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# AMERICAN Educator

A QUARTERLY JOURNAL OF EDUCATIONAL RESEARCH AND IDEAS



## The Power of Active Citizenship

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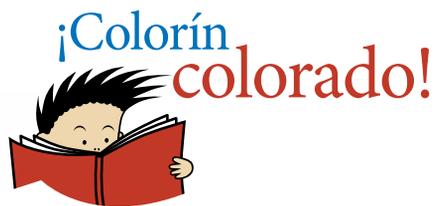
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## Renewing Adult Civic Engagement

RANDI WEINGARTEN, AFT President

AS A FORMER civics teacher, I welcome the articles in this issue about the importance of teaching students how to be active citizens. In the wake of the Parkland, Florida, shootings, of course, many young Americans have turned the tables and are teaching their elders what democracy looks like. You won't find a bigger cheerleader for civics education than me, but since that's so well covered elsewhere in these pages, I want to use this space to discuss the need for renewing *adult* civic engagement. Democracy is fragile, as we see in the United States and elsewhere, and it requires us to be more engaged than ever before.

Yale historian Timothy Snyder (*On Tyranny*) and Harvard political scientists Steven Levitsky and Daniel Ziblatt (*How Democracies Die*) point out that, today, democracies die more often through a gradual whittling away of rights and the atrophy of civic engagement than they do in an outright coup d'état.

### Every Vote Counts

Civic engagement in the United States, as measured by voting, is anemic. The U.S. ranks 31st out of 35 OECD countries for voter turnout. We know better than most that every vote counts. The 2000 presidential election ultimately was decided by the Supreme Court, after only 51 percent of the voting-age population voted. In 2016, just 59 percent of eligible voters went to the polls.

Consider the last six months: In Alabama last December, 22,000 votes determined who would be senator. In Virginia, in January, a House of Delegates race ended up tied, decided by random drawing. Imagine living in that district and not having voted. Or, take Pennsylvania, where a grass-roots movement organized to elect a new state Supreme Court. The new court then ruled that the state's congressional maps had been drawn unconstitutionally—gerrymandered—to guarantee that its delegation to the U.S.

House of Representatives would be overwhelmingly Republican, despite roughly equal numbers of Pennsylvania Republicans and Democrats. Now they have brand new maps. Votes count.

### Voter Suppression

Precisely because every vote counts, since 2008 the right wing has fought to keep millions of Americans, especially the poor and people of color, from voting.

When the Supreme Court struck down a key enforcement provision of the 1965 Voting Rights Act in 2013, Alabama, Georgia, North Carolina, and Texas passed voter restrictions aimed squarely, and successfully, at keeping people of color away from the polls. The Trump campaign used social media to run voter suppression campaigns targeted to communities of color.

When people say, "It doesn't matter—everyone is a crook," or "They're all the same," it makes voters stay home from the polls. Why are voter suppression and voter apathy such a big deal? Because voting doesn't just count—it affects *everything*.

Voting populates the three branches of government, providing our government's checks and balances. Supreme Court justices and other federal judges—all confirmed by the U.S. Senate—shape the foundational elements of American democracy: public education, labor rights, and voting rights. And so do all our state legislatures, and our town boards, school boards, city councils, boards of supervisors, and county legislators.

### Democracy on the Move

The remarkable democratic upsurge since January 21, 2017, is the largest and most

energetic of my lifetime. Beginning with the Women's March (the single largest demonstration in U.S. history), to the nationwide airport protests against the president's travel ban, to the Parkland survivors pulling off one of the biggest young people's demonstration in American history, to the moving teacher walkouts in deep-red West Virginia, Oklahoma, Arizona, and North Carolina—Americans are on the move.

## Voting doesn't just count—it affects everything.

We've taken on issues many of us thought we couldn't do much about—from sexual harassment to gun violence—and put them on the national table for conversation, debate, and action. This has helped stop the repeal of key aspects of the Affordable Care Act and secured vital resources for public schools. The system isn't so immune to political movements that it can ignore us when we act together, in numbers, in a public commitment to our values.

Now it's time to convert these moments into enduring change. That happens at the ballot box. The teacher walkouts forced public officials to come up with hundreds of millions for public education. Now educators and their allies are going to work electorally to ensure they won't lose ground when new legislatures convene next January.

I believe we are at a crucial moment in American history, and in the future of American democracy. After a decade of unrelenting attacks on the right to vote, on labor rights, and on public education, the era of passive resignation is over, and we're having a totally new conversation about civics.

How all this energy and caring translates to the ballot box is now up to all of us.

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### *A Renewed Focus on Teaching Civics Education*

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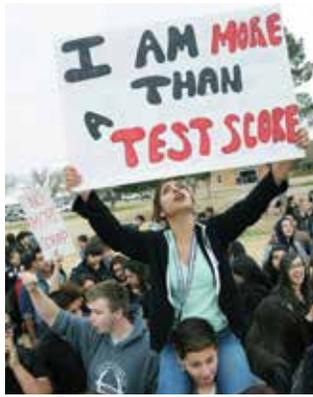


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AFT STAFF

## TEACHERS RALLY FOR PUBLIC EDUCATION, MORE SCHOOL FUNDING, HIGHER PAY

Fed up after years of budget cuts, teachers across the country have staged massive walkouts this spring to draw attention to their low wages and poor working conditions and to demand greater funding for public education. Their calls for legislative changes started in West Virginia and spread to several other states, including Oklahoma, Kentucky, Colorado, Arizona, and North Carolina. “Teachers are standing up for their students and themselves against largely red states with weak labor laws and where governors and legislators have opted for tax cuts for the wealthy instead of investments for children,” wrote AFT President Randi Weingarten in an April *USA Today* column. Weingarten has joined protesting teachers on the picket line and traveled to Puerto Rico for an Asociación de Maestros de Puerto Rico action against closing public schools there.

In places where teachers have protested, they have done so with public support. An NPR/Ipsos poll released this spring (<http://n.pr/2HsZdGu>) shows that only one in four people believes teachers are fairly paid, and that two-thirds approve of national teachers unions. Read more at [www.usat.ly/213N1vf](http://www.usat.ly/213N1vf).



## TAKING ACTION AGAINST GUN VIOLENCE

In April, on the 19th anniversary of the Columbine High School shooting, more than 2,500 walkouts took place across the country for the National Day of Action Against Gun Violence in Schools. AFT President Randi Weingarten participated in a rally in New York City, and AFT Executive Vice President Mary Cathryn Ricker attended an event in Parkland, Florida. Other steps the AFT has taken to help prevent gun violence in schools include cutting ties with Wells Fargo bank, which has a close relationship with the National Rifle Association, and releasing a watch list of investment managers that invest in companies that make assault weapons. Read more at <http://go.aft.org/AE218news1>.

## FIGHTING DeVOS—AND ABUSIVE STUDENT LOAN SERVICERS

A new “notice of interpretation” from Education Secretary Betsy DeVos aims to make it even harder to pay off student debt—and easier to get overcharged and abused in the process. DeVos has already chipped away at regulations designed to protect borrowers, allowing student loan servicers like Navient and Nelnet to engage in deceptive practices and defraud borrowers, leading them deeper and deeper into debt. The notice the Department of Education published in the *Federal Register*, asserting that federal laws regarding student debt collection preempt state laws, takes

DeVos’s campaign a step further by preventing states from regulating lenders when she refuses to do so. Education advocates say that’s not good for college access or the nation’s economy. Read more at <http://go.aft.org/AE218news2>.

## REPORT TAKES ON ASSET MANAGERS WHO ATTACK PENSIONS

A new edition of an influential report published by the AFT exposes Wall Street asset managers who earn millions in fees from investing workers’ defined-benefit pensions while simultaneously taking actions that can undermine their very existence. “Asset managers can’t have it both ways,” says AFT President Randi Weingarten. “Trustees have a fiduciary duty to ensure workers’ capital is invested in a fiscally prudent manner. These managers, who make a living as defined-benefit plan investors, cannot, in the next breath, attack those same plans.” Read more and download the report, “Ranking Asset Managers,” at <http://go.aft.org/AE218news3>.

## HONORING THE PAST AND INSPIRING TODAY’S CIVIL RIGHTS MOVEMENT

It was an emotional journey to Memphis for the thousands who gathered there in April to commemorate the historic sanitation workers’ strike of 1968 and the assassination of Martin Luther King Jr. But it wasn’t all memories and reverence: AFT leaders, including President Randi Weingarten, Secretary-Treasurer Lorretta Johnson, and Executive Vice President Mary Cathryn Ricker, and dozens of AFT members joined other labor activists and community organizers to not only honor civil rights heroes but also carry their fight forward, with activist trainings, workshops, rallies, and inspirational speeches. Read more at <http://go.aft.org/AE218news4>.

## NURSES ON A MISSION

This spring, more than two dozen nurses and health professionals from the AFT were in the U.S. Virgin Islands performing vision and hearing screenings for more than 10,000 public school students. The effort was part of the comprehensive recovery assistance the AFT has been providing since hurricanes Irma and Maria struck the islands last September. The volunteers are back home now, but the mission left a lasting impression on them. Read what two professionals learned at <http://go.aft.org/AE218news5> and <http://go.aft.org/AE218news6>.



COURTESY OF BREANN HEREL



# The Power of Active Citizenship

A RENEWED FOCUS ON TEACHING CIVICS EDUCATION

BY BOB GRAHAM AND RANDI WEINGARTEN

At the end of the day, the students at my school felt one shared experience—our politicians abandoned us by failing to keep guns out of schools. But this time, my classmates and I are going to hold them to account. This time we are going to pressure them to take action.

—Cameron Kasky, a junior at Marjory Stoneman Douglas High School

**E**arlier this year, a horrific tragedy unfolded at Marjory Stoneman Douglas High School in Broward County, Florida. On February 14, a former student walked into the school with an AR-15 semiautomatic rifle and mur-

*Bob Graham is a former U.S. senator and governor of Florida. The author of four books, including America, the Owner's Manual: You Can Fight City Hall—and Win, he currently leads efforts to encourage citizen engagement and train students to become future leaders through the Bob Graham Center for Public Service at the University of Florida. Randi Weingarten is the president of the American Federation of Teachers. Highlights from her career include serving as the president of the United Federation of Teachers, as an AFT vice president, and as a history teacher at Clara Barton High School in Brooklyn's Crown Heights.*

dered 17 students and staff in the deadliest high school shooting in American history. Only the 2012 mass killing at Sandy Hook Elementary School, with a toll of 26 young children and adult staff, resulted in a greater loss of life in a K-12 school. Since the Columbine High School shooting in 1999, 187,000 students have experienced gun violence at their schools, and active shooter drills are now commonplace.

We were devastated by the needless loss of life and anguished that yet another mass school shooting had taken place while commonsense gun safety legislation to protect America's students and educators lingered in Congress and many state legislatures. Yet we were heartened by what came next. Because, rather than allowing themselves to be further victimized, the students at Marjory Stoneman Douglas began to take matters into their own hands, meeting and networking on social media, speaking to the media, participating in vigils, organizing walkouts and demonstrations, establishing coalitions with others who share their outrage and goals, and traveling to Tallahassee and Washington, D.C., to lobby on behalf of meaningful gun safety laws.

In other words, the Marjory Stoneman Douglas students have been acting as informed and activated citizens, utilizing their constitutional rights to assemble and speak freely, and they have

learned competencies to petition the government for the redress of their grievances.

It is notable that Florida, like most states, stopped teaching civics—the study of the rights and responsibilities of citizenship in a democracy—in the 1960s, only to restore it by legislative action in 2010, with citizenship instruction making its way back into schools around 2011. (For more on each state’s civics education requirements, see the article on page 10.) Thus, these Marjory Stoneman Douglas students were among the first wave of students in Florida public schools to be taught civics in nearly four decades. For many of them, their civics education started in middle school and continued through a 12th-grade Advanced Placement government course where the teacher, Jeff Foster, espoused a simple mantra: “If you don’t participate, you can’t complain about things. I tell them in order to make a difference in the country, you need to participate. Unfortunately, we had this event happen [at Marjory Stoneman Douglas], and now it’s in live action.” Evidently, the education provided at Marjory Stoneman Douglas High School served these courageous students well: they credit their teachers with introducing them to the civic knowledge and skills they have been using so effectively. Indeed, before the shooting, some students had just had this debate on guns in Foster’s class.

The fact that these students feel empowered to take a stand on their own behalf is a testament to the value of educating young people on their rights and responsibilities as citizens in a democracy, as well as teaching them how to exercise the power of active citizenship.

### An Antidote to Authoritarianism

The events in Florida are taking place at a time when democracy itself is confronting serious threats,\* both in the United States and internationally. In October 2017, the Albert Shanker Institute brought together leading scholars and democracy activists from across the globe to discuss these challenges.<sup>1</sup> They are many: growing economic inequality, intense political polarization, government dysfunctionality and paralysis, the decline of civil society institutions such as organized religion and organized labor, attacks on science and factual knowledge, and the emergence of movements of racial, religious, and nativist intolerance. The conference’s participants, who included Han Dongfang, a leader of the independent unions in the 1989 Tiananmen Square democracy protests, and Mac Maharaj, a leader of the antiapartheid struggle who had been a prison mate of Nelson Mandela, agreed that the future of democracy cannot be taken for granted but must be actively promoted and secured by confronting these challenges. That is our work as citizens.

Education for citizenship is the first, essential part of securing the future of American democracy. (For more on the importance of civics education in preserving our republic, see the article on page 14.) This is not because—as some have incorrectly suggested—popular support for democracy is flagging or because today’s youth are less committed to democratic governance than previous generations. In fact, the best evidence indicates that support for democracy has increased modestly and American youth



Students at Edison Preparatory School protest a lack of funding for teachers in Tulsa, Oklahoma.

## Marjory Stoneman Douglas students were among the first wave of students in Florida public schools to be taught civics in nearly four decades.

are more stalwart in their support for democracy than those who are older.<sup>2</sup> Rather, it is because openness to authoritarian rule is greatest among those who are disaffected and disengaged from politics, and who are under the sway of prejudice toward fellow citizens of different backgrounds. When a person lacks a sense of his or her own power as a citizen, experiences a problem that dysfunctional democratic institutions have been unable to solve, and has little experience in working constructively with other citizens on common goals, he or she is more likely to give up on democracy and turn to a “strongman” to solve his or her problems. Education is a powerful antidote to this authoritarian temptation, because it can impart that needed sense of civic efficacy and common cause. We know from national and international studies that increases in educational attainment are highly correlated with increases in civic participation and support for democracy.<sup>3</sup> So the more education we provide to Americans—and the better we make that education—the healthier our democracy will be.

To be most effective, civics education must be resonant and relevant. Any serious effort to ensure that young people are fully educated about the values, processes, and institutions of democracy depends on accomplished and experienced teachers who both know their subjects well and actively engage students in their learning. Research both here and abroad confirms that those students who understand democracy best—and who participate most actively in civic life as adults—are those whose teachers know their material and dare to run classes that involve students in civic work and in discussions of controversial subjects.

\*For more on these threats, see “Hope in Dark Times” and “History and Tyranny” in the Summer 2017 issue of *American Educator*, available at [www.aft.org/ae/summer2017](http://www.aft.org/ae/summer2017).



Chicago students march to the U.S. Department of Education to deliver report cards to Secretary DeVos.

for them to know that there are 435 members of the House of Representatives. This concept of bottom-up civic engagement is what the book *America, the Owner's Manual: You Can Fight City Hall—and Win* is all about (see the sidebar below).

Teaching civics should be more than just understanding the structures and functions of government. In an era of “fake news”<sup>\*</sup> and Internet conspiracy theories, it is crucial that students learn how to gather and evaluate sources of information, and then use evidence from that information to develop and support their ideas and advocacy positions.<sup>†</sup> No polity can make wise decisions if its citizens do not know how to separate fact from opinion, and how to gather and weigh relevant evidence. Education for democracy shapes attitudes, values, and actions—it creates the foundations for a culture of democracy, not just an understanding of what it is. It takes time and long-term funding. It requires new forms of professional training.

Citizenship education at its best is a unification of foundational knowledge with civic values and key competencies. Together, these elements represent action civics. One of the biggest roadblocks to participatory democracy is the perception that everyday Americans can't influence government policy, and that only the privileged and special interests can command the levers of power or change bureaucracies. But if students can actually identify a problem in their school or community that is important to them, consider the options to solve that problem, marshal evidence in support of their selected solution, identify which public decision-maker can make a difference and how he or she might be persuaded to take action, determine the best time

<sup>\*</sup>For more on the proliferation of fake news and the importance of civic reasoning in a social media environment, see “The Challenge That’s Bigger Than Fake News” in the Fall 2017 issue of *American Educator*, available at [www.aft.org/ae/fall2017/mcgrew\\_ortega\\_breakstone\\_wineburg](http://www.aft.org/ae/fall2017/mcgrew_ortega_breakstone_wineburg).

<sup>†</sup>For more on developing arguments and teaching evidence-based writing, see “For the Sake of Argument” in the Spring 2018 issue of *American Educator*, available at [www.aft.org/ae/spring2018/friedrich\\_bear\\_fox](http://www.aft.org/ae/spring2018/friedrich_bear_fox).

## It shouldn't take a shooting for students to become civically engaged.

Civics instruction should be “bottom up.” We need to teach students to interact directly with their government and make government respond to their concerns. The Marjory Stoneman Douglas students have done this, but it shouldn't take a shooting for students to become civically engaged. Civic engagement should begin close to home. It is more important to teach students how to seek effective action from their school board or persuade their city commission to place a stop sign on the corner than it is

# Teaching Civic Engagement

BY BOB GRAHAM

I am a former U.S. senator, Florida governor, and member of both houses of the Florida Legislature. In my campaigns for governor and the U.S. Senate, and while serving in those offices, I was known for working full days in a variety of occupations, including as a factory worker, busboy, fisherman, and ironworker—in total, 408 workdays over a 30-year span. One job—my very first job—certainly stands out, however, and shaped much of my later work. It was 44 years ago, when I spent a semester teaching civics at Miami Carol City Senior High School.

Before working in the classroom, I was the head of the Florida state Senate's Education Committee, and I was surprised

by how little students understood about their local government institutions and how to influence change. I observed the decline in the teaching of civics, and how the curriculum placed too much emphasis on teaching about government, with too little attention to civic engagement. If students are not engaged, I found, they too often become cynical and divorced from community life, as well as the activities of a democratic society.

While bringing these concerns to a gathering of civics teachers, I was challenged to stop preaching, come into the classroom, and learn the reality teachers faced—indifferent students, parents who would not attend parent-teacher nights, an overly bureaucratic school administration,

and all those laws politicians placed on teachers. I accepted this challenge for what became a semester-long transformational experience.

With the help of my students and Donnell Morris, a young social science teacher at Carol City High School, I developed a citizen-centric civics curriculum constructed around the essential skills of effective citizenship and hands-on projects applying those skills. Our goals were to tackle real issues that students were concerned with in their school and community. Students would learn ways to advocate for real change—this was not a simulation, but an exercise in advocacy. We wanted to teach students how to make government work for them.

and conditions to pursue a decision, attract allies to an expanding coalition of support, devise a plan to engage both traditional and new media, and propose credible fiscal solutions for challenges requiring public funding—then students can both move the needle toward success for the problem at hand and gain the confidence and experience necessary for a lifetime of action civics.

The active-citizenship approach we encourage focuses on five key principles for teaching action civics:

- Help students recognize challenges or opportunities in their school, community, state, or nation that can be addressed through effective citizenship;
- Instruct students on the competencies required for civic success (i.e., the skills of effective citizenship);
- Provide students with foundational knowledge of democratic institutions and processes while teaching citizenship skills (e.g., exploring federalism to identify which level of government can resolve the challenge a student has selected);
- Instill in students the dispositions of democratic citizenship, such as respect for fellow citizens of different races, religions, classes, and sexualities, and tolerance for different political



viewpoints; and

- Encourage students to utilize their newly learned skills, knowledge, and values to address the challenge or opportunity they have identified.<sup>4</sup>

We must provide students with the opportunity to acquire the above-described citizenship skills. Civics is not an accumulation of dry facts and abstract ideas. As with any endeavor that we wish to perform well, it must be practiced. You don't learn to play the piano by reading a textbook about the piano or even memorizing famous scores. You don't learn to make persuasive oral arguments by studying the science of speech or even watching great speeches. You learn to play the piano by playing the piano. You learn to make persuasive oral arguments by practicing such arguments. And you learn the skills of civics—the habits and attitudes of democracy—by engaging in civic activities.

America needs a “crash course” in civics. More important, we need to instill an understanding of the rights and responsibilities of citizens into our collective experience. Perhaps the need has grown so acute because civics education, like other areas of social studies, has been pushed to the back burner in American schools, a victim of the single-minded focus on English language arts and mathematics wrought by our recent national obsession with standardized testing. But, in a very real sense, the students of Marjory Stoneman Douglas High School have proven the vibrancy and strength of American democracy. Despite the horror of their circumstances, they fell back on an education that provided them with the knowledge and skills to demand change from local, state, and national elected leaders. It is up to us to see that their citizenship education experience is provided to all American students. □

(Endnotes on page 43)

High school students in Boston get out the vote as part of a civics class.

Three decades later, after three terms in the U.S. Senate, I—as a senior fellow at the John F. Kennedy School of Government at Harvard University—led a class of Harvard undergraduates in an updated version of the Carol City High School curriculum. I then used these ideas last year as the basis for a new book (coauthored with my former Senate speechwriter Chris Hand), *America, the Owner's Manual: You Can Fight City Hall—and Win*, which encourages strong civics education and participation.\*

I'm honored that the United Teachers of Dade (UTD) Teaching Excellence Foundation has converted my book into a curriculum guide, combining it with professional development taught in part by me. More than 100 Miami-Dade teachers were trained in a series of union-sponsored professional development sessions this past school year, and my ideas on civic engagement are now being piloted in middle and high school civics classrooms across the county. This would not have been possible without the strong support of UTD President Karla Hernandez-Mats and her team at the union. It's my hope that next school year, we will be able to expand the program piloted by UTD's foundation to other school districts across the nation.



Senator Graham holds up his book, *America, the Owner's Manual*, during an April 2018 professional development session based on his work, as Karla Hernandez-Mats, the president of the UTD Teaching Excellence Foundation, looks on. The foundation has funded a curriculum guide and professional development sessions based on the book. This workshop was held in Miami.

\*To learn more about my ideas and review case studies of everyday Americans who have developed the skills to make changes in government policies, read *America, the Owner's Manual: You Can Fight City Hall—and Win*, published by CQ Press.

# Activating Student Engagement

BY RANDI WEINGARTEN

My passion for politics has been lifelong, but the art and science of turning that passion into student engagement was kindled in the classrooms of Clara Barton High School, where I learned how to teach civics education. While serving as legal counsel for New York City's United Federation of Teachers in the late 1980s, I had worked closely with Clara Barton, helping it through a health and safety crisis caused by construction work that had been improperly conducted on asbestos-containing insulation, ceilings, walls, and floor tiles. The relationships that were formed in that work led to an invitation to teach in the school, and I joined its faculty as a social studies teacher in September 1991.

More than a quarter of a century later, I can still vividly recall my excitement and anticipation—and my nervousness—the day I first stood in front of a political science class at Clara Barton. My students were intellectually curious, thoughtful, and hard working. As students of color, mostly of African descent, and with many first-generation immigrants from the Caribbean among their number, they brought a rich set of real-world experiences to the study of politics and government. The challenge for me as a new teacher was how to actively engage them in their learning so that their great potential could be fully realized.

Clara Barton had a solid cohort of experienced and accomplished educators, and I drew upon their professional expertise and advice as I developed my own pedagogical approach. They helped me more than I can ever properly thank them, in particular Leo Casey, with whom I taught several Advanced Placement (AP) United States Government and Politics classes. I had practiced law and litigated cases—in courts and in arbitration forums. I knew that the practice of law was more important than the study of law. Likewise, I had studied John Dewey's educational philosophy and believed in his focus on learning by doing, but I did not appreciate the full power of this approach until I saw how Barton teachers used it, and I began applying it in my own teaching.

For instance, one of my classes took part in the We the People civics competition on the Constitution and Bill of Rights. Students participated in mock congressional hearings and debates to demonstrate their

ability to apply their knowledge and understanding of American government to contemporary issues. Since this was shortly after the first Gulf War, students debated the war-making powers of Congress and the president. And, at a time when the Supreme Court had upheld laws criminalizing gay sexuality, they analyzed the rights of all Americans to privacy and intimacy. They spoke eloquently on the First Amendment protections of their speech in the schoolhouse, on how the principles of the Fourteenth Amendment should be applied to affirmative action programs, on what the Fourth Amendment had to say about police stopping and searching them on the street, and on whether the United States still needed a strong Voting Rights Act. And they related these questions to the very principles underlying American government—natural rights philosophy, republicanism, and the Lockean social contract.

In sum, my students learned how to be democratic citizens by actively using civic knowledge and practicing the skills of citizenship. Empowered by this method of education and its relevancy to their lives, they were motivated to give this work their all and went on to defeat schools from much more advantaged settings, winning the New York state championship and placing fourth in the nation in the We the People competition.

During my years at Clara Barton, I went on to teach courses in law, American history, and ethical issues in medicine, and I applied the insights I had acquired on how to actively engage students in their

learning. My law class was centered on a mock trial, in which students acted out the different roles of judge, jury, prosecution, and defense. In my ethical issues in medicine class, our practical nursing students debated real-life challenges and dilemmas in healthcare, and, weighing values such as respect for life and respect for patient autonomy, discussed how they should be handled. In my history class, students engaged in a project of researching candidates for elected office and volunteering on the campaign of the candidate of their choice.

What I learned from my teaching is that engagement is essential. Student engagement and knowledge lead to critical thinking, confidence, judgment, and empowerment. While I am a teacher of social studies and civics, and my approach is rooted in my experience, the same practices of active student engagement—project-based instruction, student inquiry, and experiential learning—are no less applicable in other subjects. But I believe these practices hold a special value and importance for civics education today: the future of our republic and democratic governance hangs in the balance at this critical moment, and active democratic citizenship is essential for its survival. Civics education, in which students learn democratic citizenship by practicing it, is essential not just for good education, but for democracy itself.

**Weingarten, bottom right, with her students at Clara Barton High School in 1994.**



COURTESY OF THE AFT

# Safeguarding Democracy through Education

If the political turmoil roiling our country has you feeling a bit discouraged, you are not alone. Several of the articles in this issue of *American Educator* make the case that democracy is at risk. But they also highlight how educators, by building students' knowledge, can help improve our national discourse and ultimately the state of the world.

As educators know, ignorance threatens basic freedoms. Our nation's founders knew the importance of an informed and engaged citizenry in a constitutional democracy. For instance, Thomas Jefferson famously wrote about the need for educating the masses in order to protect freedom.

Amid today's heated political debates, valuing freedom should be one area of common ground. After all, as many political scientists and philosophers agree, power left unchecked in the hands of a few erodes freedom. To teach this lesson to students, explore Share My Lesson's "Foundations of Democracy" collection, which discusses terms such as "authority" and "rule of law," as well as the rise of fake news.

The need for educators to fill troubling knowledge gaps is clear. One recent survey found that 49 percent of millennials cannot name a single Nazi concentration camp and 41 percent do not believe that 6 million Jews were murdered during the Holocaust. Fortunately, 9 out of 10 survey respondents felt that students should learn about the Holocaust in school.\* Visit Share My Lesson's new "Holocaust Remembrance" collection to find resources for teaching this tragic history.

Equally worrying is a report by the Southern Poverty Law Center that high school seniors struggle to answer basic questions about slavery in the United

\*To read the survey, visit [www.claimscon.org/study](http://www.claimscon.org/study).

States, and that teachers report a lack of strong resources in order to teach it well.† Visit our updated "American Slavery" collection to find resources from several partners to supplement your lessons on this difficult topic.

## Hook Students with Current Events

In learning about issues of the day, many young people become engaged in their schools and communities. Visit our newly reorganized "Climate Change" collection to build on student interest in animal welfare and the environment.

Many young people also feel strongly about addressing gun violence. Share My Lesson's new "Gun Violence in the United States" collection contains dozens of resources as well as a keynote webinar, "When Enough Is Enough," that features a panel of experts discussing solutions.

Are your students passionate about gender equality, immigration, or racial justice? Visit our "Social Justice Issues" collection dedicated to the #MeToo and #MeTooK12 movements.

Perhaps the growing wealth gap in the United States and worldwide interests

†To read the report, visit [www.splcenter.org/teaching-hard-history-american-slavery](http://www.splcenter.org/teaching-hard-history-american-slavery).

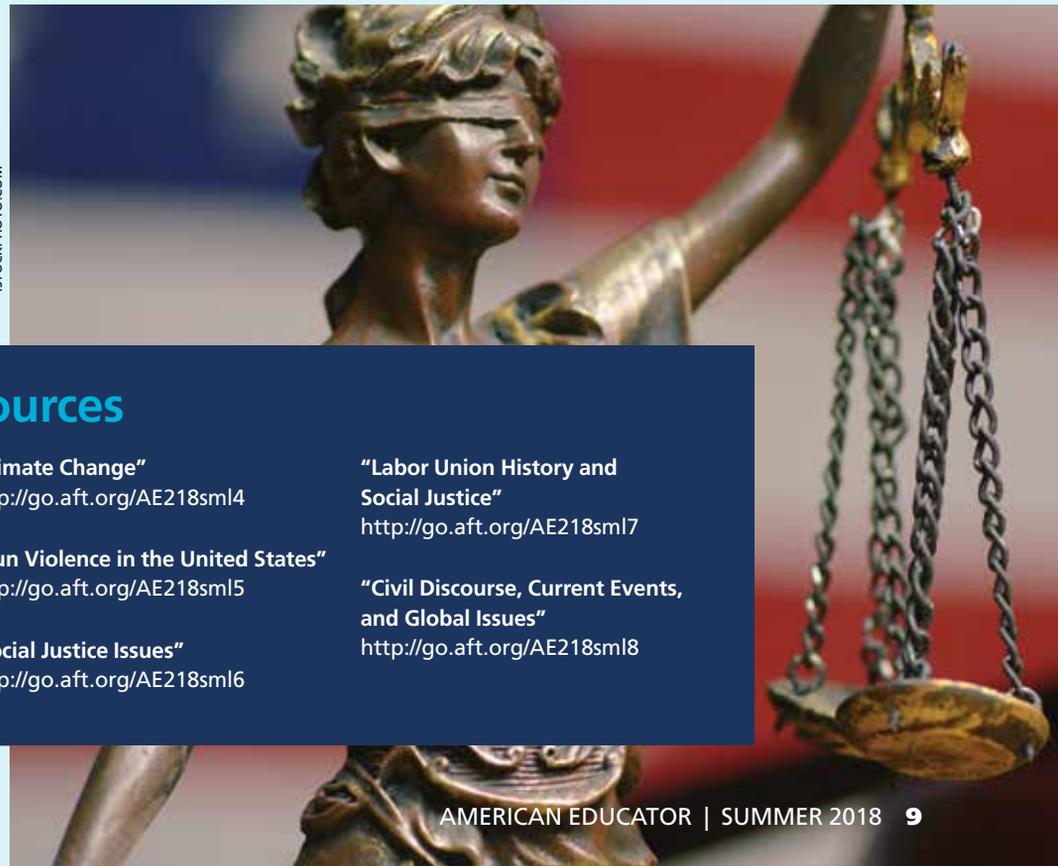
your students? Our "Labor Union History and Social Justice" collection provides lesson plans, videos, and other resources to help students understand the ways in which organized labor promotes workers' rights at home and abroad.

## Build Strong Participation Skills

Last but not least, we must help students engage effectively in our democracy. Take a look at our free webinars on "Civil Discourse, Current Events, and Global Issues," where there is bound to be one of interest. For example, if you are eager to enhance your curriculum by having students try to solve real-world problems, check out the webinars "Teaching Big Ideas for Real-World Transfer of Learning" and "Tackling World Issues by Fostering Global Competence in the Classroom."

Whatever lesson you choose, your efforts will go a long way toward strengthening our democracy. Hats off to all our users, partners, and contributors who make Share My Lesson a world-class website for learning and who contribute to the civic mission of schools. Send an email to [content@sharemylesson.com](mailto:content@sharemylesson.com) with any comments or ideas for how we can further support you.

—THE SHARE MY LESSON TEAM



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## Recommended Resources

"Foundations of Democracy"  
<http://go.aft.org/AE218sml1>

"Holocaust Remembrance"  
<http://go.aft.org/AE218sml2>

"American Slavery"  
<http://go.aft.org/AE218sml3>

"Climate Change"  
<http://go.aft.org/AE218sml4>

"Gun Violence in the United States"  
<http://go.aft.org/AE218sml5>

"Social Justice Issues"  
<http://go.aft.org/AE218sml6>

"Labor Union History and Social Justice"  
<http://go.aft.org/AE218sml7>

"Civil Discourse, Current Events, and Global Issues"  
<http://go.aft.org/AE218sml8>

# A Look at Civics Education in the United States



BY SARAH SHAPIRO AND CATHERINE BROWN

Civic knowledge and public engagement are at an all-time low. A 2016 survey by the Annenberg Public Policy Center found that only 26 percent of Americans can name all three branches of government, which was a significant decline from previous years.<sup>1</sup> Not surprisingly, public trust in government is at only 18 percent<sup>2</sup> and voter participation has reached its lowest point since 1996.<sup>3</sup> Without an understanding of the structure of government, our rights and responsibilities, and the different methods of public engagement, civic literacy and voter apathy will continue to plague American democracy. Educators and schools have a unique opportunity and responsi-

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*Sarah Shapiro is a research assistant for K-12 education at the Center for American Progress, where Catherine Brown is the vice president for education policy. This article is excerpted with permission from their 2018 report for the Center for American Progress, The State of Civics Education, which is available at [www.ampr.gs/2CAoxTP](http://www.ampr.gs/2CAoxTP).*

bility to ensure that young people become engaged and knowledgeable citizens.

While the 2016 election brought a renewed interest in engagement among youth,<sup>4</sup> only 23 percent of eighth-graders performed at or above the proficient level on the National Assessment of Educational Progress (NAEP) civics exam, and achievement levels have virtually stagnated since 1998.<sup>5</sup> In addition, the increased focus on math and reading in K-12 education—while critical to preparing all students for success—has pushed out civics and other important subjects.

The policy solution that has garnered the most momentum to improve civics in recent years is a standard that requires high school students to pass the U.S. citizenship exam before graduation.<sup>6</sup> According to our analysis, 17 states have taken this path.<sup>7</sup> Yet, critics of a mandatory civics exam argue that the citizenship test does nothing to measure comprehension of the material<sup>8</sup> and creates an additional barrier to high school graduation.<sup>9</sup> Other states have adopted civics as a requirement for high school graduation, provided teachers with detailed civics curricula, provided

community service as a part of a graduation requirement, and increased the availability of Advanced Placement (AP) United States Government and Politics classes.<sup>10</sup>

When civics education is taught effectively, it can equip students with the knowledge, skills, and dispositions necessary to become informed and engaged citizens. Educators must also remember that civics is not synonymous with history. While increasing history courses and community service requirements are potential steps to augment students' background knowledge and skill sets, civics is a narrow and instrumental instruction that provides students with the agency to apply these skills. Our recent report on civics education in high schools across the country, *The State of Civics Education*, from which this article is drawn, finds a wide variation in state requirements and levels of youth engagement. While this research highlights that no state currently provides sufficient and comprehensive civics education, there is reason to be optimistic that high-quality civics education can impact civic behavior.

## Educators and schools have a unique opportunity and responsibility to ensure that young people become engaged and knowledgeable citizens.

### Key Findings

Here is the current state of high school civics education:\*

- 1. Only nine states and the District of Columbia require one year of U.S. government or civics**, while 30 states require a half year and the other 11 states have no civics requirement. While federal education policy has focused on improving academic achievement in reading and math, this has come at the expense of a broader curriculum. Most states have dedicated insufficient class time to understanding the basic functions of government.<sup>11</sup>
- 2. State civics curricula are heavy on knowledge but light on building skills and agency for civic engagement.** An examination of standards for civics and U.S. government courses found that 32 states and the District of Columbia provide instruction on American democracy and other systems of government, the history of the Constitution and Bill of Rights, an explanation of mechanisms for public participation, and instruction on state and local voting policies. However, no state has experiential learning or local problem-solving components in its civics requirements.<sup>12</sup>

- 3. While nearly half the states allow credit for community service, only one requires it.**<sup>13</sup> Only one state—Maryland—and the District of Columbia require both community service and civics courses for graduation.<sup>14</sup>
- 4. Nationwide, students score very low on the AP U.S. government exam.** The national average AP U.S. government exam score is 2.64 out of 5, which is lower than the average AP score of all but three of the other AP exams offered by schools.<sup>15</sup> Most colleges require a score of 3 or higher, and some require a score of 4 or higher, to qualify for college credit. Only six states had a mean score of 3.0 or above, and no state had a mean score of 4.0 or above, on the AP U.S. government exam.<sup>16</sup>
- 5. States with the highest rates of youth civic engagement tend to prioritize civics courses and AP U.S. government in their curricula.** The 10 states with the highest youth volunteer rates have a civics course requirement for graduation and score higher than average on the AP U.S. government exam. Seven out of the 10 states with the highest youth voter participation rate score higher than average on the AP U.S. government exam.<sup>17</sup>

### Bright Spots in Civics Education

While models for civics education vary widely, innovative programs designed by states, nonprofits, and schools have chosen new ways to promote civics education and increase youth community engagement.

#### States with rigorous curricula

While most states require only a half year of civics education, Colorado and Idaho have designed detailed curricula that are taught throughout yearlong courses. In fact, Colorado's only statewide graduation requirement is the satisfactory completion of a civics and government course.<sup>18</sup> Because all Colorado high schools must teach one year of civics, teachers are expected to cover the origins of democracy, the structure of American government, methods of public participation, a comparison to foreign governments, and the responsibilities of citizenship. The Colorado Department of Education also provides content, guiding questions, key skills, and vocabulary as guidance for teachers.

In addition, Colorado teachers help civics come alive in the classroom through the Judicially Speaking program, which was started by three local judges to teach students how judges think through civics as they make decisions.<sup>19</sup> As a recipient of the 2015 Sandra Day O'Connor Award for the Advancement of Civics Education, the Judicially Speaking program has used interactive exercises and firsthand experience to teach students about the judiciary. With the assistance of more than 100 judges and teachers, the program was integrated into the social studies curriculum statewide. Between the rigorous, yearlong course and the excitement of the Judicially Speaking program, Colorado's civics education program may contribute to a youth voter participation rate<sup>20</sup> and youth volunteerism rate that is slightly higher than the national average.<sup>21</sup>

Idaho has focused on introducing civics education in its schools at an early age. The state integrates a civics standard into every social studies class from kindergarten through 12th grade. While a formal civics course is not offered until high school,

\*For more details and state-by-state tables, see the full report at [www.ampr.gs/2CAoxTP](http://www.ampr.gs/2CAoxTP).

kindergarten students learn to “identify personal traits, such as courage, honesty, and responsibility,” and third-graders learn to “explain how local government officials are chosen, e.g., election, appointment,” according to the Idaho State Department of Education’s social studies standards.<sup>22</sup> By the time students reach 12th grade, they are more prepared to learn civics-related topics—such as the electoral process and role of political parties, the methods of public participation, and the rights and responsibilities of citizenship—than students with no prior exposure to a civics curriculum. While Idaho does require a civics exam to graduate from high school, students have already had experience with the material through a mandatory civics course and are permitted to take the test until they pass.<sup>23</sup>

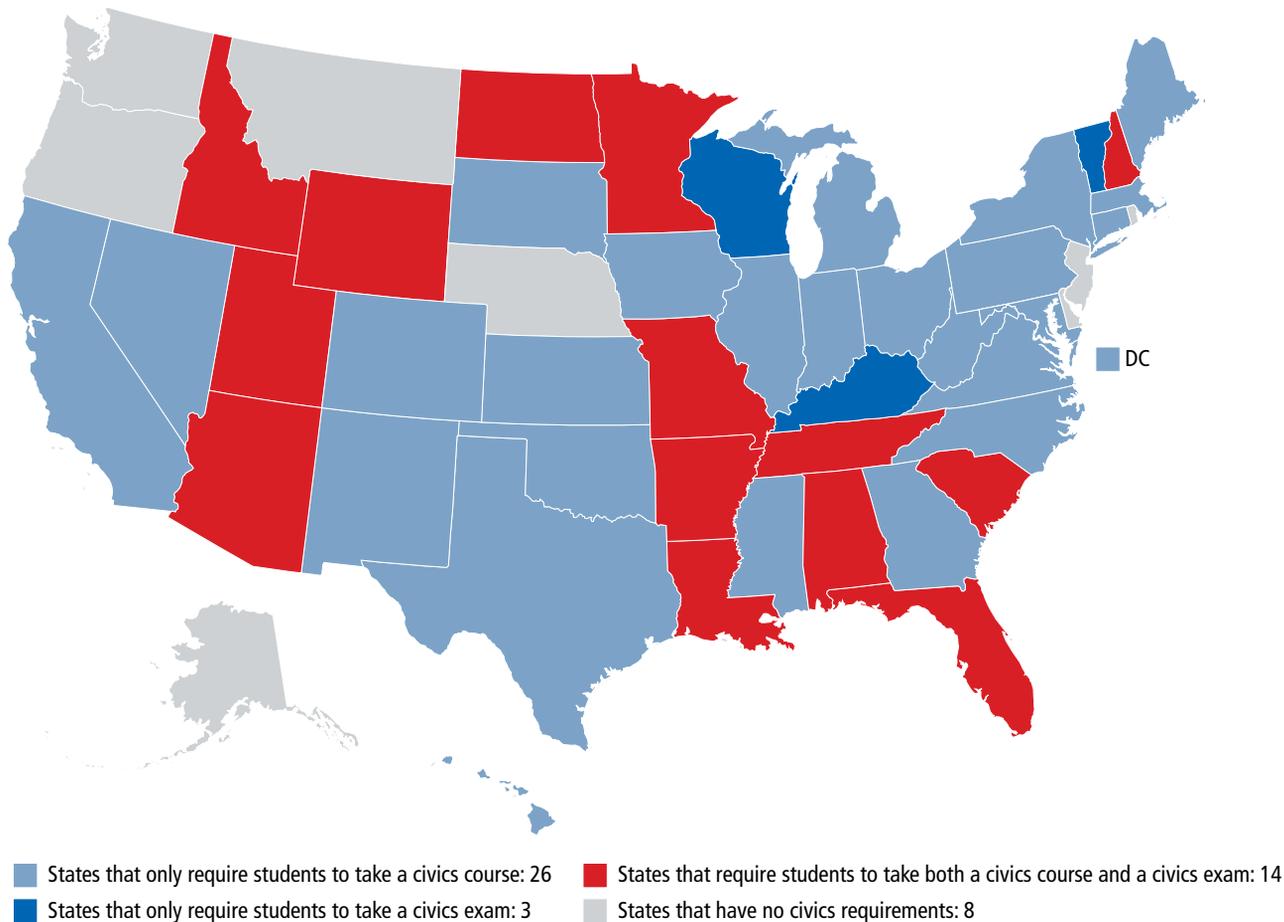
### Nonprofits that support civics education

Generation Citizen is a nonprofit that teaches what it calls “action civics” to more than 30,000 middle school and high school students.<sup>24</sup> The courses provide schools with detailed curricula and give students opportunities for real-world engagement as they work to solve community problems. Throughout a

semester-long course, the nonprofit implements a civics curriculum based on students’ civic identities and issues they care about, such as gang violence, public transit, or youth employment. The course framework encourages students to think through an issue by researching its root cause, developing an action plan, getting



## State-by-State Look at Civics Learning in High School



SOURCE: THE STATE OF CIVICS EDUCATION, 2-3.



## Few states provide service-learning opportunities or engage students in relevant project-based learning.

involved in their community through engagement tactics, and presenting their efforts to their class. At the end of the 2016–2017 school year, 90 percent of the students self-reported that they believed they could make a difference in their community.<sup>25</sup> With the goal of encouraging long-term civic engagement, Generation Citizen classes combine civics and service learning through a student-centered approach.

Teaching Tolerance, an initiative through the Southern Poverty Law Center, provides free materials to emphasize social justice in existing school curricula. Through the organization’s website, magazine, and films, its framework and classroom resources reach 500,000 educators.<sup>26</sup> Because Teaching Tolerance focuses on teaching tolerance “as a basic American value,”<sup>27</sup> its materials are rich in civic contexts. The website, for example, provides teachers with student tasks for applying civics in real-world situations and with civics lesson plans on American rights and responsibilities, giving back to the community, and examining historical contexts of justice and inequality. Teaching Tolerance also funds district-level, school-level, and classroom-level projects that engage in youth development and encourage civics in action.

There are many policy levers for advancing civics education in schools, including civics or U.S. government courses, civics curricula closely aligned to state standards, community service requirements, instruction of AP U.S. government, and civics exams. While many states have implemented civics exams or civics courses as graduation requirements, these requirements often are not accompanied by resources to ensure that they are effectively implemented. Few states provide service-learning opportunities or engage students in relevant project-based learning. In addition, few students are sufficiently prepared to pass the AP U.S. government exam.

Moreover, low rates of millennial voter participation and volunteerism indicate that schools have the opportunity to better prepare students to fulfill the responsibilities and privileges of citizenship. While this article calls for increasing opportunities for U.S. government, civics, or service-learning education, these requirements are only as good as how they are taught. Service learning must go beyond an act of service to teach students to systemically address issues in their communities; civics exams must address critical thinking, in addition to comprehension of materials; and civics and government courses should prepare every student with the tools to become engaged and effective citizens. □

### Endnotes

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(Continued on page 43)

# The Need for Civics Education

## Public Intellectuals Reflect on Democracy at Risk

On Wednesday, January 10, the American Federation of Teachers and the Albert Shanker Institute cosponsored a panel moderated by AFT President Randi Weingarten on the role that American education should play in responding to the threats confronting our democracy. Two leading public intellectuals, Timothy Snyder, the Richard C. Levin Professor of History at Yale University and the author of *On Tyranny: Twenty Lessons from the Twentieth Century*, and Danielle Allen, the James Bryant Conant University Professor at Harvard University and the director of Harvard's Edmond J. Safra Center for Ethics, discussed the importance of civics education in preserving our republic and sustaining the American ideals of liberty and democracy. Below is an excerpt of their wide-ranging conversation.

—EDITORS

**Randi Weingarten:** In the 2016 presidential election, 3 million more people voted for the person who is not president. About 77,000 votes in Michigan, Pennsylvania, and Wisconsin decided the election. In Alabama, 22,000 votes decided the recent Senate election. Yet, a University of Wisconsin–Madison study on voter suppression showed that as many as 45,000 people statewide in Wisconsin were deterred from voting in 2016 by state ID laws.

Why do I say all this? Because clearly voting matters, and clearly the policies, practices, and constitutional norms in this country change radically based upon who is in office. And that has probably never been clearer than in the last several months.

This may be the social studies teacher in me, but I'm hoping that after so many years of people rolling their eyes when it comes to any conversation about democracy or civic engagement, we've actually arrived at a new stage in the conversation,

which is: How do we make civics real in our classrooms and in our communities?

And frankly, that's why we asked the two people with us today, Danielle Allen and Timothy Snyder, to help us make sense of this moment. For our members and for all educators, I'm hoping they can answer two fundamental questions: How do we teach about democratic citizenship when democracy is at risk, and how do we build a new sense of civic engagement?

**Timothy Snyder:** For me as a citizen, American democracy is aspirational. Before 2016, there were already significant ways in which the United States was not a democracy. I would say thanks to two Supreme Court decisions, *Citizens United v. Federal Election Commission* in 2010 (which legalized unlimited political spending by corporations) and *Shelby County v. Holder* in 2013 (which weakened the Voting Rights Act), we were actually moving away from and not toward democracy, even before the election. For example, when I hear about the many recent cases of gerrymandering, I think of the 1920s and 1930s, when tiny East European dictatorships did exactly the same thing.\* They drew up electoral districts so that one ethnic group would always win.

It's clear that after watching President Trump for a year in office, this is not an individual who feels comfortable within a

\*For more on how tyranny in European history can inform our country's current political climate, see "History and Tyranny" in the Summer 2017 issue of *American Educator*, available at [www.aft.org/ae/summer2017/snyder](http://www.aft.org/ae/summer2017/snyder).



Timothy Snyder

rule-of-law state. This is not an individual who feels comfortable with constraints. His behavior constantly violates the norms that we took for granted, which hold our democratic system together.

These behaviors include an admiration for foreign dictators, such as Vladimir Putin, Recep Tayyip Erdogan, and Rodrigo Duterte, which tells you what kind of system he would like to be in. The fact that he cannot tell the truth is not just a quirk, and neither is his way of speaking about U.S. history. The slogan of his administration is "America First." In the 1930s, the phrase was used by people who opposed Roosevelt's New Deal and immigration to the United States, including that of Jewish refugees from Europe. In 1940, America First was the name of a movement that opposed war with Nazi Germany. Its spokesman, Charles Lindbergh, believed that Americans had more in common with Nazis than with people of color. To use the phrase now is to suggest a kind of alternative history, where America never entered the war and never asserted any values.

I find it interesting that Trump and White House chief of staff John Kelly refer to the Civil War as a war that could have been avoided. That's revealing about the kind of country they think they want to be in, or they think is possible. A country where we didn't need to fight a civil war, where reasonable people could have made a deal, where slavery could have reasonably continued for decades.

It's very important for us not to say we had this democracy, and now it's under threat. Instead, we must recognize that we started from an imperfect starting point, and Trump is helping us see a lot of the problems that were incipient in the system.

**Danielle Allen:** I think we should spend a little less time thinking about Trump, and we should spend more time thinking about the American people—who we are and what we need to be. I want us to think about our institutions for a second—all the big buildings in Washington, the U.S. Capitol, the Supreme Court, and the White House. Those constitute an asset, a huge body of property that in many ways is owned by all of us.

These institutions are a concrete form of knowledge. Our country's founders in the 1700s, and throughout the 1800s, tried to think through this question of how ordinary people, not aristocrats—men, yes, but ordinary people—can do collective decision making together. They conceived of a way to build institutions in order to check power, and in order to distribute power in an egalitarian way, which contrasted with what they knew from Europe.

They built institutions, these deposits of knowledge. Now, the problem with storing knowledge that way is people lose sight of the fact that those institutions are actual treasuries of insight, wisdom, and discovery. I would say that this democracy has been at risk for decades, because we, the people, have lost the knowledge that went into building those things. Consequently, we barely know how to operate them.

Even before the presidential election, my worry had been focused on young people. Were they getting enough time on civics? Were they getting enough time not just to learn about the structure of institutions but to understand the nature of agency, of personal empowerment; the personal skills of speech, of interaction

with other people, of imagination; and the courage necessary to operate democratic institutions?

Then after the election, I got so many calls and inquiries from people who wanted to know what to do. They didn't know what to do, and that really blew me away. I literally had to sit down with people and say, "OK, here's how you run a meeting. Here's how you start brainstorming what the problems are in your community, in your



Randi Weingarten

**"Clearly voting matters, and clearly the policies, practices, and constitutional norms in this country change radically based upon who is in office."**

**—RANDI WEINGARTEN**

city, in your state, and then get to the country. Here's how you prioritize. And once you figure out what are the things you care most about, here's how you find your menu of policy possibilities. And here's how you start evaluating which ones are the best ones, and here's how you find allies to help you advance that cause."

To me, this stuff is really basic, and I think it's probably basic to anybody who's been part of an organizing tradition. But that knowledge is almost gone through most of our society. So we have a big job to do to recover the bodies of knowledge that once upon a time were deeply embedded in our culture.

How does this relate to issues of race and equity? This country has been plagued by racial injustice from the beginning. We sit at a moment where very soon no particular ethnic group will be in the majority. But we've never known how to operate political systems where that's true. We've operated political systems for centuries based on the conception that somebody was in the majority and somebody was in the minority. So, the fact of the matter is, as we work

toward building an equitable, multicultural society, we don't just have to recover bodies of knowledge that we've lost; we simultaneously need to innovate, to develop egalitarian institutions in a multicultural context. My metaphor for all this is that we have to rebuild the ship while we're trying to sail it. That's the challenge we face.

**RW:** I would argue that if Leo Casey, the executive director of the Albert Shanker Institute, and I were still teaching in high schools, and teaching our juniors and seniors, we would talk about how democratic citizenship is essential to preserving and nurturing democracy. And we would talk in our classes about how voting is a sacred right and responsibility of every citizen, and the government's job is to promote the broadest possible involvement of citizenry in the elections. As Tim has already said, that is the aspiration.

Even when I was teaching in the 1990s, there was still a consensus about that aspiration. It was well before all of today's voter suppression. What's interesting now is that political polarization is the lens

through which everyone looks at everything. As a result, even when you start talking about wanting more people to vote, which is what we used to teach, that is now a political issue, not a democracy issue. How can we navigate this age of polarization and teach the importance of democratic citizenship?



Danielle Allen

**DA:** It's a really hard question. At some level, I think in communities across the country, we do need to rebuild cross-ideological alliances. Forget about solutions for the moment. Can we even imagine cross-ideological problem-exploration conversations? Fortunately, there are people working on this. There is a man named Bill Doherty at a program called Better Angels,\* which actually started a few years before the election, and it has exploded since then. He's a psychologist and a family therapist, and he builds projects that bring together people who are on opposite sides of a divide, not always partisan.

For example, one program in Minneapolis brings together police officers and African American men who have a lot of exposure to the police. It takes a lot to build up the trust that makes it possible to do meaningful problem solving. I think we need an expansion of efforts like that. I know of another group of people in Ohio working on a shared values initiative to build workshops that bring together people from divergent positions around basic

concepts of liberty and justice for all. If we can rebuild cross-class alliances, we can rebuild our capacity to do problem solving throughout the country. Then you start to have more capacity to talk about things like voting again, and not have that fall into a polarized partisan trap.

**TS:** Voting is one of the very few times we actually get our bodies out to do anything that involves the entire country. It seems to me that a common thread in some of Danielle's answers has to do with precisely that. You have to get your body out and do something. These conversations about what we might have in common, recognizing problems, even if we don't know solutions, require face-to-face discussions. It just doesn't happen over the Internet.

You can bring people out to the street by mobilizing them through the Internet, you can do cool

stuff with the Internet, but you can't have that kind of conversation. I think the reason for that has to do with recognition. You have to see the other person and recognize him or her as a human being. So, one of the things that has happened to us, which has made all this much more difficult—and it gets to the polarization and the question of what it means to be a citizen—is that it's just much easier to not recognize somebody as an individual, as a human being, if you're on the Internet.

The whole point of education is to create individuals. It takes a huge amount of collective investment. If you want to have a nation, you must invest in education to create individuals, and that's where we have punted, I think, in the last quarter century.

**DA:** Creating individuals requires educating young people for civic agency. They need to know how to identify community problems, how to articulate the problem, how to find people who also care about that problem, and how to brainstorm solutions. Then they need the basic know-how of, well, given this is the problem, what are the levers to pull to change it?

For us to make progress on rebuilding civics education, we need to let that con-

versation really operate at the level of the states and accept a diversity of approaches. But we must recognize the importance of teaching civic bodies of knowledge. For instance, in the vast majority of states, there is a requirement, primarily in high school, to teach the Declaration of Independence and the Constitution.

But the Declaration—you can hang a heck of a lot of stuff on the Declaration. It's a "how-to" manual. That how-to manual goes, first, you've got to figure out what your problem is and draw up a list of grievances. Then you've got to figure out what your values are: all people are created equal and we should build governments to provide for our safety and happiness together. And then, you have to put together your grievances and the things you care about in a rhetorically effective structure that will bring you allies, like Spain and France, not to mention everybody else in the colonies. And, you've got to be committed to some actions at the end of it.

**TS:** The Declaration also talks about what happens in the course of human events. This is why history is so important. In the last 25 years, we really have lost track of history. I say this as somebody who spends a lot of time talking to Americans about history. We've gotten ourselves into a mental state nationally where we think that everything is just the way it is, and that it has to be this way. Until everything changes, and then we have no idea how to react to it.

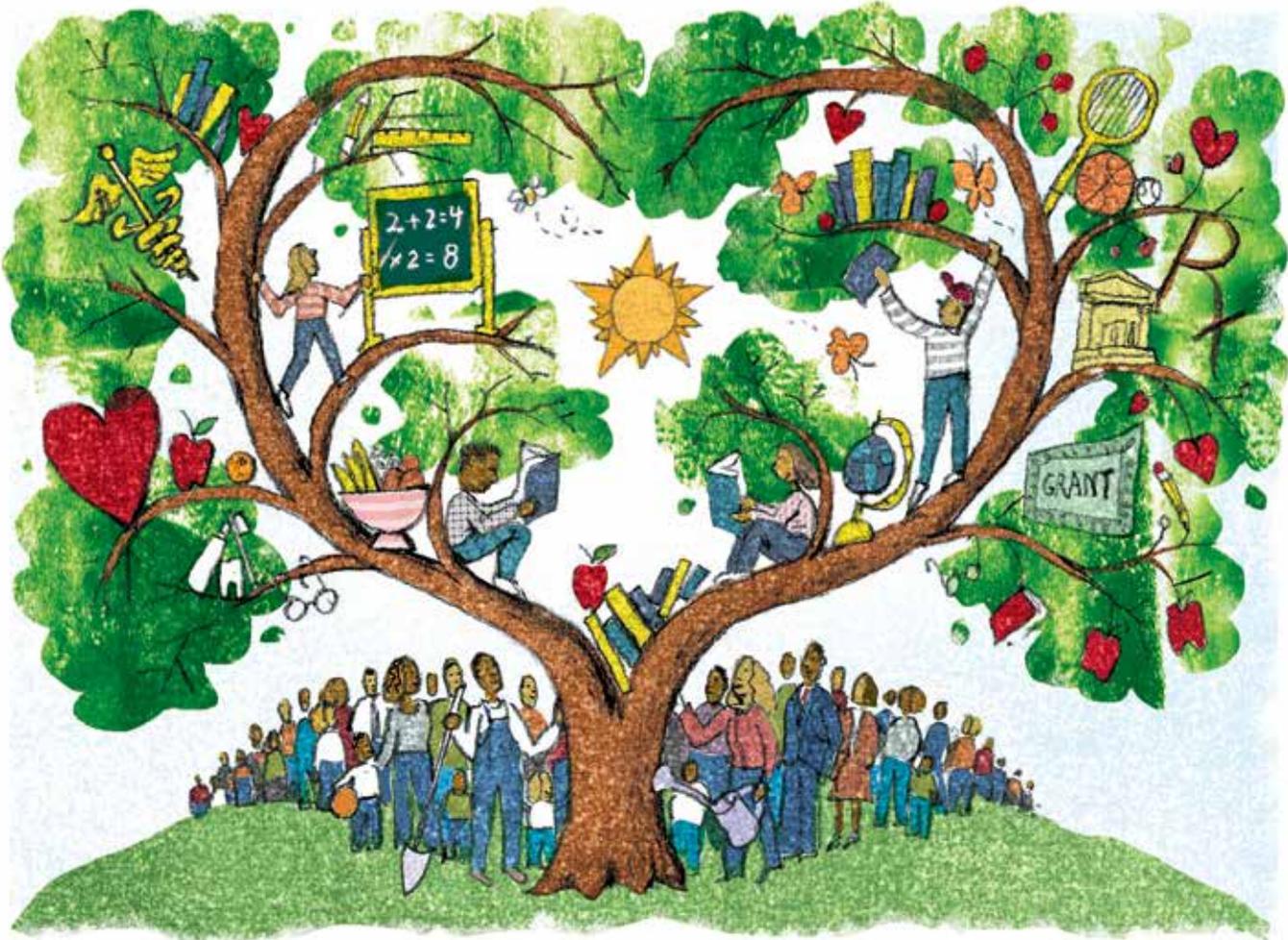
If you don't know what I'm talking about, think back to November 2016. Some of us said, "Nothing like this has ever happened before to anyone. So, what can we possibly do?" What percentage of the American population reacted like that? History tells us that not everything is totally new, that shocks are normal.

We find ourselves in a historical moment where the consequences of choices, in education and in civil life generally, are magnified and profound. Education means precisely becoming that active individual, that citizen, who is able to recognize his or her place in history and act in time and act to good effect. It just so happens that we're in a moment where the course of human events is flowing. We're at a moment where what we decide to do has multiplying effects down the generations. □

\*For more on Better Angels, visit [www.better-angels.org](http://www.better-angels.org).

# Community Schools

A Promising Foundation for Progress



BY ANNA MAIER, JULIA DANIEL, JEANNIE OAKES,  
AND LIVIA LAM

**I**ncreasing economic inequality and residential segregation have triggered a resurgence of interest in community schools—a century-old approach to making schools places where children can learn and thrive, even in underresourced and underserved neighborhoods. Community schools represent a place-based strategy in which schools partner with community

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agencies and allocate resources to integrate a focus on academics, health and social services, and youth and community development, and also foster community engagement.<sup>1</sup> Many operate on all-day and year-round schedules, and serve both children and adults.

Although this strategy is appropriate for students of all backgrounds, many community schools arise in neighborhoods where structural forces linked to racism and poverty shape the experiences of young people and erect barriers to learning and school success. These are communities where families have few resources to supplement what typical schools provide.

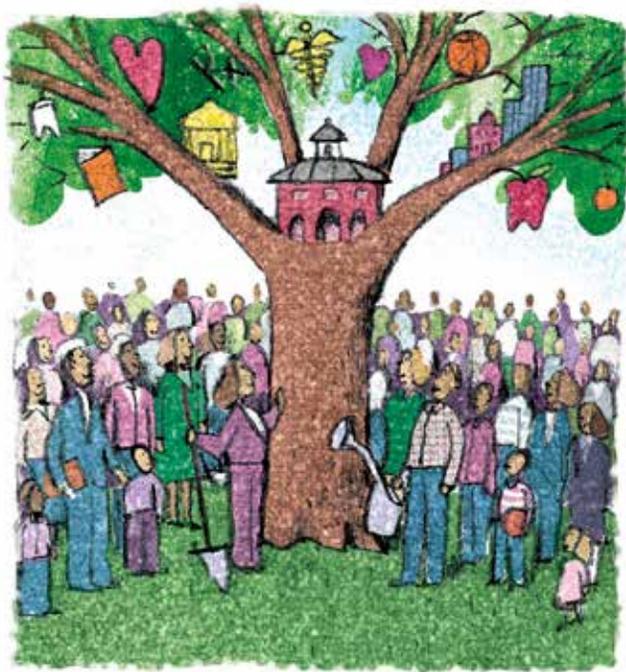
Here we chronicle the history of community schools and identify the common features, or “pillars,” that are associated with high-quality community schools.\* This article is drawn from “Community Schools as an Effective School Improvement Strategy: A Review of the Evidence,” a report that examined 143 research studies (including 49 reviews of research) on community

\*For more on how partnerships connect communities and schools, see “Where It All Comes Together” and “Cultivating Community Schools” in the Fall 2015 issue of *American Educator*, available at [www.aft.org/ae/fall2015](http://www.aft.org/ae/fall2015).

school characteristics, along with evaluation studies of community schools as a comprehensive strategy.\* For each pillar, we synthesized high-quality studies that used a range of research methods, drawing conclusions about the findings that warrant confidence while also pointing to areas in which the research remains inconclusive.

## A Brief History of Community Schools as a Response to Poverty and Inequality

Educators, community leaders, and advocates have long viewed community schools as a powerful, comprehensive response to the needs of neighborhoods experiencing poverty and racial isolation. The approach can be traced back to early 20th-century efforts to make urban schools “social centers” serving multiple social and civic needs.<sup>2</sup> With increasing industrialization, immigration, and urbanization, the socioeconomic shifts of the late 19th century created new roles for public institutions to address the needs of the urban poor. Social reformers looked to schools to be social centers that could help address these needs, teach what the reformers deemed “wholesome” community values and proper hygiene, and act as sites for open discussion with people from various class backgrounds and political orientations.



The next wave of support for community schooling came in the 1930s, as social reconstructionists sought to give schools a critical role in addressing the social upheaval of the Great Depression. They believed the crisis called for new economic and political structures and large programs to relieve poverty. Drawing on the ideas of John Dewey, America’s foremost education philosopher, community schooling proponents sought to create a strong social fabric, preserve American democracy, and strengthen struggling communities through democratic, community-oriented approaches to education.<sup>3</sup> Schools, such as

Franklin High in East Harlem, New York, acted as centers for community life that could support the well-being of the entire community while embracing the principles of democratic community-based inquiry that would help shape local ideas and politics.<sup>4</sup> For example, students at Franklin conducted neighborhood surveys to assist the neighborhood’s campaign for more public housing. However, growing conservatism in the following decades largely undermined such progressive approaches.

Community schooling also has its roots in African American struggles for quality education and local control that sought to create more positive school-community relations.<sup>5</sup> Under both de jure and de facto segregation, schools for African American children functioned as important social hubs controlled by and serving the black community, with broad-based participation, collaborative relations, and shared experiences and attempts to mitigate economic hardships and violence from white supremacists. The James Adams Community School is one example of a school rooted in this history. Between 1943 and 1956, this segregated school located in Pennsylvania served black students in grades K-9 by day and operated as a community center by night, offering free activities and classes for students, families, and community members. Its existence challenged the belief that black students were inferior, as the school and community worked together to create activities, curriculum, and community-based learning opportunities that were both challenging to and supportive of the students.<sup>6</sup>

The 1960s and 1970s brought a resurgence of community schooling. Advocacy groups saw these institutions as a way to build power by improving learning and addressing social issues,<sup>7</sup> including largely segregated and underfunded schools in urban centers that were not providing quality education to students.<sup>8</sup> Interest in community schooling also increased as a response to desegregation, as students of color bore the brunt of desegregation efforts and faced discrimination in their new schools. Community control of the schools represented a chance to remedy the downward spiral of urban education, make schools accountable to low-income black parents the way they were to parents in suburban schools,<sup>9</sup> promote democracy through wide-scale participation, and challenge discriminatory practices.<sup>10</sup> These initiatives struggled from lack of political support, insufficient funding, and opposition from some teachers who worried that community control threatened their professional responsibilities and standing.<sup>11</sup>

Like their predecessors, today’s community schools build partnerships between the school and other local entities—higher education institutions, government health and social service agencies, community-based nonprofits, and faith-based organizations. These partnerships intentionally create structures, strategies, and relationships to provide the learning conditions and opportunities—both in school and out—that are enjoyed by students in better-resourced schools, where the schools’ work is supplemented by high-capacity communities and families. Like much of American education, today’s community schools focus more on meeting the individual needs of students and families (in terms of health, social welfare, and academics) than the earlier emphasis on strengthening communities or civil society more generally. However, the most comprehensive community schools today also seek to be social centers where neighbors come together to work for the common good.<sup>12</sup>

\*For more about the research, visit [www.bit.ly/2HaDyzi](http://www.bit.ly/2HaDyzi).

Community schools cannot overcome all problems facing poor neighborhoods—that would require substantial investments in job training, housing and social safety net infrastructures, and other poverty alleviation measures. However, they have a long history of connecting children and families to resources, opportunities, and supports that foster healthy development and help offset the harms of poverty. A health clinic can deliver medical and psychological treatment, as well as glasses to myopic children, dental care to those who need it, and inhalers for asthma sufferers. Extending the school day and remaining open during the summer enable the school to offer additional academic help and activities, such as sports and music, which can entice youngsters who might otherwise drop out. Community schools can engage parents as learners as well as partners, offering them the opportunity to develop a skill, such as learning English or cooking, or preparing for a GED or citizenship exam, and this approach can support their efforts to improve the neighborhood—for example, by securing a stop sign or getting rid of hazardous waste.<sup>13</sup>

### Common Features of Community Schools

The Coalition for Community Schools defines community schools as “both a place and a set of partnerships between the school and other community resources, [with an] integrated focus on academics, health and social services, youth and community development, and community engagement.”<sup>14</sup> These partnerships enable many community schools to be open year-round, from dawn to dusk, six days a week, becoming neighborhood hubs where community members have access to resources that meet family needs and are able to engage with educators. This contrasts sharply with a “no excuses” approach in which schools that deliver high-quality instruction in a high-expectation culture are expected to surmount barriers imposed by poverty. Rather, community schools focus simultaneously on providing high-quality instruction and addressing out-of-school barriers to students’ engagement and learning.

The community schools approach is not a program, in the sense of specific structures and practices that are replicated across multiple contexts. Rather, it is grounded in the principle that all students, families, and communities benefit from strong connections between educators and local resources, supports, and people. These strong connections support learning and healthy development both in and out of school and help young people become more confident in their relations with the larger world. In distressed communities, this general principle takes on heightened urgency, as educators and the public recognize that conditions outside of school must be improved for educational outcomes to improve, and that, reciprocally, high-quality schools are unlikely to be sustained unless they are embedded in thriving communities.<sup>15</sup>

In any locality, educators developing community schools operationalize these principles in ways that fit their context, linking schools to like-minded community-based organizations, social service agencies, health clinics, libraries, and more. They take full advantage of local assets and talent, whether it is a nearby university, the parent who coaches the soccer team, the mechanic who shows students how to take apart an engine, the chef who inspires a generation of bakers, or the artist who helps students learn how to paint. Not only do student needs and community assets differ across contexts, so does the capacity of the local school system. Not

surprisingly, then, community schools vary considerably from place to place in their operation, their programmatic features, and, in some cases, their theories of school improvement.

Some schools coordinate with health, social, or other educational entities to provide services on a case-by-case basis in response to the needs of students and their families. Others work with service providers to integrate a full range of academic, health, and social services into the work of the school and make them available to all students, a strategy often called “wraparound” services.

## Community schools have a long history of connecting children and families to resources, opportunities, and supports.

Some schools complement their provision of services for students, families, and communities with practices that bring community and family voices into governance, treating families as partners rather than as clients. Still others engage with partners in economic development, community organizing, and leadership development of community members, and also offer learning opportunities and social supports to parents and students.<sup>16</sup> This diversity is evident in the array of names that various community school initiatives use to identify their work, including school-linked services, school-based services, full-service community schools, school-community partnerships, and the StriveTogether initiatives, among others.<sup>17</sup>

Notably, however, our comprehensive review of community schools research identified common features that are found in different types of community schools. These four features, or community school pillars, include (1) integrated student supports, (2) expanded learning time and opportunities, (3) family and community engagement, and (4) collaborative leadership and practice.

Integrated student supports, or wraparound services, such as dental care or counseling for children and families, are often considered foundational. Expanded learning time and family engagement are also common programmatic elements. Collaborative leadership can be viewed as both a programmatic element and an implementation strategy. The synergy among these pillars is what makes community schools an identifiable approach to school improvement: the pillars support educators and communities to create good schools, even in places where poverty and isolation make that especially difficult.

The four pillars are fundamental to the success of community schools. Individually and collectively, they serve as scaffolds (or

structures, practices, or processes) that support schools to instantiate the conditions and practices that enhance their effectiveness and help them surmount the barriers to providing high-quality learning opportunities in low-income communities. These pillars increase the odds that young people in low-income and under-resourced communities will be in educational environments with meaningful learning opportunities, high-quality teaching, well-used resources, additional supports, and a culture of high expectations, trust, and shared responsibility. Such features are associated with high-quality schools in more affluent and well-connected communities, where local institutions, family

## Well-implemented community schools lead to improvement in student and school outcomes and contribute to meeting the educational needs of low-achieving students in high-poverty schools.

resources, and the social capital of community members complement what the local schools can provide.

The conditions that these pillars enable are those that decades of research have identified as school characteristics that foster students' intellectual, social, emotional, and physical development. A skillful teacher, a challenging curriculum, and supports for both students and teachers form the starting point. Join these elements, and evidence shows that real learning—academic, physical, and social-emotional—will take place.<sup>18</sup>

The table below shows the high-quality school conditions and practices that the four community school pillars scaffold.

In sum, community school pillars are the mediating factors through which schools achieve good outcomes for students. The extent to which a community school is likely to create these conditions will depend, of course, on the emphasis it places on particular pillars and the quality of their implementation.

### Findings from Our Review of the Research

We find that well-implemented community schools lead to improvement in student and school outcomes and contribute to meeting the educational needs of low-achieving students in high-poverty schools. Specifically, our analyses produced 12 findings:\*

- **Finding 1.** The evidence base on community schools and their pillars justifies the use of community schools as a school

\*To read more about each of these findings and the lessons we draw from them, see our full report at [www.bit.ly/2HaQzJ9](http://www.bit.ly/2HaQzJ9).

## What Makes a Great School?

Pillars of Community Schools	Characteristics of High-Quality Schools
<b>Integrated student supports</b> address out-of-school barriers to learning through partnerships with social and health service agencies and providers, ideally coordinated by a dedicated professional staff member. Some employ social-emotional learning, conflict resolution training, trauma-informed care, and restorative justice practices to support mental health and lessen conflict, bullying, and punitive disciplinary actions, such as suspensions.	<ul style="list-style-type: none"> <li>• Attention to all aspects of child development: academic, social, emotional, physical, psychological, and moral.</li> <li>• Extra academic, social, and health and wellness support for students, as needed.</li> <li>• Climate of safety and trusting relationships.</li> </ul>
<b>Expanded learning time and opportunities</b> , including afterschool, weekend, and summer programs, provide additional academic instruction, individualized academic support, enrichment activities, and learning opportunities that emphasize real-world learning and community problem solving.	<ul style="list-style-type: none"> <li>• Learning is the top priority.</li> <li>• High expectations and strong instruction for all students.</li> <li>• Sufficient resources and opportunities for meaningful learning.</li> </ul>
<b>Family and community engagement</b> brings parents and other community members into the school as partners with shared decision-making power in children's education. Such engagement also makes the school a neighborhood hub providing adults with educational opportunities they want, such as ESL (English as a second language) classes, green card or citizenship preparation, computer skills, art classes, and STEM (science, technology, engineering, and mathematics) classes.	<ul style="list-style-type: none"> <li>• Strong school, family, and community ties, including opportunities for shared leadership.</li> <li>• Climate of safety and trusting relationships.</li> </ul>
<b>Collaborative leadership and practice</b> build a culture of professional learning, collective trust, and shared responsibility, using such strategies as site-based leadership/governance teams, teacher learning communities, and a community-school coordinator who manages the complex joint work of multiple schools and community organizations.	<ul style="list-style-type: none"> <li>• Culture of teacher collaboration and professional learning.</li> <li>• Assessment as a tool for improvement and shared accountability.</li> </ul>

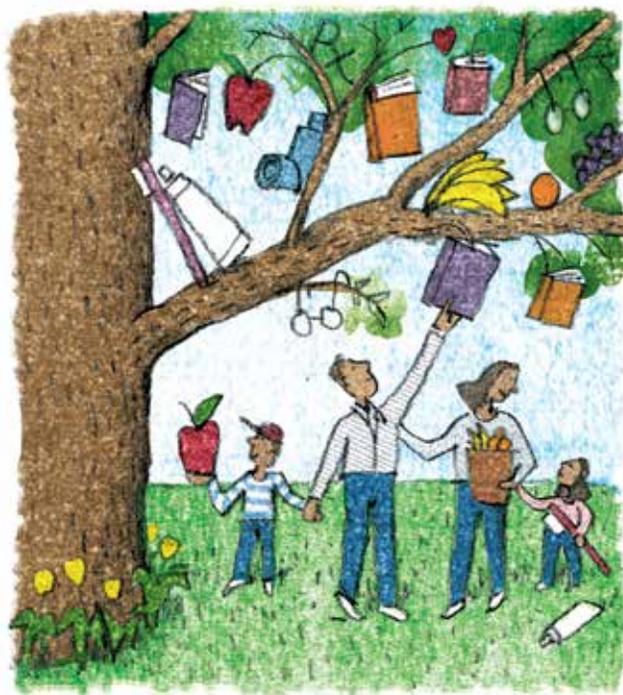
improvement strategy that helps children succeed academically and prepare for full and productive lives.

- **Finding 2.** Sufficient evidence exists to qualify the community schools approach as an evidence-based intervention under the federal Every Student Succeeds Act (i.e., a program or intervention must have at least one well-designed study that fits into its four-tier definition of evidence).
- **Finding 3.** The evidence base provides a strong warrant for using community schools to meet the needs of low-achieving students in high-poverty schools and to help close opportunity and achievement gaps for students from low-income families, students of color, English learners, and students with disabilities.
- **Finding 4.** The four key pillars of community schools promote conditions and practices found in high-quality schools and address out-of-school barriers to learning.
- **Finding 5.** The integrated student supports provided by community schools are associated with positive student outcomes. Young people receiving such supports, including counseling, medical care, dental services, and transportation assistance, often show significant improvements in attendance, behavior, social functioning, and academic achievement.
- **Finding 6.** Thoughtfully designed expanded learning time and opportunities provided by community schools—such as longer school days and academically rich and engaging afterschool, weekend, and summer programs—are associated with positive academic and nonacademic outcomes, including improvements in student attendance, behavior, and academic achievement.
- **Finding 7.** The meaningful family and community engagement found in community schools is associated with positive student outcomes, such as reduced absenteeism, improved academic outcomes, and student reports of more positive school climates. Additionally, this can increase trust among students, parents, and staff, which in turn has positive effects on student outcomes.
- **Finding 8.** The collaborative leadership, practice, and relationships found in community schools can create the conditions necessary to improve student learning and well-being, as well as improve relationships within and beyond the school walls. The development of social capital and teachers learning from their peers appear to be the factors that explain the link between collaboration and better student achievement.
- **Finding 9.** Comprehensive community school interventions have a positive impact, with programs in many different locations showing improvements in student outcomes, including attendance, academic achievement, high school graduation rates, and reduced racial and economic achievement gaps.
- **Finding 10.** Effective implementation and sufficient exposure to services increase the success of a community schools approach, with research showing that longer-operating and better-implemented programs yield more positive results for students and schools.
- **Finding 11.** Existing cost-benefit research suggests an excellent return on investment of up to \$15 in social value and economic benefits for every dollar spent on school-based wraparound services.
- **Finding 12.** The evidence base on comprehensive community schools can be strengthened by well-designed evaluations that pay close attention to the nature of the services and their implementation.

## Research-Based Lessons for Policy Development and Implementation

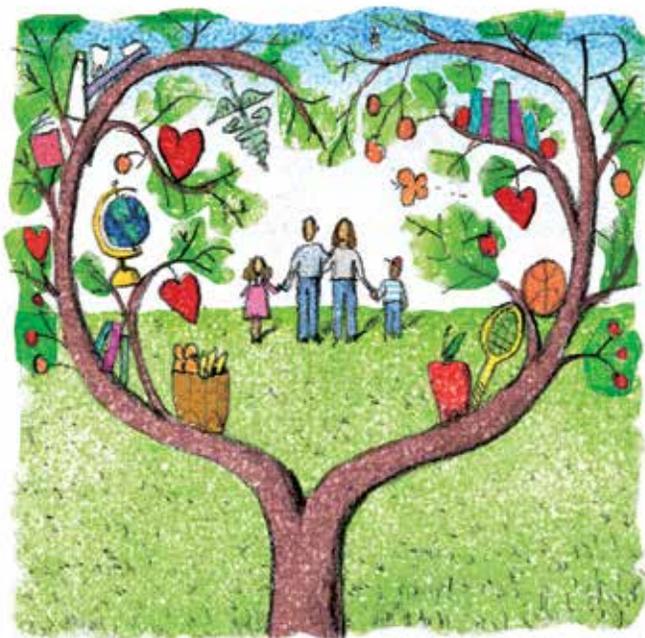
Community school strategies hold considerable promise for creating good schools for all students, but especially for those living in poverty. Based on our analysis of this evidence, we identified 10 research-based lessons for guiding policy development and implementation:

- **Lesson 1.** Integrated student supports, expanded learning time and opportunities, family and community engagement, and collaborative leadership practices appear to reinforce each other. A comprehensive approach that brings all of these factors together requires changes to existing structures, practices, and partnerships at school sites.
- **Lesson 2.** In cases where a strong program model exists, implementation fidelity matters. Evidence suggests that results are much stronger when programs with clearly defined elements and structures are implemented consistently across different sites.



- **Lesson 3.** For expanded learning time and opportunities, student access to services and the way time is used make a difference. Students who participate for longer hours or a more extended period receive the most benefit, as do those attending programs that offer activities that are engaging, are well aligned with the instructional day (i.e., not just homework help, but content to enrich classroom learning), and address whole-child interests and needs (i.e., not just academics).
- **Lesson 4.** Students can benefit when schools offer a spectrum of engagement opportunities for families, ranging from providing information on how to support student learning at home and volunteer at school, to welcoming parents involved with community organizations that seek to influence local education policy. Doing so can help in establishing trusting relationships that build upon community-based competencies and support culturally relevant learning opportunities.

- **Lesson 5.** Collaboration and shared decision making matter in the community schools approach. That is, community schools are stronger when they develop a variety of structures and practices (e.g., leadership and planning committees, professional learning communities) that bring educators, partner organizations, parents, and students together as decision makers in the development, governance, and improvement of school programs.
- **Lesson 6.** Strong implementation requires attention to all elements of the community schools model and to their placement at the center of the school. Community schools benefit from maintaining a strong academic improvement focus, and students benefit from schools that offer more intense or sustained services. Implementation is most effective when data are used in an ongoing process of continuous program evaluation and improvement, and when sufficient time is allowed for the strategy to fully mature.



- **Lesson 7.** Educators and policymakers embarking on a community schools approach can benefit from a framework that focuses on creating school conditions and practices characteristic of high-performing schools and ameliorating out-of-school barriers to teaching and learning. Doing so will position them to improve outcomes in neighborhoods facing poverty and isolation.
- **Lesson 8.** Successful community schools do not all look alike. Therefore, effective plans for comprehensive place-based initiatives leverage local assets to meet local needs, while understanding that programming may need to be modified over time in response to changes in the school and community.
- **Lesson 9.** Strong community school evaluation studies provide information about progress toward hoped-for outcomes, the quality of implementation, and students' exposure to services and opportunities. The impact that community schools have on neighborhoods is also an area that could be evaluated. In addition,

quantitative evaluations would benefit from including carefully designed comparison groups and statistical controls, and evaluation reports would benefit from including detailed descriptions of their methodology and the designs of the programs.

- **Lesson 10.** The field would benefit from additional academic research that uses rigorous quantitative and qualitative methods to study both comprehensive community schools and the four pillars. Research could focus on the impact of community schools on student, school, and community outcomes, as well as seek to guide implementation and refinement, particularly in low-income, racially isolated communities.

**W**hile we may call for additional research and stronger evaluation, evidence in the current empirical literature clearly shows what is working now. The research on the four pillars of community schools and the evaluations of comprehensive interventions, for example, shine a light on how these strategies can improve educational practices and conditions and support student academic success and social, emotional, and physical health.

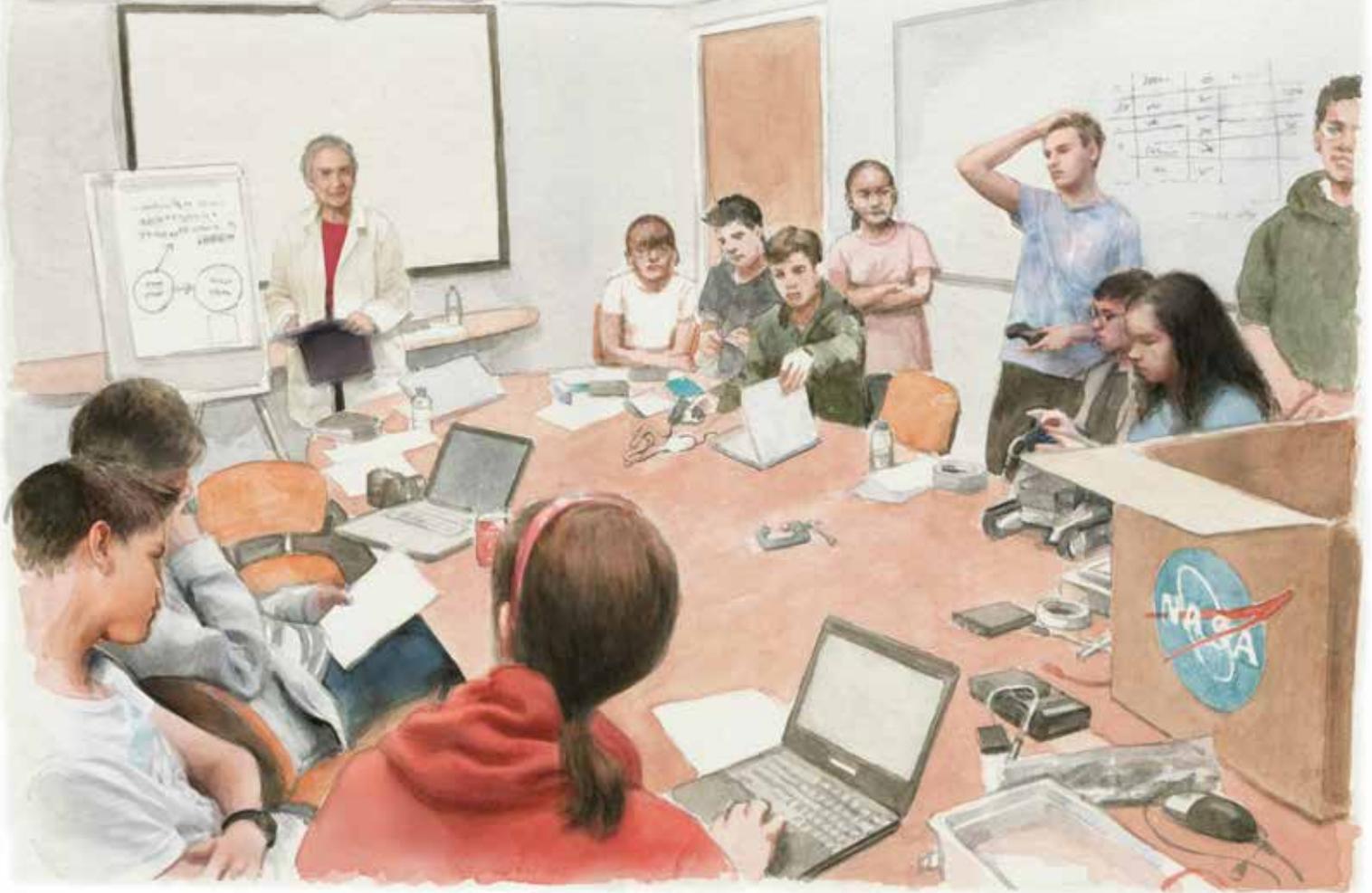
As states, districts, and schools consider the best available evidence for designing improvement strategies that support their policies and priorities, the effectiveness of community school approaches offers a promising foundation for progress. □

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# The New NGSS Classroom

A Curriculum Framework for Project-Based Science Learning



BY NICOLE HOLTHUIS, REBECCA DEUTSCHER, SUSAN E. SCHULTZ, AND ARASH JAMSHIDI

Another school year draws to a close. You sit at a faculty meeting and the principal declares that all science instruction will need to be NGSS-aligned next year. The state has officially adopted the Next Generation Science Standards (NGSS). You knew this change was coming, yet you've been dreading it. A colleague leans over and says, "What are you going to do about the NGSS? I'll probably just use the same lessons I've used for years. I'm sure I can find the practices in there somewhere." You think to yourself, "Yeah... my students already do hands-on activities, and they really seem to like science. I ask

them lots of questions. How much will my teaching really need to change?"

Not everyone at your school is familiar with these new standards, so your principal explains they are based on *A Framework for K–12 Science Education*, a report developed by the National Research Council.<sup>1</sup> Scientists, educators, education researchers, and engineers from 26 states wrote and reviewed the standards, which were published in 2013. Yours is one of 19 states that have adopted them to prepare students for college, careers, and citizenship by specifying the expectations and goals for learning. The standards, she says, will provide your school and district with a foundation to make coordinated decisions around curriculum, assessments, and instruction, from kindergarten through twelfth grade, across the life sciences, the physical sciences, the earth and space sciences, engineering, technology, and the application of science.

Your principal says that to help make the transition, she's arranged for a tour of a neighboring school where some of the science teachers have already started implementing the NGSS.

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ILLUSTRATIONS BY ENRIQUE MOREIRO

You've been given a release day to visit and observe two standards-based classrooms teaching the same scientific concept. You notice the following:

	Classroom 1	Classroom 2
<b>You hear the teacher say...</b>	<p><i>"Who can tell me the three ways that heat can be transferred between two objects?"</i></p> <p><i>"Before you can begin, you'll need to tell me what you think will happen in this lab based on the chapter reading and lab protocol. If you haven't done the reading on thermal energy, then how will you know if your results match what is expected?"</i></p> <p><i>"What did you learn about thermal energy from doing this lab?"</i></p> <p><i>"In a diagram, draw how the energy flows when a hot object touches a cold object."</i></p>	<p><i>"How do we design a device that can bake cookies using only the sun's energy?"</i></p> <p><i>"We've all reviewed the chapter on thermal energy, but before you can begin your investigation, you need to explain what you are trying to figure out. What do you still need to consider as you design your cooking device?"</i></p> <p><i>"How has this lab informed the design of your thermal device?"</i></p> <p><i>"Develop a model that explains how your device will use energy from the sun to bake your cookies."</i></p>
<b>You overhear students saying...</b>	<p><i>"Of course I took notes! I wrote it all down because I know this is probably going to be on the test."</i></p> <p><i>"This was so cool. We got exactly what it says in the book!"</i></p> <p><i>"This is so frustrating. Just tell me what I need to know!"</i></p> <p><i>"What are we up to? We're learning about the different types of thermal energy."</i></p>	<p><i>"Let me see if something in my notebook will help us figure out why the cookies aren't getting warm."</i></p> <p><i>"Aha, so that's how it works! Now I see how we can change our design."</i></p> <p><i>"This is so frustrating. I'll need to try something else."</i></p> <p><i>"What are we up to? We're figuring out how to use thermal energy from the sun to bake these cookies."</i></p>

You thank both teachers, and before talking with your colleagues, you begin to wonder to yourself: "In my own teaching, do I hear more things like the first classroom or the second? What am I trying to get my students to do? How would my kids describe what they are up to in my class?"

The Next Generation Science Standards provide a framework for shifting instruction toward what you see in Classroom 2.<sup>2</sup> The new standards ask teachers to support student learning through the application of "Science and Engineering Practices." These

practices are an integral dimension of the NGSS and are typically employed by scientists and engineers as they investigate the natural world and design solutions for real-world problems. To help students make this shift, the NGSS replace the recall of lengthy lists of isolated facts with a smaller and more focused set of "Disciplinary Core Ideas." By focusing on fewer ideas, students instead have greater opportunities to engage with these practices and to make more connections (also known as "Crosscutting Concepts") across the disciplines, thus developing a deeper conceptual understanding.

Over time, the classroom becomes less like Classroom 1, where students ask only "what?" and value *answer making*, to one more like Classroom 2, where students wonder "how?" and "why?," and where answers serve as a steppingstone toward *sense making*. This shift equips students to not only learn new information but also apply it.

Making this shift requires considerable curricular and instructional supports. Engaging students in greater exploration and investigation demands a curriculum that (1) is organized into a coherent sequence of learning, and (2) allows students multiple opportunities to engage with meaningful phenomena and grapple with relevant questions. Effectively implementing such a curriculum also requires supports to help teachers develop their content knowledge and pedagogical intuition.

Our team at Stanford University found that project-based learning is an effective framework to do just that. Below we explain how we used project-based learning and performance-based assessments to design an effective, engaging curriculum. We describe the gains in student learning we've observed and conclude with a discussion of our process for evaluating curricular materials, which we hope will serve as a tool for evaluating and selecting NGSS-aligned curricula.

### Our Curriculum Framework: Project-Based Learning, Performance-Based Assessments, and Groupwork

In 2013, the Stanford Center for Assessment, Learning, and Equity was funded by the George Lucas Educational Foundation to work with a group of middle school science teachers to develop a year-long sixth-grade curriculum (including assessments and tasks)



aligned to the NGSS.\* We decided to base this curriculum on three compatible elements: project-based learning,<sup>†</sup> performance-based assessments,<sup>‡</sup> and structured groupwork.<sup>§</sup>

**Project-Based Learning:** Our curriculum provides opportunities for students to tackle real problems and scientific issues. For each unit, we created individual and group culminating projects that enable students to:

- Access multiple forms of information needed to successfully complete the learning tasks, and apply and demonstrate their knowledge in different ways;
- Actively engage in their learning by making choices and decisions demonstrating self-directed learning; and
- Reflect on their learning and make revisions based on self-assessment, peer review, and/or teacher feedback.

These projects are open-ended and complex, and don't necessarily have one right answer.

For example, in one culminating project, students work in groups to use what they learn about thermal energy transfer to help solve some real-world engineering challenges. "Clients" such as *Cocina del Sol*, an eco-friendly Latin American food truck company, would like a device to bake their speciality cookies using the power of the sun. Another client is conducting research on Alaskan salmon and needs gloves for its researchers in Alaska who work with salmon in very cold (8°C–14°C) streams and rivers.

Students then learn the concepts and acquire the scientific and engineering skills to develop prototypes, test them, and revise solutions to the problems they are trying to solve. Students are provided with a variety of ways to access information and demonstrate understanding, such as designing and conducting investigations, engaging in whole-class discussions, developing explanations and models, reading text, and conducting research. As a result, these tasks provide students with opportunities to read, write, listen, and talk. And by the end of the unit, each group has what it needs to successfully complete its project and present it to the class.

**Performance-Based Assessments:** Our projects not only provide an excellent opportunity for students to gain skills and content understanding but also serve as performance-based assessments. The individual and group components of the projects allow students to demonstrate mastery of rigorous content and scientific practices in various ways. Together, the projects and assessments become integrally intertwined.

Evaluating such complex, open-ended projects is a significant challenge for teachers. It is important that both students and teachers have rigorous and reliable ways of assessing the projects. Thus, the curriculum we developed provides rubrics for evaluating the individual projects and giving students feedback. These



The NGSS replace the recall of lengthy lists of isolated facts with a smaller and more focused set of "Disciplinary Core Ideas."

rubrics are shared with students before they begin their projects so that they understand how their work will be evaluated.\*\*

Culminating projects provide evidence of what individual students learned, what content or skills they may still be struggling with, and how teachers might change their instruction to address gaps in student understanding. These assessments provide opportunities for students to receive formative feedback from their peers and teachers, make revisions, and reflect on their learning. Furthermore, because they are embedded within the curriculum, there is a clear and guided transition as students transfer the learning they did as part of a group to their individual projects.

**Structured Groupwork:** It is unlikely that one student, or even two, will know everything about a topic and possess all the skills to successfully complete a project, such as creating a working solar oven! However, a *well-functioning* group of four or five students just might.

Knowing that developing productive and equitable student groups requires support, we developed an introductory unit to explicitly give students opportunities to engage in groupwork strategies that they could use throughout the curriculum. This unit is based on the work of the Program for Complex Instruction at Stanford University, developed by Elizabeth Cohen and Rachel Lotan.<sup>3</sup>

\*\*For an example of an NGSS-aligned rubric from our unit on energy, see <http://scienceeducation.stanford.edu>.

\*For more on the Stanford Center for Assessment, Learning, and Equity's work in science, see <http://scienceeducation.stanford.edu>. We are also piloting a seventh- and eighth-grade science curriculum. Our website has a growing sample of free curriculum materials available.

†For more on project-based learning, see "Project-Based Instruction" in the Fall 2016 issue of *American Educator*, available at [www.aft.org/ae/fall2016/duke](http://www.aft.org/ae/fall2016/duke).

‡For more on performance-based assessment, see "Putting the Focus on Student Engagement" in the Spring 2016 issue of *American Educator*, available at [www.aft.org/ae/spring2016/barlowe-and-cook](http://www.aft.org/ae/spring2016/barlowe-and-cook).

§For more on groupwork, see "Group Work for the Good" in the Spring 2015 issue of *American Educator*, available at [www.aft.org/ae/spring2015/bennett](http://www.aft.org/ae/spring2015/bennett).

The program provides practical tools to support productive and equitable groupwork by incorporating three important ideas:

1. Assign student roles to promote active learning and equitable rates of participation in groups;
2. Develop activities that are open-ended and productively “uncertain,” thus replacing step-by-step procedures with multiple methods for achieving multiple solutions; and
3. Shift instruction so that teachers act more as facilitators and coaches focused on group interactions, probing and challenging student thinking, and monitoring student learning.



During classroom observations, we noticed students developing expertise around the use and application of math and language.

Teachers in our study were provided with our introductory “skill-building” unit to implement in their classrooms. For example, students engaged in a task in which they gained firsthand experience working together to solve a puzzle that required everyone in the group to pay attention to what other students needed. Thus, students had explicit opportunities to learn the types of behaviors expected of them while working in groups. Just as important, teachers learned how to allow students greater opportunities to discuss ideas as a group, make decisions, and even make mistakes.

During classroom observations, we observed that students were engaged in problem solving, discussing, writing, reading, designing, building, and experimenting at various points throughout the cur-

riculum. More importantly, they were engaged in productive science conversations throughout the class. In essence, we noticed students practicing fundamental skills that transcend science—they were developing expertise around the use and application of math and language.

### Results: How Do We Know It Works?

Over a three-year period, we conducted research that showed that our curriculum led to gains in both student engagement and learning outcomes for participating students (as measured by the Smarter Balanced Assessment Consortium’s math and English language arts tests, the California English Language Development Test, and a science pre- and post-assessment). We contend that these gains were supported by a curriculum and professional development package that led to changes in teachers’ instructional practices.

We had sixth-grade science teachers at various schools and districts involved as either participating or nonparticipating teachers. Participating teachers taught our NGSS-aligned course to 328 students in year two and to 347 students in year three. The nonparticipating teachers implemented their regular curriculum materials to 9,675 students in year two and to 7,935 students in year three.

We interviewed and surveyed the participating teachers to learn more about their experiences with the curriculum. They said that students appeared to be more interested, motivated, and engaged in learning science content, and were more interactive during groupwork. Additionally, teachers reported that students gained a deeper understanding of the content. One participating teacher told us:

Wow, this is cool. [Students] not only just learned science concepts, but it was really the teamwork and team building, and they felt that they learned something outside of just content, like discovering new things. I mean, I got letters from my students saying, “We really enjoyed your class. We enjoyed just learning how to work with others, and how important it is that other people have good ideas.” That’s really hard for sixth-graders—it took us a while to get to the point, but that groupwork theme throughout the whole curriculum was phenomenal.

When we observed the students engaged in groupwork, we found that the students who were participating in our NGSS-aligned course were more academically engaged (e.g., manipulating materials, talking about their tasks with peers, doing projects, and making presentations) than those who were not part of these classrooms. And in our student survey, participating students reported that their classroom assignments were more interesting, challenging, worthwhile, and enjoyable.

We also compared student achievement in our participating and nonparticipating classrooms. We found that participating students did better on the Smarter Balanced Assessment Consortium tests in math (14 points higher in year two, and 20 points higher in year three) and English language arts (9 points higher in year two, and 8 points higher in year three). In addition, participating English language learners (ELLs) performed better on the California English Language Development Test than nonparticipating ELLs (26 points higher in year two, and 18 points

higher in year three). California uses this standardized test to measure students' skills in listening, speaking, reading, and writing in English.

Aside from the math and language measures, participating students also performed significantly better than a comparison group on a pre- and post-assessment designed to measure content knowledge and levels of engagement with the science practices.

## Criteria for Evaluating Other NGSS-Aligned Curricula

As districts and states continue to adopt and implement the NGSS,\* there will be a demand for high-quality curricula and assessments aligned to them. How can teachers, administrators, and district leaders evaluate instructional materials? Below, we briefly describe five things to look for:

- 1. Alignment:** NGSS curricula must align with the performance expectations that are to be taught and assessed within each unit. Each expectation includes three specific learning dimensions that students engage with and demonstrate mastery of: content knowledge (Disciplinary Core Ideas), key overarching concepts (Crosscutting Concepts), and scientific inquiry and engineering design (Science and Engineering Practices). In our sixth-grade unit on energy (one of five units in the curriculum), we addressed these criteria by having students apply scientific and engineering design principles to investigate the transfer of thermal energy and construct a device that either minimizes or maximizes thermal energy transfer. The learning tasks within the unit support student learning about thermal energy (a Disciplinary Core Idea) and how energy transfers through a system (a Crosscutting Concept). The unit project and assessment require students to demonstrate their ability to design, construct, and test a device that transfers thermal energy (a Science and Engineering Practice).
- 2. Relevance:** High-quality NGSS curricula hook students by introducing an engaging and relevant scientific phenomenon and/or project that is woven throughout the unit and focuses students on key ideas. Quality units build on the phenomenon and/or project and identify essential questions that provide guidance to teachers and enable students to make connections. For example, in our energy unit, the essential question asks, "How do we use and control thermal energy within a system?" Students revisit this question throughout each learning task.
- 3. Learning Opportunities:** NGSS-aligned curricula provide a series of connected high-quality learning tasks directly related to the phenomena and/or project. These tasks often include prompts that lead students to ask questions, share ideas, critique the ideas of others, make decisions, and work in groups to build their knowledge.
- 4. Opportunities for Feedback and Revisions:** Throughout a quality unit, students need opportunities to self-assess and to receive constructive feedback from peers and teachers based on specific criteria. The goal of the feedback is to help students identify their current level of understanding and performance

\*While many states have adopted the NGSS, some are calling the standards by a different name. There are no specific deadlines for adoption.

and assess what they need to do to move to the next level. Feedback should be specific and based on the student's performance. Quality units build in multiple opportunities for students to receive feedback, reflect on the key points, and revise their work.

- 5. Assessments:** NGSS-aligned curricula require that students demonstrate not only their knowledge of science but also how they can apply it. To that end, quality units incorporate a variety of assessment strategies. Some assessments should be purely formative, enabling teachers to informally gather evidence of how students are doing and to identify trends in student learning. Teachers can share their findings with students and address gaps with additional instruction.

Lastly, quality units need to include performance assessments at both the group and individual level. In our curriculum, the group culminating projects are designed to provide students with creative opportunities for design making and collaboration while still demanding a high level of rigor and student mastery. As educators, we must also know what individual students know and can do, which is why the individual culminating projects are crucial.

NGSS-aligned curricula require that students demonstrate not only their knowledge of science but also how they can apply it.

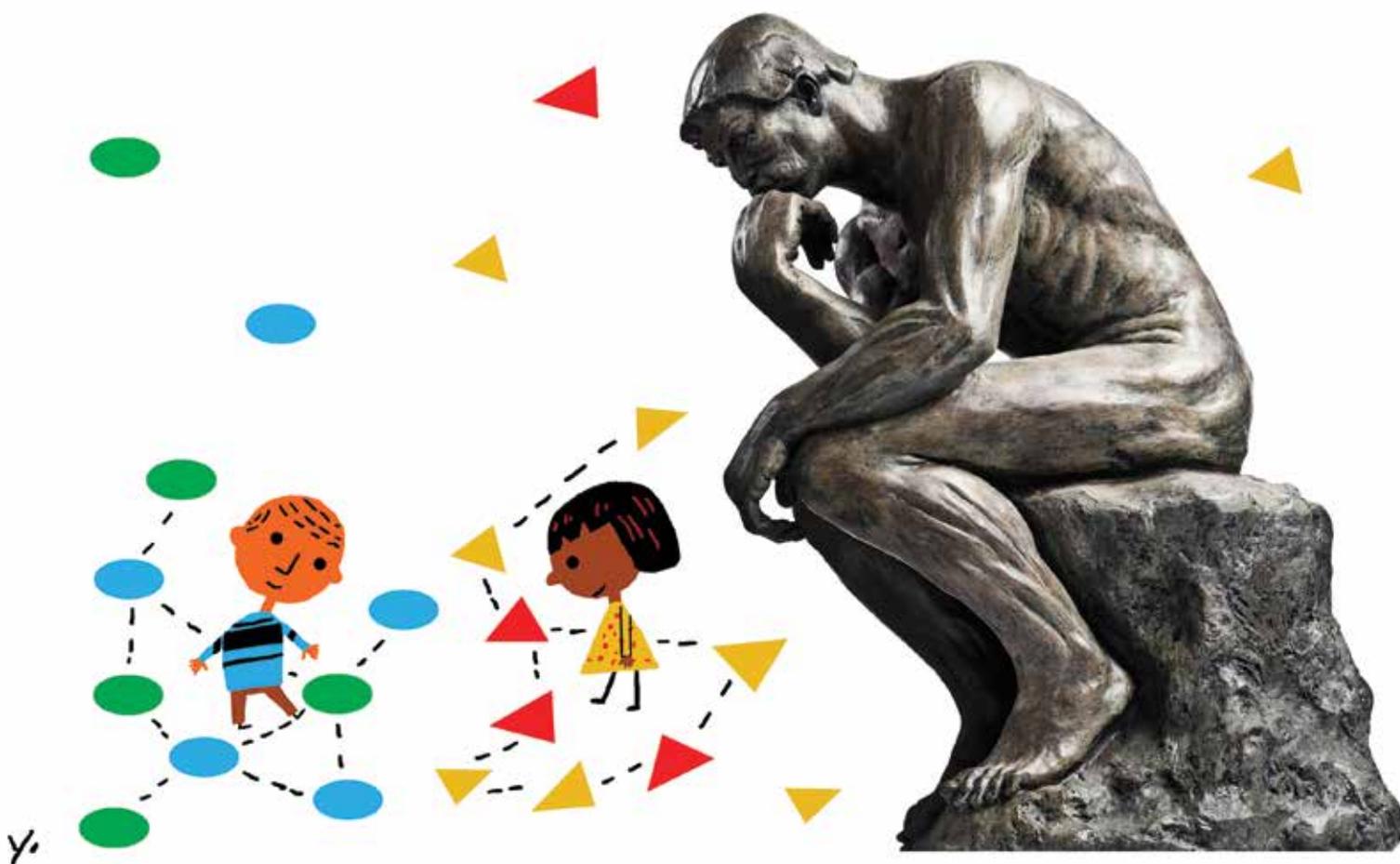
We envision the development of NGSS-aligned curricula as a way to strengthen science teaching and student learning. As discussed above, our sixth-grade curriculum embraces project-based learning as a particularly effective way to meet the demands of the new standards. It also incorporates rigorous performance assessments and effective groupwork strategies that enhance student learning and engagement.

Ultimately, our curricular framework provides a model for not only developing but also evaluating NGSS-aligned curriculum and instructional approaches to ensure they support equitable access to learning opportunities for all students. □

### Endnotes

1. National Research Council, *A Framework for K–12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* (Washington, DC: National Academies Press, 2012).
2. NGSS Lead States, *Next Generation Science Standards: For States, By States* (Washington, DC: National Academies Press, 2013).
3. Elizabeth G. Cohen and Rachel A. Lotan, *Designing Groupwork: Strategies for the Heterogeneous Classroom*, 3rd ed. (New York: Teachers College Press, 2013).

# Does Tailoring Instruction to “Learning Styles” Help Students Learn?



How does the mind work—and especially how does it learn? Teachers’ instructional decisions are based on a mix of theories learned in teacher education, trial and error, craft knowledge, and gut instinct. Such knowledge often serves us well, but is there anything sturdier to rely on?

Cognitive science is an interdisciplinary field of researchers from psychology, neuroscience, linguistics, philosophy, computer science, and anthropology who seek to understand the mind. In this regular American Educator column, we consider findings from this field that are strong and clear enough to merit classroom application.

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BY DANIEL T. WILLINGHAM

**Question:** In 2005, you wrote that there was no evidence supporting theories that distinguish between visual, auditory, and kinesthetic learners.\* I still attend professional development sessions that feature learning-styles theories, and newer teachers tell me these theories are part of teacher education. Is there any update on this issue?

**Answer:** Research has confirmed the basic summary I offered in 2005; using learning-styles theories in the classroom does not bring an advantage to students. But there is one new twist. Researchers have long known that people claim to have learning preferences—they’ll say, “I’m a visual learner” or “I like to think in words.” There’s increasing evidence that people act on those beliefs; if given the chance, the visualizer will think in pictures rather than words. But doing so confers no cognitive advantage.

\*To read my Summer 2005 column, “Do Visual, Auditory, and Kinesthetic Learners Need Visual, Auditory, and Kinesthetic Instruction?,” in *American Educator*, see [www.aft.org/ae/summer2005/willingham](http://www.aft.org/ae/summer2005/willingham).

People believe they have learning styles, and they try to think in their preferred style, but doing so doesn't help them think.

**D**ifferent children learn differently. This observation seems self-evident and, just as obviously, poses a problem for teachers: How are they supposed to plan lessons that reach all of these different learners? The job might be easier if the differences were predictable or consistent. If a teacher knew that, of the 25 students in her class, 12 learn *this* way and 13 learn *that* way, she could plan accordingly. She could teach *this* way and *that* way to separate groups of students, or she could be sure to include some of *this* and *that* into whole-class lesson plans. The question is: What is *this* and *that*?

It's fairly obvious that some children learn more slowly or put less effort into schoolwork, and researchers have amply confirmed this intuition.<sup>1</sup> Strategies to differentiate instruction to account for these disparities are equally obvious: teach at the learner's pace and take greater care to motivate the unmotivated student.<sup>2</sup> But do psychologists know of any *nonobvious* student characteristics that teachers could use to differentiate instruction?

Learning-styles theorists think they've got one: they believe students vary in the mode of study or instruction from which they benefit most. For example, one theory has it that some students tend to analyze ideas into parts, whereas other students tend to think more holistically.<sup>3</sup> Another theory posits that some students are biased to think verbally, whereas others think visually.<sup>4</sup>

When we define learning styles, it's important to be clear that style is not synonymous with ability. Ability refers to how well you can do something. Style is the way you do it. I find an analogy to sports useful: two basketball players might be equally good at the game but have different styles of play; one takes a lot of risks, whereas the other is much more conservative in the shots she takes. To put it another way, you'd always be pleased to have more ability, but one style is not supposed to be valued over another; it's just the way you happen to do cognitive work. But just as a conservative basketball player wouldn't play as well if you forced her to take a lot of chancy shots, learning-styles theories hold that thinking will not be as effective outside of your preferred style.

In other words, when we say someone is a visual learner, we don't mean they have a great ability to remember visual detail (although that might be true). Some people *are* good at remembering visual detail,<sup>5</sup> and some people are good at remembering sound, and some people are gifted in moving their bodies.<sup>6</sup> That's kind of obvious because pretty much every human ability varies across individuals, so some people will have a lot of any given ability and some will have less. There's not much point in calling variation in visual memory a "style" when we already use the word

"ability" to refer to the same thing.

The critical difference between styles and abilities lies in the idea of style as a *venue* for processing, a *way* of thinking that an individual favors. Theories that address abilities hold that abilities are not interchangeable; I can't use a mental strength (e.g., my excellent visual memory) to make up for a mental weakness (e.g., my poor verbal memory). The independence of abilities shows us why psychologist Howard Gardner's theory of multiple intelligences is not a theory of learning styles.<sup>7</sup> Far from suggesting that abilities are exchangeable, Gardner explicitly posits that different abilities use different "codes" in the brain and therefore are incompatible. You can't use the musical code to solve math problems, for example.

Learning-styles theories, in contrast, predict that catering to the preferred processing mode of a student will lead to improved learning. So what does the evidence say?

### Does Honoring a Student's Learning Style Help?

There are scores of learning-styles theories, some going back to the 1940s. Enough research had been conducted by the late 1970s that researchers began to write review articles summing up the field, and they concluded that little evidence supported these theories.<sup>8</sup> Research continued into the 1980s, and again, when researchers compiled the experiments, they reported that the evidence supporting learning-styles theories was thin.<sup>9</sup>

In 2008, professor Hal Pashler and his associates reviewed the literature and drew the same conclusion, but they also noted that many of the existing studies didn't really test for evidence of learning styles in the ideal way.<sup>10</sup> For example, if you want to test the verbalizer/visualizer distinction, it's not enough to show that visualizers remember pictures better than verbalizers do. Maybe those people you categorize as visual learners simply have better memories overall. You need to examine both types of learners and both types of content, and show that words are better than pictures for the verbalizers, and that the opposite is true for the visualizers.

The article by Pashler and colleagues prompted a microburst of articles on learning styles, but their warning that many prior studies were poorly designed went unheeded, and much of the recent research is uninformative.<sup>11</sup> Nevertheless, some studies are interpretable, and three published since 2008 claim support for a learning-styles theory. For example, one group of researchers reported that active learners benefit more from brainstorming, whereas reflective learners benefit more from instruction and recall.<sup>12</sup> In another study, one researcher compared three modes of web-based instruction and reported differences in input-oriented and perception-oriented learners.<sup>13</sup> But both articles had the same drawback; they used such a small number of experimental subjects (9–11 per group) that there's a real chance the results were flukes.

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The third experiment claimed positive results when testing psychologist Robert Sternberg's theory of self-government.<sup>14</sup> Sternberg describes some learners as "legislative," meaning they like to be able to create their own learning experiences without restraints, so they would learn best when allowed to skip learning materials. "Executive" learners like to follow directions, so they would learn best with clear guidance about what to do and when to do it. And "judicial" learners like to judge things and compare them, so they would learn best with lots of materials that they can compare. The researchers had subjects learn in an online environment with instruction matched (three groups) or mismatched (six groups) to their learning style.<sup>15</sup> The outcome measure was a little unusual—participants were asked to reflect on the material they had learned, and two raters evaluated the quality of these reflections. The researchers reported better reflections from students when the instructional method matched their preferred style than when it did not, but a breakdown showing exact group performance was not provided.

So three studies show results with some promise for two different learning-styles theories, which indicates the theories merit further investigation. But 13 other published papers, testing five different learning-styles theories, in both natural settings and laboratories, show no support for learning-styles theories. Although all of them tested students beyond the K-12 years, likely because that group was easiest for the experimenters to access, each theory predicts that differences would be observed in higher education settings.

As with the few studies showing positive results, the studies showing negative results are often imperfect (for example, some needed more participants).<sup>16</sup> But some experiments were carefully designed. For example, one study provides a straightforward, powerful test of the verbalizer/visualizer distinction.<sup>17</sup> In the study, 204 university students took a questionnaire meant to measure their proclivity to learn in one of four ways: visually, auditorily, via reading or writing, or kinesthetically.<sup>18</sup> In the next phase of the experiment, participants heard 20 statements, read one at a time. Half of the participants were to rate each statement for how well they could form a vivid mental image based on the statement. The other participants were asked to focus on the auditory aspect of the statement by judging how well they could pronounce it. Participants were not forewarned that they would be tested on information from the sentences, but the third phase posed 20 questions about them. Everyone got more questions right if they performed the imagery task (about 16 questions right), compared with the auditory task (about eight questions right). That result didn't change at all if the

questionnaire classified participants as more of a visual learner or more of an auditory learner.

In short, recent experiments do not change the conclusion that previous reviewers of this literature have drawn: there is not convincing evidence to support the idea that tailoring instruction according to a learning-styles theory improves student outcomes. Now, you may protest that I've disparaged some studies as poorly done. I should also note that the research covers only some of the existing theories of learning styles. So maybe tailoring lessons to students' learning styles *could* help, it's just that no one has done a good experiment to show that? That's possible, of course. In fact, even if 100 terrific experiments failed to support the visual/auditory learner distinction, we could still say, "Well, maybe all 100 experiments were set up in the wrong way to show that learning styles do matter. Let's try experiment number 101." When it comes to scientific theories, you can't prove a negative proposition beyond any doubt.

But "are we sure it's wrong?" is a bad criterion. We should ask whether there is good evidence *supporting* the theory. After all, if we're considering letting this theory influence classroom practice, we should be as sure as we can be that it's true. It's not enough to be able to say "we can't be certain it's false."

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### Evidence That People Act on Their Learning Style

Research from the last 10 years confirms that matching instruction to learning style brings no benefit. But other research

points to a new conclusion: people do have biases about preferred modes of thinking, even though these biases don't help them think better.

Researchers used a clever task to show that verbalizers and visualizers do try to use their preferred mode of processing.<sup>19</sup> First, the experimenters created stimuli that could be verbal or visual: participants either saw an image with three features (for example, a blue triangle with stripes) or saw a verbal description of the features ("blue," "stripes," "triangle"). The task they performed was a similarity judgement: a target figure appeared briefly, and then subjects saw two more figures and had to judge which one was more similar to the target. (The more similar figure always shared two of the three features.) Both the target and the two choices could either be visual or verbal, so there were four types of trials: visual-visual, visual-verbal, verbal-visual, and verbal-verbal.

The experimenters measured brain activity while participants performed the task and found evidence that participants recode the target to match their learning style. The more someone



reported being a “verbalizer,” the more likely they were to show increased activity in “verbal” parts of their brain (the left supra-marginal gyrus) when they were presented with images. The more they reported being a “visualizer,” the more likely they were to show increased activity in “visual” parts of their brain (the fusiform gyrus) when they were presented with words. It’s worth noting that the survey identifying participants as verbalizers or visualizers was administered at least two weeks before the experiment. The experimenters wanted to ensure that people doing the task didn’t act in accordance with a style simply because they had just finished the survey, which may have made them think about being a verbalizer or visualizer.

So this result shows that people actually act on their reported preference, changing a task so they can think in words or pictures as they like. But that doesn’t mean that changing a task to fit your style makes you think better. An obvious prediction for a learning-styles theory would be that visualizers would be better at this task when the stimuli were pictures, and verbalizers would be better when they were words. But matching the task to individuals’ preferred learning styles didn’t predict task performance.

Other experiments exploring the verbalizer/visualizer distinction show the same pattern. Depending on their self-identified learning style, people seek out written instructions or diagrams,<sup>20</sup> or look at one or the other type of information longer.<sup>21</sup> Similar data have been

observed in the visual, auditory, and kinesthetic framework.<sup>22</sup> Another example of people acting on their learning styles concerns the difference between intuitive and reflective modes of thinking.<sup>23</sup> Here’s a simple problem to illustrate the difference: “A small vase holds one white ball and nine red balls. A large vase holds 10 white balls and 91 red balls. From which vase should you randomly select a ball, if you hope to get a white one?” Intuitive thinking is fast and uses simple associations in memory to generate an answer, so it would lead you to select the large vase. That vase has more white balls, so you figure you’re more likely to get a white one. The reflective mode of thinking is slower and relies on deeper, more analytic processing of available information. It would lead you to calculate the probability of drawing a white ball from each vase and ultimately to the correct answer, the smaller vase.

Everyone uses both modes of thinking at different times, but individuals are biased to start with one or another type of processing, especially if nothing in the environment (like instructions or a time limit) nudges them toward one or the other.<sup>24</sup> But most problems are not open to equally good solutions through either type of processing. Probability problems (like the vase example) are better solved through reflection, even if your bias is toward intuition. Creativity problems that benefit from free

association are better solved by intuition, not reflection. The data show that people do have some propensity to use one or another mode of thinking, but people would be better off if they didn’t; rather, they should use the mode of thinking that’s a better fit for the task at hand.<sup>25</sup>

This suggestion—tune your thinking to the task—assumes that people have the flexibility to process as they choose. To use an example from a different learning-styles theory, we’re assuming your status as a verbalizer can be overridden if you want to think about something visually. There’s evidence that’s true. In a recent study, researchers asked participants to navigate virtual cities.<sup>26</sup> They found that verbalizers showed better memory for landmarks, but visualizers made more accurate judgments about the relative directions of city features. In a second experiment, the researchers *instructed* people to act like a verbalizer

or a visualizer. People were able to follow these instructions, and the results matched what happened when they let people process as they pleased: thinking verbally helped with landmarks, and thinking visually helped with direction. Important to our purposes, the effect of instruction overwhelmed learning style; when told to process in a manner inconsistent with their preferred style, everyone showed the same memory effect.

We saw the same pattern in the experiment discussed earlier that used sentence memory to test the verbalizer/visualizer distinction. You can remember sentences by thinking visually or

verbally, but there’s a *huge* advantage to the former strategy, and it works just as well no matter what your preferred style.<sup>27</sup> In sum, people do appear to have biases to process information one way or another (at least for the verbalizer/visualizer and the intuitive/reflective styles), but these biases do not confer any advantage. Nevertheless, working in your preferred style may make it *feel* as though you’re learning more.<sup>28</sup>

But if people are biased to think in certain ways, maybe catering to that bias would confer an advantage to motivation, even if it doesn’t help thinking? Maybe honoring learning styles would make students more likely to engage in class activities? I don’t believe either has been tested, but there are a few reasons I doubt we’d see these hypothetical benefits. First, these biases are not that strong, and they are easily overwhelmed by task features; for example, you may be biased to reflect rather than to intuit, but if you feel hurried, you’ll abandon reflection because it’s time-consuming. Second, and more important, there are the task effects. Even if you’re a verbalizer, if you’re trying to remember sentences, it doesn’t make sense for me to tell you to verbalize (for example, by repeating the sentences to yourself) because visualizing (for example, by creating a visual mental image) will make the task much easier. Making the task more difficult is not a good strategy for motivation.

People do have biases about preferred modes of thinking, even though these biases don’t help them think better.

Let's review the conclusions we can draw from this research before we consider the implications for education.

First, since the last major literature review in 2008, more experiments have been conducted to measure whether participants learn better when new content fits their purported learning style. The bulk of the evidence shows no support for style distinctions. This conclusion is in keeping with a great many prior findings. The following four conclusions are more tentative.

Second, there is emerging evidence that people have a propensity to engage in one style of processing over others. Only a few learning-styles theories have been tested this way, but there seems to be pretty good evidence for the idea that visualizers and verbalizers are biased to process information in their preferred style, and that people may be biased toward either reflective or intuitive thinking. These biases are not very strong, however.

Third, the type of mental processing people use often has a substantial effect on task success. Reflective thinking is much better than intuitive thinking for probability problems. Imagery is much better than verbalizing for sentence memory.

Fourth, people can control the type of processing they use. Someone may prefer to think intuitively when solving a problem, but they can think reflectively if something in the environment prompts them to do so, or if they recognize it's the type of problem best addressed that way.

Fifth, there's no evidence that overruling your bias in this way incurs a cost to thinking. In other words, visualizers may be biased to use visual imagery, but when verbalizers use it, they are just as successful in solving problems.

One educational implication of this research is obvious: educators need not worry about their students' learning styles. There's no evidence that adopting instruction to learning styles provides any benefit. Nor does it seem worthwhile to identify students' learning styles for the purpose of warning them that they may have a pointless bias to process information one way or another. The bias is only one factor among many that determine the strategy an individual will select—the phrasing of the question, the task instructions, and the time allotted all can impact thinking strategies.

A second implication is that students should be taught fruitful thinking strategies for specific types of problems. Although there's scant evidence that matching the manner of processing to a student's preferred style brings any benefit, there's ample evidence that matching the manner of processing to the task helps a lot. Students can be taught useful strategies for committing things to

memory,<sup>29</sup> reading with comprehension,<sup>30</sup> overcoming math anxiety,<sup>31</sup> or avoiding distraction,<sup>32</sup> for example. Learning styles do not influence the effectiveness of these strategies. □

## Endnotes

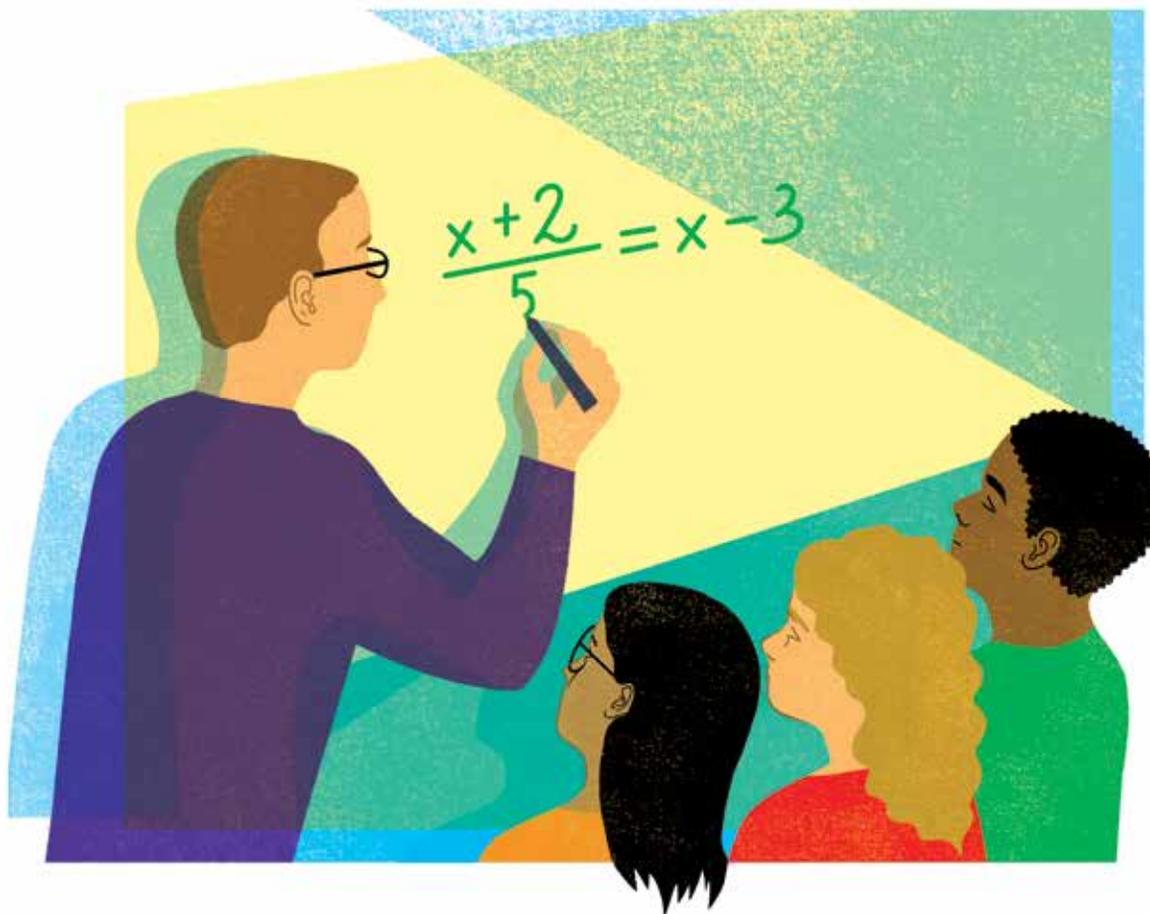
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(Continued on page 43)

# On Formative Assessment in Math

How Diagnostic Questions Can Help



BY CRAIG BARTON

I am going to start with a rather big claim: asking and responding to diagnostic questions is the single most important thing I do every lesson. This article will be my attempt to convince you why.

For 13 years, I have taught math (or “maths,” as I like to call it) to students ages 11 to 18 in the United Kingdom. For much of my career, I did not reflect on why I was doing the things I did. I was

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a relatively successful teacher, whose students always got decent results and seemed to enjoy their lessons, and that was good enough for me. It was only when I started my *Mr Barton Maths Podcast* that my cozy little world began to crumble.\* Interviewing educators from around the world really made me stop and question practices that I had done for many years without really thinking about them. These conversations led to two years of reading hundreds of books and research articles; trying, failing, and tweaking new ideas with my students; and eventually writing a book: *How I Wish I'd Taught Maths: Lessons Learned from Research, Conversations with Experts, and 12 Years of Mistakes*.

One of those key mistakes I made was to ignore the immense power of formative assessment.

Formative assessment is a phrase that is bandied around a lot. It is something all teachers are told we have to do, but often without any real substance or conviction. It is marketed as a generic teach-

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\*Mr Barton Maths Podcast features interviews with leading figures in education. To access all the episodes, visit [www.mrbartonmaths.com/podcast](http://www.mrbartonmaths.com/podcast).

ing strategy—one that can be used across all subjects—and so it is usually accompanied by whole-school training sessions, where us mathematics teachers are presented with examples from English, history, and geography and persuaded that they will *definitely* work for the likes of equations, percentages, and histograms.

So for much of my career, I steered clear of any mention of formative assessment. Then I came across the work of Dylan William, an expert on the topic. And it is a good thing I did, because I am now convinced that teaching without formative assessment is like painting with your eyes closed.

In 2016, William sent the following tweet: “Example of really big mistake: calling formative assessment ‘formative assessment’ rather than something like ‘responsive teaching.’”

Indeed, “responsive teaching” feels like a much better description to attach to the tools and strategies I will discuss here. The word “assessment” conjures up visions of tests and grades. For teachers, it means more work, and for students, more pressure. While it’s important to see tests as tools of learning, the association with assessment has probably not helped the development and adoption of this most valuable of strategies.

Paul Black, a prominent researcher on formative assessment, and William explain that an assessment functions formatively “to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited.”<sup>1</sup>

Others define formative assessment as “the process used by teachers and students to recognize and respond to student learning in order to enhance that learning, during the learning.”<sup>2</sup>

William makes the point that any assessment can be formative, and that assessment functions formatively when it improves the instructional decisions that are made by teachers, learners, or their peers.<sup>3</sup>

For me, formative assessment is all about responding in the moment. It is about gathering as much accurate information about students’ understanding as possible in the most efficient way possible, and making decisions based on that. In short, it is about adapting our teaching to meet the needs of our students.

## Classroom Culture

If students are afraid of making mistakes, how can we learn from their misunderstandings?

We have probably all taught students who leave questions out in tests and homework for fear of being wrong, and we all know



that such actions make it incredibly difficult to help them, as we have no indication of how much or in what areas their understanding is lacking. However, in my experience, far more common is a fear of making mistakes away from the written page. Many formative assessment strategies—and indeed the one I am going to focus on here—require students to be public about their answers, displaying their thoughts in front of their teacher and peers in the moment. If students fear making mistakes, and the consequences of those mistakes, then it is highly likely that they will fail to provide us with any useful information at all. After all, for the child who fears failure, not giving a response is far less daunting than having a go.

So how do we create a classroom culture that helps students overcome this problem?

By ensuring that the questions we ask students are seen not as tools of assessment but as tools of learning. We can only hope to achieve this if there are no negative consequences for being wrong. We can do this by not grading or recording students’ responses to the formative assessment questions we ask in class, for the presence of a grade or record puts a premium upon success, and they are not needed to inform our decisions in the moment.

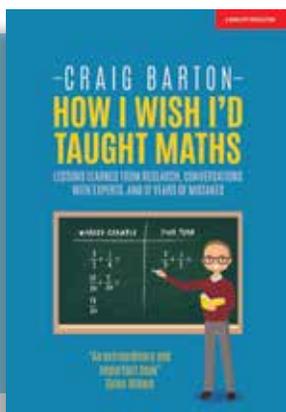
There also must be positive consequences for honest participation; mistakes need to be embraced as learning opportunities. I know that sounds ridiculously clichéd, but it is true.

## Students opting out

Another factor that can render any assessment strategy—but in particular classroom-based formative assessment—limp and ineffective is the classic opt-out. Some students may choose not to give an answer not for fear of being wrong but, to put it bluntly, because they don’t want to think. A shrug, an utterance of “I don’t know,” or a wall of silence tells us absolutely nothing about a student’s understanding of a given concept, and thus leaves us powerless to help.

Allowing such a response also conveys the message that non-participation is absolutely fine.

William argues that engaging in classroom discussion really does make students smarter.<sup>4</sup> So, when teachers allow students



*How I Wish I'd Taught Maths*, by Craig Barton, is published by John Catt Educational, which is offering *American Educator* readers a 30 percent discount off the purchase of the book through December 31, 2018. To order, visit [www.johncattbookshop.com/barton](http://www.johncattbookshop.com/barton) and use sales code SI30.

to choose whether to participate or not—for example, by allowing them to raise their hands to show they have an answer, or settling for a lack of response—we are actually making the achievement gap worse, because those who are participating are getting smarter, while those avoiding engagement are forgoing the opportunities to increase their ability.

### Finding comfort in one correct answer

Directly related to students themselves opting out is a common practice among teachers (myself very much included) that essentially does the students' job of opting out for them. See if this scenario rings any bells:

**Me:** So, does anyone know what  $-5 - -2$  is?

*(Three hands go up, one of which is Josie. Josie always gets everything right.)*

**Me:** Josie, go for it.

**Josie:**  $-3$ , sir.

**Me:** And why is that, Josie?

**Josie:** Because subtracting a minus is the same as adding a positive, and negative 5 plus 2 gives you negative 3.

**Me:** Loving your work as ever, Josie. OK, let's move on.

Well, that is exactly how many of my early attempts to assess the understanding of my students proceeded. In one book on formative assessment, a teacher is quoted as describing such a scenario as “a small discussion group surrounded by many sleepy onlookers.”<sup>5</sup> Likewise, when I interviewed William for my podcast and asked him to describe an approach in the classroom that he doesn't think is effective, he replied: “Teachers making decisions about the learning needs of 30 students based on the responses of confident volunteers.” Rarely have truer words been spoken. I find solace in the fact that I am not alone. William himself describes a similar experience:

When I was teaching full-time, the question that I put to myself most often was: “Do I need to go over this point one more time or can I move on to the next thing?” I made the decision the same way that most teachers do. I came up with a question there and then, and asked the class. Typically, about six students raised their hands, and I would select one of them to respond. If they gave a correct response, I would say “good” and move on.<sup>6</sup>

One of professor Robert Coe's “poor proxies for learning” is “(at least some) students have supplied correct answers,” and it is easy to see why.<sup>7</sup> I am seeking comfort in one correct answer. When Josie once again produces a perfect answer and a lovely explanation, I make two implicit assumptions: first, that this is down to my wonderful teaching; and second, that every other child in the class has understood the concept to a similar level. But, of course, I have no way of knowing that. By essentially opting out the rest of the class, the only information I am left with concerns Josie.

There are ways around this. We can use popsicle sticks or other random name generators to ensure each student has an equal chance of being selected. These adaptations certainly improve my initial process, but they suffer from the same fatal flaw. All stu-

dents are not required to participate to the same degree, and so the only student's understanding I have anything resembling reliable evidence about is the student answering the question. Researcher Barak Rosenshine's third principle of instruction is: “Ask a large number of questions and check the responses of all students.”<sup>8</sup> In the past, I often failed to do that. However, the strategy involving diagnostic questions that I am going to outline below has the full participation of each and every student, along with an explicit use of mistakes, built in to its very core.

### What Is a Diagnostic Question?

I used to believe two things that fundamentally dictated how I asked students questions and offered them support:

1. For any given question, there were two groups of students: those who could do it and those who could not. Those who could do it were fine to get on with the next challenge, and those who could not needed help. Crucially, they needed the same help.

Good diagnostic questions can help you identify and understand both mistakes and misconceptions.

2. Closed questions are bad, and open questions are good. Closed questions encourage a short response, whereas open-ended questions demand much greater depth of thought. Hence, I spent many years fighting the urge to ask students closed questions in class, and instead opted almost exclusively for things like, “Why do we need to ensure the denominators are the same when adding two fractions?” or “How would you convince someone that  $\frac{3}{7}$  is bigger than  $\frac{4}{11}$ ?”

I will return to the first belief in due course, but first let's deal with the nature of questions.

These two fraction questions are certainly important questions to ask students. But if our aim is to quickly and accurately assess whole-class understanding so we are able to make an informed decision on how to proceed with the lesson, they are not so good.

Their strength is their weakness. The fact that they encourage students to think, take time to articulate, and provoke discussion and disagreement makes them entirely unsuitable for effective formative assessment. How would we go about collecting and assessing the responses to “Why do we need to ensure the denominators are the same when adding two fractions?” from 30 students in the middle of a lesson as a means of deciding whether the class is ready to move on?

Open-ended questions like these are great for homework, tests, extension activities, and lots of other different situations. However, they are not great for a model of responsive teaching.

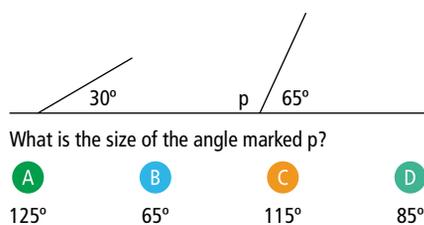
Nor is it the case that closed questions prevent thinking. Wiliam gives the example of asking if a triangle can have two right angles.<sup>9</sup> This is about as closed a question as you can get—the answer is either yes or no. But the thinking involved to get to one of those answers is potentially very deep indeed. Students may consider whether it is possible to have an angle measuring 0 degrees, or if parallel lines will meet at infinity. But this closed question, while it is indeed a brilliant one, is equally unsuited for a model of responsive teaching. If a particular student answered no, would we be convinced that he understood the properties of triangles and angles fully? Or has he just guessed? Without further probing, it is impossible to tell, and hence we are back to the same issues we have with the more open-ended fraction questions above.

So, if open-ended questions are unsuitable for this style of formative assessment, and not all closed questions are suitable, then what questions are left?

Step-forward diagnostic multiple-choice questions, or just diagnostic questions, as I refer to them.

Diagnostic questions are designed to help identify and, crucially, *understand* students' mistakes and misconceptions in an efficient and accurate manner. Mistakes tend to be one-off events—the student understands the concept or the algorithm, but may make a computational error due to carelessness or cognitive overload. Give students the same question again, and they are unlikely to make the same mistake; inform the students that they have made a mistake somewhere in their work, and they are likely to be able to find it. Misconceptions, on the other hand, are the result of erroneous beliefs or incomplete knowledge. The same misconception is likely to occur time and time again. Informing the students who have made an error due to a misconception is likely to be a waste of time, as, by definition, they do not even know they are wrong. Good diagnostic questions can help you identify and understand both mistakes and misconceptions.

The best way to explain a diagnostic question is to show you one:



What is the size of the angle marked p?

**A** 125°      **B** 65°      **C** 115°      **D** 85°

Take a moment to look at the question and, in particular, the four different answers. What would each of these answers tell you about the understanding of a student who gave them?

Answer A may suggest that the student understands that angles on a straight line must add up to 180 degrees, and that the student is able to identify the relevant angle, but that he has made a common arithmetic error when subtracting 65 from 180.

Answer B may be the result of students muddling up their angle facts, mistakenly thinking this is an example of vertically opposite angles being equal.

Answer C is the correct answer.

Answer D may imply that the student is aware of the concept that angles on a straight line must add up to 180 degrees, but that

the student has included all visible angles in her calculations.

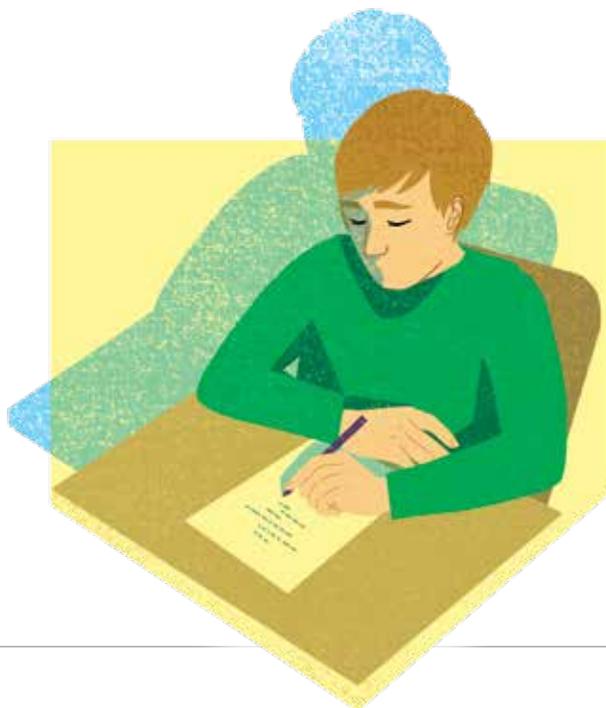
Notice how each of these answers reveals a specific and different mistake or misconception. Imagine you had a group of students who answered A, another group who answered B, and a final group who answered D. Would all three groups require the same intervention from you, their teacher?

I don't think so. Which brings us to my second (erroneous) belief. It is not always the case that students either can or cannot answer a question correctly. Sure, there may be some students who get the question correct for the same or similar reasons. But there are likely to be students who get a question wrong for very different reasons, and it is the reason they get the question wrong that determines the specific type of intervention and support they require.

For example, students who answered B and D may benefit from an interactive demonstration (for example, using GeoGebra\*) to illustrate the relationship between angles on a straight line. Students who chose B could then be presented with an exercise where they are challenged to match up an assortment of diagrams with the angle fact they represent. Those who selected D may benefit more from a selection of examples and nonexamples of angles on a straight line. But what about students who answered A? Their problem lies not with the relationship between the angles, but with their mental or written arithmetic. This may be a careless mistake, or it may be an indication of a more serious misconception with their technique for subtraction. Either way, it is not a problem that is likely to be solved by giving these students the same kind of intervention as everyone else. However you choose to deal with these students, there is little doubt that there is an advantage to knowing not just which students are wrong, but *why* they are wrong. And I have never come across a more efficient and accurate way of ascertaining this than by asking a diagnostic question.

So, what makes a question a diagnostic question? For the way I define and use them, there needs to be one correct answer and

\*For more on this interactive math application, visit [www.geogebra.org](http://www.geogebra.org).



three incorrect answers, and each incorrect answer must reveal a specific mistake or misconception. I can—and indeed do—ask students for the reasons for their answers, but I should not need to. If the question is designed well enough, then I should gain reliable evidence about my students’ understanding without having to have further discussion.

### What Makes a Good Diagnostic Question?

Not all diagnostic questions are born equal, and writing a good one is hard. Indeed, the more I use diagnostic questions with my students and colleagues, the more I read about misconceptions in mathematics, and the more experience I get in writing them, the harder I am finding it! I take some solace from the fact that this could very well be the Dunning-Kruger effect<sup>10</sup> playing out, in that as I grow more knowledgeable, I am also more aware of the difficulty of the challenge as well as my own considerable deficiencies.

At the time of writing, I have written around 3,000 diagnostic multiple-choice questions for mathematics. The vast majority of these I have used with my students either in the classroom or as part of an online quiz on my Diagnostic Questions platform,<sup>†</sup> and many have been tweaked, adjusted, and binned over the years. Throughout that time, and inspired by the work of Caroline Wylie and William,<sup>11</sup> I have devised a series of golden rules for what makes a good diagnostic question:

#### Golden Rule 1: It should be clear and unambiguous.

We all have seen badly worded questions in exams and textbooks, but with diagnostic questions, sometimes the ambiguity can be in the answers themselves. Consider the following question:

What is  $\frac{1}{12} + \frac{7}{12}$  ?

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
$\frac{8}{24}$	$\frac{8}{12}$	$\frac{7}{12}$	$\frac{2}{3}$

At first glance, nothing may appear all that wrong. The wording of the question is clear, and the incorrect answers reveal specific misconceptions. But what is the correct answer? D is clearly correct, and is probably the author’s intended correct answer. But how about B? Given that the question does not ask students to simplify their answers, B is a perfectly legitimate correct answer. So, what do we infer if students answer B? Is it that they cannot simplify fractions, or that they did not see D? Do they believe B is the only correct answer, or just one correct answer? The key point is that without asking them, we do not know for sure. And a key feature of a good diagnostic question is that we should be able to accurately infer a student’s understanding from her answer alone without needing further student explanation. In its current form, this question may be a good discussion question, but it is not a good diagnostic question.

<sup>†</sup>Diagnostic Questions is a free formative assessment platform that contains more than 40,000 diagnostic multiple-choice math questions suitable for students ages 4 to 18. Questions can be used in the classroom to identify misconceptions and promote discussion, or can be used as quizzes through the platform, which immediately returns the results back to the teacher with actionable insights into the students’ understanding. To access these questions, visit [www.diagnosticquestions.com](http://www.diagnosticquestions.com).

#### Golden Rule 2: It should test a single skill/concept.

Many good questions test multiple skills and concepts. Indeed, a really effective way to interleave,<sup>\*</sup> which is where topics are studied in short bursts with frequent switching (as opposed to presented in blocks), is to combine multiple skills and concepts together within a single question. But good diagnostic questions should not do this. The purpose of a diagnostic question is to home in on the precise area that a student is struggling with and provide information about the precise nature of that struggle. If there are too many skills or concepts involved, then the accuracy of the diagnosis invariably suffers.

Not all diagnostic questions are born equal, and writing a good one is hard.

#### Golden Rule 3: Students should be able to answer it in less than 10 seconds.

This is directly related to Golden Rule 2. If students are spending more than 10 seconds thinking about the answer to a question, the chances are that more than one skill or concept is involved, which makes it hard to determine the precise nature of any misconception they may hold.

#### Golden Rule 4: You should learn something from each incorrect response without the student needing to explain.

A key feature that distinguishes diagnostic multiple-choice questions from nondiagnostic multiple-choice questions is that the incorrect answers have been chosen very, very carefully in order to reveal specific misconceptions. In fact, they are often described as distractors, although I do not like this term, as it implies they are trick answers. The key point is that if a student chooses one of these answers, it should tell you something.

#### Golden Rule 5: It cannot be answered correctly while still holding a key misconception.

This is the big one. For me, it is the hardest skill to get right when writing and choosing questions, but also the most important. We need to be sure that the information and evidence we are receiving from our students is as accurate as possible, and in some instances that is simply not the case.

<sup>\*</sup>For more on the practice of interleaving, see “Strengthening the Student Toolbox” in the Fall 2013 issue of *American Educator*, available at [www.aft.org/ae/fall2013/dunlosky](http://www.aft.org/ae/fall2013/dunlosky).

Consider the following question:

Which of the following is a multiple of 6?

- A 20      B 62      C 24      D 26

On quick inspection, this question looks pretty good. C is the correct answer, B may indicate that students believe multiples start with the given number, and D may indicate that they believe they end with that number. I am not entirely sure what A tells me—maybe an error with the 6 times table—but apart from that, I am pretty happy with this question.

Or am I? If I am going to use this question in class, presumably my purpose is something along the lines of assessing if students have a good understanding of multiples. And yet, something that is not assessed at all in this question is arguably the biggest misconception students have with the topic.

Imagine you are a student coming into your math lesson and you are told that today you are studying multiples. Oh no, you think, I always get multiples and factors muddled up—I can never remember which ones are the bigger numbers. And then you are presented with the question above, and a smile appears on your face. You can get this question correct without knowing the difference between factors and multiples, as there are no factors present. And if I am your teacher, and several of your peers have the same problem, it could well be the case that you all get this question correct and I conclude that you understand factors and multiples, without ever testing to see if you can distinguish between the two concepts.

Interestingly, by presenting my students with this question, they may subsequently *infer* that multiples are “the bigger numbers” due to the absence of any number smaller than 6, and hence may learn the difference between factors and multiples indirectly that way. However, this is something I would prefer to assess directly, especially if I am trying to discern in the moment if I have enough evidence to move on.

So, a better question might be something like this:

Which of these is a factor of 27?

- A 7      B 13.5      C 54      D 3

I love this question—not just because it contains factors and multiples, but because of answer B. All of a sudden, dodgy definitions of factors, such as *a number that goes into another number a whole number of times*, are called into question.

Seeing as I make such extensive use of diagnostic questions, I want to ensure that the information I receive back from my students’ answers is as accurate and valid as possible. Hence, putting such time into the creation and selection of good questions is time well spent.

So, that is why I am more than a little obsessed with formative assessment, and my favorite tools for delivering it are high-quality diagnostic multiple-choice questions.

But how do I collect my students’ responses? In the past, I would have messed around with electronic voting devices. But all it takes is an empty battery, a dodgy Wi-Fi signal, or a mis-



chievous child, and your lesson can quickly be skidding off the rails. Mini-whiteboards too, while great for students writing down their work, fall prey to faulty pens and an apparently unavoidable adolescent urge to draw something not exactly related to the content of the lesson. No, once again I defer to William, who, when I interviewed him for my *Mr Barton Maths Podcast*, advised that students should vote with their fingers, because, as he said, *students may forget to bring a pen to a lesson, but they rarely forget their fingers*.

So, at the start of each lesson, I project a diagnostic question on my board. I ask students to consider the answer in silence. I then count down from three and ask them to raise their hand high in the air, showing one finger for A, two for B, three for C, and four for D. Quickly, I am able to get a picture of their understanding. I then ask a student who has chosen A to explain his reasoning, then a student who has chosen B, and so on. At the end of this process, we have a revote, and then—because there is a danger that students are just copying the perceived cleverest student in the class—I ask a follow-up question that tests the same skill. Once my students are used to this routine, it takes around two minutes per question, and I always ask at least three questions per lesson. And if some students are still struggling after the follow-up question, I am able to help them over the course of the lesson.

Which brings me to the final reason why I love diagnostic questions so much: the ability to plan for error. In the past, I would often find myself on the receiving end of a completely unexpected answer, while standing in front of a sea of 30 confused faces all looking to me for help. I would be forced to think on the spot—attempting to diagnose the error and think of a way of helping resolve it, all while trying to juggle the hundreds of other considerations tumbling through a teacher’s mind in the middle of a lesson. Now, I do not need to. By using diagnostic questions and studying the wrong answers in advance, I can plan for these errors, ensuring I have explanations, resources, and strategies ready to help. My thinking can be done before the lesson, thus making me much more effective during the lesson.

I love good diagnostic questions. I know of no more accurate, efficient way of getting a sense of my students’ understanding of a concept, and then adjusting my teaching to meet their needs. □

(Endnotes on page 43)

# Beyond a Bridge to Understanding

## The Benefits of Second Language Learning



BY MARTHA G. ABBOTT

**E**ven before having children, Jimell Sanders was intent on ensuring that her local school would be able to offer the opportunity of early second language learning. A health systems specialist at the U.S. Department of Defense in Washington, D.C., Sanders grew up in a military family and attended school with bilingual and multilingual peers. She observed firsthand the value of speaking a second language. But when she began researching language programs within her school district, she encountered a lottery system with lengthy waitlists to enter schools offering dual-language programs. She immediately set about working with her neighborhood school to supplement

its language offerings. After gaining approval and support from the mayor and the chancellor of the District of Columbia Public Schools, Sanders's local school, Charles H. Houston Elementary—a Title I school with a majority African American student population—started an English/Spanish dual-language program, where her daughter is now enrolled.<sup>1</sup>

Nearly a decade later, Sanders looks back with pride on her community activism. By helping to establish the DC Language Immersion Project, a grass-roots organization that advocates for language learning in schools, she successfully increased educational opportunities in her community.

Today, growing legions of parents are advocating for second language learning in their local schools. Like Sanders, these parents do not consider second language acquisition a skill that's just "nice to have" but one that is vital in an increasingly global environment. This environment requires Americans to equip themselves with languages that will allow them to interact not only with those outside our country's borders but also with those in our local communities whose first language is not English.

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ILLUSTRATIONS BY BEATRIZ MAYUMI

## The Anglophone Struggle

The perception that English is the worldwide language of business has handicapped our ability to make second language learning an integrated component of the K-12 curriculum. But the lack of viewing bilingualism as an inherent part of schooling in the United States has also led to a national mindset that English is good enough to get along in the world (even though 75 percent of the world's population does not speak English).<sup>2</sup> And because we view bilingualism as outside the norm, learning another language is perceived as being difficult and something that one is either good or bad at doing.\*

There is, however, a growing call from business leaders claiming they cannot expand their businesses abroad because of a lack of language competence and cultural awareness among their employees, despite a growing demand for bilingual speakers.<sup>3</sup>

It has been challenging to move the United States forward in closing the linguistic gap. The demand for speakers of Arabic, Urdu, and Pashto following the attacks of 9/11, and President Bush's announcement of the National Security Language Initiative in 2006 to prepare professionals with language skills for federal roles, largely went unheard. Since then, the government's capacity to fill positions that require language capabilities has not sufficiently grown.<sup>4</sup> Despite efforts such as the National Security Education Program, which funds students at the postsecondary level to pursue their areas of academic interest while learning a language deemed critical by the U.S. government, our efforts continue to fall short. While accurate enrollment data are challenging to report, as not all states collect K-12 language enrollments, the latest figures project that only 20 percent of K-12 students are enrolled in language study,<sup>5</sup> and only 7.5 percent of students are enrolled at the postsecondary level.<sup>6</sup> These low statistics point to a growing need to build our nation's language capacity. They also recently led to a congressionally commissioned report and a national public awareness campaign, *Lead with Languages*, seeking to improve this critical situation.

The report, *America's Languages: Investing in Language Education for the 21st Century*, was released in early 2017 by the American Academy of Arts and Sciences.<sup>7</sup> It was commissioned by a bipartisan group from both the Senate and the House of Representatives to examine the following questions: (1) how does language learning influence economic growth, cultural diplomacy, the productivity of future generations, and the fulfillment of all Americans, and (2) what actions should the nation take to ensure excellence in all languages as well as international education and research, including how we may more effectively use current resources to advance language learning?

The commission that undertook the study honed the findings into five broad recommendations:

**1. Increase the number of language teachers at all levels of education** so that every child in every state has the opportunity

to learn a language in addition to English. With 43 states and the District of Columbia citing shortages in the area of language teaching,<sup>8</sup> the crisis is real. As a result, the American Council on the Teaching of Foreign Languages (ACTFL), of which I am executive director, has teamed up with Educators Rising to encourage middle and high school teachers to form afterschool clubs that will encourage young people to consider a career in language teaching.

**2. Supplement language instruction across the education system through public-private partnerships** among schools, government, philanthropies, businesses, and local community members. The report encourages local communities to leverage their resources to expand access to language-learning opportunities. For instance, Chicago Public Schools has implemented an Arabic language program, guided by the Center for



Arabic Language and Culture, with support from the local Arabic-speaking populations, local and international businesses, and Qatar Foundation International, to enhance classroom learning.<sup>9</sup>

**3. Support heritage languages already spoken in the United States**, and help these languages persist from one generation to the next. Census data show that, generally, by the third generation, immigrant populations almost entirely lose fluency in their heritage language.<sup>10</sup> As we seek to build our nation's linguistic capacity, it is essential that heritage speakers (i.e., those who have a cultural or familial tie to a language other than English) be provided opportunities to continue to develop their native language while learning English. Programs in schools and local communities can help raise awareness among heritage speakers of the important connection between becoming fully bilingual and biliterate and career and job opportunities, which are rapidly expanding for bilinguals.

**4. Provide targeted support and programming for Native American languages**, as defined in the Native American Languages Act. The use of Native American languages in schools, whether as the language of instruction or in addition to an English-based curriculum, must be actively encouraged and supported so that these languages can not only survive but thrive. For example, the nonprofit organization Sealaska Heri-

\*For more on the history of bilingual education in the United States, see "Bilingual Education" in the Fall 2015 issue of *American Educator*, available at [www.aft.org/ae/fall2015/goldenberg\\_wagner](http://www.aft.org/ae/fall2015/goldenberg_wagner).

tage trains teachers in local languages and partners with Juneau schools to teach southeast Alaska native languages, such as Tlingit. Also, the Maine French Heritage Language Program sponsors afterschool language and cultural activities in Lewiston and Augusta for students from families with French-speaking backgrounds.<sup>11</sup>

- 5. Promote opportunities for students to learn languages in other countries** by experiencing other cultures and immersing themselves in multilingual environments. Both in high school and college, students need to be offered the opportunity to study abroad without facing hurdles in meeting graduation requirements or in fulfilling federal financial aid requisites.

## Changing Mindsets

The release of any national report must have other support mechanisms to have the intended impact and not simply fill another slot on the proverbial shelf. For this reason, my organization, ACTFL, launched a public awareness campaign at the same time *America's*

The lack of viewing bilingualism as an inherent part of schooling in the United States has led to a national mindset that English is good enough to get along in the world.

*Languages* was released. The Lead with Languages national campaign is building awareness among parents, students, and the public at large of the need for culturally and linguistically competent young people and of the important connection between learning languages and long-term personal benefits, including enhanced educational and career opportunities.

We have seen demand for bilingual employees in the United States double from 2010 to 2015,<sup>12</sup> and such demand will certainly continue to increase in the future. As such, Lead with Languages is encouraging students to take those first steps toward developing foreign language competence.

It is never too early to start this journey. For instance, 8-year-old Tobias shared his interest in languages when he submitted a video in a competition for one of 25 \$1,000 scholarships ACTFL sponsored to Concordia Language Villages—a language and cultural immersion experience in which students live in the Bemidji woods in Minnesota in the summer, simulating an experience abroad. Young Tobias explained that just as his favorite television show centers on a fisherman who has adventures traveling around the world, his dream also requires language skills: “I want to be a snake catcher, and there’s snakes all over the world in different

places, and I need to learn different languages if I want to talk [with people there]. And one of the places I want to go is France, because they might fish there, too.”<sup>13</sup>

Establishing the mindset that learning other languages is part of growing up elsewhere around the world is important to beginning a student’s language journey. Heritage learners are quick to see the importance as well. In his application for a Concordia scholarship, one awardee said, “I’m Cuban American. ... As glad as I am to live in my country, I’d like to learn the language that runs in my blood.”<sup>14</sup>

But it’s never too late to learn a language, as older students found out when Lead with Languages ran a contest called “Your Story on the Rails,” in which five college students studying or engaging in projects abroad won 15-day first-class Eurail passes to facilitate their journeys. For some students, this experience became truly transformative. That was certainly the case for Andy, a rising college sophomore from a small town in Pennsylvania. His rural upbringing had not prepared him for international travel, and he found navigating cities like Geneva, Switzerland, extremely challenging and even scary at times. Andy chronicled his journey in his blog posts, which allowed others to witness his transformation. For example, he described his first experience conducting a research interview completely in German, and he shared how learning a foreign language helped him speak with strangers and come out of his shell.

Andy is proof that the journey toward becoming a competent language speaker and world traveler is worth enduring those uncomfortable moments he described on his blog. He has become comfortable and empowered enough in different environments that he took a course in Gambia and Senegal during his winter break and studied abroad at the University of Vienna for the Spring 2018 semester.

Teachers of foreign languages know firsthand the importance of enabling students to experience the feeling of being comfortable with being uncomfortable. Yo Azama, a teacher of Japanese at North Salinas High School in Salinas, California, and a former National Language Teacher of the Year, describes the process he sees his own students going through as they embark on the journey toward global competence:

I think curious learners, whether young or old, take themselves far and beyond their comfort zones. Once they become curious, they are usually busy focusing on the topic—so without realizing it, they seem to reach well beyond their perceived capabilities. ... As a teacher, I try to be mindful about providing opportunities to spark their interest, even if it means pushing my students out of their comfortable, usual ways of thinking. Initially, students might find the new concepts strange or uncomfortable, but soon after, they find there are endless possibilities for the used-to-be-the-only-way perspective, which frees them from their prior narrow perspective.<sup>15</sup>

Showing students how language learning can tie into career aspirations is also critical. ACTFL believes that no matter what sector of the work world students find interesting, language skills will be an asset. That is why one aspect of the Lead with Languages campaign encourages students not currently studying a language

to pursue one. For example, through our “Japanese with Manga” contest, we asked high school students to submit drawings of manga comic characters for the opportunity to win free online tutoring in Japanese. The winners were manga enthusiasts who had never studied Japanese but were drawn to learning the language thanks to their love of manga culture. As one student who entered the contest declared, “Learning Japanese is important to me because I would like to live in Japan one day and become a manga artist.”<sup>16</sup>

Empowering students to speak up for language education can also help change public attitudes. Both the Lead with Languages campaign and the *America’s Languages* report feature powerful testimonials from students and young people who are vested in gaining proficiency in languages other than English. For example, Dana Banks, formerly the deputy chief of mission at the U.S. Embassy in Lomé, Togo, earned her bachelor’s degree in political science from Spelman College, followed by several advanced degrees, fellowships, and assignments overseas with the Department of State. Proficient in French, Haitian Creole, and Thai, Banks attributes her international success to her extensive international education: “My education aided me in understanding other cultures. ... I think it’s important for Americans to have the knowledge and foreign language skills of other cultures, because the world is indeed interconnected through the Internet, through advances in travel and communication—the world is moving at a fast pace.”<sup>17</sup>

## Making Progress

One exciting phenomenon taking hold in the United States is the establishment of the Seal of Biliteracy,\* which is affixed on the diplomas of high school students who graduate with proficiency in two or more languages. This initiative began in California in 2012, and currently 30 states use some form of the designation to encourage students to pursue biliteracy and to recognize the bilingual competence of their students.

As states have set language proficiency requirements to obtain the seal, classroom instruction has changed from a strict focus on the traditional grammar-based approach to learning a language to an equally important focus on developing communicative competence. Linda Egnatz, a high school Spanish teacher in Lincolnwood, Illinois, and a former National Language Teacher of the Year who was integrally involved in the passage of Seal of Biliteracy legislation in her state, says it has given many students clearly identified targets for successful language learning:

Creating a pathway to proficiency with benchmarks has resulted in the growth of intrinsic motivation among students. Simply stated, students *want* the recognition and are actively working toward it. For the first time, students and parents grasp the time element required for language acquisition. My school is in its fifth year with the Seal of Biliteracy, and each year our upper-level retention rate has grown significantly. Students proudly use the hashtag #2bilit2quit!<sup>18</sup>

As teachers such as Egnatz understand, and as the Lead with Languages campaign strives to make clear, there are direct cognitive, academic, and social benefits that must be elevated in the discussion of why language-learning opportunities should be available for all students. One program model at the elementary school level rapidly gaining traction is dual-language immersion. In such programs, students are taught half of the curriculum in English and half in another language. In most cases, the language teacher in dual-immersion programs is a regular member of the faculty, so there is no additional budget line item for the program. Some states, such as Delaware, Indiana, and Utah, have invested state funding in establishing dual-immersion programs, realizing that growing a bilingual citizenry will bring economic benefits to their states by attracting interna-



tional businesses in need of bilingual employees, as well as U.S.-based businesses looking to expand operations abroad. For the 2016–2017 school year, the New York City Department of Education made a significant push in this area by committing \$980,000 in federal funding to 38 new K–12 bilingual programs serving more than 1,200 students.<sup>19</sup>

Regardless of the program model, research points to early experiences in learning additional languages as contributing to closing achievement gaps among all populations, from special needs students to English learners to minority populations.<sup>20</sup> Academic gains have been documented in all subject areas, including English language arts, mathematics, science, and social studies, by students who have participated in language programs.<sup>21</sup> Research shows that learning a second language increases students’ ability to problem solve and makes a positive impact on memory, executive functions, and the ability to focus and multitask, among other benefits. And bilingualism decreases cognitive decline in adults and delays the onset of Alzheimer’s disease.<sup>22</sup>

With our increasingly diverse population, and given the research on language learners’ enhanced empathy, awareness of diversity, and tolerance of differences, as well as their greater sense of social justice, increasing the number of language learners is critical for societal reasons as well. Given all the

\*To learn about the Seal of Biliteracy, visit [www.sealofbiliteracy.org](http://www.sealofbiliteracy.org).

evidence, administrators and policymakers must ensure that second language learning is central in the curriculum of every school. □

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## Active Citizenship

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## Civics Education in the U.S.

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## Ask the Cognitive Scientist

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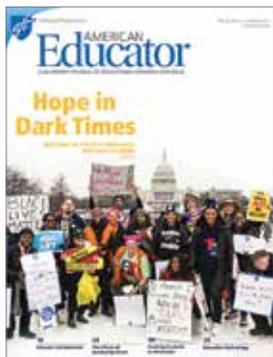
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## Formative Assessment

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