



The Daring Dozen

The world of education is so frequently ruled by standardized tests and mandated curricula that it's easy to forget we're sharpening minds, not building Buicks. We may not remember our final grade in middle school math, but we won't forget the art teacher who opened our mind to impressionism, or the parent who volunteered one morning each week to sit down with our first-grade class to read *Treasure Island* aloud. That's why we've highlighted a dozen people who we believe represent the vibrant heart and optimistic soul of education. Each one has gone above and beyond, frequently overcoming bureaucratic hurdles or professional skepticism. They come from all corners: classrooms, the business world, academia, research labs, even the Library of Congress. There are thousands more like these few, most likely down the hall or down the street. Seek them out and encourage them. Because they're teaching lessons that are worth learning.

Compiled by the *Edutopia* staff. Illustrations by Thomas Reis.

ROBERT MOSES

MATH MAVEN

Robert Moses knows a thing or two about radical ideas. Forty years ago, as head of the Student Nonviolent Coordinating Committee, he led the fight in Mississippi for voting rights for African Americans. Today, he carries the banner for a struggle that is no less revolutionary (though considerably less dangerous): making sure low-

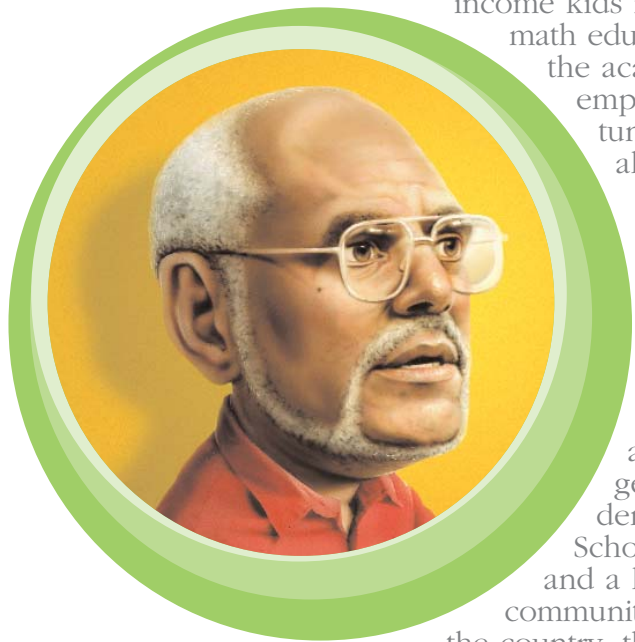
income kids receive a quality math education—and all the academic and employment opportunities that go along with it.

Each week, Moses travels from his home in Cambridge, Massachusetts, to Jackson, Mississippi, where he teaches algebra and geometry to students at Lanier High School. In Jackson and a handful of other communities throughout the country, the civil rights

leader-turned-math educator and activist works with young organizers (called math-literacy workers) and experienced educators alike as part of the Algebra Project, an initiative designed to change math education for poor minority youth.

The Algebra Project, which Moses began in 1982, aims to create a new standard for math education—one that makes college-preparatory algebra a requirement for all students regardless of their race or the neighborhood in which they live. That's no small challenge, given the disparities in math education today: According to the National Assessment of Educational Progress, on average, white 13-year-olds have already received the same level of math education as 17-year-old African Americans.

Moses's efforts have earned him the praise of civil rights workers and mathematicians alike. And just as he did in the summer of 1964, the 69-year-old enlists the aid of youth to further the cause of math literacy for all students. The Young People's Project, led by Moses's son, Omowale, brings together high school and college students to serve as tutors and role models for younger students. They're changing the culture of their community, making math cool, and ensuring that algebra is a right for all, not a privilege for the few.



SONIA HERNANDEZ

STANDARD-BEARER

In her senior year of college, Sonia Hernandez fell ill and had to drop out of school. While she was recovering, her mother told her she ought to be doing something to stay busy. So Hernandez started helping out with the preschool-age children of Mexican laborers in South Texas.

Thirty years later, she is still focused on building bridges between hardworking, often transient, families and the schools that offer their children a way up the economic ladder. In that time, she has never left the educational sector. After working as a teacher and senior manager in the San Antonio, Texas, school system, she was deputy superintendent at the California Department of Education and secretary for education for the Office of the Governor of Texas. She is now director of education for the United Farm Worker Movement (UFWM), dividing her time between Los Angeles and La Paz, Mexico. "It's time to take a more

“Schools exist to serve the kids, not the adults.”

proactive role in making sure the children of migrant workers—and those who now stay put—get all they can out of school,” she says.

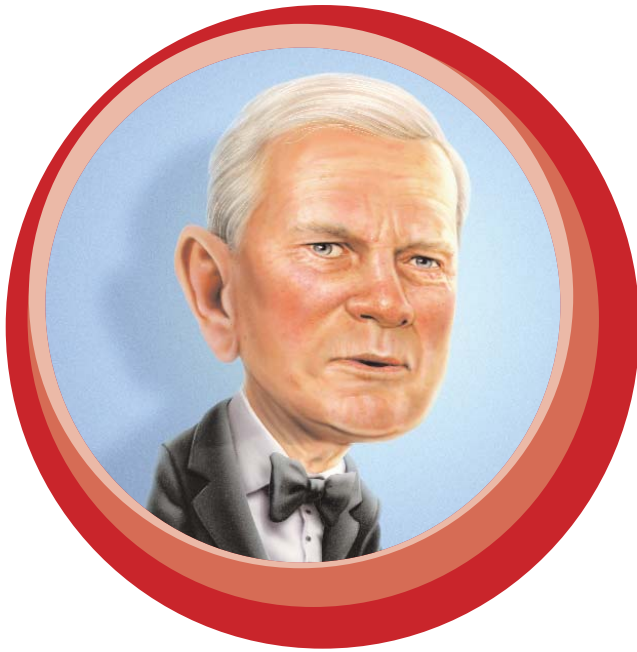
Hernandez attends organizing meetings held by the UFWM and finds that when she stands up to talk about education, no matter how noisy the audience has been,

“you can hear a pin drop.” Parents want to know not only what schools offer but also what's expected from their kids.

Of her many accomplishments, Hernandez is proudest that she's “played some small role in pushing the standards movement to the forefront nationally,” she says. “It's so important to be able to say, ‘This school is working for the kids, and this one isn't.’”

HOT LINKS

- Bob Moses
- www.algebra.org
- Sonia Hernandez
- www.ufw.org



JAMES BILLINGTON

CYBRARIAN

James Billington, who presides over the Library of Congress, understands that the 29 million books and publications, 57 million manuscripts, 12 million photographs, 2.7 million recordings, and 4.8 million maps in the library belong to the American people. And in the early '90s, he championed the idea that this vast store of knowledge

“The Internet can strengthen our democracy by helping us better understand it.”

should be brought to the people over the Internet. Under Billington's leadership, over 7 million items from more than 100 of the library's collections have been put at the fingertips of electronic searchers. Making first sources available firsthand to students throughout the nation, the National Digital Library's American Memory collections have become some of the most popular educational destinations on the Web. Billington, 75, has been called the “Cybrarian of Congress,” and as such, he is among the most important educators in America.

HOT LINKS

- James Billington
- memory.loc.gov/ammem
- Kim Smith
- www.newschools.org



KIM SMITH

BUSINESS BUILDER

As CEO and cofounder of the NewSchools Venture Fund, Kim Smith believes good schools are good business. NewSchools was designed to transform public education by using grants, loans, and equity investments to support entrepreneurs who are building ambitious education ventures. Some, like the online school guide GreatSchools.net, have already become essential tools for parents and teachers alike.

Smith believes she is “genetically encoded to be a social entrepreneur in education.” Both of her parents were educators—her mother, a public-school teacher in elementary special education, and her father, a professor of education administration for 35 years at Columbia University Teachers College.

Smith began her career as a consultant specializing in business-education partnerships, and in 1989, she was a founding member of Teach for America, which sends young teachers to serve for two years in low-income communities. Today, her Silicon Valley firm pairs the power of money with a passion for education.

Says Smith, “We want to take lessons learned by successful venture capital firms and transform the education system.”



“If teachers don’t challenge students, how will they ever know what kids can accomplish?”

BERNICE FEDESTIN

STUDENT AND DOCUMENTARIAN

Bernice Fedestin does not believe that the status should always remain quo. Last year, when Fedestin was a junior at Brighton High School, an urban school in Boston with a preponderance of minority students, she heard a classmate mention that her sister, a student at a suburban high school, was taking physics in ninth grade. Since Brighton didn’t offer the same course until the senior year, Fedestin wondered why inner-city schools should have differently timed curricula. To find out, and to highlight the disparity, she decided to make a video documentary. Calling the project “Equal Educational Opportunity: The Problem We All Live With,” the 17-year-old Fedestin enlisted the help of her teachers and received a \$5,000 grant from the Bill & Melinda Gates Foundation. She then created a survey and interviewed students at three suburban and three urban high schools. “It was something I knew had to be done,” Fedestin says. She condensed 20 hours of tape into a 20-minute video—“a very painful process”—that showed a marked difference between the challenges offered to suburban and city school students. Fedestin first showed the completed video to teachers and administrators at Brighton. “They really didn’t want to believe what we had found out,” she says. She then presented the film at a conference in Houston marking the 40th anniversary of the U.S. Supreme Court’s *Brown v. Board of Education* decision. The difference between the more demanding curricula that suburban schools teach and what Boston city schools teach, she says, reflects an unspoken prejudice that inner-city kids aren’t up to the challenge of advanced learning. Obviously this enterprising senior, who hopes to attend Harvard University as a premed next year, does not agree.

BOB KAY

FRIEND AND MENTOR

Three years ago, while Bob Kay was at home recuperating from cancer surgery, he received an amazing gift: two grocery bags filled with handmade get-well cards from the 550 students at Capitol Elementary School.

“My wife and I read them all, and then we sat there and just cried,” recalls Kay, who serves as mentor, friend, and benefactor to students at the school in Phoenix. Kay’s neither a teacher at the school nor an involved parent—he’s a mechanic who owns a truck-repair shop down the street.

At a time when many of Kay’s contemporaries spend their afternoons playing golf, Kay devotes his free time to the local schoolkids, offering help and encouragement, recognizing their achievements, and simply hanging out—a friendly, consistent presence for kids who don’t have enough good things in their lives. As president of the local Kiwanis Club, he oversees a monthly student-recognition and awards program, as well as regular donations

“I flat-out enjoy giving back.”

of food, coats, and holiday gifts to the students and their families. And when the district was planning to build a new school to replace the one that had been condemned, Kay stepped up to be a member of the design team, attending weekly meetings for more than a year to plan to new facility for the students, whom he calls “my kids.”

Kay is a fixture at Capitol. Rain or shine, he wears the same “uniform”: a work shirt, a pair of shorts, and a baseball cap turned backward. On the playground, in the classrooms, and in the cafeteria, he has a good word and a high five for everyone he sees. “The return on my investment is a smile from a child,” says Kay. “I can’t imagine not doing this.”

ANGUS KING

VISIONARY POLITICIAN

There’s a reason people live way up in Maine. No, it’s not the weather. Nor is it the glittering nightlife. People in the rugged Northeast are often an independent bunch who like doing things their own way.

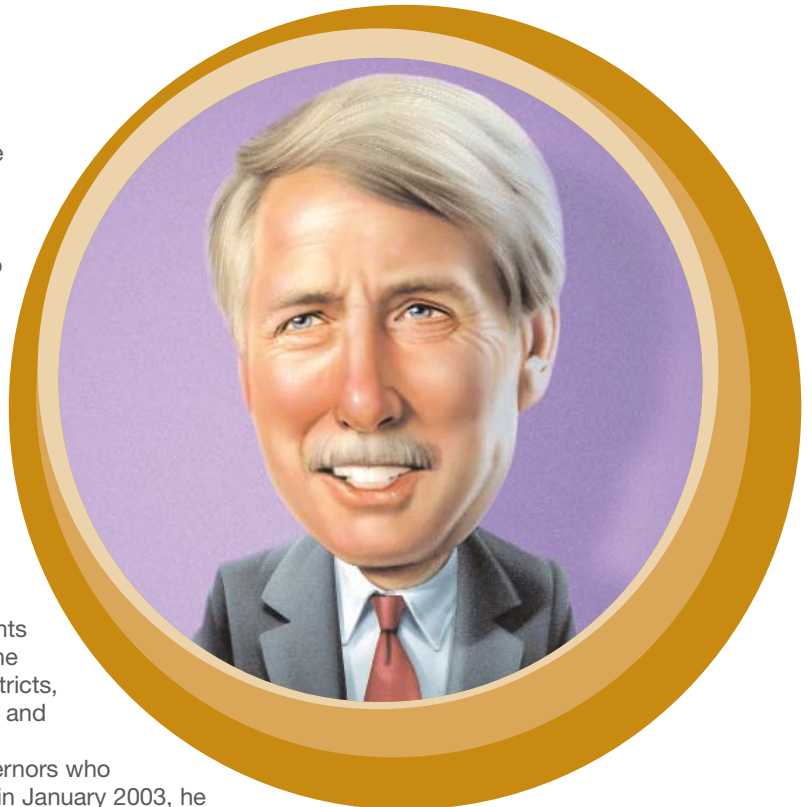
Just look at Angus King, the state’s governor from 1995 to 2003. King made a lot of noise and a lot of enemies as chief executive when he took the bold and unusual step of providing every Maine middle school student and teacher with a laptop computer. The proposal was derided by legislators, teachers’ groups, and school boards for its cost and its potential for replacing teaching with Internet surfing.

But King persisted. “We are going to have the country’s most digitally literate teachers and students,” he declared. Beginning in 2002, at a cost of more than \$37 million, the state’s 33,000 seventh and eighth graders and their 3,000 teachers were issued Macintosh iBooks. Wireless networks were also installed in the state’s 239 middle schools.

Students loved the program and completed record amounts of schoolwork. In July, Maine announced a plan to expand the laptop program into high schools. Now numerous school districts, including several in Michigan, New Hampshire, New Mexico, and Pennsylvania, are mimicking Maine.

No tech slacker himself, King may be one of the few governors who actually knows how to build a Web site. Upon leaving office in January 2003, he packed his family into an RV for a trip around the country, “road schooling” his two children and filing reports for National Public Radio and a Web site, Wheresmolly.com, named after his daughter.

It isn’t easy being ahead of the pack. As Maine’s governor, King took a pounding but persisted in giving kids a tech-savvy education. When asked for the inspiration behind his vision, he quotes hockey legend Wayne Gretzky: “Most players skate to where the puck is,” the athlete reportedly said of his secret to success in the rink. “I skate to where the puck is going to be.”



LARISSA ADAM EMMA PAULINO HAE-SIN KIM

COMMUNITY MOBILIZERS

Lasting school reform requires a partnership among all the players—parents, teachers, and administrators. Without the involvement of all three groups, change will not be lasting or complete.

In Oakland, California, three women understand the value of partnerships. Although they came from strikingly different backgrounds, they shared a frustration with a failing school system and, equally important, a belief that all children can thrive academically and emotionally—if they're in the right school. Together they developed a plan for one of the most successful new "small schools," creating hope and opportunity for hundreds of students and their families.

The women: Emma Paulino, a native of Mexico who grew tired of teachers' giving up on her three kids; Larissa Adam, an educator who longed to work in a school where she could really serve the students she was assigned to teach; and Hae-Sin Kim, a veteran administrator eager to create rigorous and high-quality schools.

The determined threesome wrote one of the first small-school proposals in Oakland, resulting in ASCEND (A School Cultivating Excellence, Nurturing Diversity), which opened in September 2001. Since that time, the 268-student school has raised attendance and test scores and improved parent involvement, defying the odds for the mostly low-income students and families. ASCEND also has served as a model for others. Educators and parents from all over the country visit the school to learn more about its structure and programs.

Three years and one graduating class (that included Paulino's oldest son) later, the three women are still working to improve educational opportunities, but their roles have changed to reflect their experience and contributions.

Paulino is now a full-time organizer with Oakland Community Organizations, the grassroots group spearheading the city's school-reform efforts. Adam has left her fifth-grade classroom to become the principal of ASCEND, working with staff members, as well as with students, families, and community partners, to build upon the success of the school's first three years. Kim, the founding principal, transferred this fall to a desk in the district office, where she trains and mentors principals of the 21 small schools throughout the district.

What keeps them going? "We're going to get to the point where all children will get the education that they deserve," says Paulino. "This is not a privilege. This is a right."

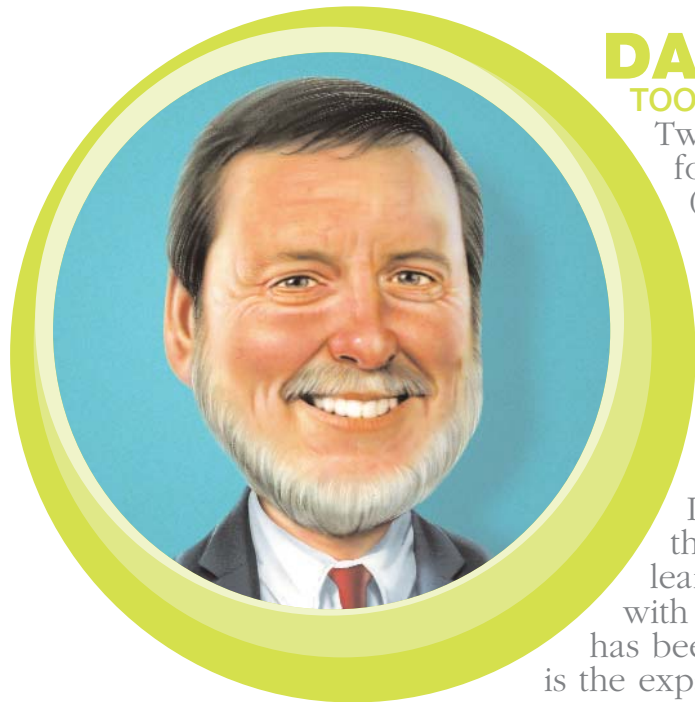


HOT LINKS

For additional articles on ASCEND
• www.edutopia.org/ASCEND

DAVID ROSE

TOOL BUILDER



Twenty years ago, David Rose and four colleagues formed the Center for Applied Special Technology (CAST), secured a small space in the North Shore Children's Hospital near Boston, and started designing technology tools to help all children learn, no matter what their physical, emotional, or intellectual limitations. CAST's eReader, for instance, combines talking and reading software to make text more accessible to struggling readers. Today, CAST's budget has ballooned from \$15,000 to more than \$5.5 million, and its staff is 50 strong. Its Universal Design for Learning approach adjusts the curriculum for students with varied abilities and learning styles, rather than imposing a set curriculum with inflexible materials. "The biggest challenge for us has been getting the idea right," says Rose. "Technology is the expansive palette that allows us to do it."

HOT LINKS

David Rose
• www.cast.org
Seymour Papert
• www.papert.org

SEYMOUR PAPERT

TECH ADVOCATE

Seymour Papert, a world-renowned mathematician and professor at the Massachusetts Institute of Technology, is a tireless advocate for putting powerful computing tools in the hands of students. A cofounder of the Media Lab and the Artificial Intelligence Laboratory, both at MIT, as well as the inventor of the Logo programming language, he has spent more than two decades promoting

"The goal should be to connect rich projects with powerful ideas."

a vision of education in which students create their own knowledge, rather than simply memorize facts and figures presented by others. Teachers, in Papert's view, should serve as guides for students, immersing themselves in projects that bring together multiple areas of the curriculum. Several years ago, he began working with a group of young offenders at the Maine Youth Center, in Portland, Maine, to explore the power of these ideas. "Some of them built airplanes, some built guitars. Everyone was staggered at the energy they showed," he says. "This project allowed some of them to get a new sense of themselves as learners."

