

EDUCATION WEEK

SPOTLIGHT

On Deeper Learning

EDITOR'S
NOTE

Classrooms are transforming in the 21st century, requiring new approaches to learning that emphasize “deeper” knowledge and understanding. In this Spotlight, explore how research is changing the way math concepts, like fractions, are being taught. See how leading Race to the Top districts are using personalized learning and take a look at classrooms using foreign language programs to prepare students in a globally competitive world. Also, see how teachers are preparing for the common-core standards, by balancing nonfiction and fiction texts, transforming writing in English/language arts courses, and preparing at-risk students for the new math standards.

This Spotlight features a collection of Education Week articles made possible in part by a grant from the William and Flora Hewlett Foundation, which supports coverage of deeper learning that will provide students with the skills and knowledge to succeed in a rapidly changing world. More at www.hewlett.org.

Published July 18, 2013, in *Education Week*

Federal Research Suggests New Approach to Teaching Fractions

By Sarah D. Sparks

There are some basic properties of numbers any 3rd grader can tell you: Each number is represented by a single symbol, and followed by a single successor. Multiplication makes a number bigger; division makes it smaller.

The problem is, none of those qualities—true of whole numbers—is true when it comes to fractions, one of the most chronically troublesome basic mathematics areas for children and adults alike. Now, as the Common Core State Standards push for earlier and deeper understanding of frac-



Christine Miller, a teacher at Sylvan Learning Center of Irmo/Lexington, works with Asia Brown, a 3rd grader, at the "Fraction Action" summer camp in Columbia, S.C.

—Brett Flashnick for Education Week

TABLE OF CONTENTS:

- | | | |
|--|---|--|
| 1 Federal Research Suggests New Approach to Teaching Fractions | 5 Math Teachers Break Down Standards for At-Risk Students | 9 Writing Undergoing Renaissance in Curricula |
| 3 Race to Top Districts 'Personalize' Plans | 6 Teachers Differ Over Meeting Nonfiction Rule | 11 Elementary Pupils Immersed in Foreign Languages |

tions, researchers and teachers are exploring ways to ensure students learn more than a sliver of the fractions pie.

“Developmental research shows even very young children have a fundamental grasp of fractions that can be built on through instruction,” said Nancy C. Jordan, a professor of education in the University of Delaware’s School of Education.

But, she added, “If children are taught math in a way that’s very rote, where they memorize procedures ... it really doesn’t help you much.”

‘Whole New World’

The traditional approach to teaching fractions can make it more likely for students to show superficial progress without real understanding, some researchers and educators argue.

“We’ve had a tendency in our traditional scope and sequence of math that you teach all this whole number stuff... and then all of a sudden you get to fractions and it’s a whole new world of what to do—everything they learned in whole numbers has nothing to do with how you do fractions,” said Linda M. Gojak, the president of the National Council of Teachers of Mathematics, in Reston, Va. “It’s one of the hardest things for kids to get their heads around.”

Cynthia Hacker, the education director for Sylvan Learning of Irmo/Lexington in Columbia, S.C., sees that confusion a lot. For more than a dozen years, the center has run a weeklong “Fraction Action” summer camp, at which students play games using shapes and number lines to compare fractions of different sizes and practice multiplying and dividing mixed and improper fractions.

While the camp focuses on elementary students, Ms. Hacker said one rising 12th grader who came to the center to boost his performance in high school math has ended up using the fractions games, too. “He’s a bright student; he just somewhere along the way missed the foundations of fractions, so now he’s having a lot of trouble with algebra.”

He’s far from alone. Students’ lack of fractions understanding has been cited as second only to word-problem difficulty as the top handicap for students learning algebra, in a survey of a representative sample of 1,000 algebra teachers conducted by the National Mathematics Advisory Panel—a federal task force created under former President George W. Bush to evaluate evidence on math teaching and learning.

The typical American approach to teaching fractions can overemphasize procedures at the expense of understanding the relationships among numbers, which is needed for higher math, according to Lynn Fuchs, a professor of

special education at Vanderbilt University in Nashville.

In the United States, curricula overwhelmingly focus on understanding fractions as parts of a whole, using area models and pie charts, and teaching students the procedures for adding or multiplying, for example.

Some Asian countries, by contrast, focus on what Ms. Fuchs calls a “measurement interpretation” of fractions: how they fall on a number line, the relationships between numbers that are represented by a fraction.

Leah Hurtubise, the director of the Mathnasium Forest Hill center in the Canadian city of Toronto, who operates a summer “Fraction Frenzy Boot Camp,” often sees middle school students who had seemed to understand fractions in elementary school, but do not understand the relationships among numbers well enough to apply what they have learned to decimals or percentages in 7th or 8th grades.

“If you ask what is $7/10$, they can tell you .70, but if you ask to convert $7/9$ they’re completely lost,” Ms. Hurtubise said. “They’re not grasping that they are dividing the top number by the bottom number.”

That’s soon to become an even bigger hurdle, as the common-core math standards push more of the early work on fractions into 3rd grade, as opposed to 4th and 5th grades. It also calls for teachers to focus less on the procedures for specific fraction problems and more on getting students to understand the relationships between numbers that underlie a fraction problem.

“It’s actually a very different way to teach fractions,” Ms. Gojak said. “It may have been implicit, but it’s not something that has been clear to teachers, and more than likely it’s not the way they learned it.”

“I want kids to understand in the long run that the meaning of the operation hasn’t changed” in a fraction-division problem, Ms. Gojak said. “I’m not just flipping and multiplying; the numerator is telling us how many things we have, and the denominator is describing the size of the piece.”

In a 2012 essay, Robert Siegler, a professor of cognitive psychology at Carnegie Mellon University, in Pittsburgh, and his colleagues call fractions a “new frontier” for understanding students’ numeracy development.

Building Better Fractions

The National Center on Improving the Learning of Fractions, based at the University of Delaware a multi-university project supported by the Institute of Education Sciences, is trying to help students and teachers become more adroit with fractions.

Researchers Ms. Jordan, Mr. Siegler, and Ms. Fuchs are working with Nashville and other public school districts to explore more

effective ways to teach these concepts.

Beyond simply being able to count, Mr. Siegler said, fraction knowledge in 5th grade “uniquely predicts” a student’s 10th grade math achievement, above and beyond the student’s IQ, family background, or even knowledge of other parts of mathematics.

Ms. Jordan’s research has found that a student’s ability to understand and estimate where fractions would fall on a number line and explain magnitude—that a number represents a set of items which can be changed or compared to other sets—will predict how well they perform in math over the long term. She is developing a screening tool for 4th-6th grade students that would identify children who are having trouble learning fractions and what areas of instruction might need to be emphasized. It is expected to go to field tests next year.

Mr. Siegler and his team at Carnegie Mellon are developing a board game intended to help early elementary students understand and compare the magnitude of different fractions. The computer-based game, “Catch the Monster,” asks students to find a monster hiding along a number line by estimating the point closest to a location using a fraction-related hint. For example, a student given the fraction $9/4$ might guess the monster was hiding close to 2, between 2 and 3 on the number line. If a student estimates correctly, the cartoon monster “dies a dramatic death,” Mr. Siegler said.

Similarly, in one of Ms. Fuch’s studies, students in 53 4th grade classes in 13 schools were randomly assigned to participate in either their school’s regular fractions instruction or a 12-week intervention focused on helping them understand underlying relationships in fractions. Students who participated in the intervention performed significantly better than peers who had not participated on a test of fractions problems culled from the National Assessment of Educational Progress. Moreover, the achievement gaps between students considered “at risk” in math—those initially in the lowest 35th percentile on a standardized math test—and those not at risk closed significantly, but only for those who participated in the program.

“We are teaching children to think of fractions in terms of quantities, how different-sized fractions compare to one another,” Ms. Fuch said. “We’re trying to teach them a more sophisticated understanding of fractions and help them do well.”

Coverage of “deeper learning” that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org. Education Week retains sole editorial control over the content of this coverage.

Published March 27, 2013, in *Education Week*

Race to Top Districts 'Personalize' Plans

By Michele McNeil

The 16 Race to the Top district winners, pushed by \$400 million in federal grants that put a premium on personalized learning, are embarking on vastly different makeovers of the classroom experience—from districtwide approaches to a narrower blueprint focused on middle school math.

Despite the divergent approaches, a review of the winning applications shows those districts are tapping similar tactics: mobile devices and individualized learning plans for students, personalized learning coaches for teachers, and data dashboards that collect all student learning information in one place.

What's more, many of the districts are embracing the philosophy that learning isn't defined by time spent in class, but by mastery of a particular subject or lesson.

For example, the Middletown city school district in New York is piloting a policy in which elementary students advance to the next grade when they show mastery of grade-level standards. In Carson City, Nev., high school students who master their high school subjects in the middle of the year can move right into earning college credit.

Last year's grant contest was the first time the U.S. Department of Education used its signature Race to the Top brand to try to push for education redesign at the local level, specifically around personalized learning.

In putting the grant money up for grabs by districts, federal officials sketched out a broad definition of what they wanted in a personalized learning environment: one in which educators used data and 21st-century tools—such as mobile devices and “learning algorithms”—to customize instruction to the needs of individual students.

The original Race to the Top competition, launched with money from the 2009 federal economic-stimulus measure, was considered successful in getting states to adopt certain policies favored by the Obama administration, such as charter school expansion and teacher evaluations tied to student academic growth. But it remains unclear how successful the district iteration, funded through fiscal 2012 congressional appropriations, will be, experts

in personalized learning say.

“What Race to Top does best is change the fundamental condition under which school happens—whether that's policy or market conditions,” said Michael B. Horn, the education executive director of the Innosight Institute, a San Mateo, Calif.-based think tank that promotes personalized learning. “But when Race to the Top delves into operations of school districts,” he said, “that's a whole other matter.”

But if nothing else, Mr. Horn said, the latest Race to the Top has “elevated student-centric learning onto the radar.”

Local Leaders

In December, U.S. Secretary of Education Arne Duncan announced the 16 district winners, which include three charter school districts, two educational cooperatives, one large urban district (Miami-Dade County in Florida), and 10 midsize districts. Grants ranged from \$10 million to \$40 million. Mr. Duncan and his staff have hailed the portfolio of winning districts as leaders in upending the traditional school experience.

Most of the winning districts plan to buy new technology with their grants. In fact, a review of the project budgets for those districts shows that at least \$77 million of the \$400 million total will be spent on technology—from iPads to additional bandwidth for schools. For example:

- The 12,000-student Metropolitan School District of Warren Township in Indianapolis will buy 6,750 new iPads so elementary and middle school students can, among other activities, keep up to date on their progress toward academic goals.
- In Guilford County, N.C., each of the district's 17,000 students use hand-held devices to access digital content, a new online learning platform, instructional software, and subscriptions to various services.
- The 345,000-student Miami-Dade system will offer 30 new laptops for students in its highly individualized middle school math program to take home.
- And elementary students in New York's 7,000-student Middletown district, which has budgeted for half its \$10 million grant on new

“

What Race to Top does best is change the fundamental condition under which school happens—whether that's policy or market conditions. But when Race to the Top delves into operations of school districts, that's a whole other matter.”

MICHAEL B. HORN

Education Executive Director, Innosight Institute

devices, will share 40 new Google Chrome notebooks.

And even in districts that don't plan to buy iPads or other tablets for students, the goal is the same: expand Internet access so students have more opportunity to learn outside the physical boundaries of a school.

Green River's Approach

The Green River Educational Cooperative in Kentucky, which encompasses 112 schools and 59,311 students in rural parts of the state, will use its grant to put Wi-Fi on buses so students can learn during long rides to and from school. Eventually, the cooperative wants to expand access to churches and businesses—an acknowledgment that in sparsely populated areas, Internet access in each student's home is no guarantee.

But Green River's plan clearly states that it is “not a technology initiative.”

MAKING IT PERSONAL

As part of last year's Race to the Top contest for districts, applicants had to design a four-year plan that would personalize learning for students. Through programs and technology, the 16 winners approach personalized learning in different ways.

DISTRICT	AWARD (IN MILLIONS)	SCOPE	DETAILS	TECHNOLOGY NEEDS
Carson City, Nevada	\$ 10.0 	4 middle and high schools, 4,109 students	E-portfolios for students to track academic progress, goals; high schools organized around six career clusters; project-based learning to further develop students' interests; professional development for teachers on student goal-setting.	Laptops for program implementation specialists at each school; new e-portfolio software.
Charleston County, South Carolina	19.4 	19 schools, 9,493 students	New digital learning platform to capture all student data in one place; teachers use new platform to assign tasks and use rapid-response daily assessments; digital personalized learning plan for every student; project-based learning and online courses to meet individual student interests.	Mobile device for every student and teacher.
Galt Joint Union, California	10.0 	6 elementary schools, 3,800 students	Personalized learning plans for every student; computer-adaptive tests to inform lessons; personalized learning coaches for teachers.	Increased access for students and teachers to "virtual learning devices."
Green River Educational Cooperative, Kentucky	40.0 	112 schools in all grades, 59,311 students	Individual career profiles for every student; grouping and regrouping students to tailor learning; personalized learning teams will work with school leaders, teachers; elimination of school time for students who demonstrate off-campus subject mastery.	Wi-Fi on school buses, with access expanded later to churches and businesses.
Guilford County, North Carolina	30.0 	24 middle schools, 17,000 students	Personalized learning plans for students; students grouped into learning cohorts; new "personalized learning environment facilitators" to coach school personnel.	Mobile, hand-held device for each student and teacher, which features digital content, online learning platform, instructional software, subscriptions.
Harmony Public Schools, Texas	29.9 	36 middle and high schools, 12,240 students	Project-based learning, goal-setting, and academic and career maps for students; "custom day" schedule with 2 hours a day of remediation in math/English, advanced classes, or electives; data dashboard to combine all data points into a single, user-friendly Web portal accessible to students, parents, educators.	Portable devices for each student to take home.
Idea Public Schools, Texas	29.2 	All 25 schools, 12,617 students	One-on-one coaching for educators to use personalized learning in core classes; new dashboard to incorporate all student-assessment data; more digital learning tools and software.	Offer more books on digital devices, add adaptive reading software to computer labs, create a tablet "app" for educator observation tool.
Iredell-Statesville, North Carolina	20.0 	15 middle and high schools, 9,321 students	30 minutes of "SWAG" time (or Supporting Warriors to Achieve Greatness) to pursue personal interests; college and career mapping for students; blended learning coach in each school; in-person and digital instruction for students.	Digital device for each student to take home.
KIPP DC, District of Columbia	10.0 	All 10 schools, 3,040 students	New learning-management system to combine assessment/achievement data into one spot; resident teachers guide small-group learning while lead teachers concentrate on personalized learning.	Scale up iPad distribution for teachers, increase iPad and computer access for students, increase use of software such as Dreambox for math, create online observational platform for teacher evaluations.
Lindsay Unified, California	10.0 	All 8 schools, 4,074 students	New digital learning (student) platform with standards/assessment data in one place; personalized "sequence of instruction" for students based on placement tests and updated with formative-assessment data; new digital facilitator platform that provides instructional content tied to standards, intensive teacher-training modules in technology, student leadership.	Netbooks, tablets, or mobile devices to take home.
Metropolitan School District of Warren Township, Indiana	28.6 	16 schools in all grades, 11,611 students	Individualized goal-setting for students, with the ability to monitor progress through a digital platform; teacher training in new technologies; students in grades 7-12 use online coursework to earn high school credit based on competency versus seat time; extended school hours to increase Internet access for students.	Laptops in 30 wireless, high school English classrooms; 6,750 iPads across all grades; \$25 in apps per iPad per year; 110 fortified iPads for special needs students; 500 additional wireless access points for high-density buildings.
Middletown City School District, New York	20.0 	All 7 schools, 7,000 students	Transition to blended learning classrooms with personal and digital instruction; creation of new Hybrid Learning Management System that provides digital content for students and the ability for teachers to monitor progress; pilot a competency-based promotion policy for elementary students (versus seat time).	iPads or similar tablets for all students in grades 8-12; 40 Chrome notebooks for elementary students.
New Haven Unified, California	29.4 	13 schools, 12,719 students	Academic and career plans created for each student; parent and student digital modules to track progress; teachers use technology, online assessment, and open education resources to free up time for small-group instruction.	Broadband devices for take-home use for 4,500 students and 170 teachers in high school, and 430 teachers and 8,400 students in middle school.
Puget Sound Educational Service District, Washington	40.0 	261 schools, 147,085 students	New regional data portal for students, teachers, parents; personalized student plans for career and college; equip all K-8 students with adaptive math instructional tools.	New digital tools, to be determined, to personalize STEM learning.
Miami-Dade, Florida	30.0 	49 middle schools, at least 11,760 students	Replicating iPrep math model in all 49 middle schools with personalized math learning plans for students; renovated, high-tech classrooms, individualized instruction, student assistance profiles to flag students at risk of failure.	Wireless technology for renovated math classrooms; 30 laptops per classroom for students to take home; 60 laptops per classroom for in-school use; laptops for 147 teachers.
St. Vrain Valley Schools, Colorado	16.6 	8 elementaries, two middle schools, 1 high school, 5,757 students	Improving STEM in select schools by creating individualized academic and career plans, expanding Web-based "telementoring" between students and busy professionals; creation of high school "innovation center" to provide real-world experiences tailored to their interests with STEM professionals.	Each "innovation center" high school student will have a technology device.

One of its primary components aims to spark a culture shift in students by making them more responsible for their own learning.

Students will start to align their learning and goals with career aspirations even in the early grades.

"I'm not talking about making Einsteins out of 3-year-olds," said George Wilson, the executive director of the Green River cooperative. "It's about having them say: 'What I do now matters about my future.'"

In Charleston County, S.C., a new digital learning platform will serve as one-stop shopping for all student data so parents, teachers, and students can track academic progress.

"One of the most important things we're pushing is students owning their learning," said Lisa Herring, the associate superintendent for academic and instructional support for the 45,000-student district. "But that also does not minimize the very important role of the teacher."

Getting students engaged in their own learning—and allowing them to pursue their own interests—is a common strategy of the winning districts.

The 24,400-student Harmony public schools, a charter school network in Texas, has designed a "custom day" with two hours of flex-time for students to receive remediation in math or English/language arts, take advanced classes in those subjects, or pursue electives.

The Iredell-Statesville district in North Carolina gives students 30 minutes of "SWAG time" (shorthand for one high school's Supporting Warriors to Achieve Greatness program) to pursue personal interests—learning to play the guitar or practicing French, for example.

That is just a small part of a much more comprehensive approach to customized learning, district officials say.

"I think the biggest change is the way instruction is delivered. This is a major culture shift," said Melanie Taylor, an associate superintendent of the 20,000-student Iredell-Statesville schools.

Making the change means incorporating digital learning into the classroom, but it also means using "blended learning coaches" in each building who can help Iredell-Statesville teachers use new technology and smaller-group instruction in their daily lessons.

"There's less lecture, less students sitting in desk. There will be more of a rotation around project-based learning and small-group instruction, and more work happening on a device," said Kelly Marcy, the executive director of student services. "More subtle will be that the teacher is the leader."

Coverage of "deeper learning" that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.

Published March 27, 2013, in Education Week

Teachers Break Down Math Standards for At-Risk Students

Educators seeking creative solutions

By Anthony Reborá

Many accomplished teachers are enthusiastic about the common-core math standards' emphasis on mathematical reasoning and strategic expertise over rote computation, but some say the transition to the new framework poses daunting challenges for students who are already behind in the subject.

"Every time I talk to other teachers, this issue comes up," said Silvestre Arcos, the founding math teacher at KIPP Washington Heights Middle School, a charter school in New York City. "The big question is, how do we build up these advanced skills with kids who come in behind?"

Students need "prerequisite knowledge" to meet the new grade-level expectations mapped out in the common standards, said José Vilson, who teaches 8th grade math at Intermediate School 52 in New York. But by the time they reach him, students at his school—many of whom are English-language learners—often "have a lot of catching up to do," he said.

Such observations appear to reflect broader professional concerns about the Common Core State Standards. More than half the respondents in a recent survey of K-12 teachers who are registered users of edweek.org said they feel unprepared to teach the common standards to high-needs students.

Despite often lacking support and clear guidance, however, teachers aren't necessarily ready to throw in the towel. Some math educators are taking steps to refine their practices and adopt creative methods to help struggling students make the shift to the new instructional paradigm.

Interpretive Work

One approach teachers commonly cite,

for example, is to maintain the Common Core's emphasis on abstract reasoning and conceptual understanding while, at least at first, using word problems that require less-advanced math skills.

"It's OK if you need to start more basic," said Mr. Arcos, explaining that initially he used two-digit addition without regrouping his 5th graders, many of whom were at a 2nd or 3rd grade level in math.

The key is to "avoid focusing on the algorithm or any tricks," he said, so that the students have to work through the problems strategically. He noted that students at his school have daily problem-solving classes in this vein, as well as computation-skills practice two mornings a week.

Similarly, Todd Rackowitz, a math teacher at Independence High School in Charlotte, N.C., noted that, in integrating the common standards into an Algebra 1 course for students who are behind grade level, he "focuses on problems that don't involve complex computation at first." Even using basic math, students can begin to "make connections between the key elements of algebra, like slope and parallel lines and rate of change," he said.

Mr. Vilson said that he, too, has had "to integrate prior [grade-level] skills into problems," adding that this can require "a lot of interpretation" of the standards, curriculum materials, and expectations for assessments. "There's some guesswork involved," he acknowledged.

Extra Support

Teachers introducing the common standards in math into classes with high numbers of at-risk or behind-grade-level students also frequently speak about the need for "modeling" and "scaffolding," highlighting the importance of providing demonstrations of solutions and bridging new concepts to students' prior knowledge.

"You have to help kids understand how to justify solutions, through discussion, interaction, and close guidance," said Mr.

Arcos, adding that his school has adjusted scheduling to allow for more small-group and one-on-one instruction in math.

Since many of the students at his school struggle with English-language and literacy issues, Mr. Arcos often focuses on building their close-reading skills as part of math instruction, helping them break apart the text of word problems and annotate the sentences. He has found that allowing the students to draw model representations of word problems and collaborate on solutions can also be helpful.

When his students are struggling with a problem or new concept, Mr. Arcos said, he demonstrates how to work through similar problems and discusses his reasoning with them.

"You never want to pass up an opportunity to really teach," Mr. Rackowitz said of his like-minded approach. "If a student is struggling, you want to give them a start and talk him through it while letting him work it out. Provide scaffolding in terms of understanding the problem and possible approaches, offering progressively less and less."

To build students' problem-solving and abstract-reasoning skills, he has also found it helpful to have students work out solutions and understanding through "group discussion and discovery." To spark engagement with problems, Justin Minkel, a 2nd and 3rd grade teacher at Jones Elementary School in Springdale, Ark., noted that he has his students "do a lot of writing in math." That practice, he said, helps students see the conceptual underpinnings of the problems they are working on and, with his assistance, see how words and phrases can relate to mathematical notations.

Mr. Minkel, whose school has a high percentage of low-income students, said he also makes an effort to give his students problems that have "practical applicability" to the real world. He noted that he has had success, for example, in having his students use what they were learning in math in an economics unit that involved determining the costs of materials for a building project against a budget.

Such activities can help students "make sense of problems"—the first of the common core's Standards for Mathematical Practice—and begin thinking about the ways math relates to their own lives, Mr. Minkel said.

'Harder to Teach'

While some math teachers working with struggling students are finding ways

to adapt their instruction to the common standards, they still point to the need for additional training and professional development in the field.

"It's harder to teach this way than just teaching algorithms and steps," said Mr. Minkel. "It forces you to go deeper. In the end, teachers have to get better at math."

The 2007 state teacher of the year in Arkansas, Mr. Minkel said he feels fortunate that his school switched to a common-core-like math approach several years ago, smoothing the transition by hiring an on-site math coach and providing regular job-embedded professional development. "She talked through a lot of the questions I had," he said of the coach. "Sometimes, we realize that we don't understand things as well as we thought."

Mr. Rackowitz, a national-board-certified teacher, noted that he has jumped at every common-core-oriented professional-development opportunity that has come his way, but still feels he needs additional training to break old habits and become more adept at helping his students adjust to new methodologies. "I need more [work] on coming up with these mathematical-discovery activities and finding creative ways not just to teach the algorithm, since that's the way I learned," he said.

At this stage, Mr. Vilson lamented, teachers' efforts to adjust to the new framework are complicated by the uncertainty surrounding the makeup of the common-core-aligned assessments, which are scheduled to be given in the 2014-15 school year. "Even with the understanding I may have acquired," he said in an email, "I still feel that I don't know much ... because of the assessments."

Coverage of "deeper learning" that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.

Published January 30, 2013, in *Education Week*

Teachers Differ Over Meeting Nonfiction Rule

By Catherine Gewertz

As the common core is brought to life in classrooms this year, some English/language arts teachers are finding themselves caught in a swirl of debate about whether the new standards require them to cut back on prized pieces of the literary canon to make room for nonfiction.

A recent spate of news reports has ignited a new wave of anxiety about the Common Core State Standards' emphasis on "informational text." Prominent coverage has been given by mainstream news organizations to a handful of teachers' complaints that they have had to drop cherished works of literature from their curricula. "Common Core Sparks War of Words," proclaimed a front-page headline in *The Washington Post*. "Catcher in the Rye Dropped From US School Curriculum," said one in *London's Telegraph*.

Frustrated with what they consider distortions, the common core's staunchest advocates have tried to correct the record, arguing that great works of fiction are a bulwark of the standards. In some states and districts, little or no guidance is being offered on the issue for teachers, leaving them to grapple with achieving the right balance of fiction and nonfiction on their own. Even where guidance is offered, teachers are carrying away varying messages, resulting in some cases in bitter disagreements over who is misinterpreting the standards.

The resulting landscape is pockmarked with debates about how much the standards require English/language arts teachers to change the literature they've long taught, whether that change is positive or

negative, and how teachers across the curriculum should be sharing the new expectations.

Arkansas offers a microcosm of the debate. On the front lines, two veteran English/language arts teachers have come away with very different interpretations and judgments.

Group Consensus

Jamie Highfill, who teaches 8th grade at Woodland Junior High School in Fayetteville, found no room this year for her cherished nine-week unit on poetry. Ditto for her unit on comedy and parody. The district's new curriculum called for her to spend most of the last quarter teaching portions of Malcolm Gladwell's *Tipping Point*, along with other articles he has written, for a unit on "causing positive epidemics."

The units before that—on constructing one's identity and on how individuals choose to treat others—included newspaper articles, a poem by Emily Dickinson, a short story by Ray Bradbury, Mark Twain's "Advice to Youth" speech, the novel *A Separate Peace* by John Knowles, the First Amendment to the U.S. Constitution, and the Stolen Valor Act, the 2006 federal law specifying punishment for misrepresentations of military service.

Ms. Highfill, an 11-year veteran and the Arkansas Council of Teachers of English Language Arts' middle school teacher of the year in 2011, said she now weaves pieces of her old poetry unit into the new curriculum whenever they are relevant.

But she is dogged by concerns that students have lost something important, and that much of what displaced it, like the Gladwell book, is not a good match developmentally for her 8th graders.

"These are very abstract concepts for them," she said. "[What they read] needs to be challenging, but it also needs to be reachable. I wasn't scaffolding it so they could understand it; I found myself dragging them through it because it was so difficult for them."

At the Fayetteville district office, Sandra Taylor, the English/language arts director, noted that the new curriculum was written with the district's teachers and laid out only what central, or "anchor," texts should be used, encompassing poetry, novels, short fiction, and works of nonfiction.

"We still teach 'Romeo and Juliet.' We still teach *To Kill a Mockingbird*," she said.

In choosing supplemental texts for those units, she said, there is "plenty of leeway" in the new curriculum for teachers to use literary works they consider important.

"When you have teachers who have been used to teaching their own things, now having to come together in a group, the group consensus is what decides it, and not everyone gets their way," Ms. Taylor said. "You might

have two anchor texts you're looking at; seven people want one, and two want the other."

Instructional facilitators in each building of the 9,100-student district are trying to convey the message of shared anchor texts and flexibility through supplemental texts, she said, but "we do have some misinterpretations from teacher to teacher."

Confusion Expected

At the state department of education in Little Rock, officials have sought to clarify the question of the fiction-nonfiction balance with school- and district-based training and written guidance.

The guiding documents describe the standards' balance of nonfiction to fiction—50 percent "informational text" across the elementary school curriculum, rising to 70 percent at the high school level. In the English/language arts classroom, the guidance says, informational texts can emphasize literary nonfiction such as essays, speeches, memoirs, and biographies.

Dana Breitweiser, who oversees the department's English/language arts program, said the department has "not gotten a lot of calls on this issue."

"I don't know if most of the schools understand, or just think they understand and don't ask questions," she said. But she also recognizes that educators are still in the throes of absorbing a lot of new information.



"Students should be reading from all types of text. It involves all the teachers a student encounters during the school day."

DANA BREITWEISER

Department's English/Language Arts Program, State Department Of Education, Little Rock

"Any time you start a new initiative, and there are big paradigm shifts, there are going to be misunderstandings and misconceptions in the beginning," Ms. Breitweiser said. "We know it takes time to get everyone on board."

English teachers should not have to displace large numbers of literary works, she said, since teachers of other subjects should be carrying a good deal of the informational-text responsibility. Ideally, she said, teachers are working in cross-disciplinary teams to decide how to balance those shared responsibilities in a solid curriculum.

"I would ask why you are cutting those

chunks of literature if you've got a rich curriculum," Ms. Breitweiser said. "Students should be reading from all types of text. It involves all the teachers a student encounters during the school day."

Ms. Highfill resents the notion that teachers are misconstruing the standards if they feel they must drop large swaths of literature from their lessons.

"I'm offended by that," she said. "It feels like a blame game. If it were that clear, why is there such a disconnect on a nationwide basis?"

She said the new curriculum is so packed that she felt she was "hitting my kids so fast with stuff they didn't have time to absorb."

And Ms. Highfill has not found the guidance on shared, cross-curricular responsibility to be translating into classroom reality. In her district, she said, "there still seems to be more of a focus on English teachers' using nonfiction in classrooms than the other content areas stepping up to the plate."

Instruction Strengthened

About 150 miles southeast of Fayetteville, at Carl Stuart Middle School in Conway, Ark., 5th and 6th grade English/language arts teacher Kathy Powers has had a very different experience implementing the common standards.

She has traded away some of the texts she most loved teaching—her "sacred cows," like

Island of the Blue Dolphins, by Scott O'Dell, and a poetry unit capped by an evening "poetry slam"—to accommodate a blend of fiction and nonfiction in a new district curriculum.

But she says that she has retained many texts she and her students love, such as C.S. Lewis' *The Lion, the Witch, and the Wardrobe*, and that the fiction-nonfiction blend has been overwhelmingly positive.

The 20-year veteran, who was Arkansas' 2011 teacher of the year, said she has found that sprinkling many of the oems from her old poetry unit into her nonfiction instruction has strengthened her teaching of both genres.

For instance, she uses Walt Whitman's poem "O Captain! My Captain!" in a unit about Abraham Lincoln's assassination, alongside *Chasing Lincoln's Killer*, a work of nonfiction by James L. Swanson, and *Assassin*, a historical novel by Anna Myers.

"In the past, I would teach fiction and explore more narrative writing, and leave it to the social studies teachers to teach nonfiction, but doing both makes my instruction stronger," said Ms. Powers. "It's a stretch for me, but it's more beneficial for my students."

When she and her fellow teachers first began reorganizing who would teach which works of fiction and nonfiction, "I did hear, 'How am I ever going to do this?' from colleagues," Ms. Powers said. "But once we put the units together, they saw how it could work. It will just take some time to own these new units and make them compatible with your teaching style."

Accountability Concerns

Some of what has stoked controversy about the standards' emphasis on nonfiction is the document's Appendix B list of "exemplar" texts.

High-school-level suggestions, for instance, include FedViews, the newsletter of the Federal Reserve Bank of San Francisco; and "Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management," by the General Services Administration.

But common-core architects say such titles are meant for classes other than English, and seeing them as texts that displace works like *The Catcher in the Rye* takes titles out of context and ignores the messages of the standards document as a whole.

In an essay published online Dec. 11 in the *Huffington Post*, Susan Pimentel and David Coleman, the lead authors of the ELA standards, lamented the "mistaken belief" that more informational text means that literature and fiction "should take a back seat" in the high school English/language arts classroom.

They noted that Page 57 of the standards lists text types that are envisioned as being at the heart of such classrooms, from novels and one-act plays to lyrical poetry, essays, opinion pieces, and biographies. They pointed out that Page 58 offers a selection of book titles, including Mark Twain's *The Adventures of Tom Sawyer* and F. Scott Fitzgerald's *The Great Gatsby*, that makes high-quality fiction's role in the ELA classroom "unambiguous."

In an email to *Education Week*, Ms. Pimentel said that teachers and local administrators are the ones who must decide how to share responsibility for the increased emphasis on nonfiction. "If a lot of good, close reading of high-quality, challenging texts is going on in science and history classes," she said, "then English/language arts teachers need to carry less of that responsibility."

The common-core authors "recommend that ELA teachers be part of the change," she said, but

that is up to each school or district to decide, and she noted that the standards do call for English/language arts teachers to teach some informational text.

Still, "we expect that in most ELA classrooms, literature is likely to account for the great majority of reading," Ms. Pimentel said.

William Maniotis, an English teacher at Merrimack High School in Merrimack, N.H., has his doubts that it will work out that way.

When he reads the common standards, he doesn't conclude that he must drop a lot of fiction from his classroom, he said, but upcoming assessments for the common standards, due to roll out in 2014-15, could exert a powerful influence on that. It is English/language arts teachers who will be held accountable for the results, which will drive what happens in their classrooms week to week, he said.

"When the new tests come out, and the focus is more on nonfiction, and the test scores go down, who are they going to look to to fix that? The English teachers," said Mr. Maniotis, who has taught for 17 years.

"That's the dilemma we face," he said. "Even though we use predominantly literature in our classrooms, we are going to have to cope with the nonfictional piece to an inordinate extent."

Getting the right fiction-nonfiction balance in the long term can mean short-term sacrifices.

Jim Burke, who teaches English at Burlingame High School in San Mateo, Calif., said he couldn't find room to teach "Hamlet" last semester, as he was focusing intently on a nonfiction-heavy unit aimed at the research and synthesis skills in the standards.

He thought his students benefited immensely from the unit, writing challenging eight- to 10-page papers that bolstered their college preparedness, he said. And he even managed to work in Hermann Hesse's novel *Siddhartha*.

But still, it pained him that Shakespeare's classic went by the wayside. Next year, he will know better how to trim the unit so that he can include "Hamlet," he said.

"You have to be willing to accept a certain amount of mess in this process of redevelopment, reimagining the curriculum," said Mr. Burke, who also runs a popular online discussion forum for English teachers. "A class is a working draft. You inevitably have some stuff on the floor."

The spring semester, an inquiry into the relationship of fear to power, will include 1984 by George Orwell, Julia Álvarez's *In the Time of the Butterflies*, and Franz Kafka's "Metamorphosis."

Coverage of "deeper learning" that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.

Published November 14, 2012, in *Education Week*

Writing Undergoes Renaissance in Curricula

Its ascent stems from the common core, college feedback, and new research

By Catherine Gewertz

Teachers are focusing on writing instruction like never before. More and more, they're asking students to write about what they read, helping them think through and craft their work, and using such exercises as tools not only to build better writers, but to help students understand what they're studying.

The shift is still nascent, but people in the field are taking notice. It marks a departure from recent practice, which often includes little or no explicit writing instruction and only a modest amount of writing, typically in the form of stories, short summaries, or personal reflections, rather than essays or research projects on topics being studied.

In Oak Park, Mich., high school students are reading and rereading texts, taking notes on different features and levels of meaning each time, to inform their reading and discussion as well as the writing they will do about those texts.

First graders in South Strafford, Vt., are reading Dr. Seuss' *The Lorax*, for fun, then for greater understanding, and then to hunt for evidence. They look for events in the plot that illustrate how the whimsical protagonist tries to protect the Earth and assemble examples into a simple paragraph to support the theme of the story.

On a literacy landscape that rarely features explicit writing instruction, and where the writing that does take place is often unconnected to reading, experts say, these kinds of projects are unusual for the way they connect writing and reading. Attention to reading has persistently been high, they say, but a focus on writing has waxed and waned in the past few decades.

"Now we're seeing a lot more attention to the idea that writing about a text can improve reading about that text," said literacy expert Timothy Shanahan, the chairman of the de-

partment of curriculum and instruction at the University of Illinois at Chicago.

Driving Change

Several forces are bringing about that change. One is the Common Core State Standards, which tie reading and writing together by placing a heavy emphasis on writing in response to one or more texts. Another—echoed in the standards—is feedback from college professors and employers, who bemoan young people's weakness in the analytical writing most needed in college and training for good jobs.

Research, too, is sparking reconsideration of the role writing can play in making better readers. "Writing to Read," a 2010 meta-analysis of 93 studies of writing interventions, found that writing had consistently positive effects on students' reading skills and comprehension. Writing about what they read was particularly helpful to students' comprehension, but so were taking notes on what they read, answering questions about it, and simply writing more often.

An expert panel brought together by the International Reading Association and the National Institute of Child Health and Human Development concluded in a report earlier this year that reading and writing require "independent instruction." Too little still is known about the "reading-writing connection," the panel said, but it is sufficiently promising to warrant further research to inform classroom practice.

In 2010, the Newark, Del.-based IRA revised its standards for teacher preparation to include a greater emphasis on writing "as a way of emphasizing the importance of the reading-writing connection," said Rita M. Bean, who chaired that committee and is a professor emeritus of education at the University of Pittsburgh. A recent policy brief from the National Council of Teachers of English, based in Urbana, Ill., calls for having students write about and discuss complex texts and use those texts as models for writing.

Reading has occupied a higher profile than writing on the literacy landscape in part because of the focus on discrete reading skills

that emanated from the National Reading Panel report in 2000, experts say, and the ensuing emphasis on those skills in the federally funded Reading First program and in state tests required under the No Child Left Behind Act of 2001.

Noting with alarm the growing gap, the National Commission on Writing in 2003 called for schools to double the amount of time they spent on writing.

"For all intents and purposes, 'literacy' became synonymous with 'reading,' and writing became the stepchild of literacy rather than an equal partner," said Andrés Henríquez, a program officer at the Carnegie Corporation of New York, which underwrote a string of studies on reading and writing, including "Writing to Read."

Students still spend little time writing in school. Teacher surveys by Steve Graham, the author of "Writing to Read," and colleagues show that students spend less than half an hour writing each day in elementary school, and much of what they write is lists and fill-in-the-blank answers to questions. Even at the high school level, seven in 10 teachers reported that their preservice training had not prepared them adequately to teach writing, and nearly half did not assign a single multiparagraph writing task per month.

"What we have, typically, is kids not writing more than a paragraph of text, all the way through high school," said Mr. Graham, a professor at Arizona State University in Tempe. "It's not very promising for writing or for writing instruction."

Poor Performance

Scores on the National Assessment of Educational Progress reflect correspondingly lackluster writing skills. The report issued in September, for the 2011 exam, shows only one in four middle and high school students writing at the "proficient" level or better.

The national picture of student writing led the authors of the common standards to elevate its role in literacy instruction and to tie it closely to reading, not only in language arts classes but across the curriculum. Assessments for the standards, being designed by

two groups of states, are expected to reflect those connections as well, with tasks that combine research and writing.

The idea, said Susan Pimentel, one of the lead authors of the standards, is to reduce writing “opinion untethered to evidence” and “decontextualized” writing—writing not based on the reading of a text—in favor of writing that requires students to read, comprehend, and respond to text, grounding their interpretations in evidence found there. That shift reflects what young people can expect in college and work, she said.

“In faculty and employer surveys, the kinds of skills that score high are the argument and evidence-related skills, developing ideas with relevant details and reasons,” Ms. Pimentel said. “Telling stories scores very low. Expressing one’s feelings, very low.”

Increasingly, educators are seeing the need to make explicit connections between writing and reading and to teach genre-specific types of writing, said Barbara Cambridge, the policy director for the NCTE.

“Writing hasn’t always been taught, especially outside of English/language arts classrooms,” she said. “We know writing helps reading. But avid readers aren’t necessarily good writers. This stuff has to be taught.”

That’s what Linda Denstaedt and her colleagues are trying to do as they craft K-12 curriculum units to reflect the standards in Michigan. At the core of their work at Oak Park High School is the “multidraft read,” aimed at teaching students to delve into reading like writers, she said, which strengthens both their reading and their writing.

They read a text again and again, first to make sense of it and note their questions, as the teacher works the room to help, Ms. Denstaedt said. A second round of annotating focuses on looking for elements of the genre and how it works. They read again to spot structural decisions the writer made to create meaning, she said. The students then use what they learned in their own writing.

“All of this adds up to learning to read in layers, learning to read like a writer,” said Ms. Denstaedt, the co-director of the Oakland Writing Project, which is a consultant to Michigan on the project and is an affiliate of the Berkeley, Calif.-based National Writing Project. “And you’re learning how to read better as you write.”

Too often, she said, writing is “all about doing tasks, assignments. We get students doing reading, and maybe writing, but we’re not necessarily helping them learn how to think their way through a text.”

Schools in Westerly, R.I., found that better writing can offer new ways to demonstrate knowledge. Dismal state science scores led the district to focus on writing and an inquiry-based approach to science instruction,

and it paid off.

Only 49 percent of the 4th graders at State Street Elementary School scored proficient on the state science test in 2010, but 80 percent did in 2011. That number slid to 63 percent in 2012, said Principal Audrey Faubert, but she is still pleased with the improvement.

“Maybe they learned the science concepts better because they had to explain things,” she said, “but I attribute it more to having a better way to show what they know, and that’s important, too.”

A math teacher in Brighton, Mich., found that writing had a powerful effect on helping her 6th grade students understand algebra concepts. Julie Mallia and a colleague from the English department, Don Pawloski, teamed up in spring 2009 to have students write 10-page “how to” books for the next fall’s 6th graders. Drawing both on math and on writing instruction, students had to explain concepts such as solving a problem with x .

Many students reported understanding the math concepts better after writing the books, Ms. Mallia said, because their writing brought them face-to-face with the spots where their conceptual understandings were weak. And it opened up a valuable formative-assessment tool.

“I was really surprised at how many students who were able to get the right answers realized in trying to write the books that they didn’t get the ideas behind them,” she said. “That gave me a chance to work with them and reteach what they didn’t understand.”

‘A Strong Tie’

Writing is poised to occupy a heftier role in the College Board’s Advanced Placement program. In 15 schools, the organization is piloting two courses that, if completed along with three other AP classes, will lead to a new “capstone” credential.

A critical-reasoning course, taken during the junior year, includes a major research project that demands a 3,000-word group paper and a 1,200-word individual paper, said John Williamson, the project’s senior director. Students must also do a 15-minute written and multimedia presentation. The end-of-year exam will require three or four 500-word essays, he said. The senior-year course is in research-methodology, culminating in a 20-page paper.

“There is a strong tie between reading and writing all the way through these courses,” he said. “When students write about what they read, they come to new understandings about it. And it’s bigger than just the writing; it’s about communicating your disciplinary understanding to different audiences.”

Diana Leddy and Joey Hawkins, the teach-

ers who developed the writing approach used with *The Lorax*, said the root of it is using writing to deepen understanding.

“To be able to write well, you need to understand the material well, and to do that, you need to be a good reader,” said Ms. Leddy. She and Ms. Hawkins work as consultants, primarily in New England schools, and also for the New York City-based nonprofit Student Achievement Partners, whose founding partners co-led the writing of the English/language arts common standards.

Ms. Leddy’s and Ms. Hawkins’ method reinterprets a tenet that has been central to many in literacy instruction.

“It’s been an axiom that children should write about what they know,” Ms. Leddy said. “That can mean writing from personal experience. But our interpretation is that we can help them know something, and that opens up a lot of areas for them.”

A memoir, a speech at a memorial service, and a college essay all offer testament to the need to know how to write from personal experience, said Ms. Hawkins. But “it’s a tremendous missed opportunity if all a kid writes about is what he knows.”

Accordingly, when Ms. Leddy teaches *The Lorax*, she walks through the text repeatedly with students, discussing it from a different angle each time. When they’re through, students learn to write short “hand paragraphs,” with the thumb as the topic sentence—the Lorax cares for the Earth—followed by three examples of how he does that and a “pink sentence” restating the interpretation.

Catherine Snow, a literacy expert and professor of education at the Harvard Graduate School of Education in Cambridge, Mass., welcomes the shift to text-based writing, saying that personal narrative has been overemphasized in most language arts classrooms.

But the risk in focusing writing exclusively on text, she said, is that many students will not be interested enough in the reading to analyze it. The text-based skills can be taught, though, through topics and texts carefully chosen to engage students, Ms. Snow said.

In a Harvard project being developed in several districts in Maryland and Massachusetts, 4th through 7th graders tackle topics that fire them up, such as whether Tater Tots should be served in the cafeteria, Ms. Snow said. Such questions drive them back to their readings to search for information they can use to build well-founded arguments, she said.

Coverage of “deeper learning” that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.

Published December 5, 2012, in *Education Week*

Elementary Pupils Immersed in Foreign Languages

States are teaching core content in other tongues

By Jamaal Abdul-alim

When it comes to lessons in other tongues, Kevin Fitzgerald, the superintendent of the Caesar Rodney school district in northeastern Delaware, is never at a loss for words.

He speaks with pride about the fact that his district's high school, Caesar Rodney High School, offers six foreign languages: French, Spanish, German, Latin, and, more recently, Arabic and Mandarin.

This school year, the district introduced a more novel and potentially more effective foreign-language initiative to talk up: a new Chinese-immersion program for 101 kindergartners, which the district plans to offer those children and successive kindergartners through 8th grade.

The immersion program, which provides instruction in math, science, and literacy in Chinese for half a day and in English for the remainder, is one of three such programs funded through Gov. Jack Markell's recently created World Language Expansion Initiative. The initiative operates with \$1.9 million annually from Delaware's state budget.

At a time when school districts face constant budgetary constraints while also being charged with preparing students for jobs in a more global economy, proponents of foreign-language instruction say Delaware's new immersion program represents an uncommon but welcome step toward introducing foreign language at an age that researchers say is optimal for students to become multilingual.

"We'd like to think it will become more common," said William P. Rivers, the executive director of the Joint National Committee for Languages-National Council for Language and International Studies, a Washington-based nonprofit that advocates for languages and international education.

Foreign-language instruction at the elementary level has been around for decades. Fund-

ing from the U.S. Department of State, whose goal was to bolster national security and the economy, served as a catalyst for some of that instruction. Delaware, in fact, is one of the states that has received the federal funding. But Mr. Rivers and others hail Delaware's initiative and a similar one in Utah as being at the cutting edge of states trying to bring more in-depth instruction.

In-Depth Doses

Lynn Fulton-Archer, the education specialist for the immersion program at the Delaware education department, said the initiatives in her state and Utah differ from previous ones at the elementary level in part because the earlier programs were "isolated" and "low intensity." In those programs, students spend between 30 and 150 minutes a week learning another language, she said, while students in Delaware and Utah get at least 150 minutes of language learning a day.

What's more, Ms. Fulton-Archer said, the teacher is not an add-on, but, instead, a regular grade-level teacher who teaches both the language and core content.

Utah's program involves immersion in Chinese, French, Spanish, and Portuguese beginning mostly in 1st grade and university-level coursework in high school. The state plans to establish 100 dual-language programs reaching 30,000 students by 2014.

Since its formal launch this fall at the Caesar Rodney district's J. Ralph McIlvaine Early Childhood Center in Magnolia, Del., which serves families from nearby Dover Air Force Base, the foreign language program has become the talk of the town, Mr. Fitzgerald said.

"In our community, I run into parents all the time, and there's a great likelihood that the conversation is going to turn to our immersion program," he said.

Sherry Kijowski, the principal at McIlvaine, says student excitement over learning Mandarin is evident from the way immersion students interact with one another.

"When they ask each other to pass crayons, they (use) Chinese words for colors," she said.

A primary benefit of the Delaware initia-

tive is that unlike most foreign-language programs in U.S. schools, it introduces students to a foreign language at an age when researchers say their brains are most receptive to picking it up and enabling them to speak the language fluently with little or no hint of a foreign accent.

"Early age is the best time to be introduced to a foreign language because the mind/brain is most plastic at that age in terms of its ability to learn a language," Hendrik J. Haarmann, the area director of cognitive neuroscience at the University of Maryland Center for Advanced Study of Language, said in an email.

The cognitive benefits of doing so, Mr. Haarmann says, are multifaceted and long term. For instance, he said, children who have "grown up bilingual" tend to have better memories and stronger protection against certain natural declines in cognitive functions later in life.

Ms. Fulton-Archer, the education specialist for the World Language Immersion program at the Delaware education department, said more than four decades of research has shown the power of immersion education to help students attain high levels of world-language proficiency.

"No other type of instruction, short of living in a non-English-speaking environment, is as successful," she said.

On the Decline

Despite the benefits associated with introducing a foreign language to young children, teaching it at the elementary level remains relatively uncommon in the United States.

While 91 percent of high schools offer a foreign language, the proportion of elementary schools that do decreased from 31 percent in 1997 to 25 percent in 2008, according to the most recent national survey by the Center for Applied Linguistics, and from 75 percent to 58 percent at the middle school level. The center conducts the survey once every decade.

The 2008 survey says there "continues to be reason for serious concern about the limited number of long sequence K-12 language

programs designed to provide students with the linguistic and cultural skills needed to communicate effectively in the United States and abroad." It also says that a large number of elementary and middle school students, especially in rural or low-socioeconomic-status schools, do not have the opportunity to study foreign language at all.

"We've just fallen so far behind other countries in terms of preparing our students for the world in which they're going to have to live and work," said Martha G. Abbott, the executive director of the American Council on the Teaching of Foreign Languages, or ACTFL, based in Alexandria, Va.

Nationally, immersion programs—not to be confused with individual foreign-language classes—have grown from only a handful in the 1970s to nearly 450 in 2011, according to the Center for Applied Linguistics.

As of August, there were 415 two-way bilingual-immersion programs in 31 states, plus the District of Columbia, according to an online directory created by the center, which says the directory is not necessarily exhaustive.

The vast majority, 391, of those programs involve Spanish. Nearly half were in California and Texas.

Resource Challenges

Superintendent Fitzgerald says it wasn't because of lack of awareness about the benefits of studying foreign language early that his Delaware district didn't introduce it until now.

"Plain and simple, either we didn't have the resources or we couldn't find the teachers," he said.

Lack of resources for foreign-language instruction is also a challenge at the national level, even as government leaders trumpet the need for American students to gain foreign-language skills so they can fill crucial voids in realms that range from national security to international trade.

Mr. Rivers of the Joint National Committee laments the recent decision at the federal level not to fund the State Department's Foreign Language Assistance Program, known as FLAP, in fiscal 2012. Until then, FLAP was the only federally financed program that exclusively targeted foreign-language instruction in K-12. The previous fiscal year it had been funded at \$26.9 million. The Obama administration has repeatedly, as part of the budget request, proposed the creation of a competitive program, Effective Teaching and Learning for a Well-Rounded Education, that would finance education in a variety of areas, including foreign languages and other subjects.

Before he moved on this year to a university presidency in California, Eduardo Ochoa, then-assistant secretary for postsecondary education at the U.S. Department of Education, testified

before a Senate panel that foreign-language instruction should not be seen as an "add on" in K-12 or higher education and should take place early in a child's experience. Such programs, he said, help develop skills that will prepare students, and the nation itself, for "economic competitiveness and jobs, collaboration to address global challenges, national security and diplomacy, and effective engagement in a diverse U.S. society."

Gov. Markell had similar things in mind when he launched the World Language Expansion Initiative in Delaware.

Advanced by High School

The initiative, which involves two Spanish programs in addition to Chinese, seeks to reach nearly 8,000 Delaware students at the K-8 level by 2020.

"We developed the initiative because we recognize that as global employers choose where to locate jobs, they are better served hiring where their employees have the skills to communicate across markets. That means fluency in two or three languages, not one," the governor, a Democrat, said during a visit to the McIlvaine Early Childhood Center.

In addition to those benefits, he said, "language study improves academic performance, builds sociocultural awareness, and enhances cognitive abilities."

By the 9th grade, Mr. Markell said he expected every student in the program to be able to pass Advanced Placement Chinese or Spanish.

For now, the program is reaching some 340 pupils, including the 101 at McIlvaine.

Superintendent Fitzgerald said one measure of the program will be the extent to which parents keep their children in it. Another, he said, will be how well immersion students perform on standardized tests.

Mr. Fitzgerald would like to see foreign language become an even more prominent part of K-12 education and says he believes it will if his district demonstrates success.

"I can foresee in the future where all of our kindergartners are involved in some sort of immersion program," Mr. Fitzgerald said. "It would be wonderful if we had the funds and the ability to provide each student with another language and help guide them through their education career."

Jamaal Abdul-alim is a freelance writer living in the District of Columbia.

Coverage of "deeper learning" that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.

Copyright ©2013 by Editorial Projects in Education, Inc. All rights reserved. No part of this publication shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic or otherwise, without the written permission of the copyright holder.

Readers may make up to 5 print copies of this publication at no cost for personal, non-commercial use, provided that each includes a full citation of the source.

Visit www.edweek.org/go/copies for information about additional print photocopies.

Published by Editorial Projects in Education, Inc.
6935 Arlington Road, Suite 100
Bethesda, MD, 20814
Phone: (301) 280-3100
www.edweek.org

EDUCATION WEEK

SPOTLIGHT

Get the information and perspective you need on the education issues you care about most with Education Week Spotlights

- The Achievement Gap • Algebra • Assessment • Autism • Bullying • Charter School Leadership • **Classroom Management** • Common Standards • Differentiated Instruction • Dropout Prevention • E-Learning • ELL Assessment and Teaching • ELLs in the Classroom • Flu and Schools • Getting The Most From Your IT Budget • Gifted Education • **Homework** • Inclusion and Assistive Technology • Math Instruction • Middle and High School Literacy • Motivation • No Child Left Behind • Pay for Performance • Principals • Parental Involvement • Race to the Top • Reading Instruction • Reinventing Professional Development • Response to Intervention • School Uniforms and Dress Codes • STEM in Schools • Teacher Evaluation • **Teacher Tips for the New Year** • Technology in the Classroom • Tips for New Teachers



VIEW THE COMPLETE COLLECTION OF EDUCATION WEEK SPOTLIGHTS

www.edweek.org/go/spotlights