

Experts to Advise on 'Best Available Scientific Evidence' for Teaching, Learning Strategies

## President Establishes National Advisory Panel on Math

On April 18, President George W. Bush issued an executive order creating the National Mathematics Advisory Panel to advise him and U.S. Secretary of Education Margaret Spellings on the "best available scientific evidence" for teaching and learning math.

Following in the footsteps of the influential National Reading Panel, the math advisory panel will convene experts to evaluate the effectiveness of various math teaching approaches and, in so doing, create a research base to improve instructional methods for teachers.

The group's interim report will be submitted by the end of January 2007, with specific recommendations on a range of topics related to math education. A final report is due by Feb. 28.

"It is more important than ever that our

students receive solid math instruction in the early grades to prepare them to take and pass algebra and other challenging courses in middle and high school," Secretary Spellings said.

The National Mathematics Advisory Panel is part of the president's American Competitiveness Initiative for strengthening math education so that the nation's students develop the skills necessary for success in the 21st century. Included in his fiscal year 2007 budget request is \$10 million to carry out the group's recommendations by supporting additional research and \$250 million for the newly proposed Math Now programs.

Math Now for Elementary School Students, which is modeled after the popular



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### 'Out of the Ordinary'

## Washington State School Rises Above Poverty, Mobility Challenges to Reach Record Achievement

“Our goal here is to ... change what's said about Holmes and the community.”

Principal Steve Barnes describes Holmes Elementary School as simply "special." It is an interesting word choice for a school with the highest student mobility rate in Spokane Public Schools and one of the highest poverty rates in the state of Washington. Nevertheless, to define Holmes as "out of the ordinary" has proven to be an apt description. Consider the fact that, in 2005, Holmes lost half of its population to transfers and gained another half from new enrollments, yet still managed to double the percentage of students reading and doing math at grade level.

Barnes explained, "Our goal here is to challenge the stereotypes and change what's said about Holmes and the community," a mission that has brought him back to the school for a third time.

In 1983, when Barnes started his education career as a student-teacher at Holmes, the community was known as a "tough area," he

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Reading First program, would use the recommendations of the math advisory panel on scientifically based research and promising practices in math instruction to

help prepare students for more rigorous course work in middle school.

Similar to the current Striving Readers Initiative, Math Now for Middle School

Students would provide intensive instruction to students whose achievement is significantly below grade level.

For more information, visit [www.ed.gov](http://www.ed.gov).

## President Discusses American Competitiveness Initiative

**I**n April, President Bush, accompanied by Secretary Spellings, spoke before an assembly of students and staff at Tuskegee University in Alabama about his American Competitiveness Initiative. The following is an excerpt of his remarks.

... Perhaps the most important way that this United States of America can remain the leader

school ... with a skill set necessary to even go further, so we remain a competitive nation? Here are some ideas.

First, one of the programs that works well is the Advanced Placement [AP] program. ... Therefore, the federal government needs to provide money to train 70,000 high school teachers on how to teach AP. In other words, take a system that's worked and see to it that it's spread all across the United States of America.

Secondly ... [my competitiveness plan would] bring 30,000 math and

science professionals to teach in our classrooms. They're called adjunct professors. I think it's a smart way and a practical way to excite children to take the courses that are necessary to make sure this country is a competitive country. ...

... So I set up ... what's called a national math panel. We've got experts coming together, and they're going to analyze the best teaching methodology for math, the best curriculum for math. We did the same thing for reading ... and it's working. ...

And then we're going to implement what's called a Math Now program that will get those recommendations into the teacher's hands. But there's also another

interesting aspect of Math Now ... that is, when we measure and find a child slipping behind in math in the eighth or ninth grade, that child gets extra help.

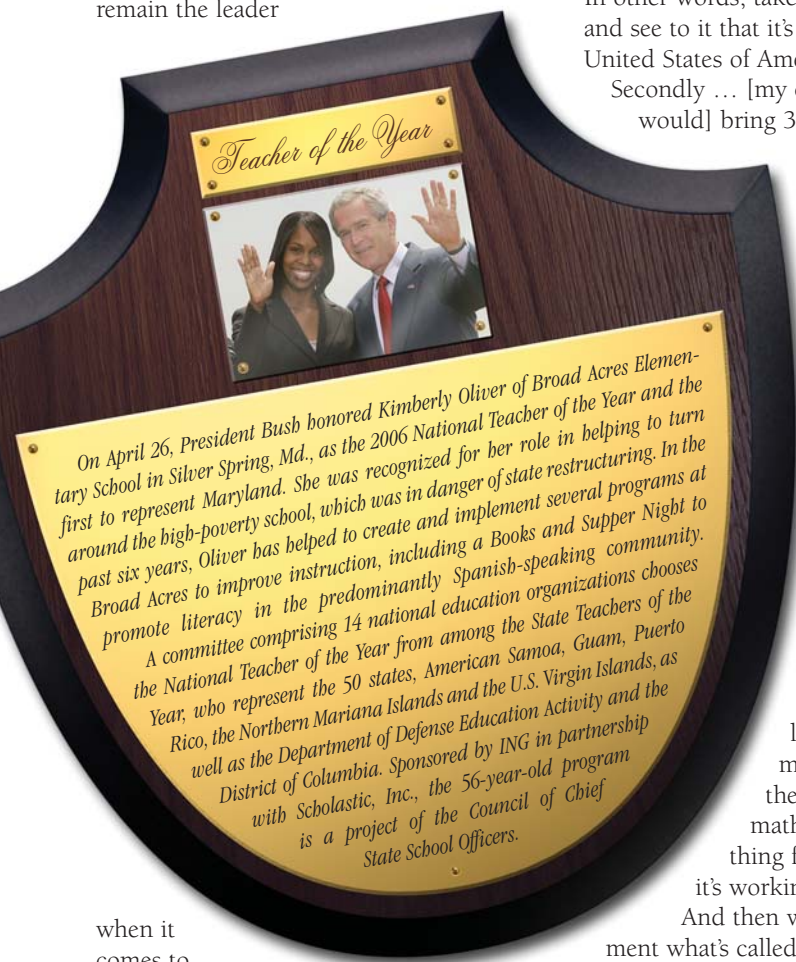
... I also understand that the federal government has a role in helping people go to college. See, it's one thing to make sure the students have got the skill set, but if there's not the financial means to get to a university, then that skill set could conceivably be wasted. ... And Congress this year listened and passed a bill which I signed into law .... There are two new grants associated with Pell Grants.

... One is called the Academic Competitiveness Grant, which will provide additional money to first- and second-year college students who have completed a rigorous high school curriculum and have maintained a 3.0 GPA [grade point average] in college. There will be up to \$750 for first-year students, and up to \$1,300 for second-year students. ...

And then we've got what's called Smart Grants. Now, these grants are for third- and fourth-year college students who have maintained a 3.0 GPA and who major in math, science or critical foreign languages. ... These grants will be up to an additional \$4,000 per person.

So the federal government needs to play a vital role. One vital role is to set the goals and strategies, to make it clear to the American people we've got a choice to make: Do we compete or do we retreat; do we become isolationists and protectionists as a nation, or do we remain a confident nation and lead the world. ...

Visit [www.whitehouse.gov](http://www.whitehouse.gov) and click on the "Education" link for the complete April 19, 2006, remarks.

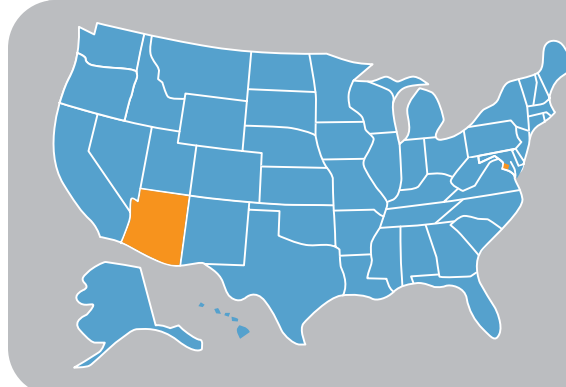


when it comes to economic development and opportunity is to make sure our education systems work well. ...

... But here's the problem: By the time our kids get into high school, we've fallen behind most of the developed world in math and science. In other words, we're closing the achievement gap, and there's improvement in the public school system around America, but what ends up happening is that we're beginning to fall off. And that's where the challenge exists.

And so, how do we make sure that our high school students are coming out of

## AROUND THE COUNTRY



**ARIZONA**—All seven of the graduating seniors on the robotics team at an inner-city high school in Phoenix will be attending college this year on full scholarships. For the past three years, every senior in the Science and Technology Club at Carl Hayden Community High School has gone into the

recalled. High crime, widespread substance abuse and dilapidated housing stigmatized the West Central neighborhood. Even when Barnes returned in 1996 for a three-year term as assistant principal, he said that the notorious reputation clung despite the joint efforts of residents and police officers to combat crime. So two years ago, when Barnes took the

position as Holmes' leader, "A few people were asking,

'Are you nuts?'" he joked.

Although Barnes remained hopeful because of the staff's longstanding commitment, the enormity of his undertaking was soon apparent. He inherited an academic record of plummeting test scores, which dropped approximately 20 points in math and 10 points in reading his first year. In the same school year, a staggering 122 children transferred into the school while 115 transferred out, which amounted to nearly one student entering and exiting the school per day in 2004.



(Holmes' student mobility index of 56 percent—surpassing the next highest in the district at 41 percent—is a continuing trend said to be partly the result of families in crisis that are homeless, struggling to pay rent, or sharing temporary housing with multiple families.)

Moreover, Holmes was tackling the demands associated with a high concentration of children from low-income families as well as a considerable sum of students with special needs, many of whom suffered from cognitive disabilities.

But Barnes, the district's 2005 Dick Stannard Distinguished Principal of the Year, preferred to accentuate the positive. He told his staff, "Let's spend our time on things we can control. We can control the delivery of instruction, the curriculum alignment, the assessments we give kids. We can focus on the belief that these kids—sure,

they have challenges in their lives—are capable of learning just like other children."

Looking beyond the challenges, though, did not mean ignoring them;

they still had to be addressed. The school's motto, "Teaching to the heart as well as the mind," speaks of its vision for the



whole child. "Yes, school is basically for education, but if kids don't have a good night's sleep, food and a good relationship with an adult, they can't learn. I think that Holmes has combined those two very effectively," said Louise Stamper, whose two eldest sons attended Holmes and whose youngest son is now in the third grade there.

After the faculty implemented a series of reform measures, their hard labor showed through in the next batch of test results. In just one year, from 2004 to 2005, the scores for fourth-graders, one of the state's benchmark levels at the time, jumped from 43.7 percent to 76.1 percent in reading, and from 28.2 percent to 60.9 percent in math, making it the first time that more than half of Holmes' students achieved proficiency in both subjects concurrently.



# Holm

military or to college, mostly on scholarship. The school's team of young engineers, which has grown from a handful of students to 50, gained national attention in 2004 when it beat many prestigious colleges and universities to win an underwater robotics competition sponsored by NASA and the Office of Naval Research.

**DISTRICT OF COLUMBIA—**The SEED Foundation, a nonprofit organization that opened the country's only urban public boarding school eight years ago in the nation's capital, is working on replicating the program in nearby Maryland. The SEED School, which spans grades 7–12, provides a rigorous, college-preparatory environment for underserved students,

who must take seven classes a day. Last month, SEED officials received approval from Maryland lawmakers to create a state-financed boarding school that the foundation would manage and possibly open as early as fall 2008. They also have plans to open a second school in Washington, D.C., in fall 2009.



Chief among these measures was the issue of teacher collaboration, which Barnes addressed with the support of a leadership team comprising an assistant principal and three new instructional coaches. When he arrived at the school, Barnes noticed that there were “hard-working, dedicated teachers but a bunch of private enterprises doing their own thing.” Time had been scheduled for teachers to team up but it needed to be used “intentionally,” he added.



The staff embraced the concept of time on task. “As we learn to be more intentional in the way we teach,” said Mary Lutton, who has taught at Holmes for 16 years, “I see us working as



**From left to right:** Principal Steve Barnes with first-grader Chelāia; fourth-grader Jade and teacher Mary Lutton; and fourth-grader Ashley listens to Lutton instructing class. On the cover, fourth-grader Elijah. Photos by Amanda Smith.

effort in place but it lacked the necessary focus for drastically improving learning. In response, Barnes introduced the idea of “data walls,” also referred to as “instruction walls,” to help teachers become experts at using data to drive instruction. Stored in a staff-only room,

the data wall is a system of pocket charts spreading across the walls that identify each child’s skill level. The data are drawn from a range of assessments and organized vertically by student performance and horizontally by academic goals to cross-reference students’ grade levels. As new data become available, teachers and instructional coaches update the students’ charts, which are maintained on index cards and color-coded to signal special services for improving achievement.

The first year Barnes looked at the data walls—a model borrowed from a project piloted in Arkansas classrooms—he immediately saw that half of the incoming first- through fourth-graders were below grade level. This ability to see the whole picture in one snapshot has helped teachers to better prepare for the academic needs of their children. Said Lutton, “We have better practices in teaching because we can see what we’re looking for.”

Another plus side of the data walls, Barnes pointed out, is that they revealed where the staff needed to align not only the curriculum with assessment results, but also services with students’ needs. The Student Success Planning team—a group

of Holmes’ administrators, special education teachers, instructional coaches, Title I teachers and reading specialists—meets every Thursday in the data walls’ room to discuss how to pool the school’s resources, such as with intervention and remediation support, to bring children up to grade level.

These new initiatives at Holmes come at a time when the neighborhood is also experiencing a revival. For the staff, it is a forecast of a brighter future as they work toward the goal established by the *No Child Left Behind Act*, to have every child proficient in reading and math by 2014. “So we’re going to continue to strive to make sure our kids can attain that,” Barnes said, “because really that’s our kids’ way out of a different lifestyle. We have to give them the best education possible so that they can see there’s another world out there.”

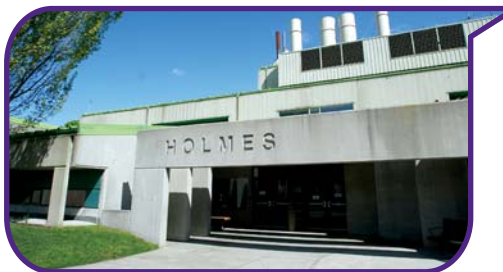
—BY NICOLE ASHBY



colleagues [from grades] K to 6 ... because it takes everybody to build the child, especially in a poverty school. There’re so few people helping these children to be successful and so many trying to beat them down.”

The next crucial area under scrutiny was curriculum alignment. Again, there was an

# es Elementary School



- > **Grade Span:** K–6
- > **Locale:** Mid-size central city
- > **Total Students:** 375
- > **Race/Ethnicity Enrollment:** 73% white, 10% American Indian, 9% black, 7% Hispanic, 1% Asian
- > **Free or Reduced-Price Lunch Eligible:** 92%
- > **English Language Learners:** 11%
- > **Special Education Students:** 15%
- > **Percentage Proficient:** In reading, 76.1%; in math, 60.9% (based on fourth-graders assessed on the 2005 state exams).
- > **Interesting Fact:** Holmes doubled the number of students at proficient levels in reading and math despite losing half of the student population while gaining another half within the same year.

## June

**National Safety Month**, sponsored by the National Safety Council. This 10th anniversary, monthlong observance provides injury-prevention tips for people in the workplace, on the road, in the home and around the community. Visit [www.nsc.org](http://www.nsc.org) or call (630) 285-1121.

## June 5–6

**Teacher-to-Teacher Initiative Summer Workshop**, Denver, sponsored by the U.S. Department of Education. This first free workshop will offer sessions for teachers of grades 6–12 in all subject areas for professional development credit. Some of the nation's best educators will share strategies for raising achievement. For more information about this workshop series, visit [www.t2tweb.us](http://www.t2tweb.us) and click on "Teacher Workshops," or call (800) USA-LEARN.

## June 26

**Presidential Scholars Program Medallion Ceremony**, Washington, D.C., sponsored by the U.S. Department of Education. This year's ceremony will honor 141 outstanding graduating American high school seniors for their academic achievement, artistic excellence, leadership and community service. For complimentary tickets to the Kennedy Center performance by Presidential Scholars in the Arts, e-mail [Presidential.Scholars@ed.gov](mailto:Presidential.Scholars@ed.gov) or call (202) 401-0961.

## Q &amp; A GLOSSARY

*How do I find a summer program for my child?*

A quality summer program that includes activities for academic enrichment can help to prevent the learning loss that research shows takes place during the summer months and can ensure students return to school prepared to learn and achieve. Following is just a sample list of organizations that provide assistance in locating an engaging and educational summer program in your community for all ages.

- > **YMCA**—(800) 872-YMCA, [www.ymca.net](http://www.ymca.net)—has more than 2,500 locations nationwide, many of which offer arts and humanities programs, including its National Writer's Voice, a network of independent literary arts centers.
- > **Boys & Girls Clubs of America**—(800) 854-CLUB, [www.bgca.org](http://www.bgca.org)—staffs some 44,000 trained specialists to support programs that provide writing assignments, help for setting academic goals and

hands-on learning about the environment.

> **4-H Club**—(301) 961-2800, [www.fourhcouncil.edu](http://www.fourhcouncil.edu)—provides 7 million American youths with programs that promote literacy in science, engineering and technology as well as rural youth development.

> **Camp Fire USA**—(816) 285-2010, [www.campfire.org](http://www.campfire.org)—sponsors mentoring opportunities and service-learning programs through 145 councils and community partners across the nation.

In addition, the U.S. Department of Education—at (800) USA-LEARN and at [www.ed.gov](http://www.ed.gov)—offers a database that includes approximately 6,800 participating schools and organizations across the country that have been awarded 21st Century Community Learning Center grants to establish summer, weekend and after-school programs.

**summer learning loss:**

the fall-off in reading and math skills during the summer months due to the lack of participation in academic enrichment activities.

## News Show Examines Child Health, Nutrition

The ways in which schools and families can promote healthy food choices and active lifestyles for students will be the focus of the June edition of *Education News Parents Can Use*, the U.S. Department of Education's monthly television program.

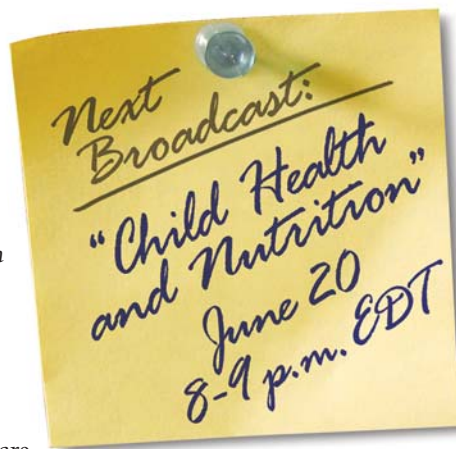
Healthy, active and well-nourished children are more likely to be prepared and motivated to learn. However, a recent government report revealed that one-third of U.S. children and teens—approximately 25 million—are either overweight or on the brink of becoming so. June's show will address this issue by: highlighting national and local programs that encourage students to eat right and exercise; discussing the

latest research on the health and fitness of America's youths; spotlighting the new federal guidelines for child nutrition; and providing tips for parents on how they can ensure their children adopt healthy habits that will help them to grow and learn.

Each month, *Education News*

*Parents Can Use* showcases: schools and school districts from across the country; conversations with school officials, parents and education experts; and advice and free resources for parents and educators.

To learn about viewing options, including webcasts, visit [www.ed.gov](http://www.ed.gov) and click on "Parents," then "News Parents Can Use," or call toll-free (800) USA-LEARN.





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## Preparing Children for the 21st Century

Secretary Spellings recently released a checklist outlining the key things parents can do to help ensure that their children are prepared for higher education as well as for the competitive workforce of today's global economy. The checklist includes action steps for preparing children for their futures, as sampled below.

- > Make sure your child understands the importance of math in elementary school. At the high school level, encourage your child to take a rigorous program of study, such as four years of math and science classes along with critical foreign language courses that include Arabic, Chinese, Japanese, Korean and Russian.
- > Encourage your child to take Advanced Placement courses in high school, as research shows that

students who take rigorous courses in high school are more likely than their peers to graduate from college in four years or less.

- > Get involved in helping your child's school to improve by finding out about the U.S. Department of Education's numerous grant programs, including Early Reading First, Teaching American History, and Improving Literacy Through School Libraries.
- > Encourage your child's teacher to take advantage of the Department's Teacher-to-Teacher Initiative, which engages some of the nation's top teachers and principals to share strategies for raising student achievement.
- > Take advantage of the new opportunities *No Child Left Behind* may provide for your child, including the possibility of transferring to another public school or receiving free tutoring.

For the complete checklist, visit [www.ed.gov](http://www.ed.gov) and click on "Parents," then "Checklist for Parents," or call (800) USA-LEARN.



**U.S. Department of Education**  
400 Maryland Ave., S.W.  
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**Comments?** Contact Nicole Ashby, Editor, (202) 205-0676 (fax), or [education@custhelp.com](mailto:education@custhelp.com).

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