celebrated averages mask deep achievement gaps among different groups of students. Its African-American and Hispanic students not only underperform white students in the district, they tend to underperform African-American and Hispanic students in Richmond, Norfolk, and other Virginia jurisdictions. And its growing number of low-income and new immigrant students tend to have much higher rates of failure than other students.

The biggest exception to this pattern is Graham Road, where just about 80 percent of the students meet the requirements for the federal free and reduced-price meal program, and 95 percent of the students are non-white—primarily the children of recent immigrants. In 2008, 100 percent of the school’s sixth-grade students met state reading standards (70 percent exceeded standards), and 96 percent met state math standards (72 percent exceeded). The previous year Graham Road also posted impressive results. In fact, in 2007, Fairfax County Public Schools produced a scatter-plot demonstrating the usual pattern of declining test scores in relation to increased poverty (see below). In the upper right quadrant of the graph is one blue diamond representing a high-poverty school with high literacy scores. That school is Graham Road.

The school wasn’t always high achieving. In 2003, only about 60 percent of students met state standards, far below the district average of about 82 percent. Today, the district level has stayed roughly the same (improving slightly in reading), while the percentage of Graham Road students who meet state standards has soared.

Bensinger-Lacy says she is concerned her school’s high achievement rates will somehow be misinterpreted as coming easily. “It isn’t easy. We sometimes think, how can we teach all we have to teach when our students come in so far behind?”

When Bensinger-Lacy became principal in 2003, she arrived as an experienced educator, most recently as the principal of a more middle-class Fairfax County school. She had always thought that schools could do better by low-income children and children of color than they were doing, and she had read all she could of the “effective schools” literature describing the characteristics and practices of high-achieving schools that served such children.

With Graham Road, she finally had a chance to lead such a school. Over the previous 20 years, the population at Graham Road had changed from primarily a white, middle-class population to a primarily immigrant population. “The middle-class neighborhood across the street has abandoned the school,” Bensinger-Lacy says. Although a few neighbor-
ing middle-class families have finally begun to return to the school, most of their students remain in parochial and private schools. Through the years, as the numbers of these middle-class students dwindled the school’s achievement levels did as well until Graham Road had the reputation of being a terrible school.

The first thing Bensinger-Lacy had to confront when she arrived as principal was that the faculty, as she puts it, had “given up.”

“It was horrible my first two years. The school had become a repository of people who hadn’t been able to make it other places. It was straight out of the literature.” Teachers took time off to run a cheerleading camp or to attend family reunions and wouldn’t even bother calling substitute teachers. She told them, “If you don’t need a substitute, maybe we don’t need you.”

She carefully documented what she saw, and she “evaluated out” weak teachers. The pivotal moment came when only two teachers bothered to attend a required training session on math instruction. She documented the episode and recalls that even the local union did not contest the evaluations. “I was very careful. And it was very clear.” Most of the original faculty members have gone, with the notable exceptions of two first-grade teachers who have since risen to leadership positions.

When Bensinger-Lacy hires teachers and staff, she looks for people who will help make Graham Road a high-achieving school. She looks for teachers who believe that even kids who come in far behind their peers in vocabulary and background knowledge can still learn to high levels. And she looks for teachers willing to work with other teachers to figure out the best ways to teach such students.

“This is a hard job, but if you want to wake up knowing that you will make a difference, this is the place to teach,” she says.

**Shaping Faculty**

As time has gone on, Bensinger-Lacy has placed greater demands on new teachers. For example, she makes sure applicants want to be part of a “professional learning community,” analyzing data in detail, developing lesson plans with other teachers, and evaluating their professional weaknesses dispassionately. She asks applicants if they will teach at least one of the school’s intersessions. The school has a year-round schedule, with regular two-week intersessions used to help some students catch up and accelerate others. Because the school has an arts focus and is a partner in a conducted by the John F. Kennedy Center for the Performing Arts in Washington, D.C., Bensinger-Lacy also looks for teachers willing to incorporate the performing arts throughout their instruction. Far from making it more difficult to hire new teachers, “The more requirements I put on candidates, the more popular we get,” Bensinger-Lacy says.
“I find the ‘millennials’ are much more ready for this way of working,” she says, referring to young teachers who have recently entered the profession. “It’s the mid-career teachers who often have problems adapting.” Kindergarten teacher Laura Robbins, who came to Graham Road fresh out of college, is an example of a “millennial” teacher. “I was looking for a school like this,” Robbins says. Robbins sought a school in which teachers work and learn collaboratively, and administrators support leadership and professional development for teachers.

On the other hand, Bensinger-Lacy relies on two very experienced teachers, Marie Parker, the school’s literacy coach, and Aileen Flaherty, the school’s math coach, to help teachers new to the school understand and use data to improve instruction and build a curriculum matched to state standards. “We couldn’t have made the progress we’ve made” without them, Bensinger-Lacy says.

Literacy coach Parker sees her job as helping teachers meet high expectations. Sometimes, she says, teachers will complain that Virginia’s learning standards are too high for Graham Road students. She regards these complaints as “teachable moments,” telling teachers, “You might think it is unrealistic, but we have to make it realistic. We don’t have a choice.” She puts it that way, she says, to acknowledge the understandable frustrations teachers have when children enter school so far behind. But, she adds, the standards “are important and appropriate.”

“We want the children to be the best they can be,” she says. So, for example, while other schools have begun to use what they call “power standards,” which means just the standards necessary for proficiency, at Graham Road “we teach all the standards.” That has contributed, she says, to the large percentage of students who don’t just meet standards but exceed them.

To jump-start discussions, Bensinger-Lacy begins with a graphic organizer that looks like a fish. The head of the fish represents a problem teachers have identified, and the diagonal “bones” spreading off the spine are the factors teachers believe contribute to that problem. Teachers identify factors such as “lack of exposure,” “lack of background knowledge,” “poverty,” and “parents’ lack of education.” Bensinger-Lacy will then say, “Okay, now cross out anything that we have no control over.” Parker says this exercise has proved to be an extremely powerful technique to acknowledge what teachers often need to talk about—that the poverty and isolation of their students is a huge drawback in academic achievement—but to then “get it off the table.”

Bensinger-Lacy’s message to the faculty, Parker says, is that, “at this school we’re successful because we find a way around all that.”

Such discussions often occur at quarterly grade-level data meetings, when teachers pore over huge, yards-long charts spread on tables that show how each student performs on each benchmark that teachers have set. The charts are organized by classroom and color-coded. Blue indicates that the student has exceeded the benchmark, green or yellow that they have met the benchmark, and red that they have not met it. Each row lists a different student, and each column represents the mastery of a specific knowledge or skill—from multiplying fractions to writing a complete sentence. The color-coding allows any faculty member quickly to see how a class is doing.
though a casual visitor might find such a chart overwhelming.

When teachers first start at Graham Road, the literacy and math coaches help them enter and interpret their data. So, for example, Parker is entering all the assessment data for the third grade in 2008 because four of the five teachers are new. The school’s expectation is that new teachers are likely to find the job a bit overwhelming at first. “This is a hard place to work,” Parker says in explanation. But as they gain experience they are expected to take control of their own data. “Marie’s job is to work herself out of a job,” Bensinger-Lacy says about Parker. So, for example, kindergarten teacher Robbins is now leading the kindergarten data team. That means that she helps input data from each of the kindergarten teachers and leads the data discussion.

While some longtime teachers chafe at the emphasis on data and find gathering data cumbersome, the process has become second nature to others. As Robbins says, “A lot of it is observations in small groups. It’s easy enough to have a notebook and jot down that someone recognizes his colors.”

Data meetings require both positive and negative observations about students’ learning—and specific examples. Each teacher first makes general observations about the data. In a kindergarten data meeting, for example, one such a comment is, “most kids have met the standard for letter recognition.” They then say something “up” (such as “Christian attempted all of the assessment—we’re not throwing sand anymore!”) and something “down” (for example: “Almost half my students don’t have sight words,” meaning words that students are so familiar with that they don’t have to concentrate on decoding.).

Sometimes, she says, teachers resist saying something negative. This tendency was evident during a recent kindergarten data meeting. After several teachers pointed only to the progress they were seeing, Bensinger-Lacy said: “It’s fine to look for progress, but it needs to be progress to a standard. If the progress is too slow, then by third grade [the data] is terrible. The bigger picture is that these are the children who won’t graduate from high school.” She goes on to remind teachers that large percentages of Hispanic students don’t graduate from high school in Fairfax County.

As painful as such discussions may be, teachers agree that close study of the data helps with the teaching process. “We can look at it and see not only what the kids know but what we should do,” says Robbins. First-grade teacher Connie Gould agrees that such data discussions “help gain objectivity” so that instead of just being exasperated, teachers can see patterns where their students have problems. “It helps you analyze,” Gould says.

The data discussion also facilitates the exchange of ideas. Early on, Robbins says, she noticed that her students weren’t catching on to rhyming as quickly as another teacher’s. “I
was able to ask her what she did.” More recently, other teachers asked her what she was doing to help her students learn letter recognition, and she described how she has students make letters with Play-Dough and shaving cream.

Bensinger-Lacy remembers that the first data discussions she led at Graham Road “were tense. They’re still intense, but then they were tense.” Her teachers, like many, were unused to having their teaching under such public scrutiny, and it took time before they felt comfortable. Now, she says, they often will discuss solutions among themselves before she even meets with them.

The results of such careful studying of the data and teacher collaboration is evident throughout the school. It is reflected in how teachers approach reading instruction, how they tackle students’ lack of background knowledge, and how they teach students to take tests.

**Reading Instruction**

In general, Graham Road follows Fairfax County’s reading curriculum, known as “balanced literacy.” Balanced literacy is a term that has gained popularity in the last decade as a way to split the difference in what has been called the “reading wars.” On one side of the reading wars are those who argue that many children need systematic, explicit phonics instruction to help them match sounds to letters and thus “decode” words quickly and accurately. On the other side are those who argue that systematic, explicit phonics instruction is harmful, stifling the joy in learning to read. Surrounding children with the printed word and with meaningful literature, these “whole language” advocates argue, is the best way to motivate children to learn to read, much the way surrounding children with spoken language is the best way to help children learn to speak.

But in recent years, whole-language approaches have been blamed in part for the fact that more than one-third of children—including many children of college graduates—are not reading fluently. Many school systems that once pursued whole-language approaches are now calling their reading programs “balanced literacy,” reflecting the inclusion of phonics instruction as part of the curriculum. However, many balanced-literacy programs still eschew systematic, explicit phonics instruction in favor of “embedded” phonics instruction. That is, instead of teaching children which sounds are represented by which letters or combination of letters in carefully sequenced lessons, they teach phonics incidentally while reading.

For many educators, the question of how to teach phonics reaches deeply into belief systems about teaching and learning and leads to great pedagogical battles. At Graham Road, the issue is a cheerfully empirical one.

“We have a good balanced-literacy program,” says Bensinger-Lacy. “But we were finding that that wasn’t sufficient.”

Teachers at Graham Road who had taught Fairfax County’s prescribed reading curriculum found that many of their students were unable to decode words they had not seen before, even if the word was in their spoken vocabulary.

Using a phonemic-awareness assessment, teachers learned that their
students had difficulties identifying sounds and the placement of sounds in words, problems that were impeding their progress in decoding. The teachers in the early grades now carefully incorporate phonemic awareness into their classroom instruction. They continue to give the phonemic-awareness assessment to their first-graders three or four times a year, to “see where we have the most problems,” Bensinger-Lacy says.

Parker adapts some speech-therapy techniques into regular classroom instruction in an attempt to help students listen carefully and produce the right sounds for English. Many students at Graham Road think, for example, that “ball” and “bat” rhyme because they both start with a “b.” “We have to teach them that it’s the ending sound that counts in a rhyme,” Parker says. But even that is often more advanced information than some students are ready for, Parker says. “We break it down. If they can’t distinguish an environmental sound,” such as the sound of a scratch across a table from the sound of fingers snapping, then “we start with CDs with sounds like a toilet flushing and a door closing and match the sound to a symbol.” Such connections not only teach students to distinguish sounds, but they also teach them that sounds can be represented symbolically.

Such detail is necessary, Bensinger-Lacy says, because, “We’re getting kids who haven’t heard English and haven’t learned to read in their own language.”

Yet even with formal instructional time on phonemic awareness and phonics, the teachers found that students still needed help. They decided that classroom instruction was not yet sufficient and agreed to make informal teaching opportunities the subject of one of their professional learning community meetings in spring 2008.

With their classes covered by teacher aides and substitute teachers, the school’s three first-grade teachers, two special educators, a teacher of English for Speakers of Other Languages (ESOL), Parker, and Bensinger-Lacy met first thing one morning. First-grade teacher Betsy Millspaugh briefly reviews current research on the need for students to have extensive experience in identifying sounds in words. “At least in this school,” she says, referring to the fact that most of the students do not speak English at home, “if you give systematic instruction in phonemic awareness, our students will perform at the same level as middle-class white students.”

The group then breaks into teams of two and three to work on activities that could be used as quick lessons during the informal opportunities teachers identify as times that could be used for additional instruction. One such time is Morning Meeting, when teachers go through a typical script used in classrooms throughout the country: “Good morning class. Today is Monday. We will learn more about plants today in science.” One team suggests leaving off the “M” in the word “Monday” and then talking about what letter should go there. They recommend that teachers adapt the old game of
“I’m packing my suitcase and in it I put…” where anything put in the suitcase would have to begin with “M.” Once students become proficient with this, the idea is to allow anything in as long as it has an “M” in the middle of the word and use other letters as well.

Another team works on materials that would bring phonemic awareness into math class—for example, by having students graph whether sounds appear at the beginning, middle, or end of different words. One team even works on rhyming and syllable-counting games that could be played while students wait in line to go to lunch or the library or for those stray five minutes that even the most organized teacher finds in the course of an ordinary day.

The teams share what they have developed and promise to distribute finished copies of materials. When asked what would happen if teachers didn’t want to work in this open, public, and collaborative way, one teacher—to the agreement of the others—says, “Molly wouldn’t hire them.”

**Vocabulary and Background Knowledge**

As students get older, the emphasis in reading instruction shifts from sound recognition, decoding, and sight words to fluency and comprehension. Throughout that process, teachers are painfully aware that their students’ limited vocabularies and background knowledge are significant obstacles that would be less pressing if their students were the children of middle-class college graduates. As Bensinger-Lacy reminds them, teachers have no control over families’ education levels, so teachers have to consider their students’ vocabulary needs in a careful, deliberate way, as seen in the lesson on segregation, desegregation, and integration. But Bensinger-Lacy has been pushing for two years for an even more systematic, formal approach to vocabulary acquisition.

“I resisted it,” instructional coach Parker says, “because the teachers already have so much on their plates.” But Parker and math coach Flaherty have developed a schoolwide vocabulary program they will lead so that classroom teachers do not have added responsibility. They selected words essential to each of the disciplines—English, math, science, and social studies—and lead systematic word studies of three of those words each week. Each student receives a binder containing one page per word and copies down the teacher’s definition, draws a picture or icon of the word, uses the word in sentences, and, finally, defines it in his or her own words. “That’s important,” says Bensinger-Lacy. “They need to put it in kid language. We all know how kids can copy a definition from the dictionary and not understand it because they don’t understand two or three words in the definition.”

Knowing students need multiple exposures to a word before they fully incorporate it into their vocabularies, faculty members continually incorporate those words into day-to-day instruction. They reinforce the words by encouraging students to seek those words as they read.

Parker is enthusiastic about a new project she and an ESOL teacher have embarked on to help students develop greater background knowledge. “ESOL teachers will say that they can’t read a particular book with students because the students don’t have the background knowledge,” Parker says. In discussing this problem, some teachers noted that when they were young
They learned a lot from watching documentaries. So Parker and the ESOL teacher are planning to a way for students to acquire just-in-time background knowledge.

If a teacher plans to use a book in class that refers to earthquakes in the Rocky Mountains, she will first have students use the “background knowledge center” (otherwise known as the classroom computers) to watch videos provided by Discovery Channel’s United Streaming service on the Rocky Mountains and earthquakes. “They can watch them as many times as they want,” Parker says. The videos are as short as 20 seconds and as long as 15 minutes and cover topics as varied as dump trucks and gazelles.

“It’s almost like an encyclopedia, but using technology,” kindergarten teacher Robbins says.

This is yet another example of how teachers at Graham Road are clear about the obstacles their students face without giving into the temptation of thinking there is little to be done about them.

**Test Preparation**

Another difficulty teachers have noticed is that many students—particularly boys—race through multiple-choice tests quickly. As a result, they miss key words and give wrong answers, even when they know the material. To slow them down, teachers have developed a test-taking method known as “best effort,” in which students are taught to sketch the main ideas of the reading passage or math problem and icons for each of the answers. “So much of our memory is stored iconically,” first-grade teacher Millspaugh says, explaining the thought process behind best effort.

Students are also expected to use background knowledge so that, for example, if a test question mentions perimeters, they write down what they know about perimeters. Not only do the little pictures and icons help students focus on the test, they also help students think through an incorrect choice. For example, an inverted fraction might easily fool someone reading quickly. Students jot down a short justification for why each possible answer is either wrong or right. Test booklets become so filled with student writing that teachers joke that test booklets “should be heavier” when they are turned back. “We take a long time to take tests,” Bensinger-Lacy says.

The sketches and notes also make it easier for students to remember and explain their thought processes to teachers when they review the test booklets. One day, for example, reading teacher Polly Malton went through a test with sixth-grade student Hazel to discuss a few errors on an otherwise stellar test. The basis of Hazel’s success: “The very first thing I did was read the passage and draw pictures of what was happening,” Hazel says. “I was saying it in my mind.” Stopping to sketch takes a long time, but the students know it is effective. Hazel, who arrived at Graham Road as a fifth-grader, says that in the past she would read but “didn’t remember—or I got
the wrong answers because I didn’t go back and reread the passage.” The few questions she got wrong on this particular test, she says, were because “I wasn’t thinking.”

Millsapugh says one of the things she likes about the test-taking method Graham Road uses is that it encourages “higher order thinking on multiple-choice tests.” Ultimately, she says, “we want our kids to be flexible thinkers. We cannot drill that in.”

The technique has proved so useful that students now use it as a note-taking system for all their expository reading, and Hazel says that even though she doesn’t take notes when she is reading fiction, the technique helps her “imagine the story in my head.”

Bensinger-Lacy says she thinks these kinds of note-taking and test-taking strategies are important and replicate those that many middle-class children develop as second-nature. “I have no apologies for doing for our kids what middle-class families do for their kids. I’m hoping that when SATs come around, they’ll understand how to take that kind of test.”

**Essential Extras**

Graham Road teachers are adamant that they do not “teach to the test” but rather to Virginia’s state standards, starting with what sixth-graders need to know at the end of their time at Graham Road and working backwards. Teachers develop curriculum maps during quarterly day-long instructional meetings. They value those meetings so much that when Bensinger-Lacy asked teachers to trim the budget, they decided to retain the meetings.

Graham Road has lost $200,000 in federal Title I funds over the last two years because Fairfax County’s Title I funds have to be stretched to pay for tutoring in schools identified as needing improvement under the federal accountability system. Bensinger-Lacy says that the curriculum meetings cost about $20,000 a year, which mostly pays for substitute teachers. Keeping them meant that field trips requiring charter buses and entrance fees have been cut, a loss Bensinger-Lacy laments. “It took me so long to get teachers to take field trips. For so long they told me they were too much trouble.” But teachers are creative with short field trips that use school buses. With the free museums and public buildings of Washington, D.C., within easy reach, some field trips are still possible.

Even field trips require careful planning, though. Parker says that one reason teachers resist field trips is that they are sometimes embarrassed by their students’ exuberance. On one trip to a fancy law office with a lobby of marble and fine art, she recalls, a group of sixth-graders “were so impressed they kept shouting and going through the revolving door over and over and trying to touch the artwork.”

That meant developing a lesson around how to act on field trips. “We have to say, ‘You’re going to want to touch the art, but we’re not going to do that,’” Parker says.

This is yet another example of how educators at Graham Road are clear-sighted about their objectives, then surmount obstacles in resourceful ways. “That’s the way we are about everything,” Parker says.