



# AMERICAN Educator

A QUARTERLY JOURNAL OF EDUCATIONAL RESEARCH AND IDEAS

## For the Love of Reading

**DANIEL T. WILLINGHAM EXPLAINS  
HOW TO ENGAGE STUDENTS IN A  
LIFELONG PURSUIT PAGE 4**



**14**

**THE  
TEACHER  
WARS**

Dana Goldstein

A History of  
America's  
Most Embattled  
Profession

**18**

**Philosophy  
for High School  
Students**

**24**

**PISA Results  
and Opportunity  
to Learn**

**32**

**Getting Group  
Work Right**

**38**

**CAGE-BUSTING  
THE CAGE-  
BUSTING  
TEACH  
ER**

FREDERICK M. HESS

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## Reading: A Lifelong Love

RANDI WEINGARTEN, AFT President

I CAN'T IMAGINE my life without books. My father was an electrical engineer, and my mother was a public school teacher; books were an integral part of my childhood. Throughout my career as a lawyer, teacher, and labor leader, books have remained my constant companions—stuffed into a briefcase, overflowing on my bedside table, stacked on my desk at work. Books have carried me to distant worlds, opened new doors, and made me feel empathy, compassion, anger, fear, joy, acceptance—and everything in between.

Forty-five percent of our nation's children live in neighborhoods that lack public libraries and stores that sell books, or in homes where books are an unaffordable or unfamiliar luxury. At the same time, two-thirds of the schools and programs in our nation's lowest-income neighborhoods can't afford to buy books at retail prices. That means that, today, 32.4 million American children go without books—even as study after study has shown that literacy is crucial to success in school, future earning potential, and the ability to contribute to the nation's economy.

Nearly four years ago, the American Federation of Teachers joined forces with First Book—a nonprofit social enterprise that has provided more than 125 million brand-new books to low-income children since 1992. Through First Book's unique marketplace, educators serving students in need buy books and educational resources at deeply reduced prices or receive them at no cost.

As one of First Book's biggest partners, we've put more than 2 million books in the hands of children in need, and we've helped First Book expand its marketplace of registered users from 20,000 to 150,000. AFT members have organized First Book events in communities across the country; last December alone, a total of 200,000 books were given away at five events in Massachusetts, New York, and Oregon.

However, our partnership with First Book is about more than just giving books to students in need. Our aim is to build on the empowerment that comes from owning that first book to create lifelong readers and lifelong learners.

A landmark study by the Annie E. Casey Foundation shows a correlation between the ability to read by the end of the third grade, continued academic success, and the end of the cycle of intergenerational poverty. Yet with 82 percent of fourth-graders from low-income families failing to reach the "proficient" level in reading on the National Assessment of Educational Progress, achieving grade-level proficiency in reading is a key issue for our schools, our communities, and our nation.

We know that reading to children is a crucial step. From the beginning, babies who are read to are exposed to the cadence of language, and school-age children who read at home for 15 minutes a day are exposed to millions of words.

Growing demands on parents—whether they're single parents working two jobs to make ends meet, or English is their second language, or they lack a quiet space to read—can make it difficult for them to read with their children. At the same time, growing demands on teachers can mean there's little time for educators to connect with parents and give them the tools they need to help their children.

In McDowell County, West Virginia, one of the poorest counties in the nation, the AFT has partnered with First Book to teach parents how to make reading a fun, nurturing activity. And through Share My Lesson, an online community with free resources, the AFT offers companion materials for teachers and parents to help the books come alive. In addition, through our partnership with PBS station WETA and Colorín Colorado, we provide free online resources for parents and educators of English language learners.

Although books expand horizons by exposing us to worlds outside our own,

children also need to see themselves, their experiences, and their cultures reflected in the books they read. Unfortunately, for too many children, this is not the norm. Only 3 percent of the 3,600 children's books reviewed by the Cooperative Children's Book Center featured African American protagonists, while no more than 2 percent focused on Asian Americans, Latinos, or Native Americans.



Weingarten with a student at a Baltimore First Book event.

We aim to change this. The AFT and First Book are using the power of the market, and the increasing number of people we are bringing to the First Book marketplace, to push publishers to print more diverse books and support diverse authors.

As educators, AFT members understand the power of books. We've seen a child's face light up when he or she first understands words on a page. We've seen how books can create confidence in a struggling reader—the more a child reads and learns, the more that child wants to read and learn, until reading becomes a lifelong love and habit.

If you work or volunteer with children in need, register now at [FirstBook.org/AFT](http://FirstBook.org/AFT) and help instill a lifelong love of reading and learning.



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The **American Federation of Teachers** is a union of professionals that champions fairness; democracy; economic opportunity; and high-quality public education, healthcare and public services for our students, their families and our communities. We are committed to advancing these principles through community engagement, organizing, collective bargaining and political activism, and especially through the work our members do.

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## 4 For the Love of Reading

### *Engaging Students in a Lifelong Pursuit*

BY DANIEL T. WILLINGHAM

What can be done when a student, who can read and generally understand texts that she comes across, simply chooses not to read for pleasure? Rather than throw up their hands and blame the lack of interest in reading on the desire to engage with the latest technology, parents and teachers can turn to effective research-based practices—and even use technology—to motivate reluctant readers at school and at home.

## 14 Quieting the Teacher Wars

### *What History Reveals about an Embattled Profession*

BY DANA GOLDSTEIN

A journalist explains why teaching operates under an intense level of political scrutiny and why educators, asked to do so much for students and society, often receive so little public support.

## 18 You Are Embarked

### *How a Philosophy Curriculum Took Shape and Took Off*

BY DIANA SENECHAL

Although philosophy is not typically taught in high school, one teacher shares how the philosophy curriculum she helped create has sharpened students' thinking and strengthened the school community.

## 24 Puzzling Out PISA

### *What Can International Comparisons Tell Us about American Education?*

BY WILLIAM H. SCHMIDT AND  
NATHAN A. BURROUGHS

Data from the most recent Program for International Student Assessment study show that inequality in opportunity to learn math is strongly related to student performance in math, and that low-income students are generally

exposed to less-rigorous math across the globe.

## 32 Group Work for the Good

### *Unpacking the Research behind One Popular Classroom Strategy*

BY TOM BENNETT

A high school teacher in the United Kingdom examines the research on group work and discusses ways to integrate it in the classroom, but cautions against its overuse.



## 38 Teachers Uncaged

### *Helping Educators Create Meaningful Change*

BY FREDERICK M. HESS

Plenty of smart guidance for teachers covers instruction, pedagogy, and curriculum, but precious little helps them deal with everyday frustrations. Educators need gentle reminding to tap into their expertise and summon their moral authority when advocating for their students.

## ESEA REAUTHORIZATION UNDERWAY

Reauthorization of the Elementary and Secondary Education Act (ESEA) is in full swing, and some of the most powerful messages to Congress on what needs to change under the law have come from educators. In January, teachers from New York City told a Senate panel that high-stakes, test-driven sanctions under the current law were corrupting good practice in the classroom. At a hearing in early February, a teacher from a Baltimore public school described how community schools can help restore opportunity in schools serving some of the city's poorest neighborhoods.

The AFT has been working to bring these frontline voices to the fore. The union delivered a petition with more than 18,000 signatures to the Senate, urging lawmakers to return ESEA to its original mission: ensuring every school receives the resources it needs to teach its students, particularly in poor neighborhoods. AFT President Randi Weingarten wrote in a recent column that ESEA reauthorization needs to start with the premise that "all students deserve a high-quality public education, and teachers need the resources and support that will allow them to teach." Read the column at <http://go.aft.org/AE115news1>.

## BRINGING PARTNERSHIPS TO SCALE

Parent engagement and community schools emerged as key themes when district and school improvement teams from several states gathered in New York City Jan. 22–25 to discuss effective labor-management collaboration. The setting was the AFT's Center for School Improvement Leadership Institute, which delivers professional development and technical assistance aimed at strengthening collaboration. About 160 educators, administrators, union leaders, and school board representatives from school systems in seven states attended the 2015 event. Read more at <http://go.aft.org/AE115news2>.

## SPOTLIGHT ON EARLY LEARNING

Early education and childcare took center stage when President Obama released his budget proposal on Feb. 2. The administration seeks funding in the 2016 fiscal year to make high-quality childcare accessible to more than 1.1 million additional children under age 4 by 2025. Separately, *Education Week* focused on early childhood and education in its latest Quality Counts report, which finds that states' performance in the early years is generally subpar. In a recent blog post for the public advocacy group MomsRising, AFT Executive Vice President Mary Cathryn Ricker lays out a compelling case for putting affordable, high-quality childcare at the top of the nation's agenda. Read it at [www.bit.ly/15xN0bF](http://www.bit.ly/15xN0bF).

## "MORAL MONDAYS" IN ALBANY

The New York state capitol filled with 1,000 activists on Jan. 12 as AFT affiliates joined "Moral Mondays" coalition partners to target unequal educational opportunities and to challenge Gov. Andrew Cuomo's failing education policies. The keynote speaker, Rev. William Barber, who established the Moral Mondays movement in North Carolina, spoke to the crowd about the hundreds of thousands of children in New York who go without the high-quality education that is their right. Days later, seven former New York teachers of the year wrote an open letter to Cuomo criticizing his

policies, particularly his efforts to link half of a teacher's evaluation to student standardized test scores. "Merit pay, charter schools, and increased scrutiny of teachers won't work because they fundamentally misdiagnose the problem," the teachers wrote. "It's not that teachers or schools are horrible. Rather, the problem is that students with an achievement gap also have an income gap, a health-care gap, a housing gap, a family gap, and a safety gap, just to name a few." Read the letter at [www.wapo.st/1DwXbec](http://www.wapo.st/1DwXbec).

**Rev. William Barber and AFT President Randi Weingarten lead a protest at the New York capitol.**



PHOTOGRAPH COURTESY OF NYSUT

## TEACHER TRAINING AND DIVERSITY

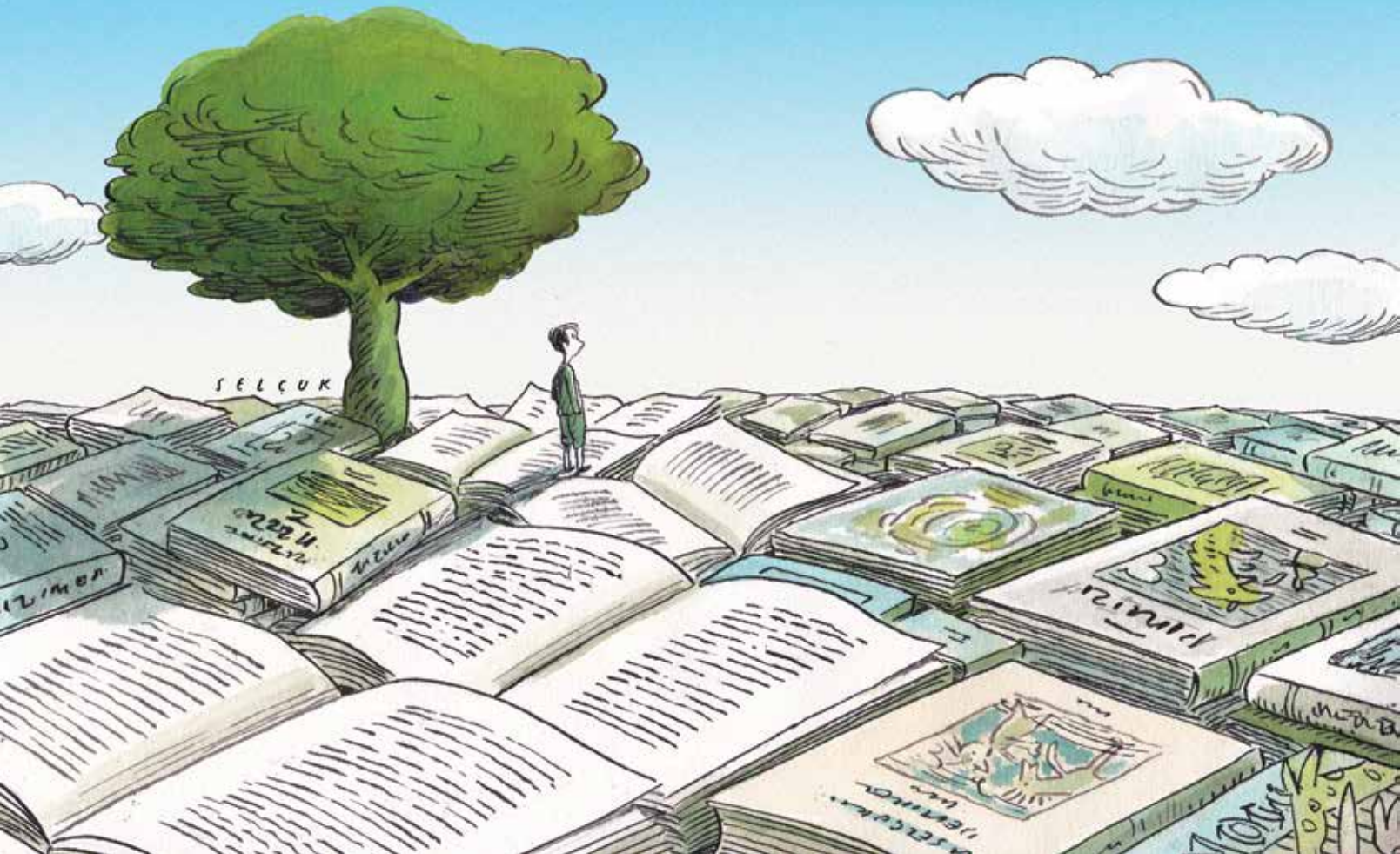
The AFT partnered with Howard University to hold a panel discussion Jan. 27 in Washington, D.C., highlighting the negative impact that the U.S. Department of Education's proposed teacher-preparation regulations will have on teacher diversity. The regulations would mandate that states receiving funding under the Higher Education Act must create new accountability systems for teacher preparation. In a major change, states would be required to implement rating systems for teacher preparation programs that are based on K–12 student performance, employment statistics, surveys of principals and graduates, and accreditation/state program approval. The potential impact for programs that train teachers for high-need schools? They will likely receive lower ratings, which could deter colleges and universities from training teachers to work in these schools. A video of the discussion is available at [www.bit.ly/1Ep9qLl](http://www.bit.ly/1Ep9qLl).

## ETHNIC STUDIES MOMENTUM

The Los Angeles Unified School District (LAUSD) late last year joined the growing number of California school systems that require ethnic studies in the high school curriculum. The district's school board voted 6-1 to offer ethnic studies at every high school by the 2017–18 school year. By 2019, students must complete at least one ethnic studies class to graduate. The vote was a victory for Ethnic Studies Now, a coalition of students, parents, community activists, and members of United Teachers Los Angeles. Long a staple of college courses, ethnic studies is currently offered at only 19 of 94 LAUSD high schools, reports the union's newspaper. The shortage "flies in the face of a wide body of research that confirms the academic and social benefits of the programs." The full article is available at [www.bit.ly/1z1uAbo](http://www.bit.ly/1z1uAbo) on page 7.

# For the Love of Reading

## Engaging Students in a Lifelong Pursuit



BY DANIEL T. WILLINGHAM

**H**ow should American teens spend their leisure time? I recently asked\* American adults this question, after explaining that the typical teen enjoys approximately five hours of leisure time each weekday.<sup>1</sup> The activity with the highest response, irrespective of race, education, and other demographic factors, was reading. Adults thought teens ought to spend about an hour and 15 minutes reading for pleasure each day.

How much time do teens actually spend reading? On average, six minutes.<sup>2</sup>

What prompts a teen to choose reading over a different activity

*Daniel T. Willingham is a professor of cognitive psychology at the University of Virginia. He is the author of When Can You Trust the Experts? How to Tell Good Science from Bad in Education and Why Don't Students Like School? For his articles on education, go to [www.danielwillingham.com](http://www.danielwillingham.com). This article is adapted with permission of the publisher from his most recent book, Raising Kids Who Read: What Parents and Teachers Can Do. Copyright 2015 Jossey-Bass/Wiley. All rights reserved.*

during her leisure time? Several factors would contribute, surely. Reading will hold little appeal if a student has trouble decoding or has problems with comprehension.

But what if a student is a fluent decoder and generally understands texts that she tackles? What if she just doesn't often choose to read? What might be done to motivate her, both at school and at home?

### The Science of Rewards

In a nutshell, the problem of motivation is this: we want the student to do something we think is important, but she chooses not to do it. That is, of course, not an unusual problem in classrooms, and a potential motivator is some kind of negative consequence.

\*The survey was conducted on MTurk, a website where volunteers can perform brief computer tasks for pay. We paid each of our 313 participants (53.4 percent female, mean age = 35.2 years) 35 cents. All were Americans at least 18 years old. The instructions said, "The average American teenager between the ages of 15 and 19 has 5.1 hours of leisure time on a typical weekday. How would you hope that your child would allocate his or her 5.1 hours (that's 306 minutes) among the following activities? Enter the number of minutes in the box next to each activity." The wording varied so that respondents without a teenage child were asked to answer as if they did.

A student who doesn't do the required work will receive low grades, or perhaps feel guilty for disappointing the teacher, or feel embarrassed should the failure become public. But by the time a student is in middle school, these blades have long lost their edge. Most unmotivated readers have the self-assurance to persuade themselves that reading is not all that important. Teachers and schools are not enthusiastic about punishment in any event, so many turn to rewards as motivators.

We want the student to read, and surely we want reading to be a positive experience. What if I offered a reward? Say I told a fourth-grader, "If you read that book, I'll give you an ice cream sundae!" The student might take me up on the deal, and he'd probably have a positive experience. So won't he then be motivated to read? It sounds so simple that it might be too good to be true.

Rewards do work, at least in the short term. If you find a reward that the student cares about, he will read in order to get it. But what we're really concerned about is his attitude toward reading; we want the student to read even if we're not around to dole out sundaes. Will the reward boost the reading attitude? Research indicates that the answer is probably no.<sup>†</sup> In fact, the reward is likely to make the attitude less positive.

The classic experiment on this phenomenon was conducted in a preschool.<sup>3</sup> A set of attractive markers appeared during free play, and the researchers affirmed that children chose the markers from among many activities. Then the markers disappeared from the classroom. A few weeks later, researchers took children, one at a time, into a separate room. They offered some children a fancy "good player" certificate if they would draw with the markers. Other children were given the opportunity to draw with the markers but were not offered the certificate. After a few more weeks, the markers reappeared during free play in the classroom. The children who got the certificate showed notably less interest in the markers than the children who didn't get the certificate. The reward had backfired: it had made children like the markers less.

The interpretation of the study rests on how children think about their own behavior. The rewarded children likely thought, "I drew with the markers because I was offered a reward to do so. Now here are the markers but no reward. So why would I draw with them?" There have been many studies of rewards in school contexts, and they often backfire in this way.<sup>4</sup>

We can imagine that rewarding children for reading could work as intended in certain circumstances. What if the child has such a positive experience while reading that it overwhelms his thinking that he's reading only for the reward? In other words, the child thinks, "Gosh, I started this book only to get that ice cream sundae, but actually it's awesome. My teacher was a sucker to offer me a

<sup>†</sup>For more on the effectiveness of rewards, see "Should Learning Be Its Own Reward?" in the Winter 2007–2008 issue of *American Educator*, available at [www.aft.org/ae/winter2007-2008/willingham](http://www.aft.org/ae/winter2007-2008/willingham).

sundae as a reward!" That's great when it does happen—and I think it can—but it means that rewards represent a risk. We're gambling that the book is going to be a big hit.

What about praise instead of a reward?† Generally, praise is motivating to children: they will do more of whatever was praised. But praise can go wrong if it's overly controlling ("I'm so glad to see you reading. You really should do that every day.") or if the child thinks it's dishonest ("You are the best reader at school."). But if the praise seems like sincere appreciation, it's motivating. And one of the advantages of praise is that it lacks the downside of rewards. Rewards are usually set up in a bargain before the action: if you read, you'll get ice cream. Praise is generally spontaneous; you don't promise praise contingent on good behavior. That means that the praised child won't think, "I did that only to get the praise," the way the rewarded child thinks, "I did that only

to get the reward." The praised child engages in the desired behavior of her own accord, and then the praise comes spontaneously. The problem is that the child must choose to read on her own before you get a chance to praise her.

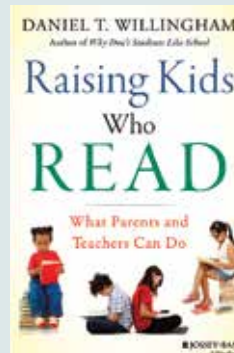
### Rewards in Practice

As I'm sure is clear by now, I'm not a big fan of school-based rewards for reading. That includes classroom displays of reading achievement—for example, posting on a bulletin board the number of books each student has read, or

adding a segment of a class bookworm for each book. To my thinking, it puts too much emphasis on having read rather than on reading. Some students (I was one) will pick easy books to boost their "score." And as a way to recognize student achievement, it doesn't account for student differences; for some, getting through a book in a month may be a real accomplishment, yet they will feel inadequate compared with their peers. Some more formal programs, like Accelerated Reader and Pizza Hut's Book It, try to make up for some of the problems inherent in a

<sup>†</sup>For more on the effects of praising students, see "How Praise Can Motivate—or Stifle" in the Winter 2005–2006 issue of *American Educator*, available at [www.aft.org/ae/winter2005-2006/willingham](http://www.aft.org/ae/winter2005-2006/willingham).

Academic reading feels like work because it is work. But pleasure ought to be the litmus test for reading for pleasure.



*Raising Kids Who Read: What Parents and Teachers Can Do*, by Daniel T. Willingham, is published by Jossey-Bass/Wiley, which is offering a 25 percent discount off the purchase of this book through April 30, 2015. To order, visit [www.wiley.com](http://www.wiley.com) and use discount code AFT25 (offer only valid in North America).

reward system. Books are allocated different points based on difficulty, for example, or each student is assigned a personal, teacher-set reading target.

All in all, I think it's a mistake to be absolutist and say that rewards should never be used. Instead, I suggest they not be the first thing teachers try, and I want educators to be aware of the research literature on potential drawbacks. I know that some districts adapt Accelerated Reader or another program for their own use, ignoring the point system, for example. The research literature on Accelerated Reader in particular is, in fact, mixed.<sup>5</sup> Much appears to depend on how it is implemented.

Such programs bring to mind a conversation I had with a district administrator. Students in her schools come from very poor homes, and she told me that they do not grow up seeing their parents read. A benefactor started a program whereby children earn cash for reading books, and the administrator felt that it was helpful. Children had not been reading, the rewards got them started, and they discovered they really liked to read. I think it would be high-handed and naive to suggest that the district stop the program. In fact, this seems exactly the situation in which to try rewards: when you can't otherwise get a toehold, rewards offer a way to get children to at least try pleasure reading. Children may then discover that they like it, and even when the rewards stop, they keep going.

But if rewards are to be a last resort, what ought to be tried first?

### Academic versus Pleasure Reading

Our goal is to encourage children to read so they can feel the pleasure of reading; rewards are meant to be a temporary incentive to start the process.

What if children don't need rewards? What if they already feel the pleasure of reading, but that feeling gets lost in less positive feelings—feelings created by the other demands of schoolwork? We expect students to feel the joy of reading when they get lost in a narrative or feel the pleasure of discovery when reading nonfiction. But as they move through elementary school and on to middle school, we add other purposes to reading. One purpose is learning: the student is expected to read a text and study it so that he can reproduce the information (e.g., on a quiz). A second purpose is to help complete a task—a project, say—which usually entails gathering information. A third purpose is to analyze how a text works—that is, how the author writes to make the reader laugh or cry. I'll use the umbrella term "academic reading" to contrast these purposes with pleasure reading.

My concern is that children might confuse academic reading with reading for pleasure.<sup>6</sup> If they do, they will come to think of reading as work, plain and simple. Sure, we'd like to think that academic reading is pleasurable, but in most schools, "pleasure" is not a litmus test. The student who tells the teacher, "I tried reading that photosynthesis stuff, but it was too boring," will not be told to find something else she'd prefer. Academic reading feels like work because it is work. But pleasure ought to be the litmus test for reading for pleasure.

I think it's a good idea for teachers to communicate these distinctions to students—not that "most of the reading we're doing is academic and therefore not fun," but that reading serves different purposes and that there is a distinction between academic reading and pleasure reading.

In some classrooms, pleasure reading is segregated from academic reading: we read because we love reading, and then we also learn how to work with texts. But the way pleasure reading is handled can still send a silent message to students that reading is work. Coercion sends that message. If a teacher makes pleasure reading a requirement (10 minutes per night, say) or demands accountability (by keeping a reading log, for example), she risks sending the message that reading is nothing students would do of their own accord.



Setting aside class time for silent pleasure reading seems to me the best way to engage a student who has no interest in reading.

### Pleasure Reading in Class

Drawing a distinction between academic reading and pleasure reading will probably not be enough to get children actually reading. What else might be tried? Schools and teachers can strive to make reading expected and normal by devoting some proportion of class time to silent pleasure reading. Research shows that many reading programs

don't actually allocate much time to reading.<sup>7</sup> Successful programs for silent classroom reading tend to have certain elements in common:<sup>8</sup>

- Students have adequate time set aside for reading; they need at least a 20-minute reading period to get into their books. Teachers set the duration dependent on their students' reading stamina (i.e., how long they can sustain attention).
- Students freely choose what they read. Choice is enormously important for motivation,<sup>9</sup> but there must be teacher guidance and teacher-set limits. Given the chance, some students will pick books that entail no reading at all. (As researcher Nell Duke ruefully noted, "independent reading time" too often turns into "independent find Waldo time.")<sup>10</sup> Teachers must



not only monitor text difficulty, but also ensure that students are exposed to a variety of genres.

- Students have ready access to a good number of books.
- Students have some opportunity to feel a sense of community through reading with book discussions, recommendations, and other sorts of activities that avid adult readers practice.
- The teacher actively teaches during this time: fielding questions, helping students select books, and conferring with students. The alternative is that the teacher reads her own book at the same time as the students, with the idea that she's modeling what a good reader does. But students can't necessarily appreciate what she's doing. Teachers actually teaching during in-class reading time seems to be essential to student success. Some of the most careful experiments indicate that without this feature, students don't benefit from silent reading time in class.<sup>11</sup>

Setting aside class time for silent pleasure reading seems to me the best way to engage a student who has no interest in reading. It offers the gentlest pressure that is still likely to work. Everyone else is reading, there's not much else to do, and a sharp-eyed teacher will notice those who are faking it. Freedom of choice also allows the greatest possibility that when the reluctant reader does give a book a try, he'll hit on something that he likes.

Given that I'm recommending this practice, you probably think there must be good research evidence that it's effective. In truth, I'd say the latest data indicate that it *probably* improves attitudes, vocabulary, and comprehension.<sup>12</sup> Some studies show a positive effect, but some don't.

I think the squishiness of the findings is attributable to the difficulty of the teaching method. I'm sure classroom pleasure reading is easy to implement poorly: stick some books in the room, allocate some class time, and you're done. But the teacher's responsibilities when it's done well are heavy indeed. She must help students select books that they are likely to enjoy. That means really knowing each child, and a middle school teacher likely has more than 100 students. If a teacher is going to be able to confer with students about what they have read, she needs to have read the book herself. Hence, she needs comprehensive knowledge of the literature appropriate to the grade level. And although I've said that silent pleasure reading is a good way to gently persuade reluctant students to give reading a try, let's not pretend this is easy. A sixth-grader who believes that reading is boring has a pretty firm sense of herself as decidedly not a reader; a teacher

must be a skilled psychologist to work around that attitude and help the student be open to reading.

## Reading at Home

I've mentioned that students' reading responsibilities change at school in later elementary years. An important change at home is their greater access to and use of digital technologies. What impact do these have on how much children read and their attitudes toward reading?

Most of the parents I talk to are convinced that digital devices are having a profound and mostly negative impact on reading. The research on this issue is more limited than you might guess. We're predicting a long-term consequence of the use of digital

technologies, but these technologies haven't been available all that long. That said, I think the digital age is having a negative effect on motivation, but not through the mechanism that most parents fear.

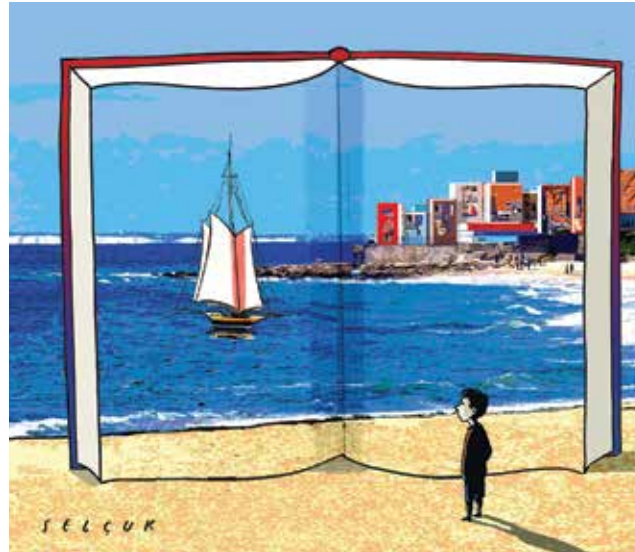
## Concentration Lost

Teachers may think that students today are easily bored because of digital devices.<sup>13</sup> Why? Some observers—including prominent reading researcher Maryanne Wolf—have suggested that habitual web reading, characterized by bouncing from one topic to another and skimming rather than reading, changes the ability to read deeply.<sup>14</sup> Nick Carr popularized this sinister possibility with the question: "Is Google Making Us Stupid?"<sup>15</sup> In that article (and in a follow-up book, *The Shallows*), Carr argued that something had happened to his brain.<sup>16</sup> Years of quick pivots in his thinking prompted by web surfing had left him unable to read a serious novel or long article. That does sound similar to the mental change many teach-

ers believe they have seen in their students in the last decade or two; students can't pay attention, and teachers feel they must do a song and dance to engage them.

I doubt that reading on the web renders us unable to concentrate, and although a formal poll has not been taken, I suspect most cognitive psychologists agree.<sup>17</sup> Yes, video games and surfing the web change the brain. So does reading this article, singing a song, or seeing a stranger smile. The brain is adaptive, so it's always changing.

If the brain is adaptive, couldn't that mean that it would adapt to the need for constant shifts in attention and so maybe lose the ability to sustain attention to one thing? I don't think so, because the basic architecture of the mind probably can't be completely



Teachers must help students select books that they are likely to enjoy.

reshaped. Cognitive systems (vision, attention, memory, problem solving) are too interdependent for that. If one system changed in a fundamental way—such as losing the ability to stay focused on one thing—that change would cascade through the entire cognitive system, affecting most or all aspects of thought. A shorter attention span would not only affect reading, it would affect our ability to reason or solve problems, for example. The brain is probably too conservative in its adaptability for that to happen.

More important, I don't know of any good evidence that young people are worse at sustaining attention than their parents were at their age. Teens can sustain attention through a three-hour movie like *The Hobbit*. They are capable of reading a novel they enjoy, like *The Perks of Being a Wallflower*. So I doubt that they can't sustain attention. But being able to sustain attention is no guarantee that they'll do so. They must deem something worthy of their attention, and that is where digital technologies may have their impact: they change expectations.

## "I'm Bored. Fix It."

Despite the diversity of activities that digital technologies afford, many share two characteristics. First, whatever experience the technology offers, you get it immediately. Second, producing this experience requires minimal effort. For example, if you don't like the YouTube video you're watching, you can switch to another. In fact, the website makes it simple by displaying a list of suggestions. If you get tired of videos, you can check Facebook. If that's boring, look for something funny on TheOnion.com.

Watching television offers the same feature: channels abound on cable, but if nothing appeals, pick something from Netflix. If you have a smartphone—and about 80 percent of teens do—then all these amusements are with you all the time.<sup>18</sup>

The consequence of long-term experience with digital technologies is not an inability to sustain attention. It's impatience with boredom. It's an expectation that I should always have something interesting to watch, read, or listen to, and that creating an interest-

## A Friend in First Book

What started out as a simple book-give-away event has blossomed into a far-reaching partnership to expand access to books for children and families in need. As part of the AFT's 2011 Back to School tour, First Book, a national nonprofit dedicated to donating books and raising the quality of education, gave 1,500 free books to West Side Elementary School in Charleston, West Virginia, during AFT President Randi Weingarten's visit, to stock the school's library.

Since then, more than 50,000 AFT members and community-based programs have registered with First Book to take advantage of its high-quality, low-cost books, educational resources, and school

supplies. Together, the AFT and First Book have also cosponsored hundreds of events across the country to promote literacy and ensure students from low-income families have access to books.

How does First Book make books available to children in need? The nonprofit developed an award-winning distribution model in which it partners with publishing companies to distribute books either for free or at significantly reduced prices. The model relies on several strategies to distribute books. First, there are book banks, in which a publisher donates and ships up to half a million books to a warehouse temporarily donated to First Book. Then there's the First Book Marketplace, where

First Book has purchased at discounted prices 6,500 titles (and growing) that are available online for approximately \$3 each. Here, users can order a specific book for their students, classroom, or school. Check it out at [www.fbmarketplace.org](http://www.fbmarketplace.org).

Recently, the AFT and First Book pioneered another way to promote reading for pleasure among children—book trucks. To bring a truck loaded with more than 40,000 books to their areas, AFT affiliates work with local partners to register 2,000 educators and programs with First Book. Not only do book-truck events bring thousands of books directly to students, they also help build community goodwill and excitement around reading, and new

**Immediate right:** Richard E. Franklin, president of AFT Local 2115 in Birmingham, Alabama, with students receiving books at Daniel Payne Middle School. **Far right:** AFT President Randi Weingarten with students holding new books in Baltimore. **Below:** Students enjoy books from First Book during the AFT's 2012 convention in Detroit.



PHOTOGRAPHS, CLOCKWISE FROM UPPER LEFT: BY JEFF ROBERTS; JOHN HARRINGTON, JIM WEST

ing experience should require little effort. The mind-boggling availability of experiences afforded by digital technologies means there is always something right at hand that one might do. Unless we're really engrossed, we have the continuous, nagging suspicion that "there must be a better way to spend my time than this." That's why, when a friend sends a link to a video titled "Dog goes crazy over sprinkler—FUNNY!" I find myself impatient if it's not funny within the first 10 seconds.

In other words, we're not distractible. We just have a very low threshold for boredom.

And this low threshold is not due to long-term changes in the brain. It's due to beliefs—beliefs about what is worthy of sustained attention and what brings rewarding experiences. Beliefs are difficult to change, but they can be changed.

## The Displacements

There's no time for reading! This idea is not new. It's called the dis-

placement hypothesis, and though it comes in several varieties, the basic idea is that when a new activity (like browsing the web) becomes available, it takes the place of something else we have typically done (like reading). Evaluating whether that's true is tricky because lots of factors go into our choices. For example, if you simply ask, "Does television displace reading?" you're expecting a negative correlation: people who watch more TV read less, and people who watch less TV read more. But research shows that the wealthier you are, the more leisure time you have. So even if television does bite into reading time, we may not see the data pattern we expect because both activities are facilitated by free time.

So has reading been displaced by digital technologies? On balance, the answer seems to be no, although most of the research in this country has focused on adults, not children.<sup>19</sup> Researchers have examined correlations between time spent on the Internet and time spent reading, statistically controlling for other variables like overall amount of leisure time. The correlation in most studies seems to

**WHO CAN SIGN UP WITH FIRST BOOK?**

- SHELTERS & CLINICS
- LIBRARIES & MUSEUMS
- MILITARY FAMILY SUPPORT PROGRAMS
- FAITH-BASED ORGANIZATIONS
- EARLY CHILDHOOD PROGRAMS
- OUT-OF-SCHOOL PROGRAMS
- AND MANY MORE!
- SCHOOLS



PHOTOGRAPH BY JOHN HARRINGTON

school or any program where at least 70 percent of the children come from low-income families, register at [FirstBook.org/AFT](http://FirstBook.org/AFT) to start receiving free or low-cost books, school supplies, and other resources for your students today.

**AFT Secretary-Treasurer Lorretta Johnson and First Book CFO Jane Robinson read to Baltimore students.**

And don't forget to visit [ShareMyLesson.com](http://ShareMyLesson.com), which offers lesson plans, handouts, and classroom materials for elementary, middle, and high school grades that align with books in the First Book Marketplace (see links in the box below).

—EDITORS

users gain access to First Book's low-cost books and resources for years to come.

At recent book-truck events, such as those held in Rochester, Syracuse, and Staten Island, New York, and Lynn, Massachusetts, students and their families were invited to come and choose books to take home. They also received free AFT-developed materials, such as bookmarks with tips on effective ways parents can read to their children.

The AFT-First Book partnership centers on more than just increasing the quantity of books. It also focuses on expanding the quality of books. By combining the AFT's grass-roots reach and First Book's purchasing power, this partnership is achieving

what neither organization could do alone. They are showing publishers the need and market for diverse characters and storylines to help all children see themselves and their own experiences reflected in books, to inspire them to read more. Check out the Stories for All Project on the First Book website to see this ever-expanding list of books.

In four short years, the AFT and First Book have jointly distributed more than 2 million free books. This partnership has taken off because AFT members see First Book as a tangible and easy-to-use way to instill in children a love of reading and learning.

If you work or volunteer in a Title I

## First Book and Share My Lesson

- <http://go.aft.org/SMLFirstBook-EarlyElem>
- <http://go.aft.org/SMLFirstBook-LateElem>
- <http://go.aft.org/SMLFirstBook-Middle>
- <http://go.aft.org/SMLFirstBook-High>



be nil or slightly positive (in the direction opposite that predicted by the displacement hypothesis). Research on television viewing does indicate that heavy viewing (more than four hours each day) is associated with less reading.<sup>20</sup>

Given the enormous amount of time devoted to digital technologies, how is it possible that children don't shove reading aside? One answer is that most people read so little, there isn't much to be shoved aside. In 1999, when they had virtually no access to digital technologies (outside of gaming), children (ages 8 to 18) spent an average of just 21 minutes per day reading books. In 2009, when access was much greater, they averaged 25 minutes.<sup>21</sup> These data are a little deceptive, however, because they are averages. It's not that every child in 1999 read for about 21 minutes. Rather, some read quite a bit and some (about 50 percent) didn't read at all. So for half of kids, there was no chance for digital technologies to displace reading.

For the kids in 1999 who did read, it may be that reading provided a sort of pleasure that digital technologies didn't replace. They liked the fun that digital technologies provide, but it was a different sort of fun than they got from reading. Notably, magazine and newspaper reading did drop during the decade that followed, arguably because that sort of reading can be done on the Internet.

I'm offering a mixed message. Good news: I doubt digital activities are "changing children's brains" in a scary way, and I don't think they soak up reading time. Bad news: they are leading children to expect full-time amusement, and for some, reading time isn't soaked up only because there's little to soak up. It's already dry as a sun-bleached saltine.

Which leads to a rather glum conclusion: most children don't read, and even if digital devices aren't directly absorbing time that might otherwise be devoted to reading, they might be making children expect instant gratification from leisure activities. But don't despair. Parents and teachers can take positive steps that might even tempt a sulky teen to read.

### How Parents Can Help

A lot of students mistakenly believe that reading means books written by dead people who have nothing to say that would be relevant to a teen's life. Nevertheless, students are expected to pore over these authors' words, study them, summarize them, analyze them for hidden meaning, and then write a five-page paper about them. To children, that's reading. It's not contemporary. It doesn't have

characters a student can identify with. It's not nonfiction. It's not magazines or graphic novels.

If a student hates reading, what might tempt her to give it a try? One entry point is a book with a story she already knows, for example, a novelization of a movie she loved. Or perhaps a book of trivia and backstage gossip about a television show she enjoys. Or you might branch out by seeking a book with less familiar content but related to her interests. For example, my niece (along with millions of other teens) got interested in forensic science through the television show *CSI*.

Parents should consider books that *look* fun. A thick book with small print looks intimidating to less-than-confident readers. Go for books that have short chapters or go for graphic novels, which look easy because of the pictures. (But be advised, many are challenging.) Children in their mid-to-late elementary school years might appreciate a collection of a comic strip they enjoy. And older kids may be interested in manga (pronounced mayn-ga), a variety of comic from Japan. Manga are published in just about every genre you can think of: adventure, mystery, horror, fantasy, and comedy, but note that mature themes (sexuality, violence) are not rare.

Another source to consider: websites like Wattpad and Figment. These operate a bit like social networking sites in that users "follow" people who post content. Users can also upvote (or "like") content and comment on it. On these sites, the content is fiction. Amateur writers post stories, hoping to gain an audience. Much of the content is aimed at

teens and preteens, and people often serialize their content; they don't post an entire novel, but rather post a chapter at a time. These bite-size portions might appeal to a reluctant reader—3,000 words can be read on your phone during a bus ride.

Parents may object that this sort of reading material is poorly written and glorifies aspects of popular culture that they find distasteful. That's a judgment call, of course. I would not let my children read material that is misogynistic, racist, or the like. But if my teen avoided all reading, I would be fine with him reading "junk." Before he can develop taste, he must experience hunger. The first step is to open his mind to the idea that printed material is worth his time. I believe parents will further their own goals by showing curiosity about their children's interests rather than disdain. Taking your child seriously as a reader—by, for example, taking a reading recommendation from him—might make him take himself more seriously as a reader.



The consequence of long-term experience with digital technologies is not an inability to sustain attention. It's impatience with boredom.

**Use social connections.** How do students learn about movies they want to see or video games they want to play? Through media advertising and their friends. Save a few highly successful series, there is no advertising for print material. It's all word of mouth, and most kids don't read.

Parents can try to correct this knowledge deficit directly by telling their children about content they think they'd like, but it would likely be more effective for students to hear these things from peers. For adults, reading is often social. Part of the success of Oprah Winfrey's book club is the feeling of being part of a group. Teens are hypersocial, so reading ought to be social for them as well.

Technology can help. There are countless book groups on the web—boards where kids discuss books, trade recommendations, post fan fiction, and the like. Booksellers offer online book reviews and discussions that are heavily populated (see [www.amazon.com/forum/book](http://www.amazon.com/forum/book) and [www.barnesandnoble.com/bookclubs](http://www.barnesandnoble.com/bookclubs)). Social cataloging sites, such as [www.goodreads.com/genres/young-adult](http://www.goodreads.com/genres/young-adult), [www.shelfari.com](http://www.shelfari.com), and [www.librarything.com](http://www.librarything.com), allow users to comment on other people's posts, let others know what they read or plan to read, get recommendations, offer commentary, engage in discussions, and so on. Goodreads also allows the posting of pictures and animated GIFs, which teens do in abundance. And for serious readers, several websites offer reviews, blogs, author interviews, and other information that might provide a welcome home for teens who like reading but don't have friends who do. For example, see [www.readergirlz.com](http://www.readergirlz.com), [www.guyslitwire.com](http://www.guyslitwire.com), and [www.teenreads.com](http://www.teenreads.com).

A child is not likely to dive into one of these communities. The most probable entry point would be through that rare book that does capture her imagination; that's the moment parents should make sure she knows that there are websites where other enthusiasts are discussing the book.

**Make it easy to access books.** Will an electronic reader help motivation? There are a few scattered studies on this question, showing mixed results.<sup>22</sup> Honestly, I'd be surprised if an e-reader made books appealing to a child who hates reading. Pleasure reading is just not that different on an e-reader, and when asked, students say they actually prefer paper; 80 percent who have experience with e-books say they still read print more often.<sup>23</sup>

Yet these same students say they think they would read more if they had access to e-books, and I tend to believe them. I don't think

e-readers make reading more fun, once the device has lost its gee-whiz luster, but an e-reader improves access. Being able to download virtually any book you want as soon as you want it (barring cost considerations) is a great advantage. If a child has just finished book two of a trilogy and is eager to read the final book, or he has just heard from a friend about a fantastic new title, that's when he's most excited to get it. But if he has to wait a few days to get to a bookstore or library, his interest may have moved on to something new. Older students can download an e-reader for their phones.

It's free, and that way they can always have a book with them.



Teens are hypersocial, so reading ought to be social for them as well. Technology can help.

### What Teachers Can Do

A friend of mine works for a program that provides information and services to low-income parents. My friend told me of a young mother saying that she appreciated the books the group had provided for read-alouds and wondered if she could have more. My friend was pleased but surprised, as the mother had already received a large number of books. As they chatted, it became clear that the mother had been discarding each book after her child had heard it once. She didn't know it was permissible (let alone desirable) for her child to hear the same book more than once.

You may have students in your class who have parents like this mother: they want to do the right thing but need a lot of help, down to details of execution that others take for granted. Teachers also tell me of parents who are less open to the idea of a central place for reading in their homes. They did not grow up in reading homes, and they feel that they turned out just

fine. Or they like the idea in principle but are not confident about their own reading. What can teachers do to promote reading in children with parents who don't know how to support it or perhaps aren't eager to do so? I can offer three suggestions.

**Offer parent workshops.** Research shows that telling parents about research-based practices in reading does lead to improvement in children's reading.<sup>24</sup> A team of teachers might develop workshops that:

- Offer information about the impact of parents' attitudes on children's success. Even though literacy is important to a child's success in school, reading at home should focus on pleasure. Teachers should teach; parents don't need to. Parents should support reading as a gateway to pleasure. Research shows that parents who view reading as fun actually have kids who read better than parents who view reading as an academic skill.<sup>25</sup>

- Offer information about how to read to a young child: how to fit it into one's day, what to do when the child is fidgety, how to find interesting books, and so on. For parents of older kids, provide information about how to support the emergent reader: when to offer support and of what sort, how long the child should read, and what sort of material he should read.
- Offer information about how to include more reading in daily life—for example, encouraging the child to bring a book for the ride to school—and suggestions for ways to reduce television watching and video gaming.

If workshops are to have an impact, parents must attend, so organizers might consider ways to make it as easy as possible for parents to do so. In addition to good publicity, strategies might include providing childcare, holding the workshop on the first floor so parents with strollers aren't thwarted, and scheduling with sensitivity to working hours (or better, scheduling the same workshop at different times). Organizers might also consider an initial parent-child event that has nothing to do with reading at all but is meant only to establish the school as a welcoming place. I visited a school that held a mother-daughter nail-art night for this purpose.

**Provide books.** Suppose you simply gave kids free books? Would they read them, and would their reading improve? Research on the impact of free-book programs has typically focused on the summer months because that's when kids who don't read really fall behind those who do.<sup>26</sup> It's a special problem for low-income kids,<sup>27</sup> as they don't have the access to books (either at home or at libraries) that wealthier children do.<sup>28</sup> Summer school programs meant to encourage kids to read at home are known to be effective,<sup>29</sup> but they are expensive.

The less expensive alternative is to provide books and hope for the best, and there is some indication that doing so does prompt reading and, in turn, boosts reading skills.<sup>30</sup> As you might guess, free-book programs seem to have a bigger impact on low-income kids than middle-income kids.<sup>31</sup>

A number of organizations provide free books to children in need (see the box on page 13). A small team of teachers might take on the task of contacting these organizations to procure books that can be distributed directly to students.

**Plant a seed.** Even if parents won't come for a workshop, you can still use the brief snippets of time you have with them to try

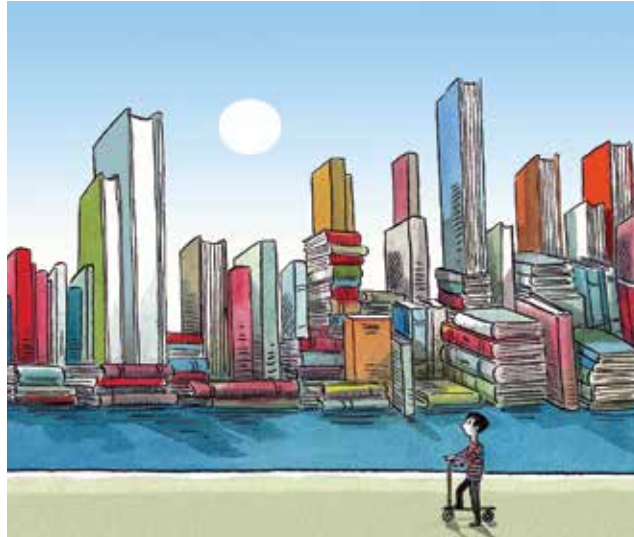
to plant a literacy seed: if they come for a parent-teacher conference, great, but if not, perhaps it's an opportune moment at pickup when the child is struggling into his jacket. What might such a seed be? If parents seem very reluctant to accord a larger role for literacy, a greater emphasis on conversation at home may lay the groundwork for literacy later.

Much has been written about the importance of talking to children, but the dictate "talk to your kids" says nothing about the quality of the speech.\* Child-directed talk composed mostly of directions (e.g., "Go get me the milk") or prohibitions (e.g., "Stop that") is not what we have in mind, but that may be what the child receives if a parent sees conversation with children as frivolous. A way around this is to suggest that parents share with their children stories of their own childhood. Stories provide structure for extended talk that is social, family-oriented, and not directive. From about age 5 until pubescence (and sometimes into the teen years), children often enjoy hearing stories that verify the remarkable fact that their parents were once young.

Another option is to suggest that parents ask their child questions. Hearing adult speech is a useful model, but the child also needs practice in formulating and expressing her ideas. In addition, asking questions sends an important implicit message about the nature of speech. The parent who uses speech mostly

to tell his child what to do silently communicates to the child that the purpose of language is to make one's wishes known to others. The parent who asks questions shows that another purpose of language is to gain new information, to learn things from others.<sup>32</sup> It's a way to model curiosity.

A natural topic for questions is what happened during the school day. Teachers can help by letting parents know when a student was particularly excited about some work during the day, and suggesting that the parent ask about it. For willing parents, a teacher could even arrange to make such communications regular, for example, by sending a text message every few days that tells parents something about classroom life that they could ask their children about: which book was read aloud, for example, or what the writing prompt was that day.



## Telling parents about research-based practices in reading does lead to improvement in children's reading.

\*For more about the word gap between low-income and more-affluent children, see "The Early Catastrophe" in the Spring 2003 issue of *American Educator*, available at [www.aft.org/ae/spring2003/hart\\_risley](http://www.aft.org/ae/spring2003/hart_risley).

What parents and teachers really want for children is to experience reading pleasure. What sort of reading pleasure? For me, reading affords a pleasure of understanding. Food writer Ruth Reichl, for example, can snare in words the elusive subtleties in the flavor of *toro*. Other writers make me understand things about myself, not always appealing things. After reading the memoir *Clear Pictures*, I remember reflecting on how lucky Reynolds Price was to have grown up among such wise and interesting people, only to realize that it was Price's acumen and sensitivity that made them so; had I known them, I would likely have missed their finest qualities. As an adult, I get great satisfaction from, at long last, coming to a better understanding of ideas that I've often encountered but only dimly comprehended; most recently, it's been the tensions among the founders of the United States.

An altogether different sort of pleasure comes from being carried to distant times and places when I read. How better to see the French Riviera during the 1920s than through the debauched, exhausted eyes of Dick Diver in *Tender Is the Night*? How could I enter the alternately solemn and boisterous world of New York's Hasidim if Chaim Potok did not take me there? And then too sometimes the pleasure lies not in the charms of a new world but in escape from my own. During graduate school, I read Herman Wouk's two-volume World War II epic *The Winds of War* and *War and Remembrance* nearly daily at lunch; I used it like worry beads to manage the anxiety consequent to my demanding academic program.

I maintain that these joys cannot be experienced through television or other media. Only reading elicits *your* contribution to the experience by demanding that you mentally create the world described. Only fiction demands that you live with the characters as long or as deeply. And with few exceptions, prose stylists show greater love of language than artists in other media.

I want my children—and yours—to experience those joys, or ones like them. And that's the goal you must keep in the forefront of your mind. As someone who has spent all of his professional life around 18- to 22-year-olds, I'll offer my impression as to what causes the greatest conflict between parents and teens: Parents are under the impression that they want their children to be happy. Children are under the impression that their parents want them to be happy the way their parents think they ought to be happy.

The danger lies in children feeling pressured and unhappy about reading. Remember that your goal is that they enjoy reading, not that they enjoy reading as you do. □

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## Resources for Free Books

### First Book

([www.firstbook.org/AFT](http://www.firstbook.org/AFT))

First Book is a national nonprofit focused on providing free and low-cost books to low-income children. So far, the organization has distributed more than 125 million books. Publisher-donated books are free if you can pick them up; otherwise, shipping costs 35 to 50 cents per book. (For more about First Book and its partnership with the AFT, see page 8.)

### Kids Need to Read

([www.kidsneedtoread.org](http://www.kidsneedtoread.org))

Kids Need to Read provides books to underfunded schools, libraries, and literacy programs, especially those serving disadvantaged children.

### Library of Congress Surplus Books Program

([www.loc.gov/acq/surplus.html](http://www.loc.gov/acq/surplus.html))

The Library of Congress gives away surplus books to schools and other eligible organizations. Often, only a small fraction of available books are appropriate for K–12 students, and the Library of Congress does not ship books; someone must retrieve them in person. Still, it might be worth exploring if you work in the Washington, D.C., area or can identify a volunteer there to pick them up.

### Reading Resource Project

([www.lefbooks.org/reading\\_resource\\_project/](http://www.lefbooks.org/reading_resource_project/))

The Reading Resource Project, managed by the Literacy Empowerment Foundation, makes books available to schools for 78 cents per book. Books are available for grades preK–3 and in English and Spanish.



—D.T.W.

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(Continued on page 43)

# Quieting the Teacher Wars

What History Reveals about an Embattled Profession



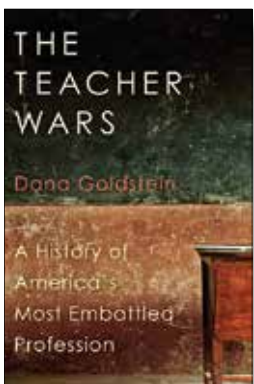
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BY DANA GOLDSTEIN

I began writing my book *The Teacher Wars* in early 2011 with a simple observation: Public school teaching had become the most controversial profession in America. Republican governors in Wisconsin, Ohio, and Indiana, and even the Democratic governor of deep-blue Massachusetts, sought to diminish or eliminate teachers' rights to collectively bargain. Teacher tenure was the subject of heated debate in statehouses from Denver to Tallahassee, and President Obama swore in his State of the Union address to "stop making excuses" for bad teachers.<sup>1</sup>

One rising-star Republican, New Jersey Governor Chris Christie, even became a conservative folk hero after appearing in a series of YouTube videos in which he excoriated individual public school teachers—all of them middle-aged women—who rose at public events to challenge him on his \$1 billion in education budget cuts, even as he cut \$1.6 billion in corporate taxes.

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Clockwise from left: A teacher and her integrated kindergarten class in Washington, D.C., in 1954; long before his presidency, Lyndon B. Johnson with his first pupils in Cotulla, Texas, in 1928; Susan B. Anthony and W. E. B. Du Bois, both of whom also taught.

Few other professions operate under this level of political scrutiny. In 2010, *Newsweek* published a cover story called "The Key to Saving American Education." The image was of a blackboard, with a single phrase chalked over and over again in a child's loopy handwriting: *We must fire bad teachers. We must fire bad teachers. We must fire bad teachers.* Wide-release movies like *Waiting for "Superman"* and *Won't Back Down*, funded by philanthropists who made their fortunes in the private sector, portray teacher tenure and its defender, teachers unions, as practically the sole causes of underperforming schools.

Everywhere I traveled as an education reporter, from the 2008 Democratic National Convention to the 2010 meeting of former president Bill Clinton's Clinton Global Initiative, powerful people seemed to feel indignant about the incompetence and job security of public school teachers, despite polls showing that the American public considers teachers highly respected professionals, nearly on par with medical doctors.<sup>2</sup>

To an extent, anxiety about bad teaching is understandable. Teachers do work that is both personal and political. They care for and educate our children, for whom we feel a fierce and loyal love. And they prepare our nation's citizens and workers, whose wisdom and level of skill will shape our collective future. Given that teachers shoulder such an awesome responsibility, it makes sense that American politics is acutely attuned to their shortcomings.



So I want to begin by acknowledging: It is true that the majority of American teachers have academically mediocre backgrounds. Most have below-average SAT scores and graduate from nonselective colleges and universities.<sup>3</sup> It is also true that one large review of practices within typical American elementary school classrooms found many children—and the majority of poor children—“sitting around, watching the teacher deal with behavioral problems, and engaging in boring and rote instructional activities such as completing work sheets and spelling tests.”<sup>4</sup>

In the Obama era, the predominant policy response has been a narrow one: to weaken teachers’ tenure protections and then use “measures of student learning”—a euphemism for children’s scores on an ever-expanding battery of hastily designed tests—to identify and fire bad teachers. One Colorado teacher told me (hyperbolically) that the disproportionate focus on punishing awful teachers made her feel “I’ve chosen a profession that, in the public eye, is worse than prostitution.”

A spate of online videos and blog posts, in which angry teachers publicly quit their jobs, has gone viral. “I can no longer cooperate with a testing regime that I believe is suffocating creativity and innovation in the classroom,” wrote Ron Maggiano, a Virginia high school social studies teacher and winner of two national teaching awards. In Illinois, Ellie Rubenstein tendered her resignation via YouTube, explaining, “Everything I loved about teaching is extinct. Curriculum is mandated. Minutes spent teaching subjects are audited. Schedules are dictated by administrators. The classroom teacher is no longer trusted or in control of what, when, or how she teaches.”<sup>5</sup>

Olivia Blanchard chose to leave her Teach for America placement in Atlanta, where hundreds of thousands of dollars in merit pay bonuses had been paid to administrators and teachers who cheated by erasing and correcting students’ answers on standardized tests before submitting them to be graded. After a round of indictments, those teachers who remained in the district were left demoralized and paranoid. When Blanchard clicked send on her resignation e-mail, she was “flooded with relief,” she recounted in *The Atlantic*.<sup>6</sup>

Blanchard, Maggiano, and Rubenstein represent a larger trend. Though polls show teachers feel more passionate and mission-driven about their careers than other American professionals, a MetLife survey of teachers found that between 2008 and 2012, the percent who reported being “very satisfied” with their current job plummeted from 62 to 39 percent, the lowest level in a quarter century.

## History Repeating Itself

I had assumed this war over teaching was new, sparked by the anxieties of the Great Recession. After all, one-fifth of all American children were growing up poor—twice the child poverty rate of

England or South Korea. Young adults were suffering from a 17.1 percent unemployment rate, compared with less than 8 percent in Germany and Switzerland. More than half of recent college graduates were jobless or underemployed for their level of education.<sup>7</sup> A threadbare social safety net, run-amok bankers, lackadaisical regulators, the globalization of manufacturing, and a culture of consumerism, credit card debt, and short-term thinking might have gotten us into this economic mess. But we’d be damned if better teachers couldn’t help to get us out. “Great teachers are performing miracles every single day,” Secretary of Education Arne Duncan said in 2009. “An effective teacher? They walk on water.”<sup>8</sup> The rhetoric could provoke whiplash. Even as we were



A classroom in New York City's Lower East Side, circa 1886

PHOTOGRAPH © BETTMANN/CORBIS

For 200 years, the American public has asked teachers to close troubling social gaps.

obsessed with the very worst teachers, we were worshipping an ideal, superhuman few.

This confusing dichotomy led me to wonder: Why are American teachers both hated and idealized, when teachers in other nations are much more universally admired? In South Korea, teachers are referred to as “nation builders.” In Finland, both men and women name teaching as among the top three most desirable professions for a spouse. Meanwhile, that old American saw—“Those who can’t do, teach”—continues to reverberate, reflecting elite condescension toward career educators.

I suspected that the key to understanding the American view of teachers lay in our history, and perhaps had something to do with the tension between our sky-high hopes for public education as the vehicle of meritocracy and our perennial unwillingness to fully invest in our public sector, teachers and schools included.

For 200 years, the American public has asked teachers to close troubling social gaps—between Catholics and Protestants; new immigrants and the American mainstream; blacks and whites; poor and rich. Yet every new era of education reform has been characterized by a political and media war on the existing teachers upon whom we rely to do this difficult work, often in the absence of the social supports for families that make teaching and learning most effective for kids, like stable jobs and affordable housing, childcare, and healthcare.

The 19th-century common school reformers depicted male teachers—90 percent of the classroom workforce in 1800—as sadistic, lash-wielding drunks who ought to be replaced by kinder, purer (and cheaper) women. During the Progressive Era, it was

working-class female teachers who were attacked, for lacking the masculine “starch” supposedly necessary to preside over 60-student classrooms of former child laborers. In the South during the civil rights era, *Brown v. Board of Education* prompted the racially motivated firings of tens of thousands of black teachers, as the Eisenhower, Kennedy, Johnson, and Nixon administrations looked the other way. Then, at the height of the Black Power movement in the 1960s and 1970s, it was inner-city white teachers who were vilified, for failing to embrace parental control of schools and Afrocentric pedagogical theories.

Over the course of history, teachers have been embattled by politicians, philanthropists, intellectuals, business leaders, social scientists, activists on both the right and left, parents, and even by

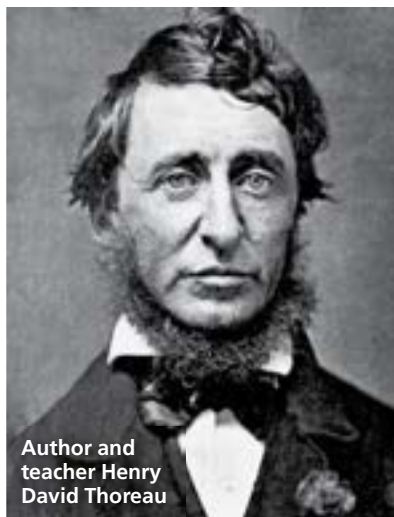
on poor people of color, today’s “bad teacher scare” employs all the classic features of a moral panic.

According to sociologists who study these events, in a moral panic, policymakers and the media focus on a single class of people (in our case, veteran public school teachers) as emblems of a large, complex social problem (socioeconomic inequality, as evidenced by educational achievement gaps). Then the media repeats, ad nauseam, anecdotes about the most despicable examples of this type of person (such as “rubber room” teachers, who collect pay, sometimes for years, while awaiting termination hearings on accusations of corporal punishment or alcoholism). This focus on the worst of the worst misrepresents the true scale and character of what may be a genuine problem.<sup>9</sup>

As a result, the public has gotten the message that public school teaching—especially urban teaching—is a broadly failed profession. The reality is concerning, but on a more modest scale: teacher-quality advocates estimate that somewhere between 2 and 15 percent of current teachers cannot improve their practice to an acceptable level and ought to be replaced each year.<sup>10</sup>

Far from confirming the perception that low-performing urban schools are uniformly bleak, talentless places, the latest research quantifies what history shows: that even the highest-poverty neighborhood schools in cities like New York and Los Angeles employ teachers who

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Author and teacher Henry David Thoreau

PHOTOGRAPH BY BENJAMIN D. MAXHAM

one another. Americans have debated who should teach public school, what should get taught, and how teachers should be educated, trained, hired, paid, evaluated, and fired. Though we’ve been arguing about these questions for two centuries, very little consensus has developed.

Amid these teacher wars, many extraordinary men and women worked in public school classrooms and offered powerful, grassroots ideas for how to improve American education. Henry David Thoreau, Susan B. Anthony, W. E. B. Du Bois, and Lyndon B. Johnson are just a few of the famous Americans who taught. They resisted the fantasy of educators as saints or saviors, and understood teaching as a job in which the potential for children’s intellectual transcendence and social mobility, though always present, is limited by real-world concerns such as poor training, low pay, inadequate supplies, inept administration, and impoverished students and families. These teachers’ stories, and those of less-well-known teachers, propel this history forward and help us understand why American teaching has evolved into such a peculiar profession, one attacked and admired in equal proportion.

### A Moral Panic

Today the ineffective tenured teacher has emerged as a feared character, a vampiric type who sucks tax dollars into her bloated pension and healthcare plans, without much regard for the children under her care. Like past conflagrations over crack babies or welfare queens, which exemplified anxiety over public spending

produce among the biggest test score gains in their regions. What’s more, veteran teachers who work long term in high-poverty schools with low test scores are actually more effective at raising student achievement than is the rotating cast of inexperienced teachers who try these jobs out but flee after one to three years.<sup>11</sup>

The history of American education reform shows not only recurring attacks on veteran educators, but also a number of failed ideas about teaching that keep popping up again and again, like a whack-a-mole game at the amusement park. Over the past 10 years, cities from Atlanta to Austin to New York have experimented with paying teachers bonuses for higher student test scores. This type of merit pay was attempted in the 1920s, early 1960s, and 1980s. It never worked to broadly motivate teachers or advance outcomes for kids.

For over a century, school reformers have hoped that tweaking teacher rating systems would lead to more teachers being declared unfit and getting fired, resulting in an influx of better people into the profession. But under almost every evaluation system reformers have tried—rating teachers as good, fair, or poor; A, B, C, or D; satisfactory or unsatisfactory; or highly effective, effective, developing, or ineffective—principals overburdened by paperwork and high teacher turnover ended up declaring that over 95 percent of their employees were just fine, indeed.<sup>12</sup> Fast-track teacher training programs like Teach for America, the Great Society-era Teacher Corps, and the 19th-century Board of National Popular Education are likewise a perennial feature of our school reform

landscape. They recruit ambitious people to the classroom, but on a small scale, and do not systemically improve instruction for kids.

History also shows that teacher tenure has been widely misunderstood. It is true that tenure protections make it costly, in both time and money, for schools to fire veteran teachers. That is because due process rights allow tenured teachers accused of poor performance to “grieve” their evaluations and terminations to an arbitrator, who can rule to send them back to the classroom.

Yet tenure predates collective bargaining for teachers by over half a century. Administrators granted teachers tenure as early as 1909, *before* unions were legally empowered at the negotiating table to demand this right. During the Progressive Era, both good government school reformers and then-nascent teachers unions supported tenure, which prevented teaching jobs from being used as political patronage and allowed teachers to challenge dismissals or demotions, once commonplace, based on gender, marital status, pregnancy, religion, ethnicity, race, sexual orientation, or political ideology. Tenure has long existed even in southern states where teachers are legally barred from collective bargaining.

Today it is usually assumed that teachers enjoy much more job security than workers in the private sector. Even if we set aside the nearly 50 percent of all beginner teachers who choose to leave the profession within five years—and ignore the evidence that those who leave are worse performers than those who stay—it is unclear whether teachers are formally terminated for *poor performance* any less frequently than are other workers. In 2007, the last year for which national data is available, 2.1 percent of American public school teachers were fired for cause, a figure that includes tenured teachers. Compared with federal workers, whom one study found are fired at an annual rate of .02 percent, teachers are exponentially more likely to be terminated. There is no comparable data from the private sector, because the Bureau of Labor Statistics groups layoffs with firings. But in 2012, companies with over a thousand employees, the closest private counterpart to large urban school systems, lost only about 2 percent of their workforce from firings, resignations, and layoffs combined.<sup>13</sup>

In some recent years, the number of new teachers hired—about 200,000 per year—equaled the total number of American college graduates minted by selective institutions (those that accept fewer than half of their applicants). The National Council on Teacher Quality estimates that high-poverty schools alone hire some 70,000 new teachers annually.<sup>14</sup> Reformers sometimes claim that this huge demand for teachers is driven by overaggressive class size limits, and they argue for decreasing the number of teachers while raising class sizes and recruiting a smaller, more elite group to the profession.<sup>15</sup> But the leading teacher demographer, Richard Ingersoll of the University of Pennsylvania, has shown that the decrease in average elementary school class sizes since 1987, from 26 to 21 children, does not fully explain the “ballooning” of the teaching force.<sup>16</sup>

According to Ingersoll, there are two other factors that together account for a larger part of the change: first, the explosion in the number of students with high-needs special education diagnoses, such as autism spectrum disorders, and second, the increase in the number of high school students who enroll in math and science courses. Those trends are not likely ones we can or should

reverse. While teacher prep programs in regions with an oversupply of teachers should raise their admission standards or shut down, calls for 100 percent of American teachers to hail from selective colleges are, frankly, absurd—especially if we also lay off the bottom, say, 2 to 15 percent of teachers each year (66,000 to 495,000 people), as some reformers would like. Currently, just 10 percent of teachers come from the most selective colleges.<sup>17</sup>

Moreover, with the possible exception of high school-level math teachers, there is little evidence that better students make better teachers.<sup>18</sup> Some nations, such as Finland, have been able to build a teaching force made up solely of star students. But other places, such as Shanghai, have made big strides in student achievement without drastically adjusting the demographics of who becomes a teacher. They do it by reshaping teachers’ working days so they spend less time alone in front of kids and more time planning lessons and observing other teachers at work, sharing best practices in pedagogy and classroom management.<sup>19</sup>

I have great sympathy for educators. American public school teaching has typically attracted individuals taking their first, tentative steps out of the working class, and one of them was my maternal grandfather, Harry Greene, a high school dropout. In his first career as a printer, he led a drive to organize a union at a nonunion shop, and for a while the fallout from that made it difficult for him to find work. When he was 52 years old, Harry finally earned an associate’s degree, and in 1965 began teaching vocational courses in New York City public high schools.

My dad, Steven Goldstein, was another first-generation college graduate who became a public school teacher. Always the jock (he attended Adelphi University on a soccer scholarship), my dad discovered he had a passion for history, too, and taught middle and high school social studies for 10 years before going into school administration, because he wanted to earn more money.

For me, the hostility directed at veteran teachers never rang true. In addition to being the daughter and granddaughter of educators, I attended public schools in Ossining, New York, with a diverse group of white, black, Latino, and Asian classmates. A few parents, like my mom, commuted down the Hudson River to New York City for corporate jobs; others were single mothers on public assistance or line cooks in the kitchen of our town’s maximum-security prison, Sing Sing. But regardless of whether they were college professors or home health aides, the most involved parents in Ossining wanted their kids in the classrooms of the most experienced teachers. My junior year math teacher, Mr. DiCarlucci, wore a full suit and tie every day, accessorized with blingy gold jewelry. Though he taught precalculus, he assigned research papers on high-level concepts like topology, to inspire us to stick with math over the long term. The white-haired Mr. Tunney guided English classes through dense classics like *All the King’s Men* with uncommon energy drawn from his infectious love for the books he taught. When teachers like that retired, the entire community mourned.

When I began reporting on education in 2007, I quickly learned how lucky I had been. Most American schools are socioeconomically segregated, very little like the integrated schools I attended in Ossining, where highly qualified teachers aspired to build long careers and to teach both middle-class and poor children. In 2005,

*(Continued on page 44)*

# You Are Embarked

How a Philosophy Curriculum Took Shape and Took Off



BY DIANA SENECHAL

Outdoors, the wind blew and the rain fell. Indoors, 10th-graders wrestled with Blaise Pascal’s Wager—his argument that one has everything to gain and little to lose by choosing to believe in God. “Yes, but you must wager,” he writes. “It is not optional. You are embarked.”<sup>1</sup> He then uses an early version of mathematical probability to demonstrate that one is better off believing.

I looked at the students poring over the text—underlining passages, raising their hands, commenting to their peers—and I saw that they themselves were embarked, although in a different way. They had chosen to take the philosophy course seriously. A few years ago, when I began teaching at Columbia Secondary School for Math, Science, and Engineering, I could not take this for granted.

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Some students took enthusiastically to my courses; others chatted in class or complained that I didn’t give them enough fun things to do. Now, the vast majority showed interest in class and turned in their work; many contributed to the school’s philosophy journal and took part in philosophy roundtables. In addition, students now in college have commented that the philosophy courses have helped them with all of their work by introducing them to seminal ideas, modes of argument, and an intellectual way of life.

If someone had told me five years ago that I would be a high school philosophy teacher, I would have been astounded and thrilled. At age 12, I began taking Latin and Greek at school; soon after, I read ancient philosophers in the original and in translation. In college, I studied Russian literature and took electives in European intellectual history, African American intellectual history, Renaissance thought, and other topics involving philosophy; in graduate school, I dug into Russian philosophy, theology, linguistics, and mythology for my dissertation and other work. Later, teaching English as a second language in middle school in Brooklyn, New York, I introduced my students to Plato, Aristotle, and Augustine; my book, *Republic of Noise: The Loss of Solitude in Schools and Culture*, devotes much atten-

tion to philosophical ideas and texts.\* Yet until 2011, I did not know that it was possible to teach philosophy in a public school.

## A Brief History

Columbia Secondary School's philosophy program dates to the school's beginnings in 2009. The founding principal, José Maldonado-Rivera, envisioned a philosophy curriculum throughout the grades (6–12). In the school's initial years, the scholar and educator Paul Thomson spearheaded the program and brought a lively dialogical spirit to the classes; teachers, graduate students, researchers, and others took part in the work. Thomson left the school in 2011 and died in 2013; the first issue of our philosophy journal, *CONTRARIWISE*, is dedicated to his memory.

The philosophy program is intended to enrich students' overall education by introducing them to argument, questioning, and rich philosophical works. In addition, philosophy serves to connect sciences with humanities and foster dialogue within the school's diverse community. Columbia Secondary School is a selective public school in New York City with a highly diverse student body. Approximately 46 percent of the students identify as Hispanic, 21 percent as African American, 18 percent as white, and 13 percent as Asian; the students come from numerous nationalities and speak a range of languages at home. Approximately 56 percent qualify for free or reduced-price meals. The school has a partnership with Columbia University, through which qualified students may take Columbia and Barnard courses.

After its promising beginnings, the school suffered tragedy and turmoil: a student drowned on a field trip to a beach, the principal was eventually removed, and there was much staff and student turnover. In September 2011, Miriam Nightengale came on board as the new principal; she hired me as a part-time curriculum adviser. (Miriam is a staunch supporter of strong curricula and has an unusually rich background in humanities and mathematics.) The philosophy program was in flux; the original philosophy staff had departed or was soon to depart, and courses were left without clear direction. Part of my job was to address this. Given the instability of the department at the time, I soon realized that the best approach would be to write a curriculum myself.

To start out, I designed and cotaught a unit on the "Good Life" (with readings from Plato, Seneca, Tolstoy, and Chesterton); seeing how well the students responded, I offered to write and teach the entire high school philosophy curriculum. I designed a series of courses: Rhetoric and Logic (grade 9), Ethics and Aesthetics (grade 10), and Political Philosophy (grade 11). In 2012–2013, I taught them all; in subsequent years, I handed two of the courses over to other teachers. Once we had a 12th grade, my colleague Ari Rubin taught Literature of Existentialism, which he developed from a course by the acclaimed educator Ruthie Stern. The middle school teachers worked out their own philosophy curriculum, which was integrated with English or social studies. By the fall of 2013, we had philosophy courses throughout the grades, in fulfillment of the original vision.

This dream position was not always pleasant. In 2012–2013, I had 260 students in all (and was still on a part-time schedule). I took piles of assignments home to grade and, like many dedicated

teachers, put in far more unpaid than paid hours. Students, too, had to adjust to the new workload; I was asking them to read and write about challenging works. Students were not willfully disruptive, but they were unused to the kind of focus required. Those who chatted during class made it difficult for others to pay attention. There were days when I could not bring quiet to the room and went home in tears.

As the months passed, I saw something remarkable taking shape. In the students' discussion and writing, I saw eloquence, struggle, wit, and dedication. Some students discovered a new interest in philosophy; others developed their interest further. Sometimes their writing was so funny and surprising that I roared with laughter; at other times, their errors helped me improve my

## The philosophy program introduces students to argument, questioning, and rich philosophical works.

lessons. In short, I had to trust in the good that was happening and strive to build on it. Yet to do so, I had to resist many pedagogical trends.

## Teaching Philosophy

There is currently great prejudice against so-called traditional teaching. Many characterize such teaching as routine and retrograde: the students sit passively and take notes, while the teacher tells them what to think and say. To counteract such passivity, classroom evaluation rubrics (for teachers and schools) favor group work, student activity, and student talk.

The problem is that to teach something substantial, you need to make room for thinking about it. Thinking is by no means passive; a student listening to a teacher may have questions, counterpoints, realizations, and much more. It is true that if the teacher talks the entire time, students may fall into passivity—but it is possible, within a so-called traditional framework, to ask the students to listen, engage in dialogue, and think on their own. In some ways, such a framework creates more room for thought than a setup where everyone works in groups and the room is filled with talk. I chose a traditional approach with many variations.

In addition, I had to resist pressure to hold frequent debates. At the outset, many of my students asked why we didn't "just have a debate." I responded that debates had a place but should not replace the careful consideration of an idea. Too often, debaters focus on out-arguing (sometimes even out-shouting) the other side instead of seeking truth. Debate carries great benefits—it can bring out the students' logic and ingenuity—but if the students do not have a foundation of knowledge, it can quickly become reductive.

\*For more on this book, see "The Cult of Success" in the Winter 2011–2012 issue of *American Educator*, available at [www.aft.org/ae/winter2011-2012/senechal](http://www.aft.org/ae/winter2011-2012/senechal).

So I told the students that I would gladly have debates but that they would not be our primary mode of discussion. Instead, I wanted students to take part in sustained dialogue about the texts and ideas.

One day, when I was introducing students to Kant's *Groundwork of the Metaphysics of Morals*, I took them to the passage where he discusses suicide. A student asked, "Can't we debate suicide?" I explained that if we actually considered what Kant was saying, we would have a basis for discussing the topic. Kant maintains that, when contemplating an action, one should consider whether one would want the *maxim* behind it to become universal moral law. Thus, if one is contemplating suicide because one feels miserable, one should ask: "Could the following maxim serve as universal moral law: that a person who feels profoundly miserable should, out of self-love, end his or her life?" Kant saw such a principle as self-contradictory; self-love, which by essence seeks to promote



life, cannot also seek to bring life to an end. Students may disagree with Kant—but only after grappling with his argument. The argument goes far beyond the assertion that "suicide is immoral" or "suicide should not be allowed"; it involves a method for evaluating such a question. (Kant's argument has flaws, of course—and I welcomed discussion of those.)<sup>2</sup>

A few students continued to press for a debate on suicide, and I continued to push back. One day, a student asked, yet again, "Why can't we just debate this?" Exasperated, I replied: "In a debate, there are two sides—and I want you to go beyond thinking in terms of two sides. I want you to see what's actually in this text, and to consider how it influences your own ideas. We could go back and forth for days about whether suicide is ever justified—but here Kant is offering a way of thinking about the issue. If we have a debate now, it will be opinion versus opinion—but if we consider Kant first, then we'll have something to debate at another level. My responsibility is to help you reach that new level. I will not do otherwise." Students looked up in surprise. A student near the front muttered, "Never argue with your philosophy teacher." (He meant this as a joke, as he was one of the liveliest arguers.)

It was probably then that I realized we were embarked, that there

was something worth sustaining and building. I was not giving the students exactly what they wanted—and here some educators might criticize me—but I was also listening carefully to them. My point was not to ignore their interests but rather to help give them shape. I insisted that if students could consider a philosophical text or idea in depth, they would be in a better position to pursue creative projects of their choosing.

A year and a half later, in February 2014, my students' philosophy journal, *CONTRARIWISE*, arrived from the printer in big boxes. The name, inspired by the words of Tweedledee in Lewis Carroll's *Through the Looking-Glass*, connotes both playfulness and argumentation. The idea for an annual journal came about in September 2013, when I was reading my students' continuations of Book VIII of Plato's *Republic*, in which they imagined what would follow after tyranny. Their writing was so imaginative and insightful that I thought it should be preserved. I asked by email whether they would prefer a booklet or a journal; the responses were so enthusiastic that I knew this had to happen. (One student, who soon afterward became one of the two editors in chief, wrote, "Journal! Totally journal!") The work took off from there.

Five months after the journal's beginnings, the editors in chief opened the first box and took the beautiful books in their hands. The excitement spread quickly throughout the school. The students could now see the results of their writing, editing, editorial decisions, artistic work, last-minute inspiration, and much more. It was no ordinary journal; in addition to the lively selection of essays, stories, poems, dialogues, and letters, it had an "Infrequently Asked Questions" page, a "Cast & Crew" page, a fake mathematical proof, an absurd index, and many other touches. Through the journal, the students had taken philosophy into their hands and shown themselves and others what was possible. The second issue, published in early March 2015, features an international writing contest.\*

## Challenging Texts

How does one go about teaching philosophy at the high school level? I will try to answer this question by describing the curriculum and reflecting on the program as a whole. I do not claim to have the last word on the subject; other teachers of high school philosophy may have markedly different approaches. All I offer here is some insight into what has gone well.

When I first began drafting ideas in the spring of 2012, someone asked me why I chose to have students read philosophical texts. After all, many textbooks and workbooks had summaries of philosophers' views; wasn't that sufficient for students at this age? I replied, "But the texts are interesting and beautiful." It hadn't occurred to me that anyone would consider them too cumbersome for teens.

Without reading the original text, how could students ever come to appreciate Thrasymachus's great challenge to Socrates in Book I of Plato's *Republic*? How could they understand Socrates's response (which arguably fills the remainder of the work)? When would they have a chance to read beautiful passages like this (from Saint Augustine's *Confessions*)?<sup>3</sup>

\*For the *CONTRARIWISE* international contest, students around the world were invited to imagine their favorite cultural dish as its own nation and then describe its struggle with a philosophical problem. The winning entries and honorable mentions (who hail from the United States, Italy, China, Turkey, and the United Kingdom) were published in the second issue of *CONTRARIWISE*.

And what is the object of my love? I asked the earth and it said: 'It is not I.' I asked all that is in it; they made the same confession (Job 28: 12f.). I asked the sea, the deeps, the living creatures that creep, and they responded: 'We are not your God, look beyond us.' I asked the breezes which blow and the entire air with its inhabitants said: 'Anaximenes was mistaken; I am not God.' I asked heaven, sun, moon and stars; they said: 'Nor are we the God whom you seek.' And I said to all these things in my external environment: 'Tell me of my God who you are not, tell me something about him.' And with a great voice they cried out: 'He made us' (Ps. 99: 3). My question was the attention I gave to them, and their response was their beauty.

It is not only the beauty that makes these texts worth reading, but the sustained thought, surprising insights, and implied way of life. These philosophers are dedicated to probing and reflection—not simply sitting around and thinking, but following a question as far as possible, even when it means recognizing their own errors. The texts contain wit, poetry, logic, paradox, vivid examples, and dialogue; how could a curriculum exclude them without impoverishing itself? It is true that they may be a bit too complex for young children, but many high school students are ready for this level of challenge.

They are also ready for texts that offer an alternative to snap judgments and group opinions. To be a philosopher is to be dedicated to ongoing questions that offer no easy solutions. Such questions can be tackled, but this takes patience, perception, and solitude. In a culture that values confidence, certainty, and group thinking—where students and others are under pressure to present well, answer questions swiftly, and arrive at group solutions—philosophical texts show ways of slowing down, honoring uncertainty, and being with one's own thoughts.

I chose to make texts a major part of the philosophy courses. Yet the goal was to have students not only learn the arguments and ideas, but respond to them. This was no easy undertaking. To respond to a text, one must be clear about what is in it; muddy interpretations lead to sloppy retorts. It would be easier to focus on the content alone, or on the students' ideas alone; bringing the two together is an ongoing challenge, and a worthy one. For me, it means rereading the texts over and over; each time that I have taught the courses, I have presented the materials somewhat differently. I have learned to clarify common points of confusion and to highlight key passages that will help students see the train of argument.

Each of the courses (for grades 9–11) consists of four long units. Each course meets twice a week; students must read and write in preparation for every class session. (There are about 90–100 students in each grade and up to 34 in a section.) The sequence allows students to draw on their previous learning; the Ethics and Aesthetics course makes frequent reference to rhetoric and logic; the Political Philosophy course, to rhetoric, logic, and ethics. In addition, there are many connections to be drawn between philosophy and other subjects; students find themselves applying ethics to global history, or political philosophy to works such as *The Crucible*. Some students have even found ways to relate political philosophy to mathematics; for instance, they have drawn analogies—and identified differences—between philosophical arguments and mathematical proofs.

The ninth-grade course, which focuses on rhetoric and logic, consists of the units "Introduction to Rhetoric"; "Arrangement and Style"; "Speeches and Declamation"; and "Formal and Informal Logic." Texts for the course include Plato's *Apology*, Pericles's funeral oration, Mark Antony's speech in *Julius Caesar*, *The Federalist*, No. 10 (by James Madison), and Martin Luther King Jr.'s "Letter from Birmingham Jail," among other speeches, essays, and poems. Students work with rhetorical techniques, analyze the style and structure of the texts, write and deliver speeches, and solve logic problems. The course has changed somewhat as other teachers have begun teaching it; last year, some teachers brought additional texts and techniques into the course, and this year the teacher focuses as much on the texts' substance as on their rhetoric. I view all of these changes as enriching; the course has taken on its own life and momentum.

## Philosophical texts show ways of slowing down, honoring uncertainty, and being with one's own thoughts.

The 10th-grade Ethics and Aesthetics course consists of the units "The Quest for an Ethical Principle"; "Virtue and the Golden Mean"; "Free Will and Responsibility"; and "Aesthetics." Students read the Book of Job, Pascal's Wager, an excerpt from Kant's *Groundwork of the Metaphysic of Morals*, Martin Buber's *I and Thou*, Saul Bellow's novella *Seize the Day*, Desiderius Erasmus's *Praise of Folly*, the second book of Aristotle's *Nicomachean Ethics*, and Nikolai Gogol's story "The Nose," among other works. During the year, they write many compositions, including an essay on two of the works read in class (or, for honors students, an essay on an ethical topic of their own choosing).

The junior year Political Philosophy course begins with the question: How are various forms of government—in theory and practice—based on assumptions about human nature? Students explore the relation between conceptions of human nature and political theories and systems. Throughout the year, they read Thomas Hobbes, Niccolò Machiavelli, John Locke, John Stuart Mill, Thomas More, Virginia Woolf, Eugène Ionesco, Jonathan Swift, George Orwell, Hannah Arendt, and others. In addition to writing analytical and argumentative essays, they write a dialogue in the style of Plato's *Republic*, a detailed description of a utopia or dystopia of their own creation, and a satirical piece.

This is the basic layout of the philosophy curriculum. I have not included the 12th grade existentialism course, since it is the creation of one of my colleagues, but it follows beautifully on what the students have studied. What astounds me is not how

well the courses have gone, but how they have given rise to philosophy-related activities such as the school's philosophy roundtables and journal.

## Philosophy for All

It has been a longstanding dream of mine to bring people together—of many ages and walks of life—to discuss works of literature and philosophy. Once the philosophy courses were underway, I thought of doing something like that for parents at my school. In particular, I would invite them to take part in philosophy roundtables, where we would discuss some of the texts that students were reading in class. The first two roundtables (which focused on Buber's *I and Thou* and Mill's *On Liberty*, respectively) drew only a few people, but the discussion was deep and lively. Then the principal suggested a student-led roundtable. At first I worried: How could students lead a discussion on texts that take a long time to sink in, texts that they had only recently read for the first time? I decided that they could do it with support.

The first student-led philosophy roundtable took place on a Thursday evening in June 2013. It focused on the question: How does one preserve independent thought in a society that largely discourages it? Texts included Orwell's *1984*, Ionesco's *Rhinoceros*, Fyodor Dostoevsky's *Notes from Underground*, E. B. White's essay "Freedom," and Erasmus's *Praise of Folly*. I structured the preparation as an honors project; the 15 students who chose to take part were exceptionally interested in philosophy and had brought insight and dedication to the course all year long. I assigned different texts and portions of the discussion to different students—yet I encouraged them to think about the overall topic and to take part in the discussion as a whole.

More than 30 students, parents, staff members, and outside guests participated; the ages ranged from 11 to 67. Despite the immensity of the topic, the discussion flowed naturally and intensely, with hands in the air, many thought-provoking and witty comments, and much building on what had already been said. The time went by too quickly; when we had only a few minutes left, one of the students burst out, "We can't let the evening go by without a tribute to folly!" The room resounded with laughter; the students then explained why, in Erasmus's work and beyond, folly was so important, and how it related to the topic of the evening. It seemed that we could have continued for another hour—but the dean signaled to me, and I to student Khadijah

McCarthy, the lead moderator, who made eloquent concluding remarks and thanked everyone for coming.

For months afterward, people were commenting on this event. It showed that it was possible for a school community to come together to discuss philosophical ideas. The adults were astounded by the thoughtfulness and insight of the students, who were likewise surprised at how well this had gone. We decided to have the final roundtable of each year be student-led; roundtables during the year would be led by me, but with the help of students.



By the second year, the roundtables already had the feel of a tradition; by the third, people were asking why we didn't hold them more often (this year, we are holding five). Topics have included time, humor, wisdom, and error.

## Publishing Student Work

If the philosophy roundtables lit a torch of possibility, the philosophy journal played with the rays and cast them far. In the introduction to the first issue, the editors in chief, Ron Gunczler and Nicholas Pape, defined the journal yet deftly avoided definition: "Here at *CONTRARIWISE*, we love philosophy. We love arguing, pointless banter, and utter nonsense that somehow comes together. We yearn to understand morality and the intricate workings of the universe. ... We hope this journal will be a platform for philosophical thought, understanding, and play. Especially play."<sup>4</sup>

The playfulness is evident: the journal opens with a letter from Folly<sup>5</sup> (the narrator of Erasmus's essay) and ends with a transcript of a lighthearted yet profound Internet chat. In between, there are many forms and topics: a "Roundtable on the Distribution of Health Care Resources"; a description of two opposite utopias joined by a bridge ("Following and Thinking"); a parody of Plato's *Republic* that somehow addresses political transformation, time travel, and world hunger ("Two Dialogues: One Ancient, One Modern"); a letter from Jiminy Cricket to Pinocchio on the ethics of lying; an essay on Machiavelli and football coaching; and more. Then there are pieces of a more solemn nature: for instance, a speech on wisdom, a reflec-



**CONTRARIWISE**, a philosophy journal published by students at Columbia Secondary School for Math, Science, and Engineering, was recognized in a national contest of student literary journals organized by the National Council of Teachers of English. To learn more about the journal, see [www.contrariwisejournal.com](http://www.contrariwisejournal.com). To learn more about the contest, see [www.bit.ly/1Blpo2e](http://www.bit.ly/1Blpo2e).



tion on John Locke's view of marriage, and an inquiry into the nature of time.

The students barely had the first issue in their hands when a review appeared on the blog of Cynthia Haven, a Stanford scholar and literary critic.<sup>6</sup> I had sent her a copy of the journal, thinking she might find it interesting—but I have never met her and had no way of knowing whether she'd pick it up. She drew attention to the students' interest in humanities and mentioned five pieces she had found intriguing (in addition to quoting from the editors' introduction). The students saw that faraway strangers could take an interest

## Good questioning is an essential component of teaching—and where is good questioning found, if not in philosophy?

in the journal. This was no fluke; in the spring, the editors in chief and two contributors participated in an interview with the communications director of PLATO (Philosophy Learning and Teaching Organization). At this point, they spoke with a sense of command and purpose.<sup>7</sup> They understood how *CONTRARIWISE* differed from other philosophy journals (and student publications) and where it could go from here.

In May 2014, the students held a celebration at a local bookstore. Like the journal itself, the event was full of meaning and nonsense, solemnity and play—all of it coming together in a delightful sequence of reading, philosophical improvisation, questions and answers, and humorous awards (such as the Godot award, which was presented to a late arriver, and a Gogol award to the “one who knows”). The audience listened, laughed, and sang; by the end, they and the participants were joined in amazement over what had taken place.

This is all interesting, some might say. But how does it apply elsewhere? Clearly, you are at an unusual school and have an atypical background; what suggestions do you have for schools that lack these resources? Is philosophy appropriate for all students, or should it be reserved for the most advanced and motivated?

Not all schools have the resources to make philosophy a required course, but there is value in doing so. Many students discover along the way that they are interested in philosophy; if it were an elective, only those with an initial interest would sign up. Making it an honors course would also be problematic; the students who do well in philosophy are not always high achievers across the board. I have seen students thrive in philosophy—students who might not have taken it had it not been required.

That said, it is possible to include philosophical works and ideas in an English, history, or science curriculum—whether by integrating them in the regular courses or offering philosophy electives.

Although many teachers are already overwhelmed with heavy workloads, those with strong interest and a way of finding the time can turn to organizations such as PLATO for resources and support. They can then develop philosophy courses and hold faculty workshops on philosophical topics. As more schools follow suit, philosophy might gain recognition as a subject in its own right.

Schools can also become involved in philosophy organizations, initiatives, contests, and so forth—and keep students informed of opportunities. Some students will respond eagerly and may choose to form a philosophy club, “Ethics Bowl” team, or other group. Such experiences could inspire students to study philosophy in college, read on their own, or investigate a problem that interests them.

In addition, teachers can study and practice philosophy; their work will affect their teaching in subtle and overt ways. Good questioning is an essential component of teaching—and where is good questioning found, if not in philosophy? The teacher who reads Plato, Pascal, Spinoza, Frege, and others will find new ways of thinking about all subjects. Moreover, she will see how to encourage such thought in students.

**B**ack to the windy, rainy day: Pascal used probability to argue that one is better off believing in God. If one stakes one's life (a finite entity, according to Pascal) on faith in God's existence, one has infinity to gain and only a finite mortal life to lose. By contrast, according to Pascal, not believing in God results in a finite gain (if even that) or an infinite loss. When we were discussing his argument, one student raised her hand. “Pascal is wrong,” she said. “He's assuming that the values in his argument are fixed. But if God doesn't exist, that changes the entire picture. Human life then becomes immensely valuable. It becomes all we have.” Indeed—not only had she found a serious flaw in his argument, but had called his very axioms into question. That was part of the point of reading Pascal's Wager in the first place: not to debate God's existence (this was a course in ethics, not religion), but to examine Pascal's argument.

As I continue to build the philosophy curriculum, I keep in mind that it may change considerably. Teachers come and go, priorities change, and students bring new ideas to the table. Yet for everyone involved, there is no turning back. We are not the same as we were before we undertook this project. Each text, roundtable, and *CONTRARIWISE* piece has propelled us along. Wherever we go from here, we will carry this with us and will be carried by it. We are embarked. □

### Endnotes

1. This passage, commonly known as Pascal's Wager, is found in Blaise Pascal's *Pensées*. This quotation appears in Blaise Pascal, *Pensées*, trans. William Finlayson Trotter (New York: Dutton, 1958), 66.
2. Some educators would hold that suicide is far too sensitive a subject for the classroom; others would argue that it is precisely the kind of topic that should be discussed, since students contend with it in one way or another. I believe that it can be discussed effectively and sensitively through the lens of a philosophical method or work.
3. Saint Augustine, *Confessions*, trans. Henry Chadwick (New York: Oxford University Press, 1991), 183.
4. Ron Gunczler and Nicholas Pape, foreword to *CONTRARIWISE*, vol. 1 (2014): vi–vii.
5. Folly is the self-praising narrator of Desiderius Erasmus's *Praise of Folly*; the *CONTRARIWISE* piece consists of a letter from this very Folly to the Russian author Nikolai Gogol.
6. Cynthia Haven, “NYC Techie Kids Buck Trend, Take On Humanities,” *The Book Haven* (blog), March 11, 2014, <http://bookhaven.stanford.edu/2014/03/nyc-techie-kids-buck-trend-take-on-humanities>.
7. Mark Balawender, “CONTRARIWISE: Pious and Especially Playful Learning in the Creation of a Journal,” PLATO, accessed January 6, 2015, [www.plato-philosophy.org/contrariwise-pious-and-especially-playful-learning-in-the-creation-of-a-journal](http://www.plato-philosophy.org/contrariwise-pious-and-especially-playful-learning-in-the-creation-of-a-journal).

# Puzzling Out PISA

What Can International Comparisons Tell Us about American Education?



BY WILLIAM H. SCHMIDT AND  
NATHAN A. BURROUGHS

**I**t is no secret that disadvantaged children are more likely to struggle in school. For decades now, public policy has focused on how to reduce the achievement gap between poorer students and more-affluent students. Despite numerous reform efforts, these gaps remain virtually unchanged—a fact that is deeply frustrating and also a little confusing. It would be reasonable to

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assume that background inequalities would shrink over the years of schooling, but that is not what we find. At age 18, rather, we find differences that are roughly the same size as we see at age 6.

Does this mean that schools can't effectively address inequality? Certainly not. One of the key factors driving inequality in schools is unequal opportunity to learn (OTL) mathematics. In previous articles for *American Educator* and elsewhere, we define OTL as the important yet often overlooked relationship between mathematics performance and exposure to mathematics content.\*

As we will explain, it is very unlikely that students will learn material they are not exposed to, and there is considerable evidence that disadvantaged students are systematically tracked into classrooms with weaker mathematics content (e.g., basic arithmetic taught in a so-called algebra class). Rather than mitigating the effects of poverty, many American schools are exacerbating them.

\*See "Equality of Educational Opportunity" in the Winter 2010–2011 issue of *American Educator* and "Springing to Life" in the Spring 2013 issue, both available at [www.aft.org/ae](http://www.aft.org/ae).

Previous work in this area has been limited by the data available,<sup>1</sup> but the most recent Program for International Student Assessment (PISA) study, coordinated by the Organization for Economic Cooperation and Development (OECD), opens up new opportunities for analysis. The 2012 PISA includes student-level measures of mathematics OTL and provides powerful evidence of inequality in OTL and its relationship to student performance. Specifically, the latest PISA data find that:

- There is large variation in exposure to mathematics content;
- OTL is strongly related to student performance; and
- Lower-income students are generally exposed to less-rigorous math.

It's not just that lower-income students are less well prepared when they enter school; the weakness of their math coursework actually keeps them from catching up.

What is truly fascinating about the PISA results is that *this is a global phenomenon*. In every country, more exposure to formal math content was related to better math performance, and almost every country showed a statistically significant relationship between student socioeconomic background and OTL. In other words, the problem we identified in the United States turns out to be a problem *everywhere*.

One interesting finding of PISA was that most of the variation in student performance was *within* schools rather than *between* them. Here in the United States, we are accustomed to talking about “good schools” and “failing schools.” According to PISA, this perspective may be overstated. On average, nearly two-thirds of the differences in student achievement in math are found in the same school, not in different schools. Much of this difference resides between classrooms, as students in the same grade cover profoundly different mathematics content—even when their classes share the same course title.<sup>2</sup> The United States does stand out, but not how you might expect: here, more like three-quarters of the differences in math achievement are within the same school. The issue appears to be less unequal schools than unequal classrooms.

These findings should make us reconsider our approach to education reform. Educational inequality is not a U.S.-specific problem, but some education systems do a much better job than we do in coping with the effects of poverty. More important, the math content that is taught in the classroom plays a critical role—a fact that has received far too little attention and one that we examine here.

## Dispelling PISA Myths

PISA is an international assessment that measures 15-year-old students' literacy in mathematics, reading, and science. First administered in 2000, PISA is given every three years. The results from the most recent assessment, administered to more than 500,000 students globally in 2012, were released in December 2013. Participating governmental entities were the 34 OECD countries, including the United States, as well as 28 non-OECD countries (and three jurisdictions in China: Hong Kong, Macao, and Shanghai). We focus this article on the PISA mathematics results of the 34 OECD countries.

The results of the latest PISA study of mathematics were quite similar to those of other international assessments: the perfor-

mance of U.S. students (481) was to a statistically significant degree below the average of other wealthy OECD countries (494) and substantially behind the top-performing countries (such as South Korea at 554). Despite several rounds of education reform, the standing of the United States is pretty much where it was nearly two decades ago.

The response to these results has been familiar, with advocates interpreting them to fit their preconceptions. Some argue that the continuing mediocrity of U.S. students in mathematics is a dire problem requiring major action (which varies based on the ideological predisposition of the speaker), while others explain away

## PISA provides powerful evidence of inequality in opportunity to learn math and its relationship to student performance.

these findings by suggesting that international comparisons are unfair because of the greater diversity of American students and/or the greater commitment of the United States to the concept of equalizing educational opportunity for all students.

We can also expect to see that one of the top-performing countries on PISA will become something of an educational fad, with scores of newspaper articles and mounds of policy papers dedicated to understanding the secret of its success—just as previous rounds of PISA have witnessed serial infatuations with Japan, Singapore, and Finland. This isn't to say nothing has been learned from these countries, of course.<sup>†</sup>

While certainly understandable, these reactions all rather miss the point. Before digging into what PISA can usefully tell us about mathematics learning in the United States and how we might improve it, let's first dispel a few misconceptions. First is the long-held belief that the weak-to-middling scores of U.S. mathematics students can be explained by a difference in who takes the test. It's amazing how often one hears the assertion that other countries only allow their elite students to take PISA while the United States ensures that students from all academic levels are tested.

The reality is that every OECD country participating in PISA or, for that matter, TIMSS (the Trends in International Mathematics and Science Study, another prominent international assessment) must meet very strict requirements in terms of student participation in order to be included. The organizers of the study are extremely

<sup>†</sup>For more on what the United States can learn from Finland, Singapore, and Japan, see “A Model Lesson” in the Spring 2012 issue of *American Educator*, “Beyond Singapore's Mathematics Textbooks” in the Winter 2009–2010 issue, and “Growing Together” in the Fall 2009 issue, all available at [www.aft.org/ae](http://www.aft.org/ae).

sensitive to the problem of sample bias. Without getting too technical, PISA is given to a random sample of all schools in a country, and within each sampled school, to a random sample of all 15-year-olds. The researchers conducting PISA make sure that the students taking the test accurately reflect the whole population of 15-year-old students in each country.

A common misunderstanding of the nature of international test scores often results in an exclusive focus on the “horse race” results of PISA: ranking the nations by their scores and trying to discern which ones are doing well and which are doing poorly. Making such comparisons is tempting and reflects our similar interest in comparing how well countries perform in the Olympics and the World Cup. But country rankings on PISA are not the same thing as comparing win-loss records for sports teams.

As we discuss below, most of the variation in student performance is *within* countries, not *between* countries. Yes, affluent students in Japan do better than affluent students in Germany, but the gap between richer and poorer students *within* either

U.S. performance in algebra may be linked to the greater emphasis on algebra topics in state eighth-grade curriculum standards starting about a decade ago.

That said, the United States still has a way to go in ensuring all students are exposed to algebra in eighth grade. As we have written previously, such exposure prepares them for higher levels of math in high school and postsecondary education. According to our research, algebra and geometry are topics taught in eighth grade in virtually all of the countries that participate in TIMSS, but in the United States, there is great variability in what math content students learn in eighth grade. We have found that by international standards, our eighth-grade students are too often taught sixth-grade math content.

The Common Core State Standards in math, however, give us hope in that they resemble the standards of high-achieving countries by exhibiting the key features of coherence, rigor, and focus. The emphasis these new standards place on algebra is also encouraging. For instance, an operations and algebraic-thinking

## We now have reason to believe that tracking is not just a problem with American schools but also a global problem.



country is far greater than the gap *between* countries. As a result, comparing cross-country variations rather than rankings based on PISA scores might be the most useful of international comparisons. Comparing a group of higher-performing countries to others on a few key metrics, such as gaps between richer and poorer students, to see what general patterns emerge contributes to a deeper understanding of key educational issues within each country and around the world.

We should also resist the temptation to assume that the U.S. education system has seen no changes in score in the last dozen years. Although the U.S. PISA mathematics ranking is essentially unchanged, there are signs of progress. For example, on the 2003 PISA, the performance of U.S. students was to a statistically significant degree below the OECD average on all four mathematics content subscales: (1) change and relationships, (2) space and shape, (3) quantity, and (4) uncertainty and data.<sup>3</sup> Nine years later, the mathematics performance of U.S. students was statistically indistinguishable from the OECD average on two mathematics subscales: change and relationships (which is closely related to algebra), and uncertainty and data (which is closely related to probability and statistics). This represents notable if unspectacular progress. Although we cannot say with certainty, the improved

domain for grades kindergarten to 5 lays a foundation for algebra in eighth grade.

### A Look at PISA and TIMSS

As we see it, one important benefit of PISA is that its data can be used to draw tentative conclusions about what influences student learning for good or ill. PISA shows us that what students are taught—the content of mathematics instruction—critically influences what students know. Just as important, it reveals that educational opportunities related to the coverage of that content widely vary in every country, and that students from disadvantaged backgrounds are systematically exposed to weaker mathematics content, worsening educational inequality.

Readers of our earlier pieces in *American Educator* might be thinking that this all sounds familiar, and it should. In those pieces, we wrote about opportunity to learn and about how American schools are characterized by pervasive inequality in OTL—inequality that is strongly associated with student socioeconomic background.

Although the *explicit* tracking of U.S. high school students has generally diminished, our studies indicate that it is still a very common but often overlooked practice.<sup>4</sup> With the most recent PISA

results, we now have reason to believe that tracking is not just a problem with American schools but also a global problem.

The foundation for studying OTL internationally is rooted in TIMSS, which allowed us to identify the strong relationship of OTL to student learning more than a dozen years ago.<sup>5</sup> But there are limitations to how far an analysis could go using TIMSS data. In TIMSS, the measure of OTL was based on a survey of teachers in a small number of randomly sampled classrooms within each school. The newest PISA, by contrast, asks a random sample of all students at a school, and therefore from multiple classrooms, about the mathematics content to which they had been exposed, whether formal mathematics, applied mathematics, or word problems.

While PISA questions are less extensive than the ones asked in TIMSS, PISA includes questions about a student's family background, permitting the development of an index of student socioeconomic status (the PISA educational, social, and cultural index) capable of being applied across countries. The advantage of these questions is that we can now study inequalities in OTL and student socioeconomic background, and the relationship between them, in a much more detailed way, one that more fully represents the diversity in schooling within countries.

A further distinction between PISA and TIMSS is in how they define the idea of opportunity to learn. In the original TIMSS (1995), OTL was defined as (1) exposure to mathematics topics, and (2) the amount of time devoted to those topics by teachers. In the latest PISA study, OTL is identified as familiarity with and exposure to a small set of key mathematics topics (much like the list of topics found in TIMSS) as well as real-world applications and word problems. The mathematics topics are mainly those typically found in grades 8 through 12 defining the academic content of the

**Table 1. 2012 PISA Results in OECD Countries and Select Non-OECD Countries and Regions**

Country	Mathematics Literacy	Exposure to Formal Mathematics	Within-Country Variation in Formal Math	% OTL Variation Within-School for Formal Math	Exposure to Applied Mathematics	Exposure to Word Problems
<b>OECD Countries</b>						
Australia	504	1.7	134	80%	2	1.8
Austria	506	1.5	129	57	1.8	2.1
Belgium	515	1.8	141	72	1.9	1.9
Canada	518	2	100	89	2.1	2
Chile	423	1.7	92	75	2.1	2
Czech Republic	499	1.8	78	71	1.6	1.6
Denmark	500	1.6	98	88	2	1.9
Estonia	521	2	56	92	1.8	1.8
Finland	519	1.7	96	88	1.7	2.1
France	495	1.9	87	*	2	2.1
Germany	514	1.7	118	67	2	2
Greece	453	1.9	92	93	1.9	1.3
Hungary	477	2	80	72	1.9	2
Iceland	493	1.1	105	96	2	2.4
Ireland	501	1.5	100	91	1.9	1.8
Israel	466	1.8	111	80	1.8	1.7
Italy	485	1.8	107	68	1.8	1.7
Japan	536	2.1	61	72	1.7	1.6
Luxembourg	490	1.4	138	86	1.9	2
Mexico	413	1.8	117	82	2.2	1.8
Netherlands	523	1.5	123	68	2.1	1.6
New Zealand	500	1.5	139	83	2	1.6
Norway	489	*	*	*	1.8	1.8
<i>OECD Average</i>	494	1.7	100	80	1.9	1.9
Poland	518	1.8	82	92	2	2
Portugal	487	1.7	100	90	2.2	1.5
Slovak Republic	482	1.7	86	67	1.9	2
Slovenia	501	1.9	86	79	1.9	2.1
South Korea	554	2.1	74	74	1.8	1.7
Spain	484	1.9	119	88	2	2.2
Sweden	478	0.8	86	92	1.7	1.9
Switzerland	531	1.4	137	60	1.9	2.1
Turkey	448	1.9	83	85	2	1.3
United Kingdom	494	1.6	118	82	1.9	1.9
United States	481	2	113	90	2	1.8
<b>Select Non-OECD Countries and Regions</b>						
Brazil	391	1.4	139	72%	2	1.5
Chinese Taipei	560	2	89	82	1.7	1.5
Colombia	376	1.7	138	84	2.2	1.9
Hong Kong–China	561	1.8	111	93	1.8	1.4
Indonesia	375	1.6	91	82	2.3	1.9
Russian Federation	482	2.1	45	95	2	2
Shanghai–China	613	2.3	57	83	1.6	1.3
Singapore	573	2.2	113	83	2	1.6

SOURCE: PISA 2012 DATABASE, [HTTP://PISA2012.ACER.EDU.AU](http://pisa2012.acer.edu.au).

\*Norway did not provide OTL data and therefore was excluded from the analyses. Data from France do not permit within-school analysis.

lower- and upper-secondary curriculum. The OECD labels this “formal mathematics.”<sup>6</sup> While TIMSS assesses formal mathematics knowledge (including the concepts, skills, algorithms, and problem-solving skills typically covered in schools), PISA assesses mathematics literacy, which is defined by the OECD as “an individual’s capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals in recognising the role that mathematics plays in the world and to make the well-

founded judgments and decisions needed by constructive, engaged, and reflective citizens.”

### The Relationship of OTL to Performance

First, we used PISA to examine how exposure to formal mathematics, applied mathematics, and word problems relates to mathematics literacy (see Table 1 on page 27). A comparison of country averages for these three OTL variables reveals considerable variation across countries on the emphasis placed on each, as measured on a 0 to 3 scale. Among the 33 OECD nations that participated in the study of OTL (Norway did not collect OTL data, while data from France do not permit within-school OTL analysis), Japan and South Korea had the highest average for formal mathematics (2.1) and Sweden the lowest (0.8). Portugal and Mexico averaged 2.2 on applied mathematics compared with the Czech Republic’s 1.6, while Turkey and Greece placed the least emphasis on word problems (1.3) and Iceland the most (2.4). A comparison across countries suggests that those education systems that spent the most time on applied mathematics tend to have lower average PISA scores—a relationship that is statistically significant.

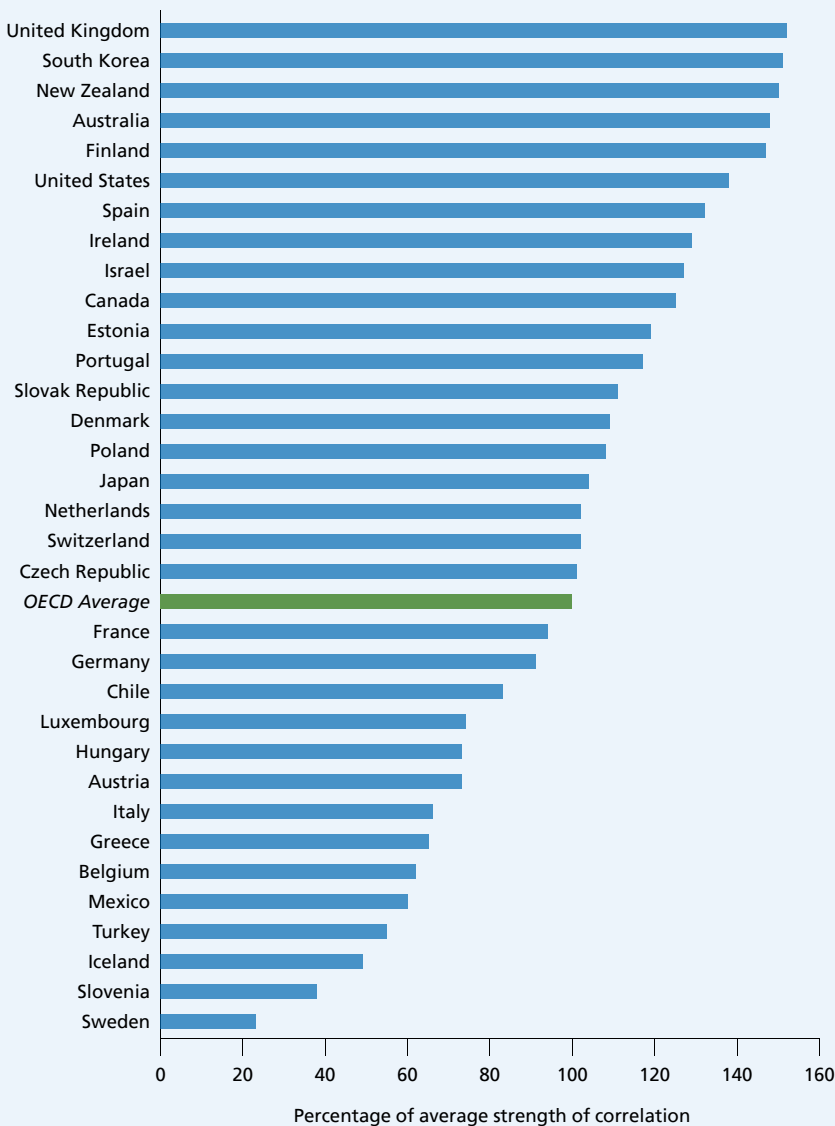
However, as we mentioned earlier, the ranking of countries can be quite misleading. For example, a different story emerges when we focus on the patterns *within* the OECD countries. We found that *within* countries, all three measures of opportunity to learn—formal mathematics, applied mathematics, and word problems—had a statistically significant positive relationship to student performance.<sup>7</sup> In other words, when students had more opportunities to study formal mathematics, applied mathematics, and word problems, their performance on PISA tended to increase, no matter in which country that student happened to live.

Exposure to word problems had a small positive association with PISA scores, while formal mathematics had a very strong positive relationship, with an estimated average effect size that was around half a standard deviation. For the United States, the relationship of formal mathematics to performance is particularly strong—around two-thirds of a standard deviation (see Figure 1). In short, PISA strongly suggests the importance of formal mathematics content.

The effect of applied mathematics was more complicated. Applied mathematics was associated with higher performance up to a certain point, after which additional exposure to applied mathematics had a negative relationship. Generally among OECD countries, increasing from no exposure to moderate exposure was associated with a substantial increase in student performance (approaching half a standard deviation), beyond which there are limited gains or even drops in performance with more frequent exposure. In other words, after a

**Figure 1. The Relationship between Formal Mathematics and Mathematics Literacy**

(OECD average = 100)



Larger values indicate that exposure to formal mathematics is more strongly related to student learning in that country, compared with the OECD average. For example, in the United States, the United Kingdom, and South Korea, one would find an extremely strong correlation between students’ exposure to formal math and their mathematics performance, whereas in Sweden, Slovenia, and Iceland, more formal math exposure is still correlated with higher performance, but the correlation is not as strong.

SOURCE: ANALYSIS OF PISA 2012 DATABASE, [HTTP://PISA2012.ACER.EDU.AU](http://PISA2012.ACER.EDU.AU).

certain point, more work in applying math actually is related to lower levels of mathematics literacy.

The small positive relationship of word problems and the positive (but more complicated) relationship of applied mathematics held for many of the PISA countries. However, the positive relationship of formal mathematics to student outcomes was far more powerful and much more consistent, holding in all education systems (OECD and non-OECD countries and regions that participated in PISA).

One reason for the stronger relationship of exposure with formal math might be that students need to be very comfortable with a mathematical concept before they can apply it in any meaningful way. For example, to calculate what percentage of one's income is going to pay for housing or childcare, or any other major expense, a person must have a clear understanding of how proportions work. It appears that a thorough grounding in formal mathematics concepts is a prerequisite both to understanding and to using mathematics.

What all this implies is that while embedding mathematics content in word problems or in real-world contexts may improve students' performance, it is the content of the mathematics instruction itself that is most crucial.



### Variation in Opportunity to Learn

Earlier, we noted the great variation in mathematics performance within OECD countries. There is also tremendous variation in exposure to formal mathematics content (as shown in Table 1's "Within-Country Variation in Formal Math" column), ranging from Belgium (41 percent above the OECD average variation) to Estonia (44 percent below the OECD average variation). As we explore in more detail below, the United States is 13 percent above the OECD average variation. PISA demonstrates quite convincingly that some countries do a much better job than others of making sure all of their students have roughly equal access to rigorous mathematics content, which includes formal mathematics.

This brings us to the problem of educational inequality. Education has traditionally been viewed as a way of establishing a "level playing field" among children from different backgrounds.<sup>8</sup> The hope has been that access to good schools will ensure equality of

opportunity, so that personal merit rather than family income will determine the course of one's life. This vision has played a fundamental role in America's self-understanding.

However, the results of PISA confirm a growing body of research indicating that the U.S. education system is not living up to the responsibilities we have placed upon it, not because students, parents, and teachers aren't doing their best, but because the education system has not succeeded in ensuring equality of educational opportunity. Not only do student scores vary tremendously, but so too does exposure to formal mathematics content. Further, this is a problem everywhere, not just in the United States. And sadly, although some countries are better at more evenly distributing opportunities to learn math, none of them has managed to eliminate these inequities entirely.

### Lower-Income Students Are Exposed to Weaker Content

These educational inequalities are in fact strongly associated with student socioeconomic status. Ideally, we would hope that low-income students would receive at least equal if not greater educational opportunities to catch up with their peers. Instead, in *every PISA-participating country, poorer students received weaker math-*

Some countries do a much better job of making sure all of their students have roughly equal access to rigorous math.

*ematics content.* School systems across the globe aren't ameliorating background inequalities; they're making them worse. Our analysis of PISA data suggests that exposure to formal mathematics is at least as important as student background in building student mathematics literacy. Theoretically, OTL could be used to mitigate the effects of student poverty; instead, we find the opposite.

The severity of educational inequality varies appreciably across countries, whether comparing variations in OTL or the influence of student socioeconomic status for different countries. There is also a big difference in how education systems, either by design or by consequence, contribute to these inequalities. For example, in some countries, the inequalities between schools are greater than others (Austria has more variation between schools than, say, Iceland). There are also substantial gaps in opportunity to learn between high- and low-income schools, with the smallest gaps among OECD systems in Estonia and the largest gaps in Austria.

These inequalities are related to average country performance: systems with larger between-school (defined by high versus low student socioeconomic status) differences in OTL also have larger between-school differences in mathematics literacy.<sup>9</sup>

It is vital to remember that, in every country, most of the variation in educational opportunity is *within* schools, not *between* them. On average, about 80 percent of the variation in OTL among OECD countries is within schools (see Table 1). The fact that most of the inequalities in mathematics content are within schools suggests that attempts to reduce educational inequality that focus on high- and low-performing schools will have limited effects.

### A More Detailed Look at the United States

Although by many metrics the United States is quite similar to other countries, there are a few areas in which it does stand out (and not for the better). The United States appears to have greater inequality in exposure to mathematics content than do other education systems. It has a 13 percent higher total variation in formal mathematics OTL than the OECD average—the 12th largest variation among the 33 OECD systems. As we might expect, the greater variation in

United States is characterized by lower between-school inequality than other countries. For years, the discussion of educational inequality and its association with student poverty has been concentrated on the problem of “failing schools,” the implication being that most of the inequities in the American education system are the product of differences between schools. This belief may have led some to suppose that the problems in the U.S. educational system are isolated, local failures, and not a failure of the U.S. education system as a whole. Although it is the case that U.S. students in schools with more-disadvantaged students are exposed to weaker mathematics content than students in more-affluent schools, this is a *smaller* problem in the United States than it is in other educational systems.

However, the PISA data reveal that the between-school inequality in student performance and student opportunity is dwarfed by within-school inequality. Three-quarters (76 percent) of the variation in student achievement is actually within school (compared with an OECD average of 64 percent), and 90 percent of the variation in opportunity to learn formal mathematics is within school (compared with an OECD average of 80 percent). These figures

In every country, most of the variation in educational opportunity is *within* schools, not *between* them.



OTL among U.S. students is associated with a higher-than-average relationship between exposure to formal mathematics and mathematical literacy (greater exposure increases math literacy), where the United States ranks sixth among OECD countries. Inequalities in mathematics instruction therefore play a somewhat larger role in accounting for educational inequality in the United States than in other nations.

What is most notable is the counterintuitive finding that the

place the United States among the nations with the highest share of within-school inequality—seventh among OECD countries for OTL inequality and 10th for inequality in student outcomes.

Another feature of the United States that may differentiate it from other countries is the decentralized character of American schooling. While other nations have federal systems, the United States has long been noted for its extremely fragmented educational structure.<sup>10</sup> This decentralization of educational structure has been accompanied by great variation in educational standards across states as well as major differences in the content of mathematics instruction across schools even in the same state.<sup>11</sup>

Over the last several decades, however, state governments assumed an ever-greater share of the responsibility for school finances, administration, and curriculum. The United States is not one large education system, but (at minimum) 50 autonomous ones. We know from the National Assessment of Educational Progress (NAEP), conducted by the

**Table 2. 2012 PISA Results for Participating U.S. States**

State/Country	PISA	Exposure to Formal Mathematics	% PISA Variation between Schools	% OTL Variation between Schools
Connecticut	506	2.07	24%	13%
Florida	467	1.98	17	5
Massachusetts	514	2.07	30	19
United States	481	2.00	11	11

SOURCE: PISA 2012 DATABASE, [HTTP://PISA2012.ACER.EDU.AU](http://PISA2012.ACER.EDU.AU).



U.S. Department of Education's National Center for Education Statistics, that just as there is considerable variation across countries, there is also variation among U.S. states. One of the fruits of the most recent PISA is that three states—Connecticut, Florida, and Massachusetts—agreed to participate in the study with full statistical samples (rather than being lumped in with students from other states). This means we can treat them as independent systems (or “countries”) for purposes of comparing them to the U.S. average and to other countries' education systems (see Table 2 on page 30).

What we find is that, while some interesting characteristics distinguish these states from one another and from other systems, they share most of the same general patterns we find in the rest of the world. Confirming the NAEP results, Massachusetts has higher average scores than the rest of the United States (514 vs. 481), although it is not among the very highest performers on PISA.

For all three states, most of the variation in student performance and opportunity to learn is within rather than between schools, and OTL is to a statistically significant degree related to student outcomes, even controlling for student socioeconomic background. In each of these three states, the same basic pattern

## The strong relationship between opportunity to learn and student outcomes suggests that schools really do matter.

emerges that we find in the United States as a whole and in other countries: inequalities in formal mathematics OTL exacerbate socioeconomic inequalities. In analyzing the differences between lower- and higher-income students (defined by the U.S. average), we found large gaps in both opportunity to learn and PISA scores, whether analyzed between schools, within schools, or a combination of the two.

Our analyses indicated that although within-school relationships are still more important, school-level factors play a much greater role in Massachusetts than in the other two states. For example, 30 percent of the variation in PISA scores and 19 percent of the variation in OTL were attributable to school-level factors. These findings are only suggestive but do point to some worthwhile avenues for exploration. For example, what is it about the Massachusetts educational system that gives schools greater importance? And what features of Florida's educational governance have resulted in lower inequality?

In addition, we should exercise caution when comparing sub-national units to national ones. At the moment, Shanghai is getting a great deal of attention due to its high PISA scores—but Shanghai

is not the whole of China any more than Massachusetts represents the entire United States. Nor does it necessarily follow that states or cities have achieved their status because of educational practices or policies. For example, the close PISA scores of the Italian Lombardy region (517) and Massachusetts (514) may partly reflect their demographic similarities, in particular their relative wealth.

Careful analyses of PISA data can tell us a great deal more than which country is currently at the top of the international standings. Research based on PISA presents strong evidence that the United States systematically disadvantages lower-income students by depriving them of strong mathematics content, but it also tells us that this is a global phenomenon. In most respects, the United States is *not* that different from other countries.

PISA also includes some real surprises that should prompt us to re-examine our approach to education reform. Although it confirms the great importance of the content of instruction, PISA cautions us that with respect to the inclusion of real-world applications, more is not necessarily better. To that end, we must not overly concentrate on such applications at the expense of teaching mathematical content. It also calls into question the idea that tracking has decreased in American schools.

PISA does provide reason for optimism, however. The strong relationship between opportunity to learn and student outcomes suggests that schools really do matter. Some education systems are much more effective in minimizing educational inequality, a fact which, in the United States, should inspire admiration as well as a renewed commitment to the challenge of education reform in the service of quality and equality. □

### Endnotes

1. The Trends in International Math and Science Study (TIMSS) surveys student knowledge and exposure to mathematics content at the country, school, and classroom levels, but does not provide student-level information.
2. William H. Schmidt, Curtis C. McKnight, Richard T. Houang, HsingChi Wang, David E. Wiley, Leland S. Cogan, and Richard G. Wolfe, *Why Schools Matter: A Cross-National Comparison of Curriculum and Learning* (San Francisco: Jossey-Bass, 2001).
3. A description of the four content subscales can be found in Organization for Economic Cooperation and Development, *PISA 2012 Results*, vol. 1, *What Students Know and Can Do: Student Performance in Mathematics, Reading and Science* (Paris: OECD, 2014). Change and relationships: This category emphasizes “relationships among objects, and the mathematical processes associated with changes in those relationships” (95). Space and shape: This category emphasizes “spatial relationships among objects, and measurement and other geometric aspects of the spatial world” (103). Quantity: This category emphasizes “comparisons and calculations based on quantitative relationships and numeric properties of objects and phenomena” (105). Uncertainty and data: This category emphasizes “interpreting and working with data and with different data presentation forms, and problems involving probabilistic reasoning” (105).
4. William Schmidt and Curtis McKnight, *Inequality for All: The Challenge of Unequal Opportunity in American Schools* (New York: Teachers College Press, 2012).
5. Schmidt et al., *Why Schools Matter*.
6. From William H. Schmidt, Pablo Zoido, and Leland Cogan, “Schooling Matters: Opportunity to Learn in PISA 2012,” *OECD Education Working Papers*, no. 95 (Paris: OECD, 2013), 7: “Three indices were developed from the student questionnaire items: formal mathematics, an indicator of the extent of student exposure to algebra and geometry topics in classroom instruction; word problems, an indicator of the frequency that students encountered word problems in their mathematics schooling; and applied mathematics, an indicator of the frequency students in their mathematics classes encountered problems that required the application of mathematics either in a mathematical situation or in an every day, real world context.”
7. The within-country analyses were done with a hierarchical model at the between- and the within-school levels. The following types of relationships were found at both levels, but here we report on the within-school results where most of the variation in OTL and performance was present. When referring to the “average,” this relates to the OECD countries only.
8. Schmidt and McKnight, *Inequality for All*.
9. Schmidt, Zoido, and Cogan, “Schooling Matters.”
10. William H. Schmidt, Curtis C. McKnight, and Senta A. Raizen, *A Splintered Vision: An Investigation of U.S. Science and Mathematics Education* (Dordrecht, Netherlands: Kluwer Academic Publishers, 1997).
11. Schmidt and McKnight, *Inequality for All*.

# Group Work for the Good

## Unpacking the Research behind One Popular Classroom Strategy



BY TOM BENNETT

It wasn't until I had been teaching 11- to 18-year-olds for four years that I realized I had been consistently misled. Up until that point I had trusted my teacher training to provide the best of what had been discovered in the discipline of teaching and learning. If I had been shown a method or theory by which I could perform my job more efficiently, I assumed it would have been forged in the crucible of experience and evidence. I assumed that what we knew about teaching, say, chemistry, for example, progressed in a linear, accumulative way. But I found the opposite.

As a philosophy and religious studies high school teacher in the United Kingdom, I discovered that a good deal of what was considered orthodoxy in my profession was unsubstantiated. I believe

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many of my teacher colleagues in the United States have made similar discoveries.

In 2004, I had just emerged from the U.K. Department for Education's Fast Track recruitment program into teaching, where I had spent weekends learning about Neuro-Linguistic Programming, a program called Brain Gym, and how to sort my students according to their learning styles.\* I was told that my students possessed multiple intelligences, and it was strongly hinted to me that the more technology I could accommodate into my lessons, the better their needs as digital natives would be met. My initial classroom design of rows and columns was frowned upon, and tables and horseshoes were recommended. And all because, I was told, the research confirmed each avenue.

Except that it didn't. Often, it barely addressed the topics. I won a teacher fellowship at Cambridge University, where I was given the opportunity to pull back the curtain of the mighty Oz of research. It was an epiphany. As I learned to navigate the university's endless libraries of education journals and papers, I was struck by a thought that at first I dismissed as impertinence: a good deal of research I had been recommended as a new teacher

\*For more about the research behind learning styles, see "Do Visual, Auditory, and Kinesthetic Learners Need Visual, Auditory, and Kinesthetic Instruction?" in the Summer 2005 issue of *American Educator*, available at [www.aft.org/ae/summer2005/willingham](http://www.aft.org/ae/summer2005/willingham).

was astonishingly misguided.<sup>†</sup> I felt like a heretic. The temerity of my emergent conclusion struck me as astonishing, rightly. But my master's degree in philosophy (with a focus on epistemology) kept pointing me back the same way: a lot of what was considered research was often based on little more than bias or opinion.

For instance, Neuro-Linguistic Programming was a ragbag of fashionable pseudoscience that had been broadly criticized, even at the time of its publication, but still it lurched on for decades. It was mystical hoo-ha that rested on the "science of success" that predicted among other things that you could tell when someone was lying. Learning styles had similarly been dead on a mortuary slab for many years, but even today teachers are earnestly instructed in their use. Brain Gym was, until recently, considered to be cutting-edge practice, including the claim, widely believed by Brain Gym enthusiasts, that water should be held to the roof of the mouth because it reaches the brain quicker that way. And so on. Everywhere you looked, education was, and is, deviled by what physicist Richard Feynman would call cargo cult science, aping the form of science in every way but the ones that mattered.

It inspired me to write *Teacher Proof: Why Research in Education Doesn't Always Mean What It Claims, and What You Can Do about It*, on which this article is based. My book bluntly exposes some of the bigger education myths that still rattle their chains in the classroom. Each chapter is devoted to a questionable educational theory; I examine each claim made for its efficacy by simply following the research crumbs backward.

Often, I found that a claim would refer to this or that seminal paper, which I would then find rested its evidence base on some other seminal paper, which I would then pursue and so on. Mad-deningly, I often found the most basic of problems: papers that referred to works by the same author, papers that relied on the most minuscule of sample sizes, papers that failed to in any way test their own hypothesis to failure, and so on. I found enormous over-reliance on opinion and testimonials as proof of any kind.

In short, I found what you might find in any science, but it seemed to be magnified in educational science. Why? One reason was that social science practitioners frequently proposed that what might be classed as proof in their field did not have to meet the rigors of the physical sciences, which is understandable given the challenge of dealing with human beings, who are not inert objects of examination but rather can be difficult and interactive participants in their own analysis. But instead of acknowledging this profound obstacle, many researchers simply ignore it.

There is a great deal of excellent research in education, but it is often drowned out by the cacophony of the fashionable, the novel, the exciting.

In 2012, to help remedy this disastrous state of affairs, I founded researchED ([www.workingoutwhatworks.com](http://www.workingoutwhatworks.com)), a teacher-led, grass-roots wiki movement aimed at empowering teachers through greater research literacy and bringing together the best research for the classrooms that need it most. Since our first conference, it's taken off, and now we're preparing for a researchED conference in New York in May 2015. Clearly, there's an appetite among many teachers to no longer be beholden to the institutions responsible

for their support, and instead to find out—through a process of profound reprofessionalization—what actually works.

One of the most enduring myths I've encountered in education is the subject of this article: group work. I've seen entire educational districts seized by the belief that group work is the only way for students to learn, or at least by far the most efficient way. I spent years wrestling with the tension between the claims supporting this teaching method and the evidence of my own classrooms. And when I investigated the foundations on which these claims were made, I found that they were often not substantiated in any credible way.

Group work does have its place in the classroom. Allowing students to partner on a particular assignment can engage them in the subject matter they are studying, help them improve their skills, and teach them the value of teamwork—as long as the students, themselves, do one crucial thing: stay on task.

**Group work can go a long way in reinforcing content knowledge. But it should not take the place of fully guided instruction.**

When students bring the necessary focus to group work, and when teachers use it appropriately—that is, to supplement instruction, not replace it—group work can go a long way in reinforcing content knowledge. But it should not take the place of fully guided instruction, which sound research (not the kind I discuss above) has overwhelmingly found is most effective in helping students learn.<sup>‡</sup> Still, in recent years, group work has become one of many fads to seemingly conquer the education world. Why is this so?

### **Where Did Collaborative Learning Come From?**

In the early 2000s, a growing swell of research seemed to support the use of group work as one of the best ways to learn.<sup>1</sup> Proponents claimed the strategy would:

- Improve learning;
- Develop social skills;
- Develop empathy and altruism;
- Deepen learning;
- Improve test scores and retention;
- Develop complex learning strategies;
- Create independent learning; and
- Enable lifelong learning.

<sup>†</sup>For more about how to tell good research from bad in education, see "Measured Approach or Magical Elixir?" in the Fall 2012 issue of *American Educator*, available at [www.aft.org/ae/fall2012/willingham](http://www.aft.org/ae/fall2012/willingham).

<sup>‡</sup>For more about fully guided instruction, see "Putting Students on the Path to Learning" and "Principles of Instruction" in the Spring 2012 issue of *American Educator*, available at [www.aft.org/ae/spring2012](http://www.aft.org/ae/spring2012).

It was also widely reported at the time that group work, or collaborative learning, was widely misused; students often sat together but infrequently learned together in a meaningful way. There were many other reports at this time, and many more afterward, all saying the same thing: if you want children to learn, then they need to be in pods. In other words, the research seemed to say that group work worked, and if it didn't, you weren't doing it right.

Very early on in my career, this was one of the pieces of absolutely infallible dogma I had been told to adopt as a way of driving learning. In one of my first few years as a teacher, I was observed teaching a lesson which, while surely not perfect, was rated *unsatisfactory*. When I queried it, I was told that because there was no group work, the students couldn't really be learning deeply enough. Regardless of outcome for the students, the process had predetermined the evaluation, almost as if the winner of the 100-meter race at the Olympics had been decided by the athlete who most closely conformed to the preferred sprinting style.



When you're a rookie and you don't have the confidence to question authority, that kind of judgment is a punch to the gut. It ruined me for months, as professional criticism often can. My lesson wasn't just judged to be average and bland, it was below par—it had failed. I was failing my students.

We can see the modern incarnation of group work emerging from such theorists as Lev Vygotsky and Jean Piaget. Vygotsky, an early 20th-century Russian psychologist, has been a major influence in the past few decades. He believed that social interaction precedes development; action is the basis of forming thoughts. According to his child-centered understanding of how we learn, pupils occupy the roles of problem solvers, and teachers are there as facilitators; this is the famous transition from the sage on the stage to the guide from the side. Language used by children is a tool used in order to think. Talk, for Vygotsky, is a learning tool. He believed that the use of talk—group work, discussion—in the classroom would help to reduce the pupil's "zone of proximal development" or the gap between where he or she could be and his or her current stage of learning. As Vygotsky put it: "What a child can do today in cooperation, tomorrow he will be able to do on his own. ... The students are responsible for one another's learning as well as their own. Thus, the success of one student helps other students to be successful."<sup>2</sup>

Proponents of collaborative learning claim that the active

exchange of ideas within small groups not only increases interest among the participants but also promotes critical thinking. As Anuradha Gokhale stated in a 1995 article, "There is persuasive evidence that cooperative teams achieve at higher levels of thought and retain information longer than students who work quietly as individuals. The shared learning gives students an opportunity to engage in discussion, take responsibility for their own learning, and thus become critical thinkers."<sup>3</sup>

According to Vygotsky, students are capable of performing at higher intellectual levels when asked to work in collaborative situations than when asked to work individually.<sup>4</sup> Group diversity in terms of knowledge and experience contributes positively to the learning process. Psychologist Jerome Bruner contends that cooperative learning methods improve problem-solving strategies because the students are confronted with different interpretations of the given situation.<sup>5</sup> The peer support system makes it possible for the learner to internalize both external knowledge and critical-thinking skills and to convert them into tools for intellectual functioning.

The theories that underpin collaborative learning can broadly be described as deriving from constructivism, the idea that we are active participants in the process of learning, not passive recipients of experience and factual accumulation. We construct new meaning as we encounter experiences and build our learning on what we already know. This means that learning is intrinsically a social process and is inseparable from the process of interacting with others. Constructivist thinking can be found in the works of such educational pioneers as Maria Montessori, Piaget, John Dewey, and Bruner. Constructivism is not by itself an educational method but a description of how constructivists believe learning takes place, whatever method is used. But advocates of constructivism have derived pedagogies from its principles, such as active learning, discovery learning, and collaborative learning, the aim being, of course, to exploit the natural process of learning by artificially reproducing the best environments in which it takes place.

The problem that immediately arises is that this conceptual model of how learning occurs is contested. One challenge it faces is that it is unverifiable. How would we know if such a theory was true or false? What evidence would invalidate it? We see this problem reoccur frequently throughout literature that supports the collaborative learning model: there are many detailed blueprints about what it means to learn collaboratively but less indication that these blueprints correspond to a meaningful description of the actual learning process.

One of the advantages of group work, the research assures us, is that it's a great way to engage children. Well, that seems to be true, if by engage you mean give them a chance to do less for a period of time and catch up with each other. Of course, many kids will leap like salmon into that river; kids really do like working in groups. But the point of group work is that it is supposed to develop and encourage skills of interactivity and motivation. In the examples where it seems to work best, those qualities and skills have to pre-exist the activity.

I must emphasize that I'm not against group work, and that I use it myself when I want students to practice knowledge recall with each other, or when I want to change the pace of a lesson full of direct instruction. I enjoy it, especially with upper high school students, who can produce some astonishingly good work (for exam-

ple, through fantastic debates and discussions that unpack prejudice and challenge axioms, or resources that the whole class can use later on like posters and notes). I use anything that gets results, and I'll try anything that looks like it works for other people. But the insistence that group work is the best way to develop higher-level thinking skills, and that it has an appreciable, improving effect on students overall, is just undemonstrated. One paper I read that celebrated its benefits had 48 participants. That's forty-eight. I could fit them in my tiny British garden. I'd barely call that evidence. It's a pattern we see time and time again in poor education research: tiny samples, short study intervals, and muscular, hopelessly optimistic extrapolation from a microscopic set of data points. One such study barely qualifies as research. Several studies, all reproducing the same flaw, still don't constitute an evidence base, for reasons that are obvious. It's also a problem with meta-studies in this area.

## What Does the Research Say?

"There is an ever increasing need for interdependence in all levels of our society today. Providing students with the tools to effectively work in a collaborative and cooperative environment should be our priority as teachers. Cooperative learning (CL) is one way to provide students with a well defined framework from which they can learn from one another."<sup>6</sup>

That was from the very opening paragraph of an online paper to which I was referred by a group-work enthusiast. First sentence: unproven and unprovable conjecture, opinion, and subjective values of the author. It doesn't really bode well for the rest of the paper.

Another paper I looked at included 250 students—not a large sample by any means. The study was focused on video-recorded evidence of group work after months of group-work training for



One of the main tasks of the teacher is to introduce children to the best of what has already been discovered and thought.

## The (Usually Ignored) Drawbacks of Group Work

The claims made by advocates of group work are frequently utopian, because in a real classroom many variables work against the success of any group activity. These include:

- 1. Disguised inactivity.** In group scenarios, students are provided with an opportunity to really put their backs into doing nothing. If you give a task to three or four people, one or two may realize it's time to freeze, because others will carry the burden of the task. In the meantime, they can coast under the guise of "research" or "running the group." Their inaction is hidden inside the smog of collaborative effort.
- 2. Unequal loading.** Related to this is the problem that while every student might participate, the participation might be profoundly uneven. Some will contribute at glacial speeds, while others will race and caper through every task and subtask.
- 3. Inappropriate socialization.** Students may end up competing to see who can discuss the task the least. Playtime has come *early* in this scenario. Pupils are well aware that group work can devolve into recess.
- 4. Unfair assessment.** When I praise a pupil, it's a clear one-to-one relationship. In grading groups, we often must give collective grades. We should do this as rarely as possible, and praise and reward individual effort where possible. Groups, after all, cannot think or learn; that is possible only for individuals.

both teachers and students. Of course, permission had to be obtained for filming, and when it wasn't, the pupils were removed from the test subjects. Students knew that they *might* be filmed that day. Teachers probably did. Groups of students were then given group tasks designed to display problem-solving ability, cooperativeness, etc. So the tasks themselves were factors in the process; what might the researchers have found in tasks that weren't designed to show the quality tested?

Researchers then had to watch selections of the clips, and decide to what degree students were on task and engaged, and what kind of quality of engagement they displayed. These are tremendously subjective properties and could vary from researcher to researcher, from day to day, depending on a million factors, subconscious and not.

And what did they find? The test groups displayed better group-work skills than the ones who had not been through the training process. They found exactly what they wanted to find, and given the way they loaded the dice from the outset, I'm not surprised. Because they used something very common in successful evaluations of contested objects of research such as collaborative learning: loaded proxy indicators.

It's easy enough to measure height or temperature. We have tape measures and thermometers for such things. But how do we measure something more abstract, like learning? What we do is try to capture the next best thing: something that we *can* measure

that we think will correspond with the quality we're interested in. For example, we can't see electrons, but we know that whenever you get them, you have voltage and amps and electricity, and light bulbs glow.

In this experiment, what did they use as proxy measures? I've mentioned that they noted degree of engagement, quality of interactivity, sustained levels of discussion, and numerous other factors. These things could at least be observed by the researchers with their senses. They found that at the end of the experiment, test groups of pupils had longer discussions, maintained their groups better, and interrupted each other far less than in the control groups.

This somehow proves that group work improves learning? Or maybe it proves that groups trained at group work get better at group work. Or it could prove a million other things. Or nothing.

## I find group work useful when pupils have spent long periods in private work, individually and self-managed.

That's the problem. We don't know. And neither do the researchers, who designed an experiment with a success criteria that revolved around "being better at working in groups." Working in groups helps you improve working in groups, apparently.

One of the recurrent themes in the literature about group work was the claim that students and classrooms would benefit from group work *if* they were trained in the skills necessary to interact as groups. This is the cart before the horse; if effort can be put into ensuring that children can behave well enough to participate meaningfully in group work, then that same effort can be directed toward teaching them just as well in non-group environments.

In 2006, both the BBC and the *Guardian* reported research that claimed that schools were failing to implement group work effectively.<sup>7</sup> This research, backed up by a much larger study of 4,000 students over a year in grades 1–9, seemed to testify to the same claims made elsewhere: pupils working in groups collaborate more, learn more, socialize more, and are more motivated to succeed. But motivation was measured by the proxy of self-evaluation questionnaires, which is a notoriously bad way of ascertaining the truth, as you will find when you survey people about their history of honesty, drug taking, and other patterns of behavior. Self-reported surveys aren't meaningless, but they're a long way from the level of data we need to evaluate the efficacy of any one learning method.

The paper referred to above generously mentions that the

Hawthorne effect (a well-documented phenomenon where participants in an experiment subconsciously attempt to meet the intended outcomes of the study) may be a factor, but then fails to explore it beyond saying that the researchers tried their best to keep it to a minimum, and that they believed it wouldn't have much of an effect.<sup>8</sup> And they conclude that they have proven students who go through the program probably get better at the kind of things the program is designed to teach. The website accompanying the paper claims that "Experimental research on small groups and psychological theory emphasises that effective group work in classrooms has enormous potential in terms of increasing children's motivation and learning."<sup>9</sup> The researchers appear to start from a hypothetical premise that doesn't even seek to explain an observed phenomena, but rather to confirm it, with an aim to rolling it out across mainstream schools.

## The Opportunity Cost of Group Work

Group work also presents us with another problem: opportunity cost. What are the students not doing when they are doing group work? Is it the most effective and efficient use of time, which is one of the most precious resources they have access to? Or could they be doing something else, with more impact?

Take, for example, when pupils are split into groups and given "seek and return" missions with specific learning goals. That's fine, but it is incredibly time consuming; half a lesson can easily be consumed in the conveyance of a group of facts that could be far more efficiently conveyed in five minutes.

Group work, to put it simply, takes a long time, and the knowledge it conveys could often be far more efficiently imparted through other methods, such as direct instruction. This isn't to say that learning is simply the accumulation of facts, but rather, that the process of that accumulation is far less well facilitated through group work.

Another conceptual problem: the idea that children learn best from other children; that they are the sources of all the information they need. This isn't a bad idea when it comes to getting them to think about alternatives and ideas and values opposite their own, because one student's opinion about something is just as good as another's for learning about justifications and difference. But when it comes to factual conveyance, that's what a subject expert is for. For every subject, there is an enormous body of content that is beyond dispute, even within the humanities, and that is one of the main tasks of the teacher—to introduce children to the best of what has already been discovered and thought. If we don't do that, we break the link between children and the legacy of our ancestors. You might as well start from scratch. That's not something I want to do with my students. I want them to build on what I and others have learned, and hopefully, to surpass us. I refuse to hobble them by forcing them to discover everything for themselves all over again.

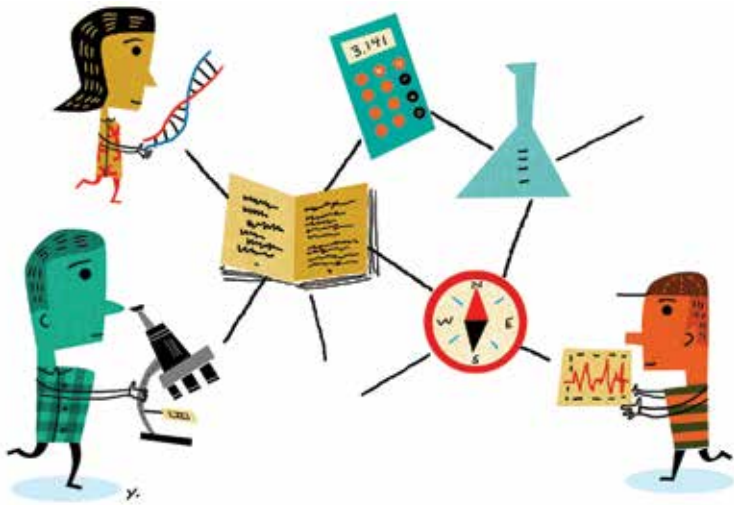
Finally, there's a problem associated with classroom management, often completely overlooked by those who advocate group work: it can wreak havoc on the behavior in your classroom. The temptation for children to be off task is simply too great for many of them, and I witness new teacher after new teacher struggle before a class of kids who are all facing each other and not the front of the class or the teacher. It's an invitation to misbehave. Many of the studies I have read have been conducted in schools that could be best described as pleasant, with groups of students who are best

described as amenable.

But group work in a difficult class, with a new teacher, can be chaos. You won't see much independent effort and collaborative thinking then. Or indeed, learning. I coach a lot of new teachers who are struggling with their students' behavior. And one of my first pieces of advice: hold off on the group work until you can manage your classroom.

### When Is Group Work Useful?

My intent isn't to discredit group work just because some have made exaggerated claims; it's a perfectly sound approach in the classroom for many activities. Sadly, to find good research that offers a more cautious approach to the best use of group work, it is often necessary to step outside of the field of pure educational research, and into cognitive psychology or business, where more



sober research has been done. Former Harvard psychology professor J. Richard Hackman, for example, is worth reading on the broader issues behind teams.<sup>10</sup> In schools, there are several good reasons to do group work:

- In situations where tasks are impossible to achieve without it—for example, football or an orchestra.
- To vary the type of classroom activity—for example, moving from a period of individual book work to a short session of cooperation, in order to stimulate the pupils by the ancient method of mixing things up a bit. A change is as good as a rest and so on.
- To improve students' ability to cooperate, reason with each other, listen to others' opinions, and so on.

These are some of the more common reasons espoused by advocates of group work. They are valuable goals for child development, and I'm happy to use group work from time to time as one way to support that.

It is possibly almost too obvious to say, but every teacher should have an aim for what he or she wants to achieve in his or her lesson, even if that aim changes as the lesson progresses. The prudent teacher then attempts to match the student activity with the method that strikes him or her as being most appropriate to achieving that aim. Utility should be the heart of this decision-making process.

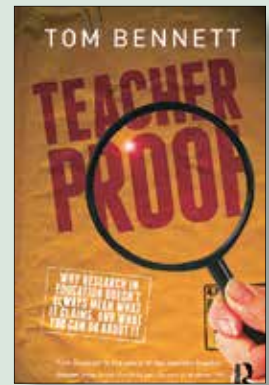
I find group work useful when pupils have spent long periods in private work, individually focused and self-managed. This form of directed learning is fine for stretches, but the human mind palls at repetition and monotony. If, as Aristotle claims, "man is a social animal," then the wise teacher has mercy on the attention spans of young minds and allows cramped muscles to stretch. There is value in discussion between pupils when it can be guaranteed that task-focus can be maintained. Ability grouping can produce a variety of interesting outcomes: more able students can push each other to new heights, and mixed-ability groupings can allow the more able to coach the less able and provide the teacher with an army of assistants.

In my own classroom, when I am sure that my older pupils have understood the content of a philosophy unit, I consolidate the learning through group work. Let's say we have worked through a unit on Kantian deontology. I then pair off the students (in groups of my choosing) to argue, back to back, for and against a simple motion regarding Kant's ethical theories. After two minutes, I blow a whistle and they have to reverse their positions conceptually, arguing against their previous positions. Then I blow again, and they reverse. It's a powerful activity that achieves an end that could not be easily achieved individually. It is hard to sharpen a knife against itself. But against a stone, or another knife?

After that, I get them to build a poster with as many arguments for and against Kant's position as they can think of. They then pass these posters to the next group of students, who correct or steal any points they can. The posters carry on until they return home to their original groups. Finally, I give the students 20 minutes to prepare for a formal debate, with a motion and groups created by me, with rules of conduct and scoring. All of these activities are ideal in collaborative forms; they use students to drive each other's recall and force them to make connections between points of understanding. Note that this requires the students to understand the content prior to the execution of the tasks; the group activities support fluidity and consolidation, not excavation.

Here's my parting advice: use group work when you feel it is appropriate to the task you want your students to achieve, and at no other time. The irony of the advocates' position is that while it correctly identifies the many benefits to using group work, their error is made when group work is preferred over other strategies because of some imagined potency, or when it is fetishized as a method imbued with miraculous properties. It isn't dogma, it isn't a panacea, and it isn't the messiah. It's one strategy among many. And it's a perfectly reasonable part of a teacher's arsenal of strategies. Not because pseudo-research has settled the matter, but because the teacher feels it appropriate at that time, for that lesson, with those children. And not before. □

*(Endnotes on page 44)*



**Teacher Proof**, by Tom Bennett, is published by Routledge, which is offering a 20 percent discount off the purchase of this book through July 2015. To order, visit [routledge.com/9780415631266](http://routledge.com/9780415631266) and use discount code VRK96.

# Teachers Uncaged

## Helping Educators Create Meaningful Change

BY FREDERICK M. HESS

There's a lot of smart guidance out there for teachers seeking advice on instruction, pedagogy, curriculum, and culture. But, when it comes to dealing with the practical frustrations that can trip teachers up every day, not so much. For teachers struggling with technology, wasted time, bureaucracy, or professional development, the most widely recommended texts have little to say. In fact, because most advice for teachers emphasizes instruction and collegiality, it can have gaping blind spots regarding policy, dealing with bureaucracy, and the nitty-gritty of teacher leadership.

A couple years back, I wrote a book called *Cage-Busting Leadership*, arguing that K-12 leaders have much more power than they think to create great schools and systems. The problem is that they are routinely stymied by "cages" built of urban legends, or a failure of imagination, or not knowing how to do what they're already free to do. I've spent a lot of time talking about these ideas to gatherings of school, state, and system leaders.

Over time, plenty of teachers have approached me to say: "Rick, I basically liked what you had to say, but most of it doesn't really apply to teachers." As one teacher put it, with admirable frankness, "My cage is that my principal is a knucklehead, the district won't support my program, my association is off in left field, and



the people writing the laws don't give a crap what I think. So, what do you have for me?"

It was a good question, and the more I thought about it, I realized that teachers inhabit a "cage" of their own, but one very different from that which ensnares school or system administrators. I'm struck by how often even acclaimed teachers tell me that they feel stifled, ignored, undervalued, and marginalized—and aren't sure what to do about it. Some react with anger; others grow bitter; most retreat to their classroom and close the door. The problem is that closing the door doesn't make the frustrations go away; at best, it muffles them.

That was the genesis of my new book, *The Cage-Busting Teacher*, from which this article is drawn. I spent a year interviewing a couple hundred teachers, teacher advocates, union leaders, and others about the cage teachers inhabit and how they can bust out of it. It became clear that while teachers lack ready access to *organizational authority* that school and system leaders can use to bust free of their cage, they have powerful tools of their own, including the ability to tap the *authority of expertise* and to summon *moral authority*. The problem is that most teachers have little understanding of how to marshal and wield these tools. Drawing on the wisdom of savvy practitioners, I seek to offer practical guidance on how teachers can do just that.

Cage-busting is not a substitute for attention to classroom practice, curriculum, and instruction, but a complement. It equips teachers to create the schools and systems where they can do their best work.

### What Is the "Cage"?

The cage consists of the accumulated rules, routines, habits, and norms that exhaust teachers' time, energy, and passion. The cage is abject professional isolation for seven hours a day. It's where everything a teacher has built can be undone by administrative churn or inflexibility. It's when even talented teachers wearily warn young colleagues to "stay in your lane." It's when teachers find that sensible ideas are dismissed because a school is "successful enough" and when they get reprimanded for trying to do more or for not waiting for their turn. The cage is wrought of policies that have destructive effects no one intended.

One New York City teacher I spoke with has led a team that hustled to raise \$100,000 in grants for English language learners and has won teaching awards and national recognition for her efforts. For all that, when she first started teaching at a struggling elementary school and sought to hold after-school tutoring sessions, she was told, "Nope"—an administrator needed to be in the building when students were present, and that wasn't in the cards. Her response? She worked even longer hours, "making home visits, setting up appointments at the public library, McDonald's, wherever." She was working harder and harder just to compensate for administrators. That's the cage!

### What Is "Cage-Busting"?

Cage-busting teachers are *concrete, precise, and practical*. They ask what the problem is, seek workable solutions, and figure out how to put those into practice. Cage-busting is not about garnering headlines or picking fights; it's about creating great places of teaching and learning, one step at a time. Cage-busters know more is possible than

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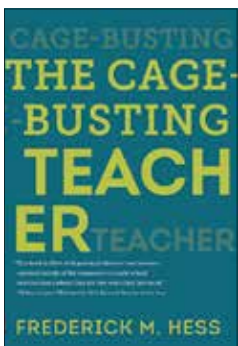


ILLUSTRATION BY DANIEL BAXTER



many teachers may imagine. Sometimes, cage-busting is just getting school or system leaders to pursue policies more sensibly.

Cage-busters believe that teachers can have enormous influence but need to learn how to use their voice. They believe that a focus on problem solving, precision, and responsibility can enable teachers to create the schools and systems where they can do their best work. They don't cage-bust *instead* of tending to curriculum and instruction, but in order to forge schools and systems where their time, passion, and energy make the biggest difference for kids.

In short, cage-busting offers a way forward. Teachers can do much better than venting to their colleagues and hoping for the best. Teachers sometimes feel powerless, but they're not. Superintendents, school leaders, principals, and policymakers are looking for problem solvers, and teachers are better positioned to help solve those problems than anyone else. People care what teachers think. It starts with teachers tackling the things that they see close up and that they can readily influence. It's not about pleasing sentiments or talk, it's about action that shows seriousness and changes culture.

Cage-busting can just be a matter of getting school or system leaders to act more sensibly. I interviewed an English teacher at Martin Luther King Jr. Student Transition Academy, a public alternative school in Memphis, Tennessee. Memphis was piloting the Bill & Melinda Gates Foundation's massive Measures of Effective Teaching (MET) project, including a commitment to incorporating student feedback via a survey. While the survey accounted for just 5 percent of a teacher's score, the teacher told me, "The scores were a freak-out moment for a lot of teachers because we were going to eventually be paid on these scales, and we didn't think they were fair or accurate. ... My students struggle in reading, and the survey was 75 questions long. They'd get bored and stop answering." She also acknowledged, "If anyone knows how teachers are doing, it's students ... I'd advocate for [the survey] but explain why they needed to shorten [it]." So she didn't give up; instead, she helped the district's teacher ambassadors craft a "positive" memo that raised the issue and offered "an idea of what should be done." The district agreed to cut the survey in half. Teachers can sometimes be tempted to fold their arms and tell them-

selves, "Nobody cares what I think." This teacher didn't. She identified a problem and got it solved.

## Cage-Busting in Action

It's always better to start by tackling problems at the school level. The problems are clear, people know one another, and proposed solutions can be concrete. But some problems can't be solved closer to home, which means having to deal with legislators and state officials. First off, knowledge matters when tackling policy concerns. It's a waste of time and energy to complain to officials about things they can't control. That's why cage-busters only wade into policy when they know exactly what problem they need to solve and who can solve it. Knowing the details helps avoid unnecessary headaches and enables you to show up in the right office with a workable solution.

Policymakers don't know how policy will play out in a classroom. Most are well aware of this. That's why they're hungry (believe it or not) for educators who can suggest workable solutions. They are more concerned about ends than means. They want to see good schools and improved student outcomes. They're less interested in the details.

If teachers show up with a modicum of sympathy for what policymakers are trying to do, specific problems to address, and workable solutions to suggest, they're pushing on an open door.

Teachers don't have a lot of experience dealing with policymakers, so it's easy for them to misstep. On this score, as throughout my book, experienced hands share some candid advice. In this case, a veteran Capitol Hill staffer, who spent years as a senior education staffer for one of the nation's most influential education lawmakers, shares some straight talk on how to work with lawmakers—whether in Washington, D.C., or state legislatures—and their staff:

- You don't need a lobbyist. "Sometimes people assume you need a lobbyist to make an appointment, but people in Congress work for you. Just call and make an appointment."
- Do your homework. "Know whom you're talking to. ... I worked for a senator who was a champion for kids with disabilities, yet people would come in

complaining about the difficulties of accommodating special needs kids. They had no idea who they were talking to. If they wanted someone who would help weaken those provisions, they needed to go somewhere else."

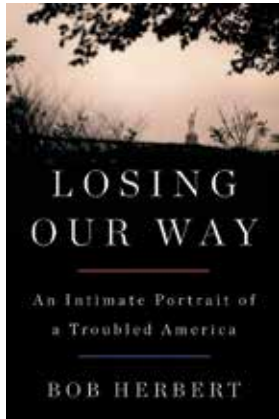
- Tell me about things I can change. "I can't help people with things that I don't control. Come in and tell me about things that I can change; otherwise, I feel like I'm wasting your time and you're wasting mine."
- Explain what should happen. "It's on the teacher to articulate what needs to change and how that change will solve the problem. That takes some work. It's not easy from the teacher's seat to know whether it's the law or implementation that is the problem. But when you've figured that out, then I'm really interested. Until you do, it's hard for me to know if I can help."
- Remember, lawmakers deal with lots of issues, which means decisions are often made by staff. "On a given day, my boss may have to vote on nuclear disarmament, environmental regulation, changes in juvenile justice programs, and student loans. In any given piece of legislation, 90 percent of the decisions were made by staff. Bills are passed by Congress that not one of the 535 members has actually read. So, keep that in mind when meeting with staff."

**C**age-busting is a complement to great classroom teaching, not a substitute for it. Teachers cage-bust so that they can spend less time in dull meetings and more time learning from colleagues. They cage-bust so that they spend fewer minutes watching students listen to announcements and more time infusing students with their passion. They cage-bust so that they spend less energy fuming at pointless paperwork and more energy helping their principals become great.

Now, none of this is easy. It requires teachers to leave the comfort of their classrooms. It calls for taking risks and learning new skills. It means listening to those with whom you disagree, empathizing with administrators, and offering solutions instead of complaints. It's a tough deal, but a good one.

Cage-busters believe it's a deal worth taking. □

## LOSING OUR WAY: AN INTIMATE PORTRAIT OF A TROUBLED AMERICA



In *Losing Our Way: An Intimate Portrait of a Troubled America* (Doubleday), former *New York Times* columnist Bob Herbert tells the stories of individuals whose lives have been irreparably changed by our country's misguided policies on a range of interconnected issues: the wars in Iraq and Afghanistan, the neglect of America's crumbling infrastructure, and the lack of funding for public schools.

His chapters on public education will resonate with educators who know firsthand the challenges that poor children bring to school. We meet the principal of a Pittsburgh elementary school where nearly all students live in poverty. Herbert describes her efforts and those of her teachers "to reduce tardiness and truancy" and "to make reading a big deal." At the same time, he explains how federal education policies that focus on high-stakes testing by linking teacher pay and evaluations to student test scores actually hamper attempts to provide students a broad education that

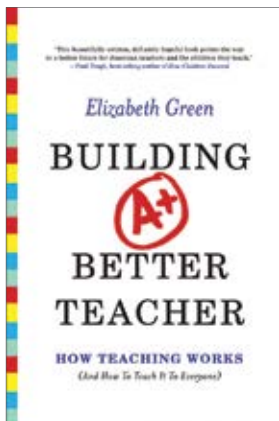
includes art, music, social studies, and science—the very subjects they need to become well-rounded adults.

We also meet a group of Pittsburgh parents who mobilized against now former governor Tom Corbett after he repeatedly cut school funding. These parents worked with members of their community to harness the power of social media and public protest to make last fall's election a referendum on the governor's education agenda.

And in a chapter titled "Cashing In on Schools," Herbert explains "the titanic influence" of the Bill & Melinda Gates, Eli and Edythe Broad, and Walton Family foundations on education policy. The latter foundation, he notes, "has unabashedly pushed a privatization agenda that, in addition to strong support for privately run charter schools, would siphon money from public schools by funneling tax dollars, in the form of vouchers and other initiatives, to families that want to send their children elsewhere."

Herbert's book is a largely bleak account of how the wealthy influence policies that directly hurt the poor and middle class. But his uplifting story of how Pittsburgh community members "have enjoyed significant success in their fight to reclaim the public schools from corporate-style reformers" is one that we can all learn from. "Democracy might have taken a beating in the United States in recent years, but it is not dead," Herbert writes. "A tremendous amount of power still resides with the people."

## BUILDING A BETTER TEACHER: HOW TEACHING WORKS (AND HOW TO TEACH IT TO EVERYONE)



Teachers have a huge impact on their students, but what is it that makes teachers great? Is terrific teaching a skill that can be learned or simply a matter of charisma? These questions are the focus of Elizabeth Green's book *Building a Better Teacher: How Teaching Works (And How to Teach It to Everyone)* (Norton).

Green, a journalist and cofounder of GothamSchools (now Chalkbeat), examines the work of Magdalene Lampert and Deborah Loewenberg Ball, education professors in Michigan who set out to describe and codify a set of explicit practices for teaching math. Green's

research then explores the influence and similarities among those efforts underway in Michigan, the teaching methods underlying Japanese "lesson study," the techniques of an Italian language school, the teaching strategies of author and educator Doug Lemov, and others. In researching their work, Green comes to focus on the importance of pedagogical content knowledge, or the intersection between teaching methods and subject matter, in how we best teach the craft of teaching.

She also does something that few education writers attempt: she tries her hand at teaching. In the book's epilogue, Green recounts the challenges and frustrations of teaching a lesson in the social studies class of a New York City public

school. Drawing on her journalism background, she teaches a lesson on biographical writing. Green, who spent a number of hours preparing for her teaching debut, writes that when the time came to lead students in a discussion of the material, "I realized quickly that I was in way over my head."

Green is convinced that what she would need to improve her skills, if she attempted teaching again, is practice—lots of it. After the experience, in which she worked closely with the actual classroom teacher, Green writes that she "relearned" many things, including what is ultimately her book's most important point: that "a person absolutely *can* learn to teach."

## New Addition

Books about education—some good, some bad, a few great—are published at a constant rate. Here at the AFT, we want to let educators know what they might find worth reading. Starting with this issue of *American Educator*, "What We're Reading" will appear in these pages. This new feature will highlight books that speak to the challenges classroom teachers face, as well as the joy (yes, joy!) they find in teaching. We hope to provide selections that offer constructive ways educators can improve their instruction and support their students and schools—books that honor their work, respect the profession, and inspire us to reclaim the promise of public education.

—EDITORS

# A Partnership for High-Quality Lessons

“BUILDING BETTER CLASSROOMS,” a three-year effort in Cleveland, Ohio, has enabled teachers in grades K–12 to take the lead in preparing high-quality instructional materials aligned to the Common Core State Standards.

The partnership between the Cleveland Teachers Union (CTU) and the Cleveland Metropolitan School District has produced about 280 lessons, which have been viewed 141,000 times on [ShareMyLesson.com](http://ShareMyLesson.com). And that’s just for students in grades K–2 and 3–5. More lessons written for grades 6–12 will be completed in spring 2015 and then posted on the site.

The key to Building Better Classrooms’ success—both locally and across the nation on Share My Lesson—was the vetting of each teacher’s lessons to ensure they were aligned to the instructional goals of the Common Core.

The Cleveland project, funded by the AFT Innovation Fund, included reviewers who were trained on the EQuIP rubric (Educators Evaluating the Quality of Instructional Products), a tool used by educators across the nation to align lessons and units to the standards. This tool was developed by Achieve Inc., a Washington, D.C.-based education nonprofit.

As they submitted their lessons, Cleveland teachers received individualized feedback from these reviewers—their peers—based on the rubric. Then, the union and district planned targeted professional learning opportunities to help teachers more deeply understand the new standards and how best to polish their lessons to meet the EQuIP criteria. So, in addition to yielding great lessons that have been downloaded nationwide, the project

helped the school district by building teachers’ expertise on the Common Core.

Mark Baumgartner, a high school English teacher and director of professional issues for the CTU, says the work hasn’t always been easy—but it’s been worthwhile and has yielded great insight into what’s needed to implement the standards correctly. For its part, the district has contributed part of the salary of Debbie Paden, a middle school teacher on assignment who manages Building Better Classrooms.

As a bonus, several of the project’s lessons have been classified as “exemplars” and are available on the website of Achieve. For more information, go to [www.achieve.org/EQuIP](http://www.achieve.org/EQuIP).

Here are a few examples of the lessons this group has produced:

## Compare and Contrast

<http://go.aft.org/AE115sm1>

In this second-grade English language arts unit, students will compare and contrast details of folktales and fairytales from around the world.

## Addition and Subtraction

<http://go.aft.org/AE115sm2>

This first-grade unit focuses on helping students learn to solve addition and subtraction problems.

## Number Partners

<http://go.aft.org/AE115sm3>

In this kindergarten unit, students work with small numbers to understand how pairs of numbers

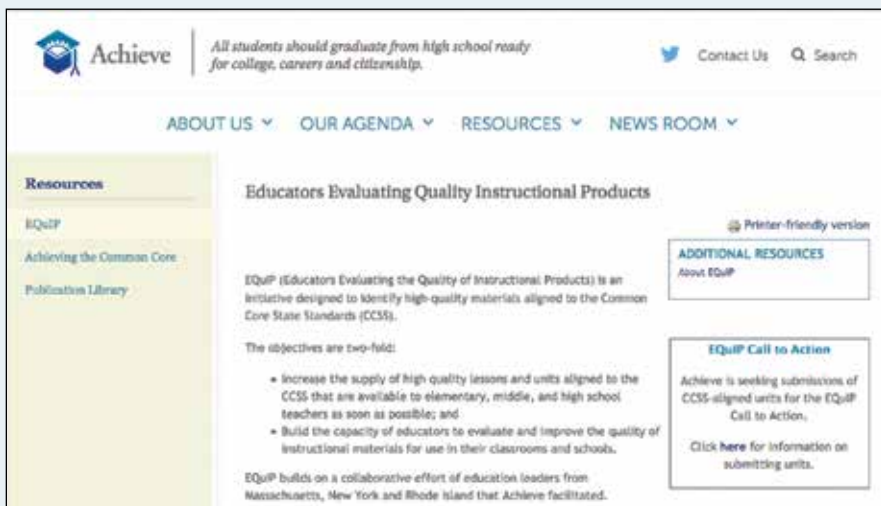
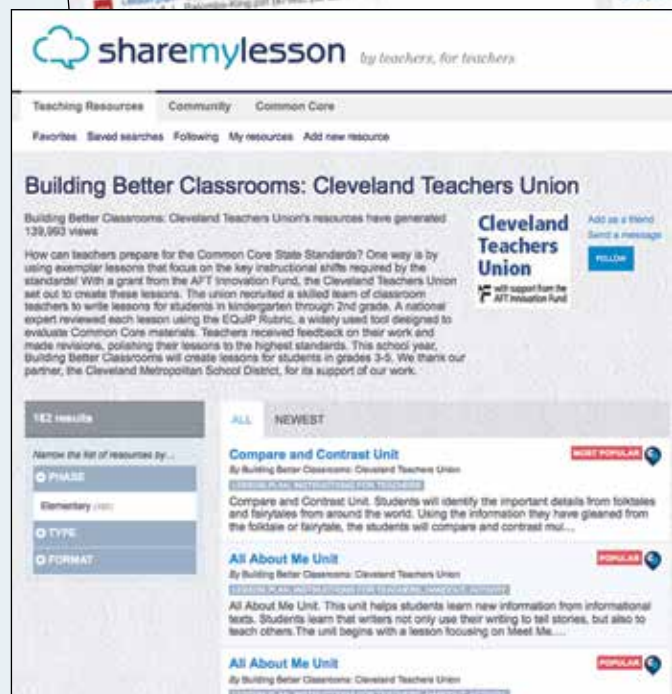
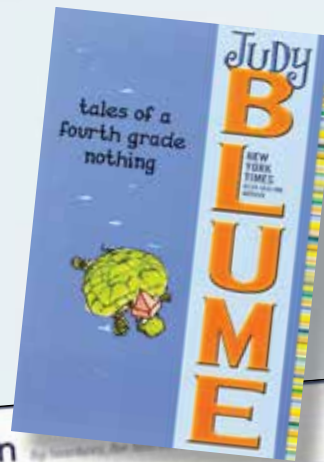


form larger numbers, including the number 10.

## Tales of a Fourth Grade Nothing

<http://go.aft.org/AE115sm4>

Use this comprehensive unit to teach a classic Judy Blume text to your fourth-graders.



# A Funding Database for Educators

NEED MONEY for a classroom project? Crayons for your students? Help with your student loans? How about a teaching fellowship overseas? Then the AFT's Database for Loan Forgiveness and Funding Opportunities is for you!

Examples of available programs are below. For the full list, visit [www.aft.org/funding-database](http://www.aft.org/funding-database). To narrow search results, simply choose the type of opportunity you seek, your location, and the subject and grades you teach.

## Classroom Donation Programs

Go to this section of the funding database for classroom supplies and supplies for your students in need. Among the opportunities is Pets in the Classroom (<http://go.aft.org/AE115tft1>), a program that provides rebates and grants for teachers looking to purchase a classroom pet. You will also find a list of providers that offer free school supplies to educators. To see if a provider is nearby, choose "Classroom Donation Programs" and select your state from the drop-down menu (be sure to leave the rest of the fields blank).

## Loan Forgiveness Programs

If you are struggling to pay back your student loans or are considering a career in

teaching, you may be eligible for loan assistance. Go to the drop-down menu and choose "Loan Forgiveness"; specify whether you are a classroom teacher, a pre-service teacher, or a provider of support services; and then choose your state to find national as well as state-specific opportunities to help reduce your debt.

## Grants and Awards

Have an idea for an amazing project but need funding? Interested in applying for awards for excellent teaching? Opportunities include:

### Target Field Trip Grants Program

Receive up to \$700 to provide an interactive learning experience for your students. <http://go.aft.org/AE115tft2>

### High School Journalism Teacher of the Year

This award presents exemplary high school journalism teachers with a laptop and an all-expenses-paid trip to speak at a national journalism conference. <http://go.aft.org/AE115tft3>

### P. Buckley Moss Foundation

Apply for up to \$1,000 to incorporate arts into educational programs. <http://go.aft.org/AE115tft4>



## Summer Studies and Exchange Programs

Examples of professional development and continuing education opportunities include the Teaching Ambassador Fellowship (<http://go.aft.org/AE115tft5>) and the National Oceanic and Atmospheric Administration's Teacher at Sea Program (<http://go.aft.org/AE115tft6>).

## Did You Know?

Up to \$250 spent on supplies for your classroom is tax deductible. Go to [www.irs.gov/taxtopics/tc458.html](http://www.irs.gov/taxtopics/tc458.html) for more information.

—AFT EDUCATIONAL ISSUES DEPARTMENT

ILLUSTRATION BY JAMES YANG

## RESOURCES

### DESIGNS FOR TEACHING

The Literacy Design Collaborative (LDC) and the Math Design Collaborative (MDC) have expanded their reach to more than 400,000 teachers across all 50 states with adaptable classroom tools that support rigorous instruction under the Common Core State Standards. LDC's website, [www ldc.org](http://www ldc.org), offers resources across grade levels and disciplines to integrate literacy development into instruction. The site also includes free access to related professional development and to teacher-created modules. In math, MDC is providing teachers with professional development that includes a set of core lessons focused on key math concepts for middle school and high school. These lessons are available at the Mathematics Assessment Project, <http://map.mathshell.org/materials/lessons.php>.

For more on the LDC and MDC initiatives, visit [www.researchforaction.org/projects/?id=89](http://www.researchforaction.org/projects/?id=89).

### FERGUSON'S WAKE

Events surrounding the deaths of Michael Brown in Ferguson, Missouri, and Eric Garner in New York City are generating a national discussion about race, justice, and the legal system. Educators can use this opportunity for teaching by visiting Share My Lesson's materials on racial profiling and stereotyping.

Cocreated by the AFT, Share My Lesson offers a growing resource base on topics tied to the issue: activism and peaceful

protests, the U.S. judicial system, tolerance and respect, and helping students express their feelings. Visit the special section at <http://go.aft.org/AE115res1>.

### MEASLES RESURGENCE

Together with public health policymakers and the scientific community, the AFT is urging individuals to protect themselves and their children by getting vaccinated against measles.

The AFT has asked members who are teachers, paraprofessionals, public employees, and healthcare workers to consult with their healthcare providers on possible boosters and reimmunizations. And the union has released "Stopping Measles in Its Tracks," <http://go.aft.org/AE115res2>, a fact sheet about the importance of vaccinations.

### STUDENTS WHO GRIEVE

The Coalition to Support Grieving Students recently launched [GrievingStudents.org](http://GrievingStudents.org), a multimedia resource to help educators and school professionals support the nine out of ten children who experience the death of a family member or friend by the time they complete high school.

The AFT is part of this coalition, which has created videos and modules informed by the work of the National Center for School Crisis and Bereavement to highlight best practices for addressing grief at school.

## A Welcome Writing Assignment

Kudos to Andy Waddell for his article “Writing about Writing: The Challenge of Helping Students ‘Get It Down on Paper,’” which appeared in the Summer 2014 issue of *American Educator*. Every English teacher who reads this insightful piece on helping students get something down on paper surely nods in agreement when Waddell posits that every teacher should be a teacher of writing.

As I reflect on my 34 years of teaching English (I have since retired), one assignment in particular jumps to mind as being especially important and meaningful to each student, motivating even the most reluctant writer. Students wrote autobiographies that covered their early lives and education, their families and friends, their beliefs, and their hopes and goals for the future. All I did was insist that important writing skills be incorporated, such as the use of anecdotal details, transition words and phrases, and introductory and closing paragraphs for each chapter. I encouraged students to include photographs and drawings, and parents took such an interest in the assignment that years later they claimed it was the most valuable writing assignment given in all of high school.



I saw students make progress at the completion of each chapter as they added more material that mattered to them. Correct grammar and spelling became truly important to them, especially when they knew this document would become part of their families’ keepsakes and would be shared with loved ones, an audience infinitely greater than just their teacher.

—KATHY MEGYERI  
Washington, DC

## Making Room for Social Studies

Thank you for “Content on the Cutting-Room Floor: A Brief History of the Elementary Curriculum,” a definitive and helpful article by Ruth Wattenberg in the Summer 2014 issue, which chronicled the diminishing teaching of social studies and science in the elementary school classroom. Watten-

berg notes in the endnotes that 53 percent of teachers don’t necessarily think the shift away from social studies and science is a bad thing; they believe that the extra attention given to math and reading is valuable—that learning in these two subjects has “improved.”

As a teacher of social studies methods at the college level, I have my own thoughts about this. As evidenced by the Praxis exam, which most teaching candidates must take, social studies is the area in which candidates tend to score lowest. The lack of attention to social studies instruction is catching up with us and clouding our understanding of democratic citizenship and its responsibilities.

Teachers are the ones who pass on what it means to be a good citizen. At the *very least*, curriculum must be integrated with the necessary social studies learning: biographies of our founding fathers and mothers, historical stories, and continued emphasis on how people around the world live and what they think. Social studies can be very hands-on and exciting, but not if teacher candidates don’t *know* much about it! Instruction in this important subject has to start in elementary school.

—MARY SCHUMACHER  
Wichita State University  
Wichita, KS

## Love of Reading

(Continued from page 13)

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## Teacher Wars

(Continued from page 17)

the average high school graduation rate in the nation's 50 largest cities was just 53 percent, compared with 71 percent in the suburbs.<sup>20</sup> International assessments conducted by the Organization for Economic Cooperation and Development show American schools are producing young adults who are less able than our counterparts in other developed nations to write coherently, read with understanding, and use numbers in day-to-day life. Even our most educated citizens, those with graduate degrees, are below world averages in math and computer literacy (though above average in reading).<sup>21</sup>

I do not believe schools are good enough the way they are. Nor do I believe that poverty and ethnic diversity prevent the United States from doing better educationally. Teachers and schools alone cannot solve our crisis of inequality and long-term unemployment, yet we know from the experience of nations like Poland that we don't have to eradicate economic insecurity to improve our schools.

What I do believe is that education reformers today should learn from the mistakes of history. We must focus less on how to rank and fire teachers and more on how to make day-to-day teaching an attractive, challenging job that intelligent, creative, and ambitious people will gravitate toward. We must quiet the teacher wars and support teachers in improving their skills and the profession. □

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## Group Work

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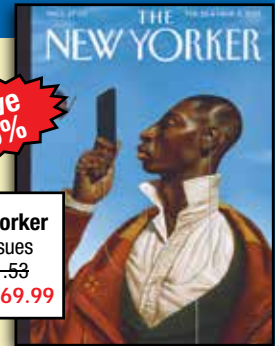
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