Bridging the
"Widest Street
in the World"
A Bold Plan for Teacher Preparation

COLLEGE OF ARTS
AND SCIENCES

COLLEGE OF
EDUCATION

Defenders of Human Rights

THE DALAI LAMA. Wangari Maathai. Elie Wiesel. Such names are synonymous with justice and freedom around the world. What better way to teach students about human rights than through their stories? Speak Truth To Power, a free online resource, uses the personal narratives of courageous individuals called "defenders" to explore human rights issues and abuses, including police brutality, genocide, and child labor.

The site, based on the book *Speak Truth To Power: Human Rights Defenders Who Are Changing Our World* by Kerry Kennedy, is a project of the Robert F. Kennedy Center for Justice and Human Rights. The center partnered with the New York State United Teachers to create a curriculum for grades 6–12 written by teachers across New York state.

The centerpiece of the curriculum is 17 lessons, each delving into a particular human rights issue through the life of a prominent defender. For instance, students learn about free expression and religious freedom through the Dalai Lama, who has championed freedom for Tibet. To learn about environmental rights, students read the personal narrative of Wangari Maathai, Kenya's leading environmentalist and women's rights advocate. And to learn about genocide, students can turn to the profile of Elie Wiesel, who has written extensively about the Holocaust.

Lessons also include suggested activities for students, such as research projects and letter-writing campaigns, as well as questions teachers can pose to stimulate further discussion. Videos and photographs of each human rights defender are available at the site, as well as a timeline of human rights milestones and a glossary of terms such as *asylum*, *censorship*, and *xenophobia*.

To visit the Speak Truth To Power website, go to **www.rfkcenter.org/sttp**. For webcasts and blog posts, go to **http://blogs.nysut.org/sttp**. To download the curriculum, go to **http://locals.nysut.org/speaktruth_curriculum_complete.pdf**.

The Middle Class: Union Made

UNION MEMBERSHIP is essential for building a strong middle class, according to a recent report published by the Center for American Progress. *Unions Make the Middle Class: Without Unions, the Middle Class Withers* explains how unions promote political participation and ensure that workers are paid fairly, thereby strengthening the middle class. As the chart to the right shows, the decrease in union membership over the past 40 years is closely tied to the decrease in the middle class's share of the nation's income. As the report explains, "The middle class weakened over the past several decades because the rich secured the lion's share of the economy's gains." The report attributes the decline in union membership to a changed political and legal landscape that has prevented workers in the private sector from exercising their right to join a union.
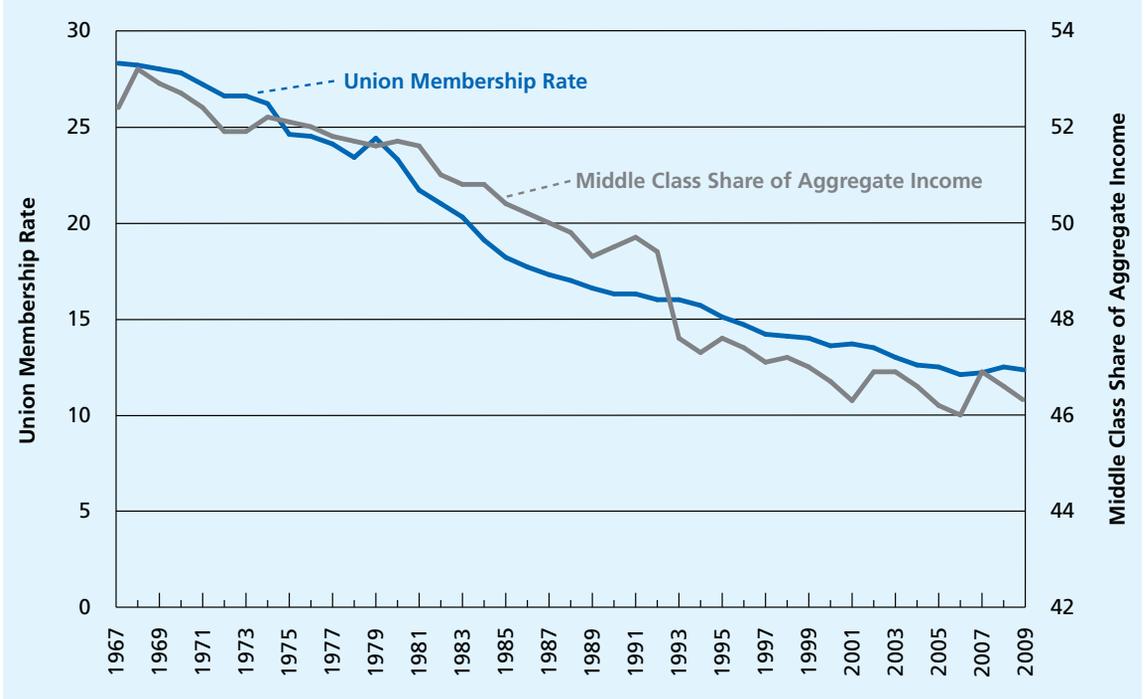
Visit **www.americanprogressaction. org/issues/2011/04/unions_middle_ class.html** to download the full report and access related research, including a map with state-by-state data.

Union Membership Rate

Middle Class Share of Aggregate Income

SOURCES: AUTHORS' ANALYSIS. UNION MEMBERSHIP RATE IS FROM BARRY T. HIRSCH, DAVID A. MACPHERSON, AND WAYNE G. VROMAN, "ESTIMATES OF UNION DENSITY BY STATE." MIDDLE CLASS SHARE OF AGGREGATE INCOME IS FROM UNITED STATES CENSUS BUREAU.

How to Do Peer Assistance and Review

FOR SCHOOL DISTRICTS looking to establish Peer Assistance and Review (PAR) programs, an online user's guide provides just the tools and information they need. The Project on the Next Generation of Teachers at the Harvard Graduate School of Education has created a free, comprehensive website (available at **www.gse.harvard. edu/~ngt/par**) that outlines the many benefits of PAR, a program that relies on consulting teachers who excel in the classroom and are released from teaching duties to mentor new teachers and support struggling veteran teachers, as well as make recommendations to a committee on whether the teachers they are working with should remain in the profession. The committee is typically made up of teachers and administrators, and cochaired by the union president and a high-level district administrator. PAR is a true labor-management partnership in that union and district officials jointly oversee all aspects of the program.*

The website draws on the PAR programs of seven school districts: Cincinnati, Ohio; Minneapolis, Minnesota; Montgomery County, Maryland; Rochester, New York; San Juan, California; Syracuse, New York; and Toledo, Ohio. Each program's history, specific design, and lessons learned are highlighted. The site's authors emphasize that these programs are examples only: "There's no simple recipe for PAR," they write. "There's no guarantee that what works in one setting will work in another." To that end, the site answers several practical questions such as whether PAR can be adopted at the bargaining table, if principals should help plan PAR, and how districts pay for the program. The site also includes links to contract provisions, research and conference papers, and sample documents relating to PAR.

*For an article on PAR from the Fall 2008 issue of *American Educator*, see **www.aft.org/pdfs/ americaneducator/fall2008/goldstein.pdf**.

Russia's Hermitage Museum Comes to the Classroom

THE STATE HERMITAGE MUSEUM in St. Petersburg, Russia, widely considered one of the world's best museums, offers seven free online courses for students through its Virtual Academy (visit **www. hermitagemuseum.org/html_En/ 06/hm6_2.html**). The courses, based on works at the museum, cover a variety of time periods and topics: medals, Rembrandt, ancient Rome, biblical subjects, the Winter Palace, knights, and ancient Egypt. The course on Rembrandt, for example, begins with a brief biography, explores his life as a collector and painter, explains the social and political context in which he lived, and then discusses many of his major paintings and prints. The image below shows the course's introduction to *Abraham's Sacrifice*. The underlined words—*Abraham*, *patriarch*, and *Old Testament*—all link to a glossary that provides definitions

and background knowledge.

The course on ancient Egypt is just as extensive, covering geography, history, religion, architecture, and writing. The image below left provides a glimpse of the

content on pyramid construction. The course on the Winter Palace offers a fascinating way to begin learning Russian history. The image below right explains the origin of the name the Hermitage.
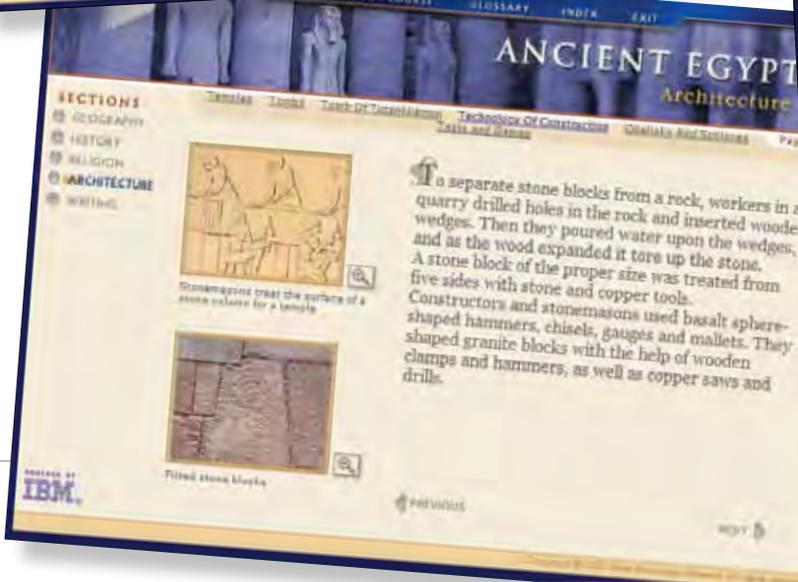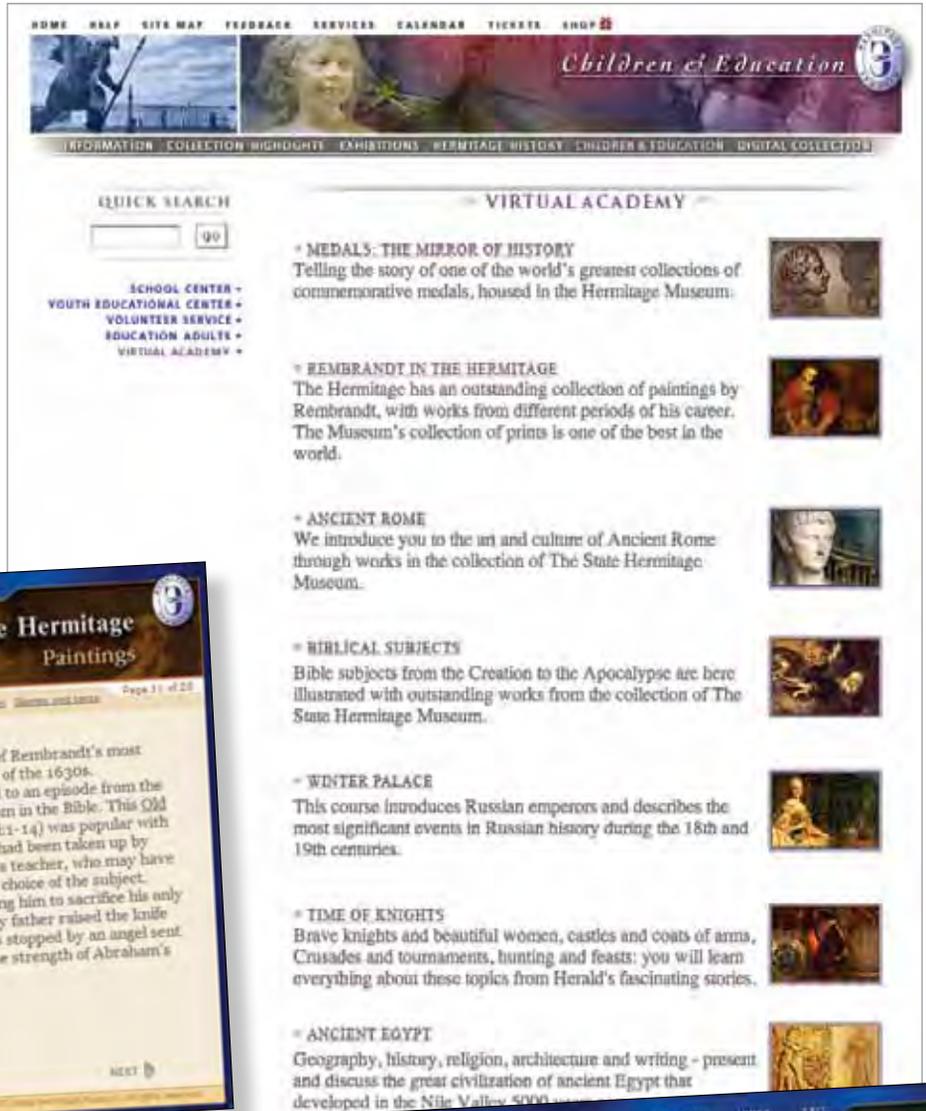
Science in Summer

STUDENTS' AND TEACHERS' curiosity about the natural world—chemistry, weather, marine life, and more—doesn't end when summer begins. It may only grow as school vacations provide time to explore. Two online science resources, the Jason Project and the National Science Foundation's special reports, are sure to fascinate students and teachers alike.

The Jason Project offers in-depth information on topics such as extreme weather, geology, energy, and ecology. The site (visit **www.jason.org**) uses photographs and videos as well as stories about real-life scientists and current events to simplify complex ideas and introduce students to important terms, such as *atmosphere*, *supercell*, and *lightening*, which appear in "Operation: Monster Storms," the site's weather curriculum. All of the units are designed as "operations," complete with games and digital labs that take students on "missions" as they learn about plate tectonics, physics, and more. For full access, be sure to register (it's free and quick). Once you are logged in, you'll enter Jason's Mission Center, shown above right.

The National Science Foundation's special reports (available at **www.nsf. gov/news/special_reports**) examine a variety of topics—including climate change, dead zones, and jellyfish—through detailed descriptions, quotes from leading researchers, and videos. Several of the reports seem specially designed to appeal to those students who have yet to discover how fascinating science is: for example, there are reports on the many sciences embedded in NFL football and NASCAR racing. Even the reports that first appear more traditional, like "Chemistry Now," have interesting twists, such as proceeding from the chemistry of water to that of cheeseburgers and chocolate.

Book Club for Teachers

LOOKING FOR A WAY to connect with, and learn from, colleagues across the country? Join the *Education Week* Teacher Book Club. Just go to **www. edweek.org/tm/section/bookclub/ index.html** to sign up. Four times a year, staff members select a noteworthy book, post a book backgrounder (which is really helpful in deciding whether to buy the book and participate), and arrange a three- to five-day online discussion with the author and club members.

The next book, which will be discussed the week of July 18, is Mike Schmoker's *Focus: Elevating the Essentials to Radically Improve Student Learning*. A former English teacher, administrator, and football coach, Schmoker does not fall for faddish reforms; he emphasizes good instruction and high-quality instructional materials.

© IMAGES.COM/CORBIS

Bridging the "Widest Street in the World"
Reflections on the History of Teacher Education
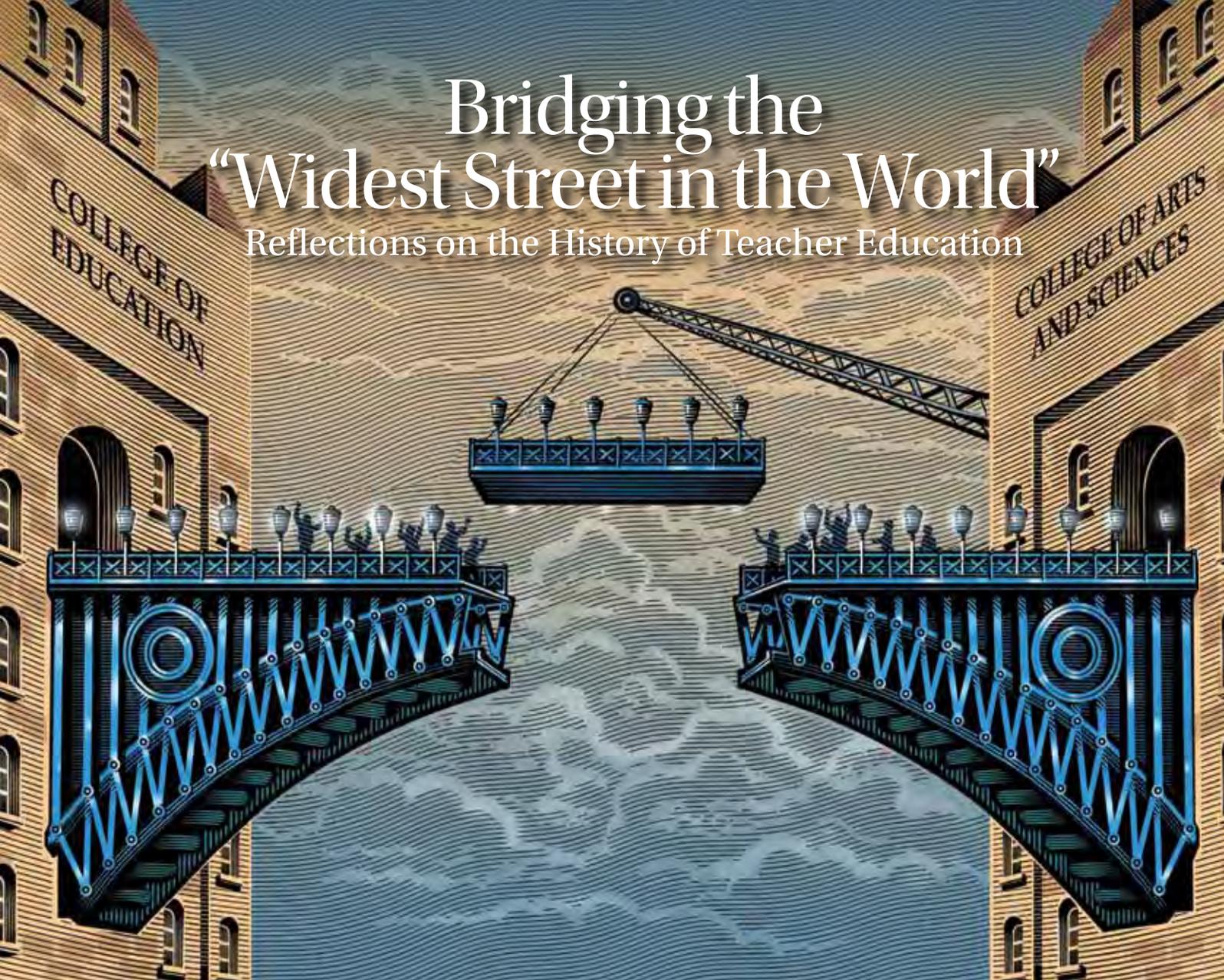
BY JEFFREY MIREL

For at least a half century, education reformers have quipped that 120th Street in New York City, the street that separates Teachers College from the rest of Columbia University, "is the widest street in the world."[1] Underlying this quip is the belief that Columbia's liberal arts faculty members regularly dismiss the child-centered educational methods promoted by their colleagues at Teachers College as at best misguided and at worst anti-intellectual. In turn, professors at Teachers College routinely denounce their liberal arts colleagues as musty traditionalists who fail to recognize that most elementary and secondary students in American schools find discipline-based education useless and irrelevant to their lives.[2]

Jeffrey Mirel is the David L. Angus Collegiate Chair in education and a professor of history at the University of Michigan, Ann Arbor. His previous positions include serving as a junior high and middle school English and history teacher. His most recent book is Patriotic Pluralism: Americanization Education and European Immigrants.

As cartoon-like as this portrait is, it contains more than a kernel of truth. Since the creation of public schools in the early 19th century, people have been debating questions about the relative importance of subject matter and pedagogical methods in teacher training programs.[3] Yet because of the highly decentralized nature of 19th- and early 20th-century American public education, these debates were essentially moot. Each school district was a largely independent governing body, and school board members in the vast number of rural districts across the land hired whomever they pleased, often regardless of a teacher's preparation (or lack thereof).

This situation began to change dramatically in the first half of the 20th century. Schools and colleges of education became an integral part of American universities, and state-created "normal schools" (charged specifically with preparing teachers) became colleges in their own right.[4] In both cases, these institutional changes seemed to offer the prospect of uniting specialists in subject matter and pedagogical methods. Instead, these groups sought to establish their separate areas of expertise and thus

wound up widening the gap between them. Indeed, for most of the 20th century, dialogues between "ed school" faculty members and their liberal arts colleagues about how to train prospective teachers in such fields as English, history, mathematics, and science were scarce, with neither side respecting the expertise of the other. With few exceptions, this lack of dialogue and collaboration in teacher training continues to the present day. It is arguably one of the most important factors contributing to the poor quality of teacher education in this country.

A parting of the ways between education and liberal arts faculty members was not inevitable. In fact, in the late 19th century, a different model emerged at the University of Michigan (U-M), in which liberal arts faculty members and the professors dedicated to the "art and science of pedagogy" worked together on teacher education. This unified approach to teacher education took root after a significant change in admissions procedures that U-M introduced in the late 19th century. At the time, virtually every college and university in the country admitted students on the basis of examinations, which differed from institution to institution. In 1870, U-M shifted from using examinations for admissions to requiring simply that prospective students graduate from "accredited" high schools. In this system, the accrediting agents were U-M faculty members and, as a consequence, liberal arts professors regularly visited high schools across the state (and eventually across the country), determining whether schools were teaching students well enough for them to be worthy of U-M admission.[5]

Known as the Michigan Diploma Plan, this approach to college and university admissions had two main effects on teacher education at U-M. First, U-M liberal arts faculty members broadened their intellectual horizons to assess not just whether the high school teachers they were assessing as part of the accreditation process knew the academic content they were teaching, but also whether they appeared to be knowledgeable and effective teachers. In other words, they paid attention to both subject matter *and* teaching methods. Second, the more these faculty members visited high schools, the more they realized that U-M students who became high school teachers needed training in how to teach. Consequently, in 1879, Michigan became the first university in the country to create a permanent chair in pedagogy, which was housed in the College of Literature, Science, and the Arts. Over the next two decades, the faculty members serving as the education chair worked closely with their colleagues in the College of Literature, Science, and the Arts to introduce U-M students to the "science and art of teaching." In other words, they helped students become better teachers in their subject areas.[6] As William Payne, the first education chair, put it, "Successful teaching involves two elements—[subject] matter and methods." He believed that these two aspects of good teaching were deeply intertwined and neither should be neglected.[7]

Unfortunately, early in the 20th century, this approach to teacher education at Michigan ended.[8] As liberal arts faculty members increasingly sought to develop their own fields of inquiry, few of them wanted to spend time visiting and accrediting high schools. To address this problem, in 1899, the university hired another education faculty member to take over the accreditation program. While some liberal arts professors continued to visit high schools, this redesign of the accreditation process was the first step toward dividing subject matter from methods at U-M. As the number of "educationists" at U-M grew, the university created a Department of Education within the College of Literature, Science, and the Arts. Faculty members of this new department increasingly focused their teaching and research on such non–liberal arts fields as educational administration and school finance. In 1921, the department left the College of Literature, Science, and the Arts and became the School of Education. With this move, faculty members in the liberal arts and their colleagues in the School of Education were literally and intellectually separated. The once-collaborative approach to teacher education vanished.[9]

Over the years, no one referred to South University Avenue, the street that separates the School of Education from Michigan's

For most of the 20th century, dialogues between "ed school" faculty members and their liberal arts colleagues about how to train prospective teachers were scarce.

liberal arts college, as the "widest street in the world," but the gap between education specialists and disciplinary specialists in Ann Arbor became as broad and deep as at any university in the country. While the circumstances that led to this disconnect at Michigan were unique, the trend they represented was widespread. Indeed, the rise of schools and colleges of education and the growing indifference of liberal arts faculty to teacher training ensured that this gap would go unbridged for decades to come.[10]

Two other developments pertaining to the rise of schools and colleges of education made matters worse. First, between 1920 and 1950, state governments increasingly made schools and colleges of education the main institutions legally permitted to train prospective teachers for certification.[11] With this development, the center of gravity in teacher training moved almost completely to education faculty members whose areas of expertise were in such fields as educational administration, elementary and secondary school teaching methods, educational measurement (i.e., testing), and educational psychology. While prospective high school teachers still had to take liberal arts courses in areas such as English, history, mathematics, and the sciences to meet state certification standards, the certification bar often was quite low.[12] In addition, increasing numbers of prospective elementary school teachers took many if not most of their courses in schools and colleges of education, leaving them with modest exposure to traditional liberal arts courses.

This trend relates directly to the second development that undermined the quality of teacher education—the diminished weight given to liberal arts knowledge in teacher training curri-

cula. Beginning in the 1920s and continuing to the present day, many faculty members in schools and colleges of education adopted ideas rooted in progressive education that paid considerably less attention to curricula based in the liberal arts.[13]

Emerging in the late 19th and early 20th centuries, ideas developed by reformers known as progressive educators provided what was then a much-needed critique of the conditions and practices in public schools across the United States. At the time, most public schools (in big cities and rural areas) were overcrowded, most instruction was teacher centered, and, for the most part, the pupil's role was passive. Teachers taught curricula that were unrelated to the lives of children, focused on having students memorize rather than understand texts, and kept students in line using corporal punishment.[14]

Progressive educators sought to correct all these ills, but they were particularly concerned about the nature and content of school curricula, which they denounced as little more than col-

> ## Dewey's connection of discipline-based subject matter and pedagogy was revolutionary. Sadly, over the next century, Dewey was badly misunderstood.

lections of random facts (e.g., a list of the major rivers of South America). Worse, progressive critics argued, teachers typically presented the facts without any sense of context or even a reason why such information might be useful.

John Dewey, long regarded as the "father" of progressive education, focused on this problem in his classic 1902 essay "The Child and the Curriculum." He argued that changing the nature of curricula was central to improving the quality of teaching and, by implication, teacher education. Dewey was emphatic that pupils *should* learn discipline-based content, but he urged educators to recognize that, for the most part, such content was structured around questions and research that were meaningful to experts in various academic disciplines, not to children. As he explained, "Textbook and teacher vie with each other in presenting to the child the subject-matter as it stands to the specialist.... The material is not translated into life-terms." By lamenting the lack of "life-terms," Dewey was arguing for discipline-based curricula to be reframed in ways that connected "with what the child has already seen and felt and loved."[15]

Dewey declared that this should not be a process of either dumbing down or sweetening up such content to make it easier for students to memorize facts. Rather, he argued, reframing the content should enable educators to view traditional curricula as a vast storehouse of answers to problems that people in the past have solved. From that perspective, educators' primary task was to create engaging problems for students to solve, problems that would compel them to seek answers in discipline-based knowl-

edge. As Dewey put it, discipline-based subject matter "must be restored to the experience from which it has been abstracted."[16] For example, in a Deweyan school, students might learn about the Pythagorean theorem when dealing with a real-life problem like building a shed that requires right angles on the corners, rather than just memorizing an abstract mathematical formula.

Dewey's connection of discipline-based subject matter and pedagogy was brilliant and revolutionary. It offered professors in schools and colleges of education a marvelous opportunity to reach out to their colleagues in the liberal arts to work together in reshaping curricula and teacher education along Deweyan lines. Sadly, this is not what happened. Over the next century, Dewey was badly misunderstood. He became a sort of patron saint for teacher educators who wanted to make classrooms more student centered and active, and to make the curriculum more relevant to students' daily lives. But few teacher educators were as committed as Dewey to making the liberal arts an essential part of this "new education." Many of them took Dewey's critique of the formal and abstract nature of disciplinary knowledge as reason enough to avoid stressing such knowledge—especially at the elementary level. Consequently, beginning in the 1930s, some education school faculty members sought to create their own curricula for elementary schools, curricula that were long on relevance and interest, but short on discipline-based knowledge and information.[17] Far too many of these curricula engaged children, but did not prepare them for more advanced studies. Compounding this problem, few liberal arts professors saw improving teacher education, especially on the elementary level, as something worth their time and effort. In short, no one seemed to realize the importance of early education in laying a strong foundation for future studies and for life. And so, as the 20th century wore on, the gap between discipline-based content and pedagogy widened.

Nowhere were these trends clearer than in the development of social studies education. In the late 19th and early 20th centuries, history, geography, and civics were important parts of most elementary schools' curricula. For example, in cities such as Chicago, Cleveland, and Detroit, the prescribed program of studies in the elementary grades regularly included biographies of historical figures like Columbus, Washington, and Lincoln; folktales or fables; units on geography (local, national, and foreign, depending on the grade level); and elements of civics, such as knowledge of the separation of powers in the Constitution.[18]

While there is not a great deal of evidence about how well these subjects were taught or how much of this material pupils retained, many child-centered progressive educators rejected these subject-centered approaches as merely simplified versions of the austere and distant disciplines that Dewey had criticized. Believing they were holding true to Dewey's vision, child-centered progressive educators in the 1920s and 1930s sought to create more relevant and interesting course materials that they argued "unified" history, geography, and civics into a new and exciting approach they referred to as social studies. Perhaps the most important educationist associated with this effort was Paul R. Hanna, who was educated at Teachers College

and who spent three decades as a professor in the School of Education at Stanford. During these years, he became one of the leading social studies educators both in the United States and internationally.[19]

In the 1930s, Hanna argued that elementary schools needed a social studies curriculum that would be much more interesting and relevant for children than the traditional history, geography, and civics approach of the past.[20] Believing that he was enacting Dewey's ideas, Hanna sought to create a curriculum centering on "human relations," which he believed were basic human activities (e.g., producing goods and services, communication and transportation, and recreation) that would resonate with elementary children. Echoing Dewey, he stated, "Human relations are those unitary life experiences that the specialists have broken up and classified into such subject-matter fields as history, geography, civics, economics, sociology, political science, ethics, esthetics, anthropology, [and] individual and social psychology."[21] But when Hanna got down to the specifics about what his "human relations" curriculum was about, the links between it and disciplinary knowledge—links that were central to a true Deweyan approach—were tenuous at best.

Defining interest and relevance as relating to the immediate experiences of children, Hanna developed what became known as the "expanding environments" or "expanding communities" approach. This innovation essentially scrapped the earlier discipline-based social studies curriculum and replaced it with a series of lessons that in the first grade focused on "home and school life." He then had children move outward to "community life" in second grade, considered how people adapted to different forces of nature in third grade, and so forth. Hanna believed that these topics were far more interesting for elementary pupils than stories about, for example, young Ben Franklin. Indeed, this approach questioned the usefulness of history altogether, because it was not part of children's immediate experience.[22] This is not to say that traditional history, geography, and civics disappeared from elementary schools, but they increasingly gave way to lessons based on such topics as what it means to live in a social group.[23]

Refining his ideas in the late 1930s and 1940s, Hanna published a series of enormously popular social studies textbooks that promoted the "expanding environments" approach in simple, colorful, readable formats. They were among the most widely used, if not *the* most widely used texts in elementary social studies in the country.[24]

The popularity of these texts was due to more than just their accessible format for children. Another factor was that elementary school teachers needed only a very modest amount of knowledge about history, geography, civics, or the social sciences to use these

When one of the leading social studies educators got down to specifics, the links between his curriculum and disciplinary knowledge—links that were central to a true Deweyan approach—were tenuous at best.
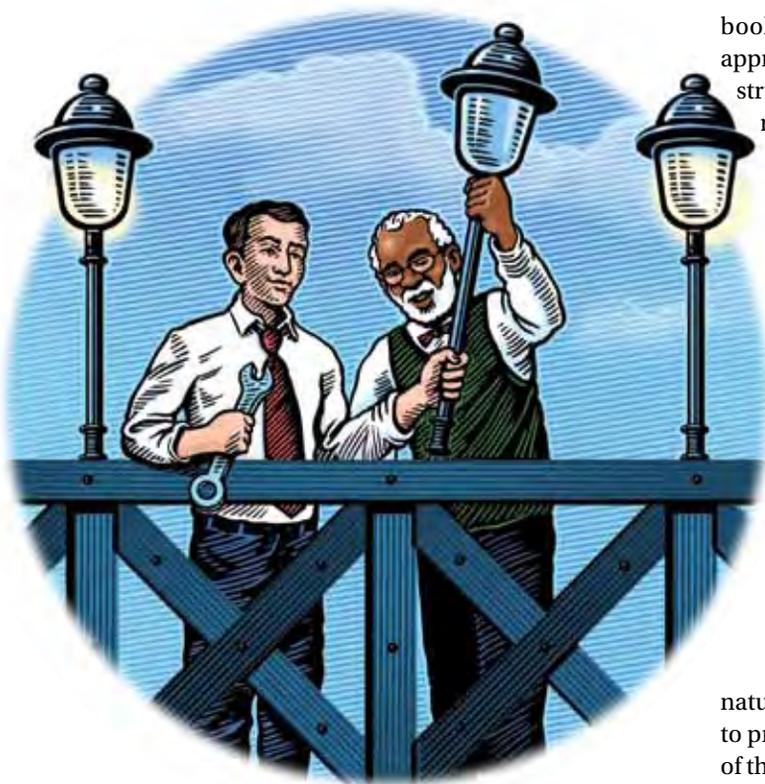
books. Hanna was quite honest about why he structured his approach to social studies this way. Writing in 1934, he stated, "I struggled for a long time to get some kind of structure that did not represent merely the traditional categories of economics, political science, sociology, anthropology, history, and geography, *because these would scare most teachers not having had anything in these fields* [emphasis added]."[25] Whether such subjects really would have "scared" elementary teachers (or prospective teachers) is anybody's guess. But Hanna certainly assumed that elementary teachers were unprepared to go beyond the simple stories in his textbooks. Thus, rather than providing a foundation for pupils to expand their historical, sociological, or economic knowledge—what Dewey had hoped problem-based curricula would promote—these stories became ends in themselves.

Over the next half century, this problem worsened. As education and public policy professor David K. Cohen argues, the absence or weakness of state curricula and the decentralized nature of American school governance led schools and colleges to prepare prospective teachers "to teach no particular version of their subjects."[26] Rather than encouraging teacher trainees to delve deeply into how to teach liberal arts subjects, teacher

education programs taught their graduates "a generic sort of teacher education" that prepared them to teach "nothing in particular."* Given this situation, it is no surprise that many teachers eagerly embraced such easy-to-use (and relatively liberal arts–free) programs as Hanna's expanding communities.

This lack of interaction between teacher education and the liberal arts was a continuing source of concern and controversy. Throughout the second half of the 20th century, there were increasingly frequent and acrimonious debates about the quality of teacher education, with particular emphasis on the lack of disciplinary knowledge among most prospective and practicing teachers. For example, in the late 1940s and early 1950s, a number of critics such as Mortimer Smith and Arthur Bestor published widely discussed books deploring the discipline-adverse aspect of teacher education.[27] As Smith explained, the "official philosophy" (i.e., child-centered pro-

The often-repeated belief that, after Sputnik, American teacher educators and K–12 teachers rediscovered the liberal arts is erroneous.

gressive education) of most teacher training institutions at best ignored traditional subject matter and at worse disparaged it. Specifically, he declared, "Our teacher training colleges and the graduate schools of education in our universities are wholeheartedly devoted to methodology." Smith maintained that concerns about effectively teaching subject matter were simply outside the perspective of most schools and colleges of education.[28]

In October 1957, the Soviet launch of Sputnik jarred educators and created a new opportunity for reconnecting the disciplines with pedagogy. Amid the panic about Sputnik, many social commentators and political leaders argued that the reason the Soviets were beating the United States in the "space race" was the poor quality of public schools. Responding to this criticism, and to the lure of federal money following the creation of the National Science Foundation and passage of the 1958 National Defense Education Act (NDEA), a number of professors from the liberal arts and social sciences entered the field of school reform. Almost all of their reform efforts stressed the importance of disciplinary knowledge in improving teacher education and classroom practice. By far the most famous of these initiatives was "Man: A Course of Study" (MACOS), an interdisciplinary curriculum created in the mid-1960s by Jerome Bruner and an amazingly diverse group of educators. Drawing on the skills and knowledge of anthropologists, folklorists, linguists, and psychologists, to name just a few of the backgrounds

of the people involved in the project, MACOS promised to transform late elementary social studies (fourth or fifth grade) by getting children to address the question, "What is human about human beings?"[29] Using films, storytelling, and other novel pedagogical approaches, MACOS educators got children engaged with disciplinary content, for example, learning about how such people as the Bushmen of the Kalahari and the Netsilik Eskimos adapted to challenging environments and developed rich, distinctive cultures.[30]

Students and teachers responded enthusiastically to pilot versions of this curriculum, which seemed to offer a brilliant new approach to bridging subject matter and educational methods. Yet by the mid-1970s, MACOS had become a flashpoint of the emerging "culture wars." In 1970, for example, an evangelical minister in Lake City, Florida, denounced MACOS as "godless, humanistic, evolution-based, socialistic, and 'sensual in philosophy,'" claims that eventually impelled school district leaders to discontinue the program. Over the next few years, right-wing critics across the country made a concerted attack on MACOS, which essentially ended the use of the program entirely.[31]

While the highly politicized battle over MACOS was unusual in the post-Sputnik reform era, the lack of influence that such initiatives had on teacher education, curriculum content, or pedagogical strategies, unfortunately, was typical. Indeed, by the late 1970s, few of the discipline-based reform programs were still in use. In other words, the often-repeated belief that, after Sputnik, American teacher educators and K–12 teachers rediscovered the liberal arts is erroneous. In fact, the impact of the post-Sputnik reforms on such indicators of student performance as high school course taking in math, science, and foreign languages (key areas of NDEA) was minimal.[32] Discipline-based reforms did not take hold for a variety of reasons, but two factors stand out. First,

given that teacher education largely focused on methods (not disciplinary content), many elementary teachers did not have the liberal arts knowledge necessary to teach new curricula. Second, many of these programs did not provide adequate resources for professional development to aid the teachers in implementing the new materials.[33] As these reform efforts scaled down in the 1970s, few scholars on either side of the subject matter/pedagogical divide were eager to try again.

Nevertheless, economic and political developments in the late 1970s and early 1980s created the conditions for another opportunity for revising teacher education, this time with some promising and seemingly enduring results. In 1983, the U.S. Department of Education published *A Nation at Risk*, a short, powerful, and widely discussed critique of public education. This manifesto inspired a range of education reforms. Regarding teacher education, the authors of *A Nation at Risk* echoed critics from the past, declaring, "The teacher preparation curriculum is weighted heavily with courses in 'educational methods' at the expense of courses in the subjects to be taught." The authors added, "A survey of 1,350 institutions training teachers indicated that 41 percent of the time of elementary school teacher candidates is spent in education courses, which reduces the amount of time available for subject matter courses."[34] Implicit in such criticism was the question of whether schools and colleges of education were up to the job of preparing teachers for the challenges of the increasingly globalizing economy.

By far the most important response to this challenge came several years later when a small but influential group of scholars began researching the question, "What exactly do prospective and practicing teachers need to know?" Their answer was "pedagogical content knowledge" (PCK), an approach to teacher education that has gained momentum and influence to this day.[35] Advocates of PCK then and now seek to better understand the components of effective teaching and, thus, to improve the quality of teacher education. Like most previous critics of teacher education, the supporters of PCK demand that prospective and practicing teachers— including elementary teachers—have a strong background in the subjects they are going to teach. But they argue that such a background is not enough. In addition to subject-matter knowledge, scholars promoting PCK maintain that teachers also must find ways to communicate knowledge to others. Unlike prior initiatives to improve teacher education, this is not a call for simply better methods courses in schools of education. Rather, it blends content and pedagogy. As several prominent proponents of PCK explain, teachers "must have two types of subject-matter knowledge: knowledge of the subject field, and knowledge of how to help their students come to understand the field."[36] In many ways, these ideas draw from the work of Dewey as well as research done by cognitive scientists who became interested in schooling during the post-Sputnik era.

Yet PCK is unlike previous reform efforts in a number of important ways. Central to PCK is the belief that how teachers *represent* knowledge is a vital component of effective teaching. Representing knowledge is akin to what Dewey referred to as translating discipline-based knowledge into life-terms. As PCK advocates explain, effective teachers consistently seek better ways to "represent" or "transform" subject matter to make it accessible to their students: "These representations or transformations of subject matter take many forms—metaphors, analogies, illustrations, examples, in-class activities, and homework assignments."[37]

The beauty of paying attention to representing subject matter in this way is that representations can be researched, and those that are effective and efficient in increasing student learning can be taught to prospective and practicing teachers. In other words, PCK offers the possibility of changing the nature and content of schools and colleges of education by getting them to concentrate on reconnecting subject matter and pedagogy in ways that make a dramatic difference in how teachers teach.

Another striking difference between PCK initiatives and previous efforts to change teacher education is that the main proponents of PCK are largely faculty *within* schools and colleges of education. Many of them are among the most well-respected education researchers in the country.[38] Thus, they cannot be dis-

Pedagogical content knowledge, a growing approach to teacher education, demands that teachers have a strong background in their subjects and find ways to communicate knowledge to others.

missed as outsiders who do not understand the challenges of teacher education.

As exciting as PCK is, it could be much more powerful if teacher educators had a set K–12 curriculum as a foundation for their work. The heart of PCK is ensuring that teachers have mastered both the content they will teach and the best ways of teaching it. But without a common core curriculum, teacher educators interested in PCK must guess at what content teachers might teach and what representations are more effective in that teaching. Currently, with nothing more than vague standards to guide them, each school district is free to adopt or develop its own curriculum—or to ignore curriculum entirely (leaving it up to schools or individual teachers). As David K. Cohen has pointed out, this situation severely limits the effectiveness and efficiency of teacher preparation,[39] especially since there is no way to predict which teacher candidate will end up in which district or school. Some prospective teachers may need to be prepared to teach a prescribed curriculum and/or pedagogy; others may need to be prepared to write their own curriculum. If the new effort to develop PCK is to flourish, it must be guided by a common core curriculum.

E. D. Hirsch, Jr., has been arguing for over two decades for a coherent, discipline-based core curriculum that all students must follow. By implication, such a core curriculum could lead directly to a transformation of teacher education.[40] Once teacher educa-

tors know exactly what knowledge and skills prospective teachers will be required to teach in K–12 classrooms, they then can focus on instructing these prospective teachers in such approaches as PCK, approaches that would improve instruction and learning.

For more than a century, teacher educators and their colleagues in the liberal arts have failed to collaborate in linking two of the most vital aspects of the instructional experience—subject matter and pedagogy. Today, however, with the movement toward a common core curriculum and the growing influence of PCK in schools and colleges of education, we have before us a new and exciting opportunity to span the subject matter and methods divide. Realizing this opportunity will take a great deal of work, long-term commitments, and lots of goodwill. But if the last century of failed unilateral reforms teaches us anything, it is that both sides need each other and that even the widest street in the educational world can be bridged if colleagues on both sides agree to meet each other halfway. □

Endnotes

1. "Education: Change on 120th Street," *Time*, May 3, 1954.

2. Diane Ravitch, *Left Back: A Century of Failed School Reforms* (New York: Simon and Schuster, 2000), 162–201.

3. Simona Goldin, "Studenting: An Historical and Sociological Study" (PhD diss., University of Michigan, 2010), 24–80; and Paul G. Perrault, "The Evolution of Teacher Certification and the Qualifications to Teach in Four States, 1890–1930" (PhD diss., University of Michigan, 2010).

4. Geraldine Joncich Clifford and James W. Guthrie, *Ed School: A Brief for Professional Education* (Chicago: University of Chicago Press, 1988).

5. Marc A. VanOverbeke, *The Standardization of American Schooling: Linking Secondary and Higher Education, 1870–1910* (New York: Palgrave Macmillan, 2008).

6. Stephen Mucher, "Subject Matter and Method in the Preparation of High School Teachers: Pedagogy and Teacher Education at the University of Michigan, 1871–1921" (PhD diss., University of Michigan, 2003).

7. Mucher, "Subject Matter and Method," 105–135.

8. Robert Bullough cogently argues that some prominent teacher educators were still arguing for this approach in the early decades of the 20th century. Robert V. Bullough, Jr., "Pedagogical Content Knowledge circa 1907 and 1987: A Study in the History of an Idea," *Teaching and Teacher Education* 17, no. 6 (2001): 655–666.

9. Mucher, "Subject Matter and Method," 200, 213–244.

10. David L. Angus, *Professionalism and the Public Good: A Brief History of Teacher Certification* (Washington, DC: Thomas B. Fordham Foundation, 2001), 17.

11. During the 19th century and well into the 20th century, local school boards or county educational leaders often certified teachers after candidates for certification passed examinations on the subjects they were going to teach. Angus, *Professionalism and the Public Good*, 3–12; and Perrault, "The Evolution of Teacher Certification."

12. To make matters worse, "one study in 1933–34 reported that only 29.74 percent of all high school teachers in Kansas were teaching in their major, and in the smaller schools, the figure was only about 6 percent." Angus, *Professionalism and the Public Good*, 18.

13. Ravitch, *Left Back*, 162–201; and David F. Labaree, *The Trouble with Ed Schools* (New Haven, CT: Yale University Press, 2004), 129–169. On the continuing influence of "progressive" educational ideas on schools and colleges of education faculty, see Steve Farkas and Jean Johnson, *Different Drummers: How Teachers of Teachers View Public Education* (New York: Public Agenda, 1997).

14. Lawrence A. Cremin, *The Transformation of the School: Progressivism in American Education, 1876–1957* (New York: Alfred Knopf, 1961), 3–8.

15. John Dewey, "The Child and the Curriculum" (Chicago: University of Chicago Press, 1902), 24.

16. Dewey, "The Child and the Curriculum," 22.

17. Ravitch, *Left Back*, 162–198.

18. Jeffrey E. Mirel, *Patriotic Pluralism: Americanization Education and European Immigrants* (Cambridge, MA: Harvard University Press, 2010): 52–54; and Anne-Lise Halvorsen, "Back to the Future: The Expanding Communities Curriculum in Geography Education," *Social Studies* 100, no. 3 (May–June 2009), 115–120.

19. Anne-Lise Halvorsen, "The Origins and Rise of Elementary Social Studies Education, 1884 to 1941" (PhD diss., University of Michigan, 2006), 293–362; and Jared R. Stallones, *Paul Robert Hanna: A Life of Expanding Communities* (Stanford, CA: Hoover Institution Press, 2002).

20. Diane Ravitch, "Tot Sociology; Or What Happened to History in the Grade Schools," *American Scholar* 56, no. 3 (Summer 1987): 343–354.

21. Halvorsen, "Elementary Social Studies Education," 317, 321.

22. Halvorsen, "Elementary Social Studies Education," 317–319; and Ravitch, *Left Back*, 156–158. There was no reliable research to prove whether these topics and activities really engaged elementary pupils.

23. Stallones, *Paul Robert Hanna*, 168.

24. Stallones, *Paul Robert Hanna*, 3.

25. Halvorsen, "Elementary Social Studies Education," 317.

26. David K. Cohen, "Learning to Teach Nothing in Particular: A Uniquely American Educational Dilemma," *American Educator* 34, no. 4 (Winter 2010–2011): 44–45, www.aft.org/pdfs/americaneducator/winter1011/Cohen.pdf.

27. Mortimer Smith, *And Madly Teach: A Layman Looks at Public School Education* (Chicago: Henry Regnery, 1949); and Arthur Bestor, *Educational Wastelands: The Retreat from Learning in Our Public Schools* (Urbana: University of Illinois Press, 1985).

28. Smith, *And Madly Teach*, 21, 23, 62–82.

29. Peter B. Dow, *Schoolhouse Politics: Lessons from the Sputnik Era* (Cambridge, MA: Harvard University Press, 1991), 72, 79–80.

30. Dow, *Schoolhouse Politics*, 72–177. The focus on the Bushmen and the Netsilik was a deliberate break with the curricula promoted by Paul Hanna. Rather than beginning with "the familiar surroundings of home and neighborhood," MACOS rested on the belief that elementary students could be more engaged by studying things that were mysterious and new. Dow, *Schoolhouse Politics*, 80.

31. Dow, *Schoolhouse Politics*, 179. On other right-wing attacks on MACOS, see 185–228.

32. On the lack of change in high school course taking after NDEA and the growth of "general" science and math courses rather than such courses as chemistry and calculus, see David L. Angus and Jeffrey E. Mirel, *The Failed Promise of the American High School, 1890–1995* (New York: Teachers College Press, 1999), 116–120.

33. Dow, *Schoolhouse Politics*, 263–264. Robert Church and Michael Sedlak, *Education in the United States* (New York: The Free Press, 1976), 414–417.

34. National Commission on Excellence in Education, *A Nation at Risk* (Washington, DC: U.S. Government Printing Office, 1983), 22.

35. Scholars today frequently refer to this approach as relying on "specialized content knowledge for teaching." For some early examples describing PCK, see Lee S. Shulman, "Knowledge and Teaching: Foundations of the New Reform," *Harvard Educational Review* (Spring 1987): 1–22; and Helen Featherstone and Sharon Feiman-Nemser, "The Student, the Teacher, and the Moon," in *Exploring Teaching: Reinventing an Introductory Course*, ed. Helen Featherstone and Sharon Feiman-Nemser (New York: Teachers College Press, 1992), 75–78.

36. Suzanne M. Wilson, Lee S. Shulman, and Anna E. Richert, "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching," in *Exploring Teachers' Thinking*, ed. James Calderhead (Sussex, UK: Holt, Rinehart, and Winston, 1987), 104–124; Bullough, "Pedagogical Content Knowledge"; and Labaree, *The Trouble with Ed Schools*, 163–166.

37. Wilson, Shulman, and Richert, "'150 Different Ways' of Knowing," 112.

38. They include such scholars as Robert Bain, Deborah Loewenberg Ball, David K. Cohen, Pam Grossman, Magdalene Lampert, Annemarie Palincsar, Lee Shulman, Suzanne Wilson, and Sam Wineburg.

39. Cohen, "Learning to Teach Nothing in Particular."

40. E. D. Hirsch, Jr., *The Making of Americans: Democracy and Our Schools* (New Haven, CT: Yale University Press, 2009).

Pedagogical Content Knowledge for World History Teachers

Bridging the Gap between Knowing and Teaching

BY LAUREN McARTHUR HARRIS AND
ROBERT B. BAIN

Common sense asserts that teachers need content knowledge to teach. Perhaps this is why the public, policymakers, and teacher educators in the United States have worried about teachers' content knowledge for well over 150 years. At least since John Dewey's 1902 essay "The Child and the Curriculum," these worries have taken two related but different forms.

The first set of worries centers around the amount of content knowledge teachers possess in the subject areas they teach. Such concerns typically equate content knowledge for teaching with content knowledge as defined by universities for majors and minors. Hence, university course work has become the proxy for measuring the content knowledge required to teach subjects in most states.

The second concern, which is more common among teacher educators than others, focuses on the *instrumental quality* of teachers' content knowledge. This particular type of knowledge that teachers need to help specific students learn specific content (including subject-specific facts, concepts, and skills) is known as pedagogical content knowledge (PCK).

Unfortunately, the extant research on the PCK teachers need to teach various school subjects is modest and uneven, with most of the research focusing on content areas such as math and reading, and fewer studies on other subjects, such as history.[1] Moreover, almost all of the work on teacher knowledge in history has focused on teachers of U.S. history or other national histories. There are few studies that have looked carefully at the knowl-

Lauren McArthur Harris is a postdoctoral research fellow at the University of Michigan and a former high school world history teacher. Robert B. Bain is an associate professor in the School of Education and in the Department of History within the College of Literature, Science, and the Arts at the University of Michigan. Previously, he taught high school history and social studies for 26 years. This article is adapted with permission of Taylor & Francis Group, LLC, www.taylorandfrancis.com, from "Pedagogical Content Knowledge for World History Teachers: What Is It? How Might Prospective Teachers Develop It?" The Social Studies*, Volume 102, Issue 1, January 2011, pages 9–17, copyright 2011.*

edge needed to plan and teach world history at the secondary level. Thus, although world history is the fastest growing course in secondary social studies,[2] there is little consensus over what constitutes the knowledge teachers need to help students learn the history of the world.

We are currently conducting a series of studies to determine what knowledge world history teachers need and how they can use it to plan instruction. Here, we report on a small but in-depth study designed to examine how four pre-service and six in-service world history teachers think about, organize, and make meaning of separate and discrete world historical events, first for themselves and then for their students. This study—part of a larger study by Lauren McArthur Harris on instructional tools and teachers' PCK of world history—offers insight into teachers' varying capacity to use nested scales of time and categories of space to build coherence among a wide range of historical events.[3] Of the six practicing history teachers in the study, four had taught high school world history for at least three years with a wide range of world history–specific professional development, one had taught high school U.S. history and was teaching world history for the first time, and the other was a veteran teacher and scholar of world history with more than 10 years of teaching experience in secondary and university world history classrooms, as well as extensive world history–specific professional development.

The teachers were asked to organize a seemingly random stack of cards listing 18 historical events and concepts into a "big historical picture" by placing each card onto a large piece of butcher paper, adding labels, and drawing lines to connect events and give them meaning. The 18 cards spanned many time periods and geographic locations, and listed different global, interregional, cross-temporal, and regional events, such as the Atlantic slave system, Bantu migrations, the Renaissance, the Haitian Revolution, and the Cold War. While the participants sorted the cards and built their concept maps of world history, they all talked aloud about their decisions, revealing their thinking for each move.* Teachers did the card sort twice: first, to capture their own understandings, and

second, to explain how (or if) they might structure those events for instructional purposes.

The differences among the 10 teachers were stunning. Although all the teachers drew connections or categorized events along temporal-spatial scales at some point or another, there were discernible differences in how the more experienced world history teachers built connections among events, constructed coherent historical narratives, related world historical content to students' understandings, and employed such conceptual devices as cross-cultural or temporal comparisons or examples as pedagogical tools for organizing instruction. The experienced world history teachers not only constructed complicated conceptual maps with more multiple and fluid connections among events, but also, although not prompted to do so, began to classify events as global, cross-regional, or regional, and to explain connections among events situated at the different scales. For example, Figure 1 (on page 14) shows the initial card sort by the veteran teacher with over 10 years experience. He filled the space between cards with connecting lines and/or language to show dynamic relationships among and between events, regardless of their region, time period, or scale.

In organizing the cards, the experienced world history teachers moved swiftly among scales and events, and back again—often puzzling over how to situate an event that spanned eras or regions.

On the other hand, the inexperienced (pre-service) world history teachers were more likely to simply place the cards in chronological order or within categories, such as economic or governmental groupings. Two things differentiated their maps from the ones discussed above. First, there were far fewer attempts to connect events to each other. Second, once an event landed in a category, the inexperienced teachers typically treated it as an example of that category. Thus, it tended to lose its place in the arc of history.

---

*Harris used an analytical framework developed through a content analysis of every monograph in the *Journal of World History* from its first issue in 1990 until 2008. In her analysis, she located conceptual devices world historians implicitly or explicitly use to build coherence in their work. (See endnote 3.)

Figure 1: The most experienced world history teacher's first card-sort map

★ Neolithic Agricultural Revolution — Fundamental to all that follows

★ = 3 most historically significant events

Development of Written Language — Sedentism, towns, city-states
1. warfare
2. monumental architecture
3. tribute
4. writing

Bantu Migrations — Representative of the role of migrants and nomads generally

★ Map of the Silk Routes

Afro-Eurasian unification

Cultural Exchange → Buddhism in China

Development and Spread of Buddhism

Decline of the Han Empire

Newest global religion uses Silk Roads

Development and Spread of Islam

Last unification Silk Roads revived? → China engaged then withdraws

The Mongol Empire

The Naval Voyages of Cheng Ho (Zheng He)

Development of the Incan Road System — Late flowering of civilization

Mansa Musa Becomes King of Mali

Columbian Exchange

Atlantic Slave Trade

The Haitian Revolution

Feudalism — New-Euro Unification

Johannes Gutenberg Develops the Printing Press — Fragmentation / Competition / Spread of ideas

The Renaissance — Competitive Commercial City-states Very powerful

★ Industrial Revolution

The Meiji Restoration — Japan realizes & modernizes

World War I — Colonial War?

India Gains Independence from Great Britain — End of colonialism but world already divided

Cold War — Partly responsible for end of colonialism / Outdated Now more complex

---

Because some drew connecting lines between categories, such as government and economy—but not among the events—it appears that the categories became more important than the events (see Figure 2 on page 15). When they did make connections between events, novice world history teachers did not offer much detail or they hesitated when explaining or even drawing connections. Further, the inexperienced teachers often appeared to be unsure of how to represent particular connections between world historical events for their students. For example, a novice pre-service teacher explained that she would "say what feudalism is, and use the Meiji Restoration as an example, but I don't know how I'd do that."[4]

So, what are we to make of this peek into how world history teachers constructed historical and pedagogical meaning for themselves and their students? It is important to acknowledge that all the teachers attempted to connect events to avoid the "one-darn-thing-after-another" pit that threatens to swallow all history instruction. Also, the teachers did find ways to sort and group all the historical events so that no event stood alone. Thus, all the teachers demonstrated a modicum of factual knowledge of events and an understanding of the types of events.

However, the experienced world history teachers went beyond factual and categorical knowledge of events. They drew on

Figure 2: A novice world history teacher's first card-sort map

★ *= 3 most historically significant events*

Individuals who have made a significant impact on different cultures

Transportation of goods/people

| The Naval Voyages of Cheng Ho (Zheng He) | Bantu Migrations | ★ Columbian Exchange | Atlantic Slave Trade | Development of the Incan Road System | The Mongol Empire | Map of the Silk Routes |

Mansa Musa Becomes King of Mali

General developments affecting the entire world

Cultural movements/ economic changes

Johannes Gutenberg Develops the Printing Press

| Development and Spread of Buddhism | Development and Spread of Islam | ★ Development of Written Language |

Industrial Revolution

Conflict (violent & non-violent)

The Meiji Restoration

The Haitian Revolution

Events shaping both physical and cultural boundaries of nations

Neolithic Agricultural Revolution

Political system

Cold War

India Gains Independence from Great Britain

Feudalism

The Renaissance

★ World War I

Decline of the Han Empire

---

understandings of relationships of events across time and space, or at least were able to speculate about such relationships in action. Explicitly situating events in their respective historical places, these teachers used global, interregional, and regional scales as well as historical categories to link and nest the events, demonstrating multiple connections and suggesting complicated understandings of changes over time and space. Thus, the experienced world history teachers were able to weave together events to tell coherent stories with cross-regional comparisons and connections to larger global patterns.

Certainly, historical content knowledge mattered in this task, but so did knowing

the processes of making comparative or cross-regional connections across wide expanses of time and space. The teachers with the most experience with both world history content and world history pedagogy developed the most complicated and useful maps. However, it did not appear to be simply the teachers' number of years teaching or the number of history courses they took that made the difference. The key difference appeared to be the teachers' knowledge of global world history *and* their ability to attend to students' needs in learning world history, including likely misconceptions and points of interest.

For example, one of the experienced

world history teachers used some cards twice in his instructional organization, explaining that students needed a big picture of the global story at the beginning of his course and that they would later return to those same events to study them in more depth (see Figure 3 on page 16). Thus, he used cards to create an introductory "big picture" unit that spanned from the Agricultural Revolution to the Cold War, and then reused and reconnected the cards as he planned instruction.

It seems, then, that beyond the type of history courses typically taken by history majors, history teachers need courses and professional development that focus on teaching and learning world history on a

Figure 3: An experienced world history teacher's second card-sort map (instructional organization)

| Neolithic Agricultural Revolution | Development of Written Language | Development and Spread of Buddhism | Columbian Exchange | World War I | Cold War |

| | | Development and Spread of Islam | Industrial Revolution | | |

Intro: "Big Picture"

Empires

| | | Development and Spread of Buddhism | Bantu Migrations | | Decline of the Han Empire |

S

S
| Development and Spread of Islam | S Feudalism | Mansa Musa Becomes King of Mali | S Map of the Silk Routes | The Mongol Empire |

| | | Development and Spread of Buddhism | | |

Post-Classical

| The Renaissance | | | The Naval Voyages of Cheng Ho (Zheng He) |

Early Modern

| Johannes Gutenberg Develops the Printing Press | ★ Columbian Exchange | Atlantic Slave Trade | |

Modern

| ★ Industrial Revolution | The Haitian Revolution | | The Meiji Restoration |

20th Century

| ★ World War I | World War II | S Cold War |

| | India Gains Independence from Great Britain | |

East Asia

Did not use

| Development of the Incan Road System |

★ = *3 most historically significant events*

S = *most challenging for students*

Note: *This teacher used some cards more than once.*

---

global scale, offering the knowledge and skills needed to create coherent and flexible organizational schemes for the history of the world. Knowledge of both particular events and possible connections spanning centuries, millennia, nations, continents, and hemispheres seems to enable teachers to develop and teach more meaningful connections.

World history teachers not only need multiple pictures of historical events, but also must be able to make connections between and among them for themselves and their students. In historian Emmanuel Ladurie's terms, world history teachers need to be both parachutists (able to see the big picture) and truffle hunters (able to find the most salient facts).[5] Pre- and in-service professional development should help teachers both float over the temporal-spatial landscape to see historical facts at differing scales and put their noses to the ground to dig for important details. □

(Endnotes on page 38)

Building a Common Core for Learning to Teach

And Connecting Professional Learning to Practice
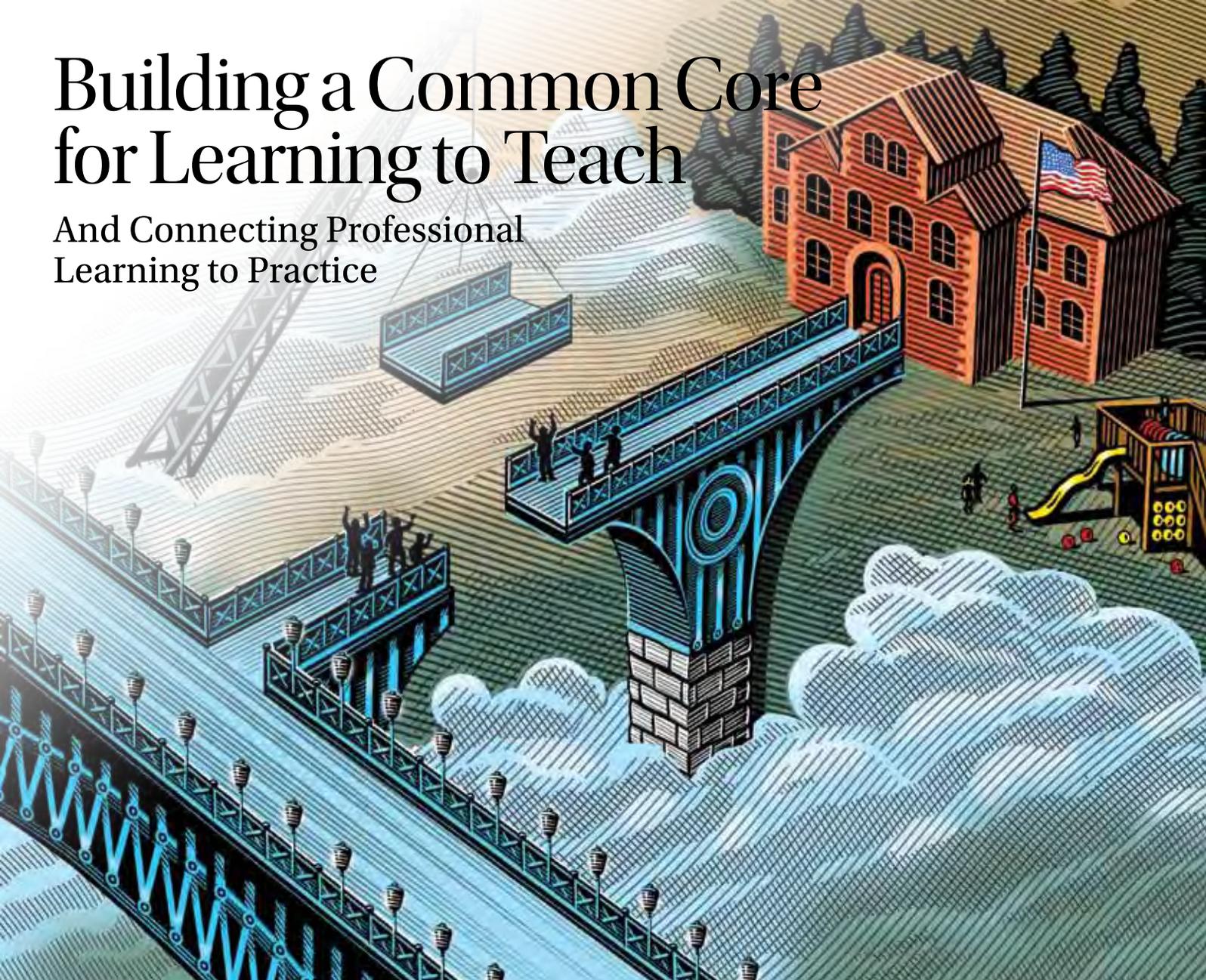
By Deborah Loewenberg Ball and
Francesca M. Forzani

Americans expect more than ever from their schools. With an eye on "high-performing" nations, policymakers and education leaders in the United States worry about our global competitiveness and the need to prepare our youth for the demands of the knowledge econ-omy. High school graduation requirements are becoming tougher, and new and more complex learning goals are being instituted. At the same time, our education system is underperforming in terms of both what it produces and for whom; it is a system that has never guaranteed or delivered high-quality education to all students.[1] In fact, it is not really a system at all: our schools vary significantly from one neighborhood to the next, there are more curricula than schools, and tests do not assess what students have been taught.[2]

Improving educational outcomes, and the schools responsible for producing them, requires attention to many interconnected factors, from standards, assessments, and curriculum, to parents, communities, families, social supports and services, and public resources.[3] Nonetheless, students' learning depends fundamentally on what happens *inside the classroom* as teachers and learners interact over the curriculum. Interventions must somehow affect these instructional transactions in order to affect students' learning. Yet most policy recommendations remain far from this educational fulcrum. Most policymakers are more

Deborah Loewenberg Ball is the dean of the University of Michigan School of Education, where she is also the William H. Payne Collegiate Professor and an Arthur F. Thurnau Professor. She has authored or coauthored over 150 publications, is an elected member of the National Academy of Education, and serves on the National Board for Education Sciences. Previously, she was an elementary classroom teacher for many years. Francesca M. Forzani is the associate director of the Teacher Education Initiative in the University of Michigan School of Education. Previously, she taught high school English for four years in the Mississippi Delta, where she was a Teach for America corps member. She also served on the staff of Teach for America's summer training institute for three years.

concerned with recruiting "better" teachers and developing new approaches to teacher evaluation and accountability than with building the infrastructure needed for high-quality instruction.[4] This strategy focuses on inputs (teacher "quality") and gauges its success based on outputs (student achievement gains), without connecting the dots to ensure that what students do with those "better" teachers leads to improved learning. Because "better" is defined by bets such as academic background or commitment, rather than demonstrated instructional capability, it is not surprising that this approach is neither reliable nor effective. It is a gamble, not a systematic strategy for intervening and improving learning and teaching inside classrooms. Because it is unreliable, some students win and others lose.

The Dynamics of Educational Improvement

Focusing directly on the development of instructional practice and its effects is not easy, however. One major shortcoming in our educational infrastructure has been the lack of a common cur-

> Most policymakers are more concerned with recruiting "better" teachers than with building the infrastructure needed for high-quality instruction.

riculum. A second has been an impoverished approach to supporting teaching practice. These two are related, for any effort to develop and improve teaching is weakened when there is no agreement about what to teach.[5] Taken together—no agreed-upon curriculum and no system for developing skilled teaching practice—hope for instructional improvement is slim. In this article, we propose a departure from inherited ideas about instruction and its improvement. Our proposal shifts away from individual "style" and open-ended "learning from experience" as the building blocks of practice, and emphasizes instead the importance of common professional standards.

Given the strong individualistic culture that permeates teaching and learning to teach in the United States,[6] why might a shift to shared specific standards for professional practice be possible? The Common Core State Standards, which specify a set of learning goals in mathematics and English language arts, represent a watershed for this country.* They offer the possibility of a common foundation on which a stronger educational infrastructure could be built. And more Americans now understand that skillful teaching is crucial for students' success. Skillful teaching can make the difference between students being at the top of the class or the bottom, completing high school or dropping out.

Of course, many policymakers seem to believe that good teaching is an innate skill or a creative act, not something one can learn to do. This is both false and—if it were true—hopeless. The teaching force numbers over 3.5 million. At this scale, thousands of

*To learn about these standards, see www.corestandards.org.

regular people must learn to teach effectively. Even if some people teach effectively without training—and some do—there are simply not enough such "natural teachers" to fill every classroom in this country. And in the next few years, we will need about 1.7 million _new_ teachers. We would like them to be skillful in helping students learn.

To face this challenge, some argue that we should make it easier for people to enter the classroom, let almost anyone try their hand at teaching, and, with rigorous systems of evaluation, weed out those who prove ineffective. Using tools of labor economics, others propose incentives to recruit "the best and the brightest" and salary schemes that pay for results. Although these strategies may sound sensible, none is sufficient to solve the core problem of ensuring that _every_ teacher helps students succeed, because none focuses on the training and support needed to teach responsibly.
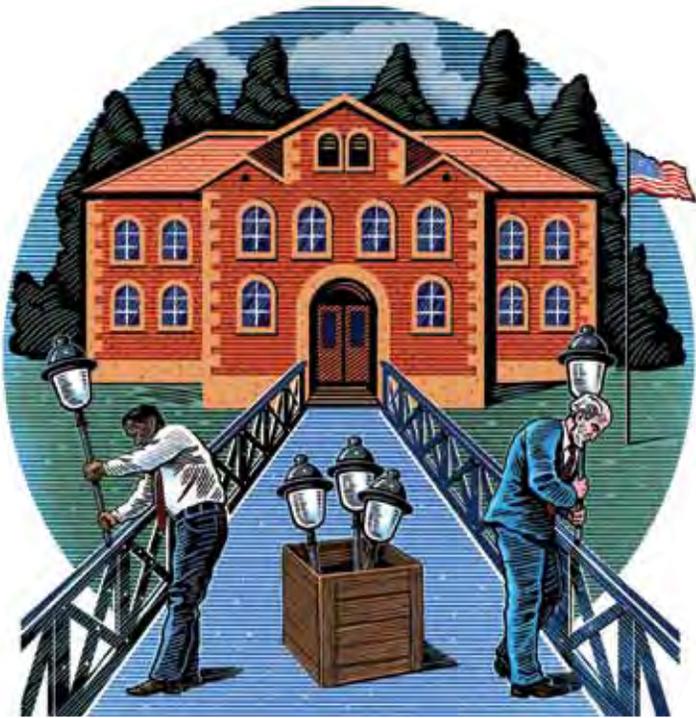
Teaching effectively depends on more than being smart and gaining experience. In no other skilled trade or profession would we leave performance so much to chance. We do not believe that flying an airplane, for example, depends on nothing more than a strong interest in and commitment to air travel, a dose of academic knowledge, and hit-or-miss experimentation on real passengers. Few people would travel on planes if such beliefs were the basis for pilots' training. Neither would they tolerate such haphazard preparation for the practice of hairdressers, veterinarians, or surgeons. Yet somehow it has been tolerated for the practice of teaching children. It is at least as dangerous, and more unethical.

Herein lies the crux of the challenge: improving educational outcomes for young people depends on developing and supplying skilled instructional practice. Such practice is complex and involves much that is not natural or intuitive. However, teaching is a large-scale occupation with high turnover.[†] Thus, we need a system that can enable large numbers of people to carry out this practice reliably and responsibly. For all children to experience high-quality instruction, we cannot depend on individual practitioners making it up based on personal preference and inventiveness. When teachers receive minimal preparation and are encouraged to follow their whims, children are put at risk. No profession or skilled trade that serves adult clients is so cavalier with preparation or so reluctant to set clear, shared standards of practice.

Ironically, this reluctance to specify skilled practice is a barrier to instructional improvement. The widely reinforced belief that teaching is a creative art, mostly learned on one's own, impedes the possibility of substantial growth in knowledge and improvement in practice. Collective knowledge, shared standards for practice, and common principles and protocols are the markers of a profession. Encouraged by the agreement on a common core of content for students' learning in mathematics and English language arts, we propose, in parallel, a common core curriculum for teacher preparation.

[†]Although many decry the fact that so many teachers leave the classroom after a few years, this is a complicated issue. In order to attract teachers, the occupation was designed to facilitate eased entry and, hence, weak occupational commitment.[7] Moreover, it was not designed to support professional advancement. To make teaching a long-term career for more people, more changes would be required than simply calling for better retention.

activities of teaching which are essential; if they cannot discharge them competently, teachers are likely to face significant problems. Competent engagement in them would mean that teachers are well-equipped to develop other parts of their practice and become highly effective professionals."[9]

In working to articulate these high-leverage practices, we sought to shift teachers' training from an emphasis on knowledge and beliefs to a focus on judgment and action. A practice-focused curriculum for learning to teach would focus on the actual tasks and activities involved in the work. Such a curriculum would not settle for developing teachers' beliefs and commitments. Because the knowledge that matters most is that which is used in practice, the professional curriculum would emphasize repeated opportunities to do the interactive work of teaching and to receive feedback—not just to talk about that work.

The identification of a common core of high-leverage teaching practices requires a specific description of skilled teaching practice. The fields of teaching and teacher education often seem

A Common Core for Teaching Practice

To improve the quality of teaching across the entire United States, educators must establish a common core of fundamental professional knowledge and skill that can be taught to aspiring teachers, across all types of programs and pathways. This common content should include knowledge and skills on which novices can be assessed reliably in order to make decisions about their readiness for independent practice and for advancement. It also should serve as the foundation for ongoing professional training.

This common core should focus directly on the development of instructional practice.[8] Although it should attend to the knowledge and orientations that underlie effective teaching, the academic training should support the demands of the actual work—what teachers need to know in order to practice effectively and make good judgments. If new teachers must be able to help students learn to evaluate sources and write persuasive arguments, explain the concept of gravity, develop young people's capacity for civic engagement, and diagnose pupils' difficulties with adding and subtracting fractions, then professional training must prepare teachers for these tasks, which are difficult to do well. Why would we ever think it reasonable for individual teachers to devise ways to carry them out on their own? Or for each new teacher to invent how to teach? If teachers fail to help significant numbers of their students learn, it may be because they do not receive sufficiently explicit professional training that would help them to do so. To blame the environment, the children, or their parents denies the efficacy of skilled professional practice and violates the fundamental ethical commitment of the teaching profession: to help every student succeed.

Along with our colleagues at the University of Michigan, we have worked for the past several years to identify a set of *high-leverage practices* that underlie effective teaching. We also have been developing ways to teach these practices so they can serve as the foundation for the curriculum used in a variety of pathways to teaching.[†] We have defined high-leverage practices as "those

> ## To improve the quality of teaching, educators must establish a common core of professional knowledge and skill that can be taught to aspiring teachers, across all types of programs and pathways.

preoccupied with adjectives for describing practice that distract from deliberate attention to the logical and ethical obligations of skillful teaching. Labels such as "effective," "teacher directed," "culturally responsive," "inquiry-oriented," "ambitious," or "reform-oriented," for example, are attempts to anchor instruction in a set of worthy commitments but say little about its specific entailments. Some center on the connection to student learning (e.g., "effective," "ambitious") while others emphasize surface features (e.g., "teacher-directed," "reform-oriented"). But these terms are vague and can be misleading—instruction that attends closely to children's ideas, for example, often involves a substantial amount of work on the teacher's part and might therefore be labeled "teacher-centered" as reasonably as "child-centered." For the purposes of a core curriculum for learning to teach, we focus on *responsible instructional practice* keyed to a set of basic professional orientations.

Defining Instructional Practice

The fundamental professional imperatives of teaching are to help students master academic knowledge and skill, and to support their social and emotional development. Schools are, for many children, the primary opportunity for academic learning.

By "academic learning," we do not mean a narrow collection of facts and procedural skills, assessed only by standardized tests. We mean conceptual understanding; the capacity for disciplined

---

reasoning, analysis, argument, and critique; and the ability to communicate ideas and interact effectively with others. Academic goals for students include critical and creative thinking, and the ability to solve problems related to local, national, and global issues. Students also must develop the ability to use and adapt to rapidly changing technology, and to interact effectively in a global society. All of this requires factual knowledge and procedural skills, but it also challenges students to review, apply, and expand what they have learned in substantive ways.

Responsible instructional practice means working assiduously to help all students reach these goals, and seeking to minimize educational inequities. This includes skill in selecting, representing, and opening content for a wide range of students from many different backgrounds; establishing sensitive, respectful, and helpful relationships with all students and their families; and resourcefully using students' out-of-school experiences. It is not

Teachers must understand their subjects deeply and flexibly, and skillfully represent them in intellectually honest ways to a wide range of students.

enough for teachers to believe that all students are entitled to a high-quality education and that all students can learn; teachers must also have the skills to act on those beliefs in their teaching. Caring about students, although important, is insufficient for responsible practice. Skillful teaching involves facilitating in-depth analysis of ideas through reading, writing, and discussion; scaffolding students' knowledge and skill development through assignments and projects that require in-depth explanation, the sophisticated use of argument and evidence, and the strategic employment of technology; and encouraging growth in interpersonal skills through whole- and small-group work, oral argument, and other opportunities for social interaction.

The core work of instruction is to build bridges between students and the subject being studied. School subjects and children's ideas about them are, consequently, of primary importance. Teachers must understand their subjects deeply and flexibly, and skillfully represent them in intellectually honest ways to a wide range of students. Care with the subject matter is central to students' futures. If teachers are casual about the impressions that students draw about the nature of a subject, they may lessen students' engagement in the subject and detract from their learning. They may, for example, lead students to think that mathematics is not subject to reason, but is merely a series of mindless rules and formulas (or, just as bad, an endless game of guess and check). Similarly, if teachers are inattentive to important aspects of the ideas that they teach, students may develop misconceptions or distorted understandings of key concepts—many of which may interfere with the pursuit of more demanding learning goals later. An inadequately prepared history teacher, for instance, may gloss over debates about ideas or events, leading students to think that history is not subject to investigation and revision, but is just a
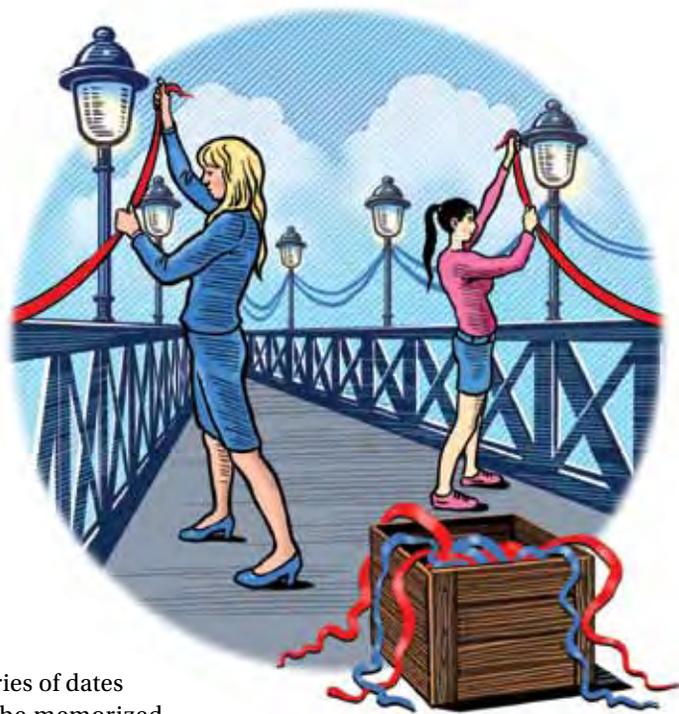
series of dates to be memorized and irrelevant-seeming stories about white men. The responsibility to represent subject matter with integrity and care is at the heart of teachers' obligation to help students learn.

To facilitate learning, teachers must know their students well—not only their personalities and preferences, but also their ideas about subjects and their ways of thinking about them, including their intellectual habits, misconceptions, and interests. They must understand the ways in which students' personal and cultural backgrounds bear on their work in school and be able to respond with appropriate instructional activities. This means skillfully eliciting, probing, and analyzing students' thinking through verbal interactions and written work. It also means teaching students how to be "people who study in school"—learners who are disposed toward questioning, skilled argument and discussion, and intellectual honesty, particularly in relation to specific school subjects.[10] These are examples of what we mean by *high-leverage practices.*

Other Challenges: Lack of Knowledge, Grain Size, and Subject- and Context-Specificity

In addition to identifying the high-leverage practices at the heart of responsible teaching, constructing a common core for teaching presents other problems. Because the tasks and activities of responsible teaching are many and the time for teacher training and professional development is limited, we must identify those aspects of the work that are the most important for novices to learn to do well. Doing this requires addressing our collective lack of knowledge about teaching, questions of "grain size" (i.e., how detailed this work ought to be), and the subject- and context-specific nature of teaching practice.

Identifying the core elements of teaching requires a special "decomposition of practice,"[11] which is challenging because of our underdeveloped language of practice. From one teacher preparation program to the next and from one researcher to the next, the language used to describe teaching is neither precise nor com-

mon. For example, although teachers use questions continually, no set of technical labels exists for particular types of questions within a content domain. Questions that teachers use to elicit students' thinking—such as, "What have you found so far?" or "Can you explain how you got your answer?"—are different from ones they might use to challenge or extend their students' thinking—such as, "What if an older student said that 8/8 is greater than 5/5 because there are more pieces?" Similarly, even widely used words like "curriculum" and "scaffolding" mean different things to different people. A precise, shared technical language about instructional practice would enable much faster progress in research and thinking about teaching.

A related challenge is finding an appropriate grain size at which to identify and name the work of teaching. A high-leverage practice must be small enough to be clearly visible in practice, but not so small as to atomize it. In other professions, from aviation to medicine to cosmetology, professionals are trained to carry out specific elements of their work that have been articulated at a useful grain size. For example, prospective pilots are trained to execute takeoffs, landings, and turns, not just given basic advice; medical students are taught how to conduct a physical examination and dress a wound; hair stylists learn to precisely cut different textures and lengths of hair and to add highlights with care. Guidance for teaching practice, however, is often much less specific. Saying that teachers should "differentiate instruction" for different learners or "motivate" students or "connect with students' everyday experience" is to articulate principles or goals, not the detailed skills and steps required to achieve them.

In decomposing and naming high-leverage practices around which consensus could be built, another problem that must be faced is the content- and context-specific nature of teaching. Regarding the content-specific nature of teaching,[12] take, for example, the asking of questions. Precision about the purposes and framing of questions, as well as their real-time posing and sequencing, is a high-leverage practice. So is eliciting and interpreting students' understanding. However, both of these practices are tied intimately to specific subject-matter content. A good question in a history class is not the same as one in a mathematics lesson. History teachers ask students to evaluate the credibility of different sources and consider factors that shape their reliability. Mathematics teachers request and support mathematical explanations, which are not the same as either historical or scientific explanations. Asking students to explain why an odd number plus an odd number always equals an even number is different from asking a question about sources or about experimental results. Designing a prompt to assess students' developing abilities to write a comparative essay is different from constructing a task to elicit students' learning about a specific scientific idea, such as force or light.

Regarding the context-specific nature of teaching, a key issue is the unique cultural context of each classroom. Leading a whole-class discussion of themes in Toni Morrison's *Beloved* depends on context: because students' experiences and relationships to the text differ, the instructional work is not the same in a suburban Connecticut classroom as in a classroom in rural Mississippi. Students are likely to interpret the text differently, to interact differently with it and one another, and to react in distinctive ways to its language and imagery. Consequently, the resources avail-

able to and demands on the teacher would differ from one context to the next. Expectations and norms for communicating with parents and colleagues might also vary depending on the community in which a school is located and on the policy context bearing on a particular school system.

Toward a Common Core Curriculum for Responsible Practice

Whereas other professions have been able to decompose practice, agree on the most important knowledge and skills, and develop, support, and assess them, teaching has not. This is our challenge, and our time to overcome it is now.

We must identify the tasks of teaching that are so important that skillfully executing them is fundamental to effective teaching. Examples include being able to figure out and respond to what students say, launch a task in class, check quickly on students'

> With a practice-focused curriculum for learning to teach, prospective teachers would learn to use high-leverage practices to teach high-leverage content, much of it derived from the Common Core State Standards.

understanding, conduct a class discussion, or call a parent about a difficult situation.

In contrast, a high-leverage practice is the ability to recognize key patterns of thinking, ideas, and misconceptions that students in a specific grade level typically have when they encounter a given idea. Elementary mathematics teachers should be able to examine students' solutions to a complex subtraction problem and recognize how students arrived at their answers (right or wrong). Teachers must be able to probe whether correct answers represent valid understanding, and have good sense about when to check. Middle school English teachers should be able to recognize why some populations of students consistently use forms of subject-verb agreement that differ from academic English, and they should have effective strategies for teaching students how and when to use academic English. Elementary science teachers should know that the process of photosynthesis frequently confuses fifth-graders, and they should understand why. Not all common patterns of student thinking involve errors; teachers should be able to recognize common ways that students think about content, including predictable developments they make as they grow. For example, when young children begin to "count on" (i.e., know instantly that there are nine items when one is added to a set of eight that they have already counted, as compared with their earlier practice of counting all over again), teachers should immediately recognize this significant step. Teachers should also have relevant cultural and social knowledge. For instance, urban African American adolescents are likely to have deep experience of word play that can enhance their ability to engage in complex literary analysis,[13] and middle schoolers' social preoccupations

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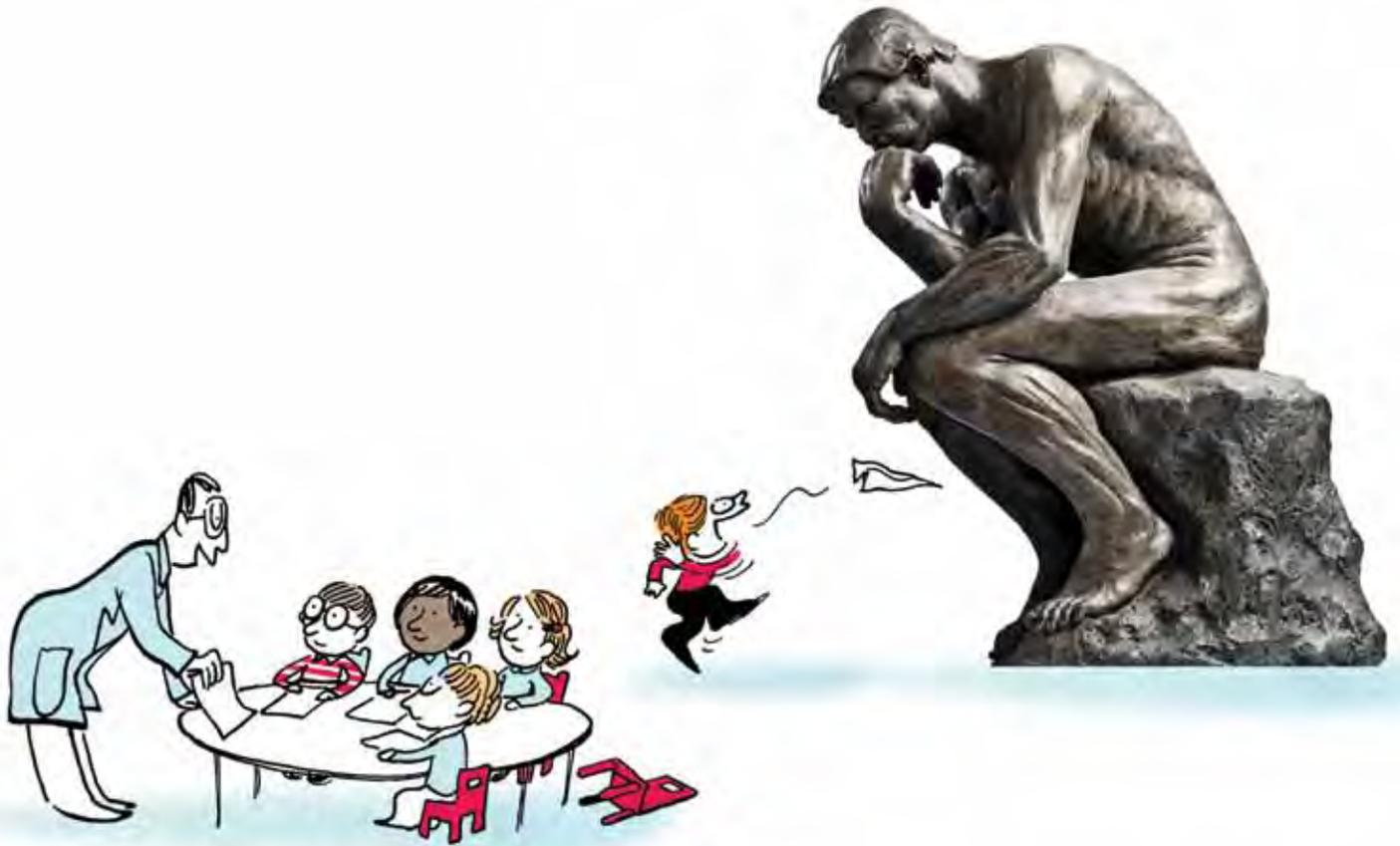
How does the mind work—and especially how does it learn? Teachers' instructional decisions are based on a mix of theories learned in teacher education, trial and error, craft knowledge, and gut instinct. Such knowledge often serves us well, but is there anything sturdier to rely on?

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

BY DANIEL T. WILLINGHAM

Question: Some children seem to have very little difficulty staying on task, but others, try as they might, get distracted easily. And

Daniel T. Willingham is a professor of cognitive psychology at the University of Virginia. His most recent book, Why Don't Students *Like* School?*, is designed to help teachers apply research on the mind to the classroom setting. For his articles on education, go to www.danielwillingham.com. Readers can pose specific questions to "Ask the Cognitive Scientist," American Educator, 555 New Jersey Ave. N.W., Washington, DC 20001, or to amered@aft.org. Future columns will try to address readers' questions.*

those seem to be the same students whose tempers flair at what seem to be small provocations. Why is it that some children have so much trouble controlling themselves? Is there anything I can do to help them?

Answer: Among cognitive scientists, this quality is usually called "self-regulation" and it has been the subject of intense study in the last five years. The idea is that there is often a rapid, automatic response to a situation, but that automatic response may not be the one that the individual, upon reflection, would want to make. Self-regulation refers to the ability to inhibit the automatic response and to do something else; more generally, it refers to the ability to control one's emotions, to control attention and other cognitive processes, and to plan and control behavior. This capacity turns out to have enormous consequences for academic and social success. And, as teachers observe daily, children differ widely in how much of this capacity they seem to have. Recent research indicates that teachers can help students—especially students having the most trouble—by providing an organized classroom environment, and by removing elements in the environment that can trigger impulsive behavior.

What do the following three scenarios have in common?

- Construction workers pour cement for a sidewalk outside your fifth-grade classroom, clearly visible through the windows, but Vincent manages to ignore this interesting scene and focus on his work.

- Fourteen-year-old Rosalind practices her piano scale exercises faithfully, even though she'd rather hang out with her friends, because she dreams of playing Chopin.

- Malik has been carefully building a block structure for five minutes when another preschooler walks by and accidentally knocks it over. Malik manages to swallow his disappointment and starts to build the structure again.

In each scenario, the child is showing *self-regulation*. Self-regulation refers to being able to control and plan emotions, cognitions, and behaviors.[1] Each child has an automatic inclination to do one thing—watch the construction workers, socialize with friends, mourn the fallen tower—but overcomes that impulse and chooses to do something else that serves longer-term goals.[2]

It seems obvious that self-regulation would be a prized trait. But researchers interested in understanding self-regulation (and trying to boost it) quickly run into complications. The three examples provided above seem to have something in common, but it's easy to see some differences as well. Vincent is regulating his attention in the face of external distractions. Some researchers have emphasized this feature of self-regulation, and measure it with laboratory tasks that require rapid shifts of attention.[3] A related idea is that self-regulation can be measured via the successful inhibition of responses that would come naturally or automatically. For example, in the Head-Toes-Knees-Shoulders task,[4] preschoolers are asked to touch a body part when the experimenter names a different body part (e.g., to touch their toes when the experimenter says "knees," and to touch their knees when the experimenter says "toes").

Other researchers have emphasized emotional regulation like that shown by Malik. It would not be ethical to frustrate small children for the sake of observing their reactions, so emotional regulation is sometimes measured by observing children in natural situations, and more often via a parental questionnaire.[5] Parents (or teachers) are asked to reflect on a child's typical behavior, and to rate a series of statements for how well they apply to the child: for example, "Tends to fall to pieces under stress," and "Is easily irritated."

Still other researchers have thought of self-regulation as more like Rosalind's piano practice. They have emphasized the ability to delay gratification; that is, to persist in a task that is unrewarding in anticipation of a greater reward in the future. A landmark study of delayed gratification among preschoolers was conducted by Walter Mischel.[6] A child was left alone in a room with a treat such

as a marshmallow. He could, at any time, ring a bell to summon the experimenter, and then he would be allowed to eat the marshmallow. But if the child could refrain from eating the marshmallow until the experimenter returned on her own, a second marshmallow would be added and the child could eat both. Thus, like Rosalind, the child had the choice of having something pleasurable immediately, or forgoing it in anticipation of gaining an even greater reward later.

Finally, some researchers have trusted that when you describe self-regulation, people know what you mean. People generally feel confident in judging whether an individual is rather impulsive or more measured in his or her responses. These judgments seem to be correct, or at the very least, there is agreement among them: kindergarten teachers' ratings of their students' self-regulation agree pretty well with the ratings of the same children by their first-grade teacher a year later.[7] And, perhaps more surprisingly, people seem to be honest when asked to rate their own self-regulation; self-ratings correspond with ratings provided (anonymously) by friends and coworkers.[8]

Are we really talking about the same thing in these various examples of self-regulation? To some extent, yes. Recent studies have administered a variety of self-regulation tests to the same set of individuals to test the obvious prediction: if the tests all measure the same thing, then individuals scoring well on one should score well on the others, and individuals scoring poorly on one will score poorly on the others. Different measures of self-regulation are associated, but only moderately so.[9] In addition, neuroscientists have pointed out that different self-regulation tasks seem to depend on the same parts of the brain (more specifically, the prefrontal cortex controlling subcortical regions, which are associated with reward and emotion). This anatomic commonality is some indication that these diverse tasks are somewhat related.[10] For the sake of simplicity, I will talk about these perhaps different types of self-regulation as though they are the same thing.

Why is self-regulation good, and where does it come from?

The usefulness of self-regulation seems intuitive, and indeed, higher levels of self-regulation are associated with a variety of positive outcomes in schooling. Controlling for other factors (such as family income, parents' education, and the like), preschoolers with good self-regulation have higher levels of school readiness—they are more likely to come to school physically healthy, with age-appropriate social and emotional functioning, and with a good attitude toward learning.[11] Good self-regulation in preschool predicts reading and math proficiency in kindergarten, over and above intelligence,[12] but poor self-regulation is associated with a greater likelihood of expulsion from preschool classrooms.[13]

The association of self-regulation and academic achievement continues into elementary school[14] and middle school.[15] We might

> Good self-regulation in preschool predicts reading and math proficiency in kindergarten, over and above intelligence.

wonder whether this association is just a byproduct of the student-teacher relationship; kids who are low in self-regulation are more likely to have behavior problems, whereas kids who are high in self-regulation are probably better liked by their teachers—little wonder that the latter learn more. But studies show that even when one accounts for these factors, self-regulation is still a strong predictor of academic achievement.[16]

Teachers' ratings of kids' self-regulation are also associated with children's social competence, including measures of their empathy,[17] as well as the extent to which they take classroom rules to heart[18] and show socially appropriate behavior.[19] Further, a lack of inhibitory control is associated with social problems. Students who are low in self-regulation are at greater risk for persistent disobedience, aggression, and temper tantrums.[20] In teens, poor self-regulation is associated with delinquency, drug and alcohol abuse, and risky sexual behavior.[21]

Given that it is so desirable, how can we help our students improve their self-regulation? To answer that question, we must first understand its source. One's success in self-regulation is partly due to genetics—you inherit a propensity toward impulsivity or self-regulation from your parents.[22] But that's only part of the story, and it's important to bear in mind that inherited traits can be changed. On occasion, people think of genetics as predestination, but consider that height is highly heritable—tall parents tend to have tall kids, and short parents short kids—but height is also susceptible to environmental factors. We grow to greater or lesser height depending on nutrition. In the case of self-regulation, the "nutrition" concerns the nature of the home and of parenting practices. In particular, two broad factors emerge as important in parenting: emotional support and cognitive support.

Several studies indicate that emotional supports from parents—meaningful praise,* affection, sensitivity to the child's needs, and encouragement—are associated with more successful self-regulation, and their opposites—criticism, coldness, indifference to the child's needs, and physical or verbal control—are associated with poor self-regulation in the child.[23] In studies like these, parent-child interaction is typically measured through direct observation. The researcher might visit the home, or the parent and child might come to the laboratory and be asked to perform a collaborative task, such as assembling a figure from Legos. Whether at home or in the lab, the parent-child interaction is categorized on several dimensions, using a set coding scheme (which is somewhat similar to a detailed rubric that a teacher may use to assess students' presentations). This finding—that parental warmth is associated with the child's self-regulation—complements other work showing that positive interactions with adults

> ## Students who are low in self-regulation are at greater risk for persistent disobedience.

help children understand their own emotional experiences, the emotional experiences of others, and how to interact in a responsive, sensitive manner.[24]

In addition to emotional support, studies show that cognitive support from parents is also important. As you might expect, one source of cognitive support is intellectual stimulation from parents (e.g., posing questions to the child, using complex sentence structures) and intellectual resources in the home (e.g., books, engaging toys). Other data show that kids gain self-regulation skills when their parents encourage them to be autonomous, and provide support for that autonomy.[25] Somewhat more subtle is the cognitive support that comes from the principles of behavior and limits that parents set. Children appear to develop better self-regulation skills in homes where there are well-structured and consistent rules.[26] We might speculate that when the daily routine inside the home is predictable (and both the rules and their enforcement are predictable), children are more likely to adjust their own behavior to conform to the routine, and that repeated practice in this sort of adjustment yields long-term increases in self-regulation. The bending of one's own wishes to the rules of the house constitutes practice in self-regulation.

This research is still relatively new; a detailed picture of the particular influences that shape self-regulation is not yet apparent. It is difficult to be more specific about which features of an emotionally warm and cognitively supportive home are crucial, because many features of such homes are themselves correlated, making it difficult to pinpoint the influence of any one of them.[27] The influence of different parenting practices is also difficult to specify, because parenting does not just affect kids—kids affect parenting practices. That is, different children elicit different parenting strategies from the same parents.[28] Parents often feel that they had a pretty well-thought-out philosophy of parenting, but then the children came along with different plans! Thus, we can easily imagine a situation in which kids have (perhaps small) differences in self-regulation due to genetic factors, and these small differences lead parents to make different choices in parenting strategies, which in turn influence the child's behavior, which then influences the parents, and so on.

What can teachers do?

Students begin preschool with a set of self-regulation skills that are a product of their genetic inheritance and their family environment. Can their experiences at school change their self-regulation, for better or worse?

There have been some promising attempts to write school curricula that improve self-regulation in children. One example is Tools of the Mind, an early childhood program comprised of 40 activities meant to improve a set of three mental functions, one of which is self-regulation. (The others are working memory—the

---

*To find out what constitutes meaningful praise, see "How Praise Can Motivate—or Stifle," which I wrote for the Winter 2005–2006 issue of *American Educator*: www.aft.org/newspubs/periodicals/ae/winter0506/willingham.cfm.

mental "space" in which thought happens—and cognitive flexibility, that is, the ability to adjust to change.) The 40 activities include, for example, dramatic play, aids to improve memory, activities that encourage collaborative turn-taking, and activities meant to encourage talking to oneself as a self-regulatory strategy. The curriculum takes up 80 percent of the school day, and interventions of one or two years have been shown to have positive effects on children's self-regulation.[29] Another example that helps develop self-regulation while focusing on social and emotional learning is the Promoting Alternative Thinking Strategies curriculum for preschool and elementary school children.[30] These two programs have some evidence of effectiveness, but more research needs to be done.

Suppose a teacher wants to improve the self-regulation of the children in her classroom, and she is not free to adopt a wholesale curriculum (or is not sure she wants to do so). What steps might she take?

Several studies indicate that teachers actually have minimal impact on the development of children's self-regulation.[31] But these overall effects may be minimal because schooling affects self-regulation for just a subset of children (since those who come to school with good self-regulation will show no improvement in the studies). One study[32] that did find that teachers can have an impact focused on kindergartners who, at age 15 months, had been categorized as "socially bold" (which previous studies have found is an indicator that children are more likely to be off task in kindergarten). The researchers categorized the teachers as sensitive, overcontrolling, or detached. Sensitive teachers were consistent, positive, warm, and appropriately responsive to children's cues. Overcontrolling teachers imposed their own learning agenda on children without heeding their cues. Detached teachers were frequently unaware of what children were doing, and responded only halfheartedly when the children needed adult supervision. When paired with an overcontrolling or detached teacher, kids who had been socially bold at 15 months were likely to be off task and to act in impulsive, inappropriate ways. But if paired with a sensitive teacher, these children showed fewer negative behaviors, less time off task, and more self-reliance. In short, teachers can have an impact on the kids who need it most.

Similar results were observed in a more recent study of first-graders.[33] An intervention with their teachers emphasized (1) improving planning and organization, (2) making classroom management more consistent, and (3) facilitating students' independent and small-group work. As in the study just described, it was only students who started the year with poor self-regulation who were helped by being in the classroom of a teacher who had

The factors that improve self-regulation in the home—warmth, organization, and predictability—also seem to be important in classrooms.

undergone the training.[34] Students who started the year with average or better self-regulation skills showed no special advantage from being in these classrooms. (All students did improve, as self-regulation would be expected to improve with age.) These findings dovetail with earlier findings that students learn more in classrooms that are well organized,[35] and that teachers who devote more time to classroom organization in the fall have more student-managed activities in the spring.[36]

Thus, in the final analysis, the factors that improve self-regulation in the home—warmth, organization, and predictability—also seem to be important in classrooms. Children learn to self-regulate through practice. A well-organized classroom requires that children practice inhibiting their own moment-to-moment desires in favor of acting in accordance with the pace set by the teacher. In addition, a well-organized classroom minimizes chaos and distractions. But with all this talk of organization, let's not imagine a police state—warmth is just as important, both to the benefit of the classroom atmosphere, and to help students learn empathy and emotional regulation. The fact that students with initially poor self-regulation benefit most indicates that these children are learning at school something that other children learned at home.

Creating an organized classroom with a warm atmosphere is something that every teacher strives for; knowing that it may have a positive impact on students' self-regulation may put it even higher on a teacher's (long) list of priorities. But improving classroom organization and atmosphere is also a long-term project. Are there strategies available in the short term that can help students better self-regulate? A different body of research is relevant to this question, and it does offer some suggestions. Researchers have posed the following relevant question: when confronted with a challenge to self-regulation—for example, a dieter offered a sumptuous dessert—what factors in the *immediate environment* predict whether self-regulation will reign, or whether the dieter will succumb to temptation? Researchers have identified three factors that predict yielding: negative emotions, lapses, and cue exposure. Let's briefly explore each, then turn to the possible implications for the classroom.

Negative emotions such as anger, depression, stress, or frustration are likely to make adults act impulsively.[37] When people are upset, they are more likely to overindulge in food[38] or alcohol,[39] or to abuse drugs.[40] They are more likely to act aggressively,[41] to impulsively spend too much money,[42] or to engage in risky sexual behavior.[43] Even just being tired makes adults more likely to lie.[44] Negative emotions seem to make people act in the moment, and to disregard future consequences. The reason is not known with any certainty; it's been suggested that the negative emotion draws

much of their attention, and so compromises decision making,[45] or that indulging provides short-term relief from anxiety, and so seems rational in the moment.[46]

A second problem for self-regulation is lapses (that is, "falling off the wagon"). It is familiar to us in the form of the dieter eating a brownie or the reforming alcoholic having a drink; once the abstainer has lapsed, it seems not only easy to lapse again, but pointless to abstain any longer. This phenomenon has been repeated several times in the laboratory. If subjects can eat as much or as little as they care to during the experiment, dieters will eat less than nondieters, as one might expect. But if, as part of the experiment, everyone is *required* to eat a high calorie food, dieters *don't* eat less in order to compensate for the calories just consumed. On the contrary, dieters in that situation eat *more* than nondieters.[47]

A third feature of the environment that can make self-regulation challenging is cues (that is, subtle or overt reminders of the appeal of the thing to be avoided). Simply put, if I'm dieting, it's harder for me to turn down a sundae if I actually *see* it.[48] The visual appeal might make me think about how marvelous it would taste. Similarly, actually seeing drugs or drug paraphernalia makes it more likely that substance abusers will relapse.[49]

These three factors that confound self-regulation— negative emotions, lapses, and cues—suggest some classroom changes that might help students. First, teachers can try to be mindful of the effect of negative emotions on students' ability to self-regulate. When a student does act impulsively, a calm, warm correction and redirection of the student is more likely to prevent further impulsive acts than a rebuke that makes the student feel bad. In addition, teachers should expect that a student who is depressed or is having a hard time at home will have more difficulty working on his own, controlling his temper, and other tasks that require self-regulation. The student might need more support from the environment—a quiet environment in which to work, for example, or more monitoring and guidance than other students on independent work. Needless to say, such support must be provided in a sensitive manner so that the student does not feel singled out among her peers.

The data on negative emotions also provide some insight into what can be the cyclical nature of misbehavior. Many misbehaviors—fighting, teasing, breaking rules—are associated with negative emotions, and negative emotions reduce the ability to self-regulate. For example, the child who gets in a fight will be angry and probably frustrated. When the fight is broken up, those negative emotions will make it harder for the child to do anything requiring self-regulation—including staying out of another fight.

The finding that lapses can lead to people more or less giving up their attempts to self-regulate points again to the importance of the student-teacher relationship. With a warm, trusting relationship in place, the teacher will have the credibility to encourage the student to put the lapse behind him, and to resolve again to behave as he knows he should: attend to his work, refrain from fighting, or avoid whatever the trouble spot may be.

The importance of cues in self-regulation failures yields a straightforward classroom application: get rid of the cues. In his celebrated marshmallow study, Mischel noted that the children who did not eat the marshmallow often used a strategy of eliminating the cue: they turned around in their seats, for example, so that the marshmallow was no longer visible, and thus, less tempting. I once visited a first-grade classroom that had just acquired a rabbit as a class pet. In the hour I was there, children sitting near the bunny found it almost impossible to concentrate on anything else. When I visited the next week, the teacher had hung an attractive wall hanging from the ceiling, hiding the rabbit's cage. Problem solved. When students are distracted, it's always worth considering removing the distraction altogether, rather than counting on the students to ignore it. More generally, when there is a trigger in the environment that prompts poor self-regulation in one or more students, it's worth weighing the pros and cons of removing the trigger.

The fact that students with initially poor self-regulation benefit most indicates that these children are learning at school something that others learned at home.

Helping students better self-regulate is a daunting task because it seems such a personal, permanent quality of an individual. But researchers have shown that it is open to change, and they also have shown that good self-regulation is associated with a broad spectrum of positive academic and social outcomes, and that poor self-regulation is associated with greater risk for correspondingly bad outcomes. These facts highlight the urgency for teachers to do all they can to help students grow in this area. □

Endnotes

1. Janet Metcalfe and Walter Mischel, "A Hot/Cool-System Analysis of Delay of Gratification: Dynamics of Willpower," *Psychological Review* 106, no. 1 (1999): 3–19; and Dale H. Schunk and Barry J. Zimmerman, "Social Origins of Self-Regulatory Competence," *Educational Psychologist* 32, no. 4 (1997): 195–208.

2. Wilhelm Hofmann, Malte Friese, and Fritz Strack, "Impulse and Self-Control from a Dual-Systems Perspective," *Perspectives on Psychological Science* 4, no. 2 (2009): 162–176; and William James, *The Principles of Psychology* (New York: Henry Holt, 1890).

3. See, for example, Bridget M. Gaertner, Tracy L. Spinrad, and Nancy Eisenberg, "Focused Attention in Toddlers: Measurement, Stability, and Relations to Negative Emotion and Parenting," *Infant and Child Development* 17, no. 4 (2008): 339–363.

4. Claire Cameron Ponitz, Megan M. McClelland, J. S. Matthews, and Frederick J. Morrison, "A Structured Observation of Behavioral Self-Regulation and Its Contribution to Kindergarten Outcomes," *Developmental Psychology* 45, no. 3 (2009): 605–619.

5. See, for example, Ann Shields and Dante Cicchetti, "Emotion Regulation among School-Age Children: The Development and Validation of a New Criterion Q-Sort Scale," *Developmental Psychology* 33, no. 6 (1997): 906–916.

6. Walter Mischel, Ebbe B. Ebbesen, and Antonette Raskoff Zeiss, "Cognitive and Attentional Mechanisms in Delay of Gratification," *Journal of Personality and Social Psychology* 21, no. 2 (1972): 204–218.

7. Christopher J. Trentacosta and Carroll E. Izard, "Kindergarten Children's Emotion Competence as a Predictor of Their Academic Competence in First Grade," *Emotion* 7, no. 1 (2007): 77–88.

8. Angela Lee Duckworth and Margaret L. Kern, "A Meta-Analysis of the Convergent Validity of Self-Control Measures," *Journal of Research in Personality* 45, no. 3 (2011): 259–268.

9. Duckworth and Kern, "Convergent Validity of Self-Control Measures"; and Traci Sitzmann and Katherine Ely, "A Meta-Analysis of Self-Regulated Learning in Work-Related Training and Educational Attainment: What We Know and Where We Need to Go," *Psychological Bulletin* 137, no. 3 (2011): 421–442.

10. Jessica R. Cohen and Matthew D. Lieberman, "The Common Neural Basis of Exerting Self-Control in Multiple Domains," in *Self Control in Society, Mind, and Brain*, ed. Ran Hassin, Kevin Ochsner, and Yaacov Trope (Oxford: Oxford University Press, 2010), 141–162; Todd F. Heatherton and Dylan D. Wagner, "Cognitive Neuroscience of Self-Regulation Failure," *Trends in Cognitive Science* 15, no. 3 (2011): 132–139; and Nora D. Volkow, Gene-Jack Wang, Joanna S. Fowler, and Frank Telang, "Overlapping Neuronal Circuits in Addiction and Obesity: Evidence of Systems Pathology," *Philosophical Transactions of the Royal Society B: Biological Sciences* 363, no. 1507 (2008): 3191–3200.

11. Nancy Eisenberg, Carlos Valiente, and Natalie D. Eggum, "Self-Regulation and School Readiness," *Early Education and Development* 21, no. 5 (2010): 681–698.

12. Clancy Blair and Rachel Peters Razza, "Relating Effortful Control, Executive Function, and False Belief Understanding to Emerging Math and Literacy Ability in Kindergarten," *Child Development* 78, no. 2 (2007): 647–663; and Megan M. McClelland, Claire E. Cameron, Carol McDonald Connor, Carrie L. Farris, Abigail M. Jewkes, and Frederick J. Morrison, "Links between Behavioral Regulation and Preschoolers' Literacy, Vocabulary, and Math Skills," *Developmental Psychology* 43, no. 4 (2007): 947–959.

13. Walter S. Gilliam and Golan Shahar, "Preschool and Child Care Expulsion and Suspension: Rates and Predictors in One State," *Infants and Young Children* 19, no. 3 (2006): 228–245.

14. Karl L. Alexander, Doris R. Entwisle, and Susan L. Dauber, "First-Grade Classroom Behavior: Its Short- and Long-Term Consequences for School Performance," *Child Development* 64, no. 3 (1993): 801–814; and Carlos Valiente, Kathryn Lemery-Chalfant, Jodi Swanson, and Mark Reiser, "Prediction of Children's Academic Competence from Their Effortful Control, Relationships, and Classroom Participation," *Journal of Educational Psychology* 100, no. 1 (2008): 67–77.

15. Angela Lee Duckworth and Martin E. P. Seligman, "Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents," *Psychological Science* 16, no. 12 (2005): 939–944.

16. Paulo A. Graziano, Rachael D. Reavis, Susan P. Keane, and Susan D. Calkins, "The Role of Emotion Regulation in Children's Early Academic Success," *Journal of School Psychology* 45, no. 1 (2007): 3–19.

17. Mary K. Rothbart, Stephan A. Ahadi, and Karen L. Hershey, "Temperament and Social Behavior in Childhood," *Merrill-Palmer Quarterly* 40, no. 1 (1994): 21–39.

18. Grazyna Kochanska, "Multiple Pathways to Conscience for Children with Different Temperaments: From Toddlerhood to Age 5," *Developmental Psychology* 33, no. 2 (1997): 228–240.

19. Nancy Eisenberg, Richard A. Fabes, Mariss Karbon, Bridget C. Murphy, Marek Wosinski, Lorena Polazzi, Gustavo Carlo, and Candy Juhnke, "The Relations of Children's Dispositional Prosocial Behavior to Emotionality, Regulation, and Social Functioning," *Child Development* 67, no. 3 (1996): 974–992.

20. Sheryl L. Olson, Arnold J. Sameroff, David C. R. Kerr, Nestor L. Lopez, and Henry M. Wellman, "Developmental Foundations of Externalizing Problems in Young Children: The Role of Effortful Control," *Development and Psychopathology* 17, no. 1 (2005): 25–45; and Ann-Margret Rydell, Lisa Berlin, and Gunilla Bohlin, "Emotionality, Emotion Regulation, and Adaptation among 5- to 8-Year-Old Children," *Emotion* 3, no. 1 (2003): 30–47.

21. Kris N. Kirby, Nancy M. Petry, and Warren K. Bickel, "Heroin Addicts Have Higher Discount Rates for Delayed Rewards Than Non-Drug-Using Controls," *Journal of Experimental Psychology: General* 128, no. 1 (1999): 78–87; Robert F. Krueger, Avshalom Caspi, Terrie E. Moffitt, Jennifer White, and Magda Stouthamer-Loeber, "Delay of Gratification, Psychopathology, and Personality: Is Low Self-Control Specific to Externalizing Problems?" *Journal of Personality* 64, no. 1 (1996): 107–129; and Patrick D. Quinn and Kim Fromme, "Self-Regulation as a Protective Factor against Risky Drinking and Sexual Behavior," *Psychology of Addictive Behaviors* 24, no. 3 (2010): 376–385.

22. H. Hill Goldsmith, Kristin A. Buss, and Kathryn S. Lemery, "Toddler and Childhood Temperament: Expanded Content, Stronger Genetic Evidence, New Evidence for the Importance of Environment," *Developmental Psychology* 33, no. 6 (1997): 891–905; Michael I. Posner, Mary K. Rothbart, and Brad E. Sheese, "Attention Genes," *Developmental Science* 10, no. 1 (2007): 25–29; and Mary K. Rothbart and John E. Bates, "Temperament," in *Handbook of Child Psychology, Vol. 3: Social, Emotional, and Personality Development*, ed. Nancy Eisenberg, William Damon, and Richard M. Lerner, 6th ed. (Hoboken, NJ: John Wiley and Sons, 2006), 99–166.

23. See, for example, Susan D. Calkins, Cynthia L. Smith, Kathryn L. Gill, and Mary C. Johnson, "Maternal Interactive Style across Contexts: Relations to Emotional, Behavioral and Physiological Regulation during Toddlerhood," *Social Development* 7, no. 3 (1998): 350–369; Nancy Eisenberg, Qing Zhou, Tracy L. Spinrad, Carlos Valiente, Richard A. Fabes, and Jeffrey Liew, "Relations among Positive Parenting, Children's Effortful Control, and Externalizing Problems: A Three-Wave Longitudinal Study," *Child Development* 76, no. 5 (2005): 1055–1071; National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network, "Do Children's Attention Processes Mediate the Link between Family Predictors and School Readiness?" *Developmental Psychology* 39, no. 3 (2003): 581–593; and NICHD Early Child Care Research Network, "Predicting Individual Differences in Attention, Memory, and Planning in First Graders from Experiences at Home, Child Care, and School," *Developmental Psychology* 41, no. 1 (2005): 99–114.

24. See, for example, Carollee Howes, Catherine C. Matheson, and Claire E. Hamilton, "Maternal, Teacher, and Child Care History Correlates of Children's Relationships with Peers," *Child Development* 65, no. 1 (1994): 264–273.

25. Annie Bernier, Stephanie M. Carlson, and Natasha Whipple, "From External Regulation to Self-Regulation: Early Parenting Precursors of Young Children's Executive Functioning," *Child Development* 81, no. 1 (2010): 326–339.

26. Liliana J. Lengua, Elizabeth Honorado, and Nicole R. Bush, "Contextual Risk and Parenting as Predictors of Effortful Control and Social Competence in Preschool Children," *Journal of Applied Developmental Psychology* 28, no. 1 (2007): 40–55; and Valarie Schroeder and Michelle L. Kelley, "Family Environment and Parent-Child Relationships as Related to Executive Functioning in Children," *Early Child Development and Care* 180, no. 10 (2010): 1285–1298.

27. Rachel A. Razza, Anne Martin, and Jeanne Brooks-Gunn, "Associations among Family Environment, Sustained Attention, and School Readiness for Low-Income Children," *Developmental Psychology* 46, no. 6 (2010): 1528–1542.

28. Nancy Eisenberg, Masa Vidmar, Tracy L. Spinrad, Natalie D. Eggum, Alison Edwards, Bridget Gaertner, and Anne Kupfer, "Mothers' Teaching Strategies and Children's Effortful Control: A Longitudinal Study," *Developmental Psychology* 46, no. 5 (2010): 1294–1308; and Samuel P. Putnam, Becky L. Spritz, and Cynthia A. Stifter, "Mother-Child Coregulation during Delay of Gratification at 30 Months," *Infancy* 3, no. 2 (2002): 209–225.

29. W. Steven Barnett, Kwanghee Jung, Donald J. Yarosz, Jessica Thomas, Amy Hornbeck, Robert Stechuk, and Susan Burns, "Educational Effects of the Tools of the Mind Curriculum: A Randomized Trial," *Early Childhood Research Quarterly* 23, no. 3 (2008): 299–313; and Adele Diamond, W. Steven Barnett, Jessica Thomas, and Sarah Munro, "Preschool Program Improves Cognitive Control," *Science* 318, no. 5855 (2007): 1387–1388.

30. See, for example, Mark T. Greenberg, Carol A. Kusche, Elizabeth T. Cook, and Julie P. Quamma, "Promoting Emotional Competence in School-Aged Children: The Effects of the PATHS Curriculum," *Development and Psychopathology* 7, no. 1 (1995): 117–136; and Celene E. Domitrovich, Rebecca C. Cortes, and Mark T. Greenberg, "Improving Young Children's Social and Emotional Competence: A Randomized Trial of the Preschool 'PATHS' Curriculum," *Journal of Primary Prevention* 28, no. 2 (2007): 67–91.

31. Marie S. Burrage, Claire Cameron Ponitz, Elizabeth A. McCready, Priti Shah, Brian C. Sims, Abigail M. Jewkes, and Frederick J. Morrison, "Age- and Schooling-Related Effects on Executive Functions in Young Children: A Natural Experiment," *Child Neuropsychology* 14, no. 6 (2008): 510–524; NICHD, "Predicting Individual Differences"; and Lori E. Skibbe, Carol McDonald Connor, Frederick J. Morrison, and Abigail M. Jewkes, "Schooling Effects on Preschoolers' Self-Regulation, Early Literacy, and Language Growth," *Early Childhood Research Quarterly* 26, no. 1 (2011): 42–49.

32. Sara E. Rimm-Kaufman, Diane M. Early, Martha J. Cox, Gitanjali Saluja, Robert C. Pianta, Robert H. Bradley, and Chris Payne, "Early Behavioral Attributes and Teachers' Sensitivity as Predictors of Competent Behavior in the Kindergarten Classroom," *Journal of Applied Developmental Psychology* 23, no. 4 (2002): 451–470.

33. Carol McDonald Connor, Claire Cameron Ponitz, Beth M. Phillips, Q. Monét Travis, Stephanie Glasney, and Frederick J. Morrison, "First Graders' Literacy and Self-Regulation Gains: The Effect of Individualizing Student Instruction," *Journal of School Psychology* 48, no. 5 (2010): 433–455; for a different intervention with some of the same spirit, see also C. Cybele Raver, Stephanie M. Jones, Christine Li-Grining, Fuhua Zhai, Kristen Bub, and Emily Pressler, "CSRP's Impact on Low-Income Preschoolers' Preacademic Skills: Self-Regulation as a Mediating Mechanism," *Child Development* 82, no. 1 (2011): 362–378.

34. Rimm-Kaufman et al., "Early Behavioral Attributes."

35. See, for example, Catherine M. Bohn, Alysia D. Roehrig, and Michael Pressley, "The First Days of School in the Classrooms of Two More Effective and Four Less Effective Primary-Grades Teachers," *Elementary School Journal* 104, no. 4 (2004): 269–287.

36. Claire E. Cameron, Carol McDonald Connor, and Frederick J. Morrison, "Effects of Variation in Teacher Organization on Classroom Functioning," *Journal of School Psychology* 43, no. 1 (2005): 61–85.

37. For a review, see Heatherton and Wagner, "Cognitive Neuroscience of Self-Regulation Failure."

38. Eric Stice, Katherine Presnell, and Diane Spangler, "Risk Factors for Binge Eating Onset in Adolescent Girls: A 2-Year Prospective Investigation," *Health Psychology* 21, no. 2 (2002): 131–138.

39. Ned L. Cooney, Mark D. Litt, Priscilla A. Morse, Lance O. Bauer, and Larry Gaupp, "Alcohol Cue Reactivity, Negative-Mood Reactivity, and Relapse in Treated Alcoholic Men," *Journal of Abnormal Psychology* 106, no. 2 (1997): 243–250.

40. Yavin Shaham, Uri Shalev, Lin Lu, Harriet de Wit, and Jane Stewart, "The Reinstatement Model of Drug Relapse: History, Methodology, and Major Findings," *Psychopharmacology* 168, nos. 1–2 (2003): 3–20.

41. Menno R. Kruk, Jozsef Halasz, Wout Meelis, and Jozsef Haller, "Fast Positive Feedback between the Adrenocortical Stress Response and a Brain Mechanism Involved in Aggressive Behavior," *Behavioral Neuroscience* 118, no. 5 (2004): 1062–1070.

42. Sabrina D. Bruyneel, Siegfried Dewitte, Philip Hans Franses, and Marnik G. Dekimpe, "I Felt Low and My Purse Feels Light: Depleting Mood Regulation Attempts Affect Risk Decision Making," *Journal of Behavioral Decision Making* 22, no. 2 (2009): 153–170.

43. Kathleen A. Ethier, Trace S. Kershaw, Jessica B. Lewis, Stephanie Milan, Linda M. Niccolai, and Jeannette Ickovics, "Self-Esteem, Emotional Distress, and Sexual Behavior among Adolescent Females: Inter-Relationships and Temporal Effects," *Journal of Adolescent Health* 38, no. 3 (2006): 268–274.

44. Nicole L. Mead, Roy F. Baumeister, Francesca Gino, Maurice E. Schweitzer, and Dan Ariely, "Too Tired to Tell the Truth: Self-Control Resource Depletion and Dishonesty," *Journal of Experimental Social Psychology* 45, no. 3 (2009): 594–597.

45. Andrew Ward and Traci Mann, "Don't Mind If I Do: Disinhibited Eating Under Cognitive Load," *Journal of Personality and Social Psychology* 78, no. 4 (2000): 753–763.

46. Rajita Sinha, "Chronic Stress, Drug Use, and Vulnerability to Addiction," *Annals of the New York Academy of Sciences* 1141 (2008): 105–130.

47. C. Peter Herman and Janet Polivy, "The Self-Regulation of Eating: Theoretical and Practical Problems," in *Handbook of Self-Regulation: Research, Theory, and Applications*, ed. Roy F. Baumeister and Kathleen D. Vohs (New York: Guilford, 2004), 492–508.

48. See, for example, Carlos M. Grilo, Saul Shiffman, and Rena R. Wing, "Relapse Crisis and Coping among Dieters," *Journal of Consulting and Clinical Psychology* 57, no. 4 (1989): 488–495.

49. Shaham et al., "The Reinstatement Model of Drug Relapse."

"Paul Revere's Ride"
Awakening Abolitionists
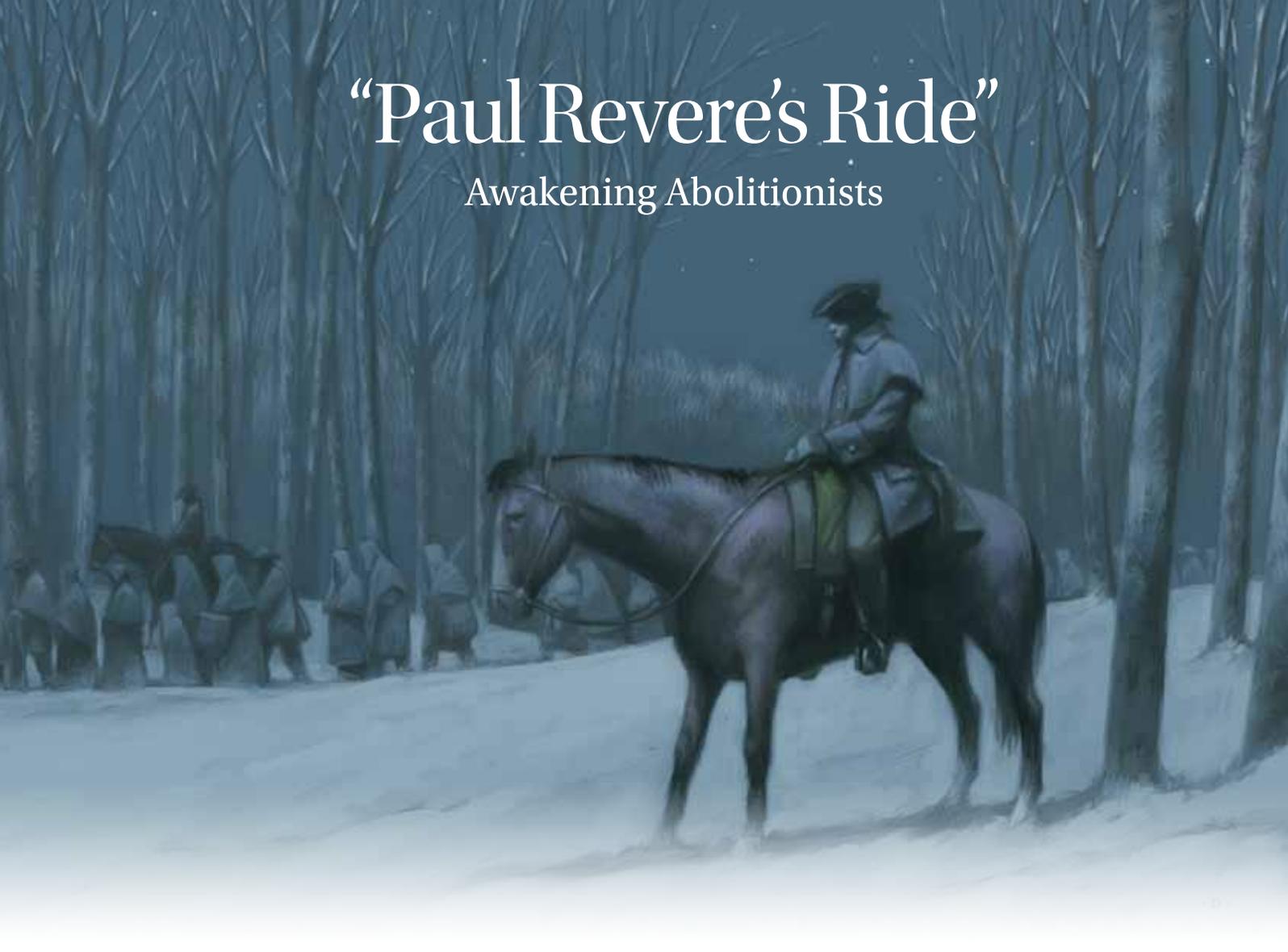
BY JILL LEPORE

Henry Wadsworth Longfellow used to be both the best-known poet in the English-speaking world and the most beloved, adored by the learned and the lowly alike, read by everyone from Nathaniel Hawthorne and Abraham Lincoln to John Ruskin and Queen Victoria—and, just as avidly, by the queen's servants. "Paul Revere's Ride" is Longfellow's best-known poem. It begins at a trot:

> Listen, my children, and you shall hear
> Of the midnight ride of Paul Revere.

It clips ("impatient to mount and ride, / Booted and spurred,

Jill Lepore is the David Woods Kemper '41 Professor of American History at Harvard University and a staff writer at the New Yorker. *She also serves on the board of the National Council for History Education and on the executive board of the Society of American Historians. Her books include* The Name of War, New York Burning, *and* The Whites of Their Eyes: The Tea Party's Revolution and the Battle over American History. *This article is excerpted with permission from "How Longfellow Woke the Dead" in the* American Scholar, *Volume 80, No. 2, Spring 2011. Copyright ©2011 by Jill Lepore. The entire article is available online at www.theamericanscholar.org/how-longfellow-woke-the-dead.*

with a heavy stride"); it clops ("impetuous, stamped the earth, / And turned and tightened his saddle-girth"); then it gallops—

> A hurry of hoofs in a village street,
> A shape in the moonlight, a bulk in the dark,
> And beneath, from the pebbles, in passing, a spark
> Struck out by a steed flying fearless and fleet

—until, at last, it stops:

> So through the night rode Paul Revere;
> And so through the night went his cry of alarm
> To every Middlesex village and farm,—
> A cry of defiance and not of fear,
> A voice in the darkness, a knock at the door,
> And a word that shall echo forevermore!

Generations of American schoolchildren have memorized these lines and recited them in class, sweating it out, which is why Longfellow is known as a schoolroom poet. "Dear Mr. Longfellow: I am a little girl nine years old. I have learned some of your poems and love them very much," wrote Berta Shaffer from Ohio in 1880. This is, no doubt, a kind of acclaim. But for a poet's literary reputation, to be read by children—and especially to be loved by children—is the sweet, sloppy kiss of death. Beginning even before

the rise of New Criticism, literary scholars have paid almost no attention to Longfellow, dismissing "Paul Revere's Ride" as just another cloying Longfellow poem, ho-hum and dum-de-dum-de-dum-de-dum, a piece of 19th-century romantic nationalism, drippy, contemptible, silly. "Rarely has so respected a writer been so discredited by posterity," as the literary historian Lawrence Buell once put it.

Harvard literature professor, a scholar of poetry, and editor and translator of a landmark anthology, *The Poets and Poetry of Europe* (1845), Longfellow could speak eight languages and read more than a dozen. His own poems are thick with allusions, especially of the classical sort. But they were also so singularly accessible and so overwhelmingly popular that he has been blamed, preposterously, for the death of poetry, as if readers reared on Longfellow were ruined forever for anything tougher. He worked hard to make poetry look easy; his success was his failure.

Worse, his work has been described as "maternal," which of course, does no one's work any good, the maternal being generally and viciously thought to be opposed, at least since the Enlightenment, to the intellectual. Anyone who could possibly like Longfellow, the argument goes, is a twit.

That Longfellow has been neglected, and relegated to the domestic, the maternal, and the juvenile, means that he was never subjected to the scrutiny of New Historicists. If he had been, they might have picked up on something strange about "Paul Revere's Ride," which is that one way of reading it is as a poem less about liberty and Paul Revere, and more about slavery and John Brown.

This story starts in 1837, the year Longfellow arrived at Harvard, where he met the future senator Charles Sumner, four years his junior, who was lecturing at the law school. Longfellow and Sumner became best friends and remained best friends for the rest of their lives. The historian Frederick Blue, who has carefully documented their friendship, calls them an odd couple, which gets it just about right: Sumner was dogmatic and abrasive, even ferocious; Longfellow was gentle and retiring and contented, a famously nice man. Sumner pursued politics; politics made Longfellow cringe. They divided their talents. They once posed together for a portrait; it is titled *The Politics and Poetry of New England*. Everyone knew which was which.

At the beginning of 1842, Longfellow entertained Charles Dickens during his American tour; he took him to Boston's North End to see Copp's Hill and the Old North Church. Not long after, Longfellow sailed for Europe. ("I am desolate," Sumner wrote, at Longfellow's departure.) In London, Longfellow again ran into Dickens and listened to him fulminate over slavery and American hypocrisy. Meanwhile Sumner, back in the States, had become an ardent abolitionist. He wrote to Longfellow, begging him to put his pen to the cause. "Write some stirring words that shall move the whole land," Sumner urged. "Send them home, and we will publish them." Longfellow obliged; on the return sea voyage, he wrote seven poems in his cabin during "stormy, sleepless nights." His *Poems on Slavery* was published later that year—they're not that stormy. Longfellow had no appetite for combat and no interest in attacking slave owners (that was for Sumner to do); instead, he wrote mournfully—modern readers would say mawkishly—about the plight of slaves. His poems on slavery were, in his view, "so

mild that even a Slaveholder might read them without losing his appetite for breakfast." Still, he was proud of them.

Longfellow is often considered to have held himself above politics, but really, he was afraid of it. He had little taste for political speech—even Sumner's—and less for the fray. Longfellow may not have taken up politics in his poetry, but he followed it closely, and his diary is full of references to slavery and sectionalism and, after 1850, to the Fugitive Slave Act. ("If anybody wants to break a law, let him break the Fugitive-slave Law," he wrote. "That is all it is fit for.") His account books, too, are filled with references to slavery: month by month, year after year, in dozens and dozens of carefully recorded entries, Longfellow noted sums of money given to black newspapers, black schools, black churches, and, espe-

"Paul Revere's Ride" echoes lines from Longfellow's *Poems on Slavery*—poems full of fugitive slaves riding through the night, calling out, bearing witness, singing what Longfellow calls "songs of liberty."

cially, to fugitive slaves. In 1854, for instance, his accounts include these items:

> Jan. 25—For Slaves 3.00
> Feb. 16—Slaves in Canada 5.00
> March 29—Negro Church Buffalo
> June 23—Mr. Spence Negro School 3.00

"June 13—To free a slave 5.00," he wrote in his account book for 1856, and "Dec.—To ransom Slave 3.00," two years later. Longfellow used some of the money he made writing poems to buy men, women, and children their freedom.

The day John Brown was to be hanged, Longfellow wrote in his diary: "The second of December, 1859. This will be a great day in our history; the date of a new Revolution,—quite as much needed as the old one. Even now as I write, they are leading old John Brown to execution in Virginia for attempting to rescue slaves! This is sowing the wind to reap the whirlwind, which will come soon."

This is Longfellow, an almost maddeningly restrained and genteel man, at his most ardent. Was there a way he could do his part, in his timid manner? John Brown had started "a new Revolution." Longfellow, writing poems about history, got to thinking about the old one.

"Paul Revere's Ride" was published in the *Atlantic Monthly* in January 1861. The issue appeared on newsstands in Boston on December 20, the day South Carolina seceded from the Union. The poem was read at the time as a call to arms, rousing northerners to action, against what Charles Sumner called the "Slaveocracy"—

"a warning voice" waking those who would concede to barbarism from what George Sumner (Charles's brother) called "their precious Sunday slumbers." This meaning was once popularly understood—and taught. A public school manual from 1913 reminded teachers that in order for students to understand "Paul Revere's Ride," they had to know "enough about the Civil War to grasp the purpose Mr. Longfellow had in writing the poem." That meaning has been forgotten. And the poem can also be read as concerning not just the coming war, but slavery itself: "Paul Revere's Ride" is, in one sense, a fugitive slave narrative.

During the weeks Longfellow was writing "Paul Revere's Ride,"

the plight of slaves was very much on his mind. He was attending lectures by Frederick Douglass. He was listening to George Sumner condemn the Supreme Court's decision in *Dred Scott*. He was fervently reading speeches given by Charles Sumner. He was casting his vote for Lincoln. He was sympathizing with John Brown. Fearful of politics, Longfellow was, nevertheless, wishing he could do his part, quietly, gently, poetically. "I long to say some vibrant word, that should have vitality in it, and force," he had written to Charles Sumner. And there is more: much in "Paul Revere's Ride" echoes lines from Longfellow's *Poems on Slavery*—especially "The Slave's Dream," "The Slave Singing at Midnight," "The Witnesses," and "The Warning"—poems full of fugitive slaves riding through the night, haunted by the dead, hurrying through the darkness, calling out, bearing witness, singing what Longfellow calls (in "The Slave in the Dismal Swamp") "songs of liberty."

Longfellow's historical sources for his account of Revere's ride appear to have been limited and, of course, the poem wasn't meant to be accurate. Longfellow loved lore. He began "Hiawatha": "Should you ask me, whence these stories? / Whence these legends and traditions, / . . . I should answer, I should tell you, / 'From the forests and the prairies.' " He had, though, seen at least one old document: a letter written by Paul Revere in 1798 to Jeremy Belknap, founder of the Massachusetts Historical Society, describing the night of April 18, 1775. Longfellow almost certainly read this letter because it was published in October 1832 in *New England Magazine*, in the same issue in which a very early poem of Longfellow's appeared.

Revere described starting out in Boston: "I . . . went to the north part of the town, where I had kept a Boat; two friends rowed me across the Charles River, a little to the eastward where the *Somer-*

set Man-of-War lay. It was then young flood, the ship was winding, and the moon was rising. They landed me in the Charlestown side." Longfellow, starting out his poem, stays close to Revere's account:

> . . . with muffled oar
> Silently rowed to the Charlestown shore,
> Just as the moon rose over the bay,
> Where swinging wide at her moorings lay
> The Somerset, British man-of-war;

But then he leaves Revere's description behind. His ship takes on a different cast:

> A phantom ship, with each mast and spar
> Across the moon like a prison bar,
> And a huge black hulk, that was magnified
> By its own reflection in the tide.

Why? To Longfellow's abolitionist readers, the name *Somerset* would have readily called to mind the landmark 1772 *Somerset* case, which outlawed slavery in Britain. And here the "phantom ship" conjures something more. It is as dark and haunting as a slave ship—a dominant conceit in abolitionist writing—"each mast and spar . . . like a prison bar." Longfellow had written about just such shackled ships in "The Witnesses," where across the "Ocean's wide domains . . . Float ships, with all their crews, / No more to sink nor rise":

> There the black Slave-ship swims,
>   Freighted with human forms,
> Whose fettered, fleshless limbs
>   Are not the sport of storms.

Revere, in his letter to Belknap, next described leaving Charlestown. "I set off upon a very good Horse; it was then about 11 o'Clock, and very pleasant. After I had passed Charlestown Neck, and got nearly opposite where Mark was hung in chains." Mark, "hung in chains," refers to the rotting remains of a slave from Charlestown who was executed in 1750, after he and a slave woman named Phyllis were convicted of poisoning their master, a Charlestown merchant, with arsenic. Phyllis was burned at the stake in Cambridge, not far from Longfellow's house, in a place called Gallows Hill; Mark was executed in Charlestown, and his body was left, hanged in chains, as a warning to Boston's slaves of the danger of rebellion. By the time Revere made his ride in 1775, Mark's bones had been hanging at Charlestown Neck for a quarter century, bearing witness.

Maybe it was Revere's remark about that landmark, Mark's bones, that sparked in Longfellow this thought, but here the poem takes a turn. In Boston, the man who mounts the belfry of the Old North Church to light the lanterns looks out at Copp's Hill, the burying ground where Longfellow had taken Dickens and where Puritan minister Cotton Mather lay entombed, but which was also, by the 1850s, far better known as the place where Boston's blacks were buried:

> Beneath, in the churchyard, lay the dead,
> In their night-encampment on the hill,
> Wrapped in silence so deep and still
> That he could hear, like a sentinel's tread,

The watchful night-wind, as it went
Creeping along from tent to tent,
And seeming to whisper, "All is well!"

In "The Witnesses," Longfellow's dead whisper something else, from the depths:

These are the bones of Slaves;
    They gleam from the abyss;
They cry, from yawning waves,
    "We are the Witnesses!"

By now, Longfellow has departed quite radically from Revere's account (which, in any event, was written long after the fact). "In Medford, I awaked the Captain of the Minute men," Revere wrote Belknap, "and after that, I alarmed almost every House, till I got to Lexington." Revere stopped in Lexington for half an hour and had a bite to eat while he talked with John Hancock, Samuel Adams, and William Dawes. On the way to Concord, he stopped again, this time to talk with Dr. Samuel Prescott, and was then captured by the British. But in Longfellow's poem, Revere races onward,

. . . through the gloom and the light,
The fate of a nation was riding that night;
And the spark struck out by that steed, in his flight,
Kindled the land into flame with its heat.

That flight, too, has a counterpart not only in abolitionist literature—where, in the wake of the Fugitive Slave Act, the fate of the nation was often said to ride on a slave's flight—but also in Longfellow's *Poems on Slavery*. In "The Slave's Dream," another horseman rides wildly through the night:

. . . at furious speed he rode
    Along the Niger's bank;
His bridle-reins were golden chains,
    And, with a martial clank,
At each leap he could feel his scabbard of steel
    Smiting his stallion's flank.

This man, though, is a slave, dreaming of riding all the way home to Africa. And while Revere, Longfellow's Son of Liberty, rides through New England farms and towns, to the sounds of the barnyard—

He heard the crowing of the cock,
And the barking of the farmer's dog,
And felt the damp of the river fog,
That rises after the sun goes down.

—his son of slavery rides to the howls of African beasts:

At night he heard the lion roar,
    And the hyena scream,
And the river-horse, as he crushed the reeds
    Beside some hidden stream;
And it passed, like a glorious roll of drums,
    Through the triumph of his dream.

But that triumph is no triumph at all. The slave never wakes from his dream. "The Slave's Dream" ends with death: "For Death had illumined the Land of Sleep, / And his lifeless body lay / A worn-out fetter, that the soul / Had broken and thrown away!" But "Paul Revere's Ride" ends with the rider, having wakened from its slumber every New England village and farm, riding on, into history ("You know the rest. In the books you have read"):

For, borne on the night-wind of the Past,
Through all our history, to the last,
In the hour of peril men will hear

The midnight message of Paul Revere,
And the hurrying hoof-beat of his steed.

That, anyway, is what Longfellow wrote. But, in a letter written on November 23, 1860, Longfellow's brilliant editor, J. T. Fields, offered a decided improvement.

Dear Longfellow.
    Dont you think it better to end Paul Revere's Ride on this line,

In the hour of darkness and peril and need,
The People will waken and listen to hear
The hurrying hoof-beat of his steed,
And the midnight message of Paul Revere.

Why I Force My Students to Memorize Poetry

Despite the Fact That It Won't Be on the Standardized Test

BY ANDY WADDELL

Some years ago, at a conference of English teachers, a group of colleagues and I found ourselves in a room by a fire with time to kill. I suggested that each of us recite some poem or speech we had learned in school. I realize such a suggestion is nerdy to an almost unbelievable degree, but these were English teachers after all, and I expected full well that the idea would be taken up with enthusiasm. I pictured not only exclamations as to the beauty of the words, but funny stories of nervousness overcome, childish misreading of famous lines, perhaps even negative comments, such as, "And that is why, to this day, I cannot stand Longfellow." What I did not expect from my young colleagues was their response that they had "never really memorized anything."

I shouldn't have been surprised. Even when I was in school, in the '60s and '70s, memorization was already outdated. In 1956, Benjamin Bloom had published his famous *Taxonomy*, forever relegating memorization to the lowest level of mental functioning. Gone already were the "set pieces," mostly moralistic or patriotic poems, that all schoolchildren had been forced lock-step into learning by heart. No longer would apple-cheeked youngsters recite en masse, "In fourteen hundred ninety-two, Columbus sailed the ocean blue." Why waste time on that arbitrary fact when one can merely pose the question, "Would the world have been better off if Columbus had never sailed across the Atlantic?" Then, after a brief explanation of who Columbus was, what exactly the Atlantic is, and the obligatory comment that there are "no right or wrong answers," Junior is off and running at the very highest level of Bloom's taxonomy: *evaluation*.

In English class, memorization (of Shakespeare in particular) has limped on under the justification that students were *interpreting* the work, thus elevating the exercise to level three—*application*—though just as often higher praise is heaped on those students able to *synthesize* the Bard into, say, a rap version of the prologue of *Romeo and Juliet* or even a

Andy Waddell teaches English at Santa Clara High School in Santa Clara, California. He has worked as a high school teacher and administrator for 24 years.

discussion of the horrors of arranged marriage, thus demonstrating that students have analyzed the play and distilled the *main idea*.

The first real poem that I can remember learning in school is Robert Frost's "Stopping by Woods on a Snowy Evening." My third-grade class recited it chorally at a school assembly, each of us clutching in our dirty hands an actual sleigh bell that we shook vigorously on every accented syllable. Every year, to demonstrate the primacy of sound over sense in poetry, I recite it for my classes, shaking now my keys in place of the long-lost bells. I mangle the poem, just as I did 40 years ago, stubbing the toe of every iambic foot to emphasize the sing-song rhythm; then I recite the same words again in a more adult manner to show that the rhythm is underneath the words. I've never found a better way to teach iambic meter, but every year I have students who have stopped listening, so caught up are they in the amazement of my first words, "I

learned this poem in third grade." More than a few have flatly refused to believe me. From their perspective, in the post-memorization era, the retention of 16 lines is simply beyond the limits of human capability.

I also use the poem to illustrate something about the meaning of poetry and about levels of interpretation. I vividly remember old Mrs. Trolinger, in a moment of pause from chanting the poem, saying, "You know class, when I read this poem, I don't just see a man stopping in the woods to think about the woods, I see a man stopping in his life to think about his life." I remember this sentence so many years later because, in third grade, it made *no sense to me whatsoever*.

Frost said, "Poetry is what gets lost in translation." It is also what is lost in interpretation. The genius of Mrs. Trolinger, a woman I still remember with unmixed love, was her faith that the meaning of the poem would come with time, would settle into our brains quietly like the snow into that dark New England

field. Besides that one offhand comment, no attempt was made to *interpret* the poem. We were saved from the reductionism of seeking the *main idea*. She had faith in the words themselves, the beauty of the image and the sound. When we were ready we would see what she meant. And one day we would roll those words, "miles to go before I sleep," around in our heads, maybe before nodding off to sleep ourselves, and see a darker image there: a longing for the respite of death. But we could only do that if the words were in our heads, ready to be reexamined as our consciousnesses grew.

When my grandfather was dying, my mother tried to distract him, from the pain of his suffering and from the indignity of the crowded public hospital where he would spend the last few days of his life, by asking him to recite a poem he'd learned in grade school. "I don't remember that," he barked. For my own part, I thought my mother was crazy. Besides having been out of grade school for 75 years, Grandpa suffered from arteriosclerosis, which had made him forgetful, a neighborhood wanderer, a man who couldn't always retrieve his grandson's name or what state he lived in.

"Sure you do, Dad," she said. "Half a league, half a league / Half a league onward." And to my amazement, Grandpa joined in. "All in the valley of Death / Rode the six hundred." Thirty, forty, fifty lines came rolling out of him. His voice deepened; the lines in his face relaxed. He was somewhere else.

The words were deep in his mind, close to the soul. As his brain shut down it had inexplicably chosen this to retain alive. Poem after poem, as well as the Gettysburg Address, the Preamble to the Constitution, the 23rd Psalm and many, many others, she coaxed out of him. These words, wedged in by rote so long before, were still active in his fading brain. Though now playing out the last scene of his strange and eventful history, this man who had lied about his age to get into the Great War, who had spent his working life pushing a mail cart, found that neither wasteful war nor sluttish time could ever dissever his soul from the souls of those writers, those poets whose words rolled round his head, whose cadences had entered his soul, had become a part of him.
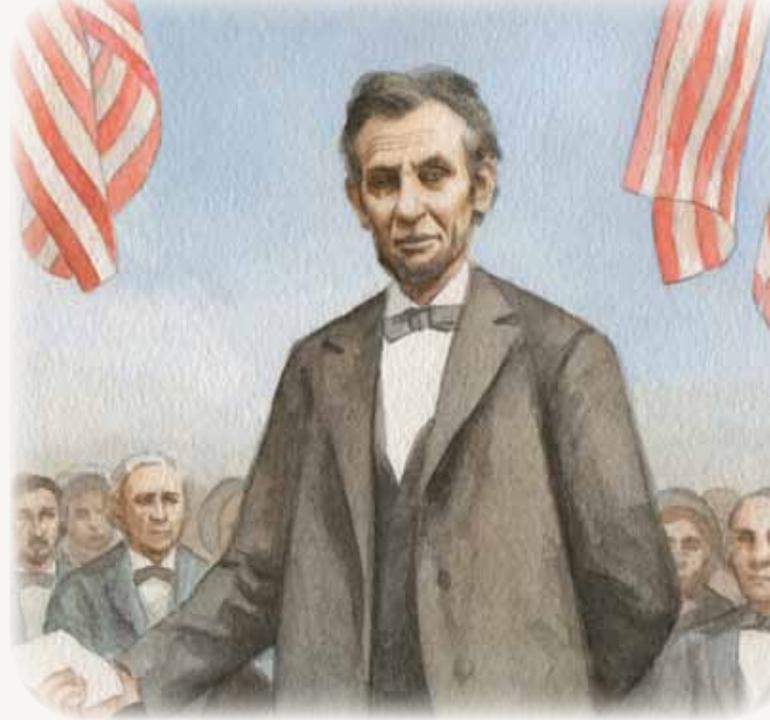
So often we see education as a series of units leading to an examination, which will in turn prepare students for the SATs or APs they need to pass to enter university where, if they pass other examinations, they will graduate and earn large incomes. We hold those future earnings before our students like a carrot while beating them with a fear of failure. No wonder then so many dig in their heels at the sight of anything as impractical as poetry. How can we expect anything else when this attitude is validated from the very educators, school boards, and state superintendents most responsible for deciding what students should know? Even when poetry is on the test, in the framework, it is on the most pedestrian level: a series of terms to be memorized, a puzzling jumble of lines to be decoded for the *main idea*. And if the point is to find the main idea, no wonder the students ask with frustration, "Why can't he say what he means?"

I am against neither examinations nor practicality. It is important that our scores rise, that our students get into the "good" colleges, that they succeed in their careers, that their taxes someday feed me in my old age. But some nod must be given to a larger idea: that we live through our consciousness, that thought is composed of words, that as English teachers we have a unique opportunity and responsibility to put words into our students' heads—crisp, delicious words, "words opalescent, cool, and pearly," words to entertain and sustain them. Words they may never forget. ☐

Lessons from Finland

Professional educators—whether in the classroom, library, counseling center, or anywhere in between—share one overarching goal: seeing all students succeed in school and life. While they take great pride in their students' accomplishments, they also lose sleep over their students' unmet needs. Professional educators routinely meet with students before and after school, examine student work to improve lesson plans, reach out to students' families in the evenings and on the weekends, and strive to increase their knowledge and skills. And yet, their efforts are rarely recognized by the society they serve.

The AFT is committed to supporting these unsung heroes. In this regular feature, we explore the work of professional educators—not just their accomplishments, but also their challenges—so that the lessons they have learned can benefit students across the country. After all, listening to the professionals who do this work every day is a blueprint for success.

ILLUSTRATIONS BY NENAD JAKESEVIC

By Pasi Sahlberg

Since Finland emerged in 2000 as the top-scoring Organisation for Economic Co-operation and Development (OECD) nation on the Programme for International Student Assessment (PISA), researchers have been pouring into the country to study the so-called "Finnish miracle." How did a country with an undistinguished education system in the 1980s surge to the head of the global class in just a couple of decades?

Pasi Sahlberg is the director general of the Centre for International Mobility and Cooperation (CIMO) in Helsinki, Finland, and an adjunct professor at the Universities of Helsinki and Oulu. He has been a teacher and teacher educator, as well as an education specialist for the World Bank and the European Commission. His forthcoming book is titled Finnish Lessons: What Can the World Learn from Educational Change in Finland. *This article is adapted with permission from Sahlberg's "Developing Effective Teachers and School Leaders: The Case of Finland," in* Teacher and Leader Effectiveness in High-Performing Education Systems, *edited by Linda Darling-Hammond and Robert Rothman and available online at www.all4ed.org/files/TeacherLeaderEffectiveness Report.pdf.*

Research and experience suggest that one element of the Finnish system trumps all others: excellent teachers and leaders. This article looks at how Finland develops such excellence in its teacher workforce. (This discussion is also relevant to excellence among leaders; in Finland, those who aspire to leadership positions must be effective teachers before they can begin leadership training.[1])

Until the 1960s, the level of educational attainment in Finland remained fairly low: only one in ten adult Finns had completed more than nine years of basic education, and achieving a university degree was uncommon.[2] Back then, Finland's education level was comparable to that of Malaysia or Peru, and lagged behind its Scandinavian neighbors of Denmark, Norway, and Sweden. Today, more than 98 percent of Finns attend preschool at the age of six, 99 percent complete compulsory basic education at the age of 16, and three out of five young Finns enroll in and 50 percent complete state-funded higher education after upper secondary school.[3] Finland publicly recognizes the value of its teachers and trusts their professional judgment in schools. The Finnish education system does not employ external standardized student testing

to drive the performance of schools. Neither does it employ a rigorous inspection system of schools and teachers. Instead of test-based accountability, the Finnish system relies on the expertise and professional accountability of teachers who are knowledgeable and committed to their students and communities.

Recruiting the Best

Among young Finns, teaching is consistently the most admired profession in opinion polls of high school graduates.[4] Becoming a primary school teacher in Finland is a very competitive process. Only Finland's best and brightest are able to fulfill those professional dreams. Every spring, thousands of high school graduates submit their applications to the departments of teacher education in Finnish universities. Usually it is not enough to have completed high school and passed a rigorous matriculation examination. Successful candidates must have not only good scores and excellent interpersonal skills, but also a deep personal commitment to teach and work in schools. Annually only about one in every ten applicants will be accepted to study to become a primary school teacher. Among all categories of teacher education (i.e., not just primary), about 5,000 prospective teachers are selected from about 20,000 applicants.

Candidates are first selected based on matriculation examination results, their high school records, and relevant records of out-of-school accomplishments. Then:

1. Candidates complete a written exam on assigned books on pedagogy.
2. Candidates engage in an observed clinical activity replicating school situations, where social interaction and communication skills come into play.
3. The top candidates are interviewed and asked, among other things, to explain why they have decided to become teachers.

The selected, highly capable candidates then complete a rigorous teacher education program *at government expense.*

Wages are not the main reason young people become teachers in Finland. Teachers earn very close to the national average salary level for all occupations, typically equivalent to what midcareer middle school teachers earn annually in the OECD nations— about $41,000 in U.S. dollars.[5] (However, the relative difference between salaries of beginning and senior teachers is much larger in Finland than in the United States.[6]) More important than salaries are such factors as high social prestige, professional autonomy in schools, and the ethos of teaching as a service to society and the public good. Thus, young Finns see teaching as a career on par with other professions where people work independently and rely on scientific knowledge and skills that they gained through university studies.

Preparing Them Well

All teachers in Finnish primary, middle, and high schools must hold a master's degree; preschool and kindergarten teachers must hold a bachelor's degree. There are no alternative ways to receive a teacher's credential in Finland; the university degree constitutes a license to teach.[7]

Primary school teachers, who teach grades 1 to 6, major in education, while upper-grade teachers concentrate their studies in a particular subject (e.g., mathematics), as well as didactics (i.e., pedagogical content knowledge specific to that subject).

Teacher education is based on a combination of research, practice, and reflection, meaning that it must be supported by scientific knowledge and focused on thinking processes and cognitive skills used in conducting research. In addition to studying educational theory, content, and subject-specific pedagogy, each prospective teacher for primary school and beyond completes a master's thesis on a topic relevant to educational practice. After finishing secondary school and entering a teacher preparation program, successful completion of a master's degree in teaching generally takes five to seven and a half years, depending on the field of study.[8]

A broad-based teacher-prep curriculum ensures that newly prepared Finnish teachers possess balanced knowledge and skills in both theory and practice. It also means they possess deep pro-

> Instead of test-based accountability, the Finnish system relies on the expertise and professional accountability of teachers who are knowledgeable and committed.

fessional insight into education from several perspectives, including educational psychology and sociology, curriculum theories, student assessment, special needs education, and pedagogical content knowledge in selected subject areas. Each of the eight universities that offer teacher education in Finland has its own strategies and curricula that are nationally coordinated to ensure coherence, but locally crafted in order to make the best use of the particular university's resources.

Subject teachers complete a master's degree in one major subject and one or two minor subjects. Students then apply to a university's department of teacher education to study pedagogy for their focus subject. Subject-focused pedagogy and research are advanced in Finnish universities, and cooperative and problem-based learning, reflective practice, and computer-supported education are common. A higher education evaluation system that rewards effective, innovative university teaching practices has served as an important driver of these developments.

Finland's commitment to *research-based teacher education* means that educational theories, research methodologies, and practice all play an important role in preparation programs.[9] Teacher education curricula are designed to create a systematic pathway from the foundations of educational thinking, to educational research methodologies, and then on to more advanced fields of the educational sciences. Each student thereby builds an understanding of the systemic nature of educational practice. Finnish students also learn how to design, conduct, and present original research on practical or theoretical aspects of education.

Another important element of Finnish research-based teacher education is practical training in schools. Over the five-year pro-

gram, candidates advance from basic teaching practice, to advanced practice, and then to final practice. During each of these phases, students observe lessons by experienced teachers, practice teaching while being observed by supervisory teachers, and deliver independent lessons to different groups of pupils while being evaluated by supervising teachers and department of teacher education professors and lecturers. Practicum experiences comprise about 15 to 25 percent of teachers' overall preparation time. Much of this work is completed within special teacher-training schools governed by the universities, which have curricula and practices that are similar to normal public schools. Some student teachers also practice in a network of selected municipal field schools, which are regular public schools. Schools where practice teaching occurs have higher professional staff requirements, and supervising teachers have to prove they are competent to work with student teachers.

Teacher training schools are also expected to pursue research and development roles in collaboration with universities' departments of teacher education and, sometimes, with the academic faculties that also have teacher education functions. These schools can, therefore, introduce sample lessons and alternative curricular designs to student teachers. These schools also have teachers who are well prepared in supervision as well as in teacher professional development and assessment strategies. Because teacher education is so strong, Finnish teachers are very well prepared to take a teaching job as soon as they are assigned to a school.

Hiring, Evaluation, and Retention

Because Finland has no centralized management of education, the school staff and the principal, together with the school board, typically make hiring decisions. Small allowances or premiums are offered to attract young teachers to teach in small rural schools, which are generally less popular than those in the urban areas near the universities where teachers have studied. The teaching force in Finland is highly unionized; almost all teachers are members of the Trade Union of Education.

There is no formal teacher evaluation. Teachers receive feedback from their principal and the school staff itself. Because Finland does not have a standardized assessment for evaluating students, there is no formal consideration of student learning outcomes in the evaluation. A good teacher is one who is able to help all children progress and grow in a holistic way.

Universities are the only organizations entitled to issue teacher licenses in Finland. Teachers apply for open positions directly to municipalities (which own the schools). Teaching positions are filled by the head of the school or the local education authority, depending on the administrative regulations in the municipalities. There are two types of teaching posts in Finnish schools: fixed-term and open-ended. With fixed-term positions, teachers are typically hired for one school year, knowing that the need of the school is temporary (e.g., to fill in for a teacher on maternity leave). These posts are quite few and the recruitment procedure

is straightforward. The vast majority of teaching positions are open-ended, and they are filled carefully, with much attention paid to teacher recruitment and selection. Once a teacher is hired, there is no probation period and there are no measures of teacher effectiveness or means for terminating a contract unless there is a violation of the ethical rules of teaching. Finland relies on the strong preparation of teachers, their professional ethic, and their opportunities for ongoing engagement with colleagues in the professional work of teaching, including curriculum and assessment development, to support their effectiveness.

When new teachers are employed in a school, they usually stay for life. An official estimate suggests that only 10 to 15 percent of teachers leave the profession during the course of their career.

Primary school teachers often compare what they do with the work that doctors do in medical clinics. A key characteristic of Finnish teachers' work environment is that they are autonomous,

> **Practicum experiences comprise about 15 to 25 percent of teachers' overall preparation time, and supervising teachers have to prove they are competent to work with student teachers.**

trusted, and respected professionals. Unlike nations that have bureaucratic accountability systems that make teachers feel threatened, overcontrolled, and undervalued, teaching in Finland is a very sophisticated profession, in which teachers feel they can truly exercise the knowledge and skills they have learned in the university.

While Finnish teacher education has been praised for its systematic academic structure and high overall quality,[10] professional development and in-service programs for teachers are more variable. In Finland, induction of new teachers into their first teaching position is less uniform than initial preparation. It is up to each school and municipality to take care of new teachers' induction to their teaching assignments. Some schools have adopted advanced procedures and support systems for new staff, whereas other schools simply bid new teachers welcome and show them their classrooms. In some schools, induction is a specific responsibility of school principals or deputy principals, while in others, induction jobs may be assigned to experienced teachers. Teacher induction is an area that requires further development in Finland, as has been pointed out in a recent European Commission report.[11]

Concerns have also been raised recently about the variability of in-service education. Municipalities, as the overseers of primary, middle, and high schools, are responsible for providing teachers with learning opportunities based on their needs. Whereas some Finnish municipalities organize in-service programs for all teachers, in others it is up to individual teachers or school principals to decide how much and what type of professional development is needed and whether such interventions will be funded. Although schools are financed equitably, the

central government has only limited influence on the budget decisions made by municipalities or schools. Therefore, although all teachers' annual duties include three days devoted to planning and professional development, some teachers have more opportunities for professional development than others. In response to concerns about uneven opportunities for in-service professional learning, the Finnish Ministry of Education, in collaboration with municipalities, plans to double the public funding for teacher professional development by 2016.[12]

Engagement in Curriculum, Assessment, and Leadership

During the course of Finland's education reforms, teachers have demanded more autonomy and responsibility for curriculum and student assessment.[13] Gradual growth of teacher training and professionalism in Finnish schools since the 1980s has made this a legitimate appeal. Teachers' engagement in these areas contributes to teacher status, satisfaction, and effectiveness.

While the *National Curriculum Framework for Basic Education* and similar documents for upper secondary education provide guidance to teachers regarding the content that students must master in each grade or course, curriculum planning is the responsibility of schools and municipalities. Local education authorities and teachers approve the school-level curriculum, and school principals (who must be qualified, experienced teachers) play a key role in curriculum design. Teacher education ensures that all educators have well-developed curriculum knowledge and planning skills. Moreover, the importance of curriculum design in teacher practice is helping shift the focus of professional development from fragmented in-service training toward more systemic, theoretically grounded school-wide improvement efforts.

Along with curriculum design, teachers play a key role in assessing students. Finnish schools do not use standardized testing to determine student success.* There are three primary reasons for this. First, while assessment practice is well grounded in the national curriculum, education policy in Finland gives a high priority to personalized learning and creativity as an important part of how schools operate. Therefore, the progress of each student in school is judged more against his or her individual development and abilities rather than against statistical indicators. Second, education authorities insist that curriculum, teaching, and learning—rather than testing—should drive teachers' practice in schools. Student assessment in Finnish schools is embedded in the teaching and learning process and is used to improve both teachers' and students' work throughout the academic year. Third, determining students' academic performance and social development in Finland are seen as a responsibility of the school, not external assessors. Teachers are the best judges of how their own students are progressing in school.

Finnish schools accept that there may be some limitations on

comparability when teachers do all the grading. At the same time, Finns believe that the problems often associated with external standardized testing—narrowing of the curriculum, teaching to the test, unethical practices related to manipulating test results, and unhealthy competition among schools—can be more problematic. Since Finnish teachers must design and conduct appropriate curriculum-based assessments to document student progress, classroom assessment and school-based evaluation are important parts of teacher education and professional development.

Although Finnish teachers' work consists primarily of classroom teaching, many of their duties lie outside of class. Formally, teachers' working time in Finland consists of classroom teaching, preparation for class, and two hours a week planning schoolwork with colleagues. From an international perspective, Finnish teachers devote less time to teaching than do teachers in many

Teachers' strong competence and preparedness are the prerequisites for the professional autonomy that makes teaching a valued career.

other nations. For example, a typical middle school teacher in Finland teaches just under 600 hours annually. In the United States, by contrast, a teacher at the same level typically devotes 1,080 hours to teaching annually.[14]

This, however, does not imply that teachers in Finland work less than teachers in other countries. An important—and still voluntary—part of Finnish teachers' work is devoted to the improvement of classroom practice, the advancement of the school as a whole, and work with the community.[15] Because Finnish teachers take on significant responsibility for curriculum and assessment, as well as experimenting with and improving teaching methods, some of the most important aspects of their work are conducted outside of classrooms.

Because teaching is highly professionalized, diverse responsibilities are handled within the teaching role. A peculiar feature of Finnish schools is that all the teachers are equal and are expected to do similar types of things. It is very rare for anyone to be assigned to a strictly nonteaching role. Job portfolios may differ—teachers may have some type of special role in working with the curriculum or in parent-school cooperation or in a business-school partnership—but everybody still teaches.

If teachers have a special role that is particularly time-consuming, they still continue to teach, perhaps with fewer teaching hours. Rarely do these roles receive additional compensation; occasionally, principals may offer a small stipend to teachers who are doing other work in addition to their teaching. This means that there is only a little room for career development in Finnish schools. However, as mentioned earlier, senior teachers do have much higher salaries than beginning teachers.[16]

---

*The only external test in Finland is the matriculation examination that students who want to go on to higher education take at the end of general upper secondary school.

Teachers' capacity to teach in classrooms and work collaboratively in professional communities has been built systematically through academic teacher education. A smart strategy is to invest in quality at the point of entry into teacher education. The Finnish example suggests that a critical condition for attracting the most able young people is that teaching be an independent and respected profession rather than just a technical implementation of externally mandated standards and tests. Teachers' strong competence and preparedness are the prerequisites for the professional autonomy that makes teaching a valued career. □

Endnotes

1. Andrew Hargreaves, Gabor Halasz, and Beatriz Pont, "The Finnish Approach to System Leadership," in *Improving School Leadership, Volume 2: Case Studies on System Leadership*, ed. Beatriz Pont, Deborah Nusche, and David Hopkins (Paris: OECD, 2008), 69–109.

2. Pasi Sahlberg, "Educational Change in Finland," in *Second International Handbook of Educational Change*, ed. Andy Hargreaves, Ann Lieberman, Michael Fullan, and David Hopkins (New York: Springer, 2010), 323–348.

3. Statistics Finland, "Education," www.stat.fi/til/kou_en.html, accessed September 4, 2010.

4. Marjukka Liiten, "Ykkössuosikki: Opettajan Ammatti" [Top Favorite: Teaching Profession], *Helsingin Sanomat*, February 11, 2004.

5. Organisation for Economic Co-operation and Development, *Education at a Glance, 2010: OECD Indicators* (Paris: OECD, 2010).

6. Organisation for Economic Co-operation and Development, *Education at a Glance, 2010*.

7. OAJ, *Teacher Education in Finland* (Helsinki, Finland: OAJ, 2008), www.oaj.fi/pls/portal/docs/page/oaj_internet/01fi/05tiedotteet/03julkaisut/opekoulutuseng.pdf, accessed January 26, 2011.

8. Ministry of Education, *Opettajankoulutus 2020* [Teacher Education 2020], Committee Report 2007 (Helsinki, Finland: Ministry of Education, 2007), 44.

9. Ian Westbury, Sven-Erik Hansen, Pertti Kansanen, and Ole Björkvist, "Teacher Education for Research-Based Practice in Expanded Roles: Finland's Experience," *Scandinavian Journal of Educational Research* 49, no. 5 (2005): 475–485; and Ritva Jakku-Sihvonen and Hannele Niemi, eds., *Research-Based Teacher Education in Finland: Reflections by Finnish Teacher Educators*, Research Report 25 (Turku, Finland: Finnish Educational Research Association, 2006).

10. Juhani Jussila and Seppo Saari, eds., *Teacher Education as a Future-Molding Factor: International Evaluation of Teacher Education in Finnish Universities* (Helsinki, Finland: Higher Education Evaluation Council, 2000).

11. European Commission, *Common European Principles for Teacher Competences and Qualifications* (Brussels: Directorate-General for Education and Culture, 2004).

12. Ministry of Education, *Ensuring Professional Competence and Improving Opportunities for Continuing Education in Education*, Committee Report 2009 (Helsinki, Finland: Ministry of Education, 2009), 16.

13. Erkki Aho, Kari Pitkänen, and Pasi Sahlberg, *Policy Development and Reform Principles of Basic and Secondary Education in Finland Since 1968* (Washington, DC: World Bank, 2006).

14. Organisation for Economic Co-operation and Development, *Education at a Glance, 2010*.

15. Pasi Sahlberg, "Education Policies for Raising Student Learning: The Finnish Approach," *Journal of Education Policy* 22, no. 2 (2007): 147–171.

16. Organisation for Economic Co-operation and Development, *Education at a Glance, 2010*.

Pedagogical Content Knowledge

(Continued from page 16)

Endnotes

1. Robert Floden and Marco Meniketti, "Research on the Effects of Coursework in the Arts and Sciences and in the Foundations of Education," in *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*, ed. Marilyn Cochran-Smith and Kenneth M. Zeichner (Mahwah, NJ: Lawrence Erlbaum Associates, 2006), 261–308.

2. Robert B. Bain and Tamara L. Shreiner, "Issues and Options in Creating a National Assessment in World History," *History Teacher* 38, no. 2 (2005): 241–272; and Sean Cavanagh, "World History and Geography Gain Traction in Class," *Education Week* 26, no. 28 (March 21, 2007): 10.

3. Lauren McArthur Harris, "Building Coherence in World History: A Study of Instructional Tools and Teachers' Pedagogical Content Knowledge" (PhD diss., University of Michigan, 2008).

4. Harris, "Building Coherence in World History," 242.

5. Although historians have often quoted Ladurie's description of historians as either parachutists or truffle hunters, we have never been able to find the place where Ladurie either wrote or said this. Recently, however, J. H. Elliott reported that Ladurie urged Elliott to cite him as the source of these distinctions "with confidence." J. H. Elliott, *Spain, Europe, and the Wider World, 1500–1800* (New Haven, CT: Yale University Press, 2009).

Common Core for Teaching

(Continued from page 21)

can be harnessed for productive collective work.

In addition to high-leverage practices, we need to identify the content knowledge most important to competent beginning teaching and find ways to articulate professional orientations and commitments. Although instructional practice should be at the center, a common core for teaching practice would include explicit learning goals that encompass the range of skills, knowledge, understandings, orientations, and commitments that underlie responsible teaching. An important aspect of the curriculum for learning to teach would be the special kinds of content knowledge needed for teaching.[14]

Teaching is always about teaching *something*. Although the lack of a common curriculum in the United States has often discouraged teacher educators from focusing beginners' training on any particular academic content, the advent of the Common Core State Standards makes it possible to identify specific instructional practices, and specific topics and texts within school subject areas, that could serve as the foci of a redesigned professional curriculum for learning to teach responsibly. One way to approach choosing this content is to think again in terms of what is "high leverage" for beginning teachers. "High-leverage content" comprises those texts, topics, ideas, and skills in each school subject area that are essential for a beginning teacher to know well. High-leverage content is foundational to the ideas and skills of the K–12 curricula in this country, is taught in some form or another across most published textbooks and curricula, and appears frequently. In addition, high-leverage content is fundamental to students' learning and often causes difficulty if not taught well. It also is often known only superficially by prospective teachers, or is entirely new to them.* Examples of high-leverage content in elementary mathematics, for example, might include place value; computational procedures with whole numbers, decimals, and fractions; and mathematical explanation and representation. In secondary English language arts, it could include writing a coherent essay, and reading and analyzing *Romeo and Juliet* and *Invisible Man*.

With a practice-focused curriculum for learning to teach, prospective teachers would learn to use specific, high-leverage practices to teach specific, high-leverage content, much of it derived from the Common Core State Standards. They would also learn how to enact professional norms and commitments in the context of instruction (not just to talk about them). Although the full curriculum would vary in some ways from program to program, the focus on high-leverage practices and content would not. Our field has shied away from this kind of common core curriculum for new teachers for decades, with troubling results. There has never been a better time to change than now.

We hear a great deal about how much more respected and supported teaching is in other countries than in the United States. Here, teaching is paradoxically both romanticized and disdained. More important, though, is that teaching is broadly underestimated and teacher education, both "traditional" and "alternative," is the object of significant criticism. Demanding that the public respect teachers or defending the status quo, however, will not lead to improved systems for the development of responsible instructional practice.

Our goal is to support the demanding

---

*This definition of high-leverage content derives from the work of the Mathematics Methods Planning Group at the University of Michigan School of Education.

work of teaching. Doing this effectively means unpacking and specifying instructional practice in detail, and designing professional education that will provide multiple opportunities to fine-tune crucial design, interaction, and analysis skills. Other trades and professions have been able to break their work into meaningfully learnable skills and knowledge, accompanied by discriminating judgment. To move from individualism to professionalism in teaching, and improve the learning of all students, we must do the same. □

Endnotes

1. Theresa Perry, Robert P. Moses, Joan T. Wynne, Ernesto Cortes Jr., and Lisa Delpit, eds., *Quality Education as a Constitutional Right: Creating a Grassroots Movement to Transform Public Schools* (Boston: Beacon Press, 2010).

2. David K. Cohen and Susan L. Moffitt, *The Ordeal of Equality: Did Federal Regulation Fix the Schools?* (Cambridge, MA: Harvard University Press, 2009).

3. David K. Cohen and James P. Spillane, "Policy and Practice: The Relations between Governance and Instruction," *Review of Research in Education* 18, no. 1 (1992): 3–49.

4. Cohen and Moffitt, *The Ordeal of Equality*; James Hiebert and Anne Morris, "Teaching, Rather Than Teachers, as a Path Toward Improving Classroom Instruction" (paper presented at the Research Presession of the National Council of Teachers of Mathematics, Indianapolis, IN, April 11–13, 2011; Anne Morris and James Hiebert, "Creating Shared Instructional Products: An Alternative Approach to Improving Teaching," *Educational Researcher* 40, no. 1 (2011): 5–14; and Magdalene Lampert and Filippo Graziani, "Instructional Activities as a Tool for Teachers' and Teacher Educators' Learning in and for Ambitious Practice," *Elementary School Journal* 109, no. 5 (2009): 491–509.

5. David K. Cohen, "Teaching Quality: An American Educational Dilemma," in *Teacher Assessment and the Quest for Teacher Quality: A Handbook*, ed. Mary Kennedy (San Francisco: Jossey-Bass, 2010), 375–401; and David K. Cohen, "Learning to Teach Nothing in Particular: A Uniquely American Educational Dilemma," *American Educator* 34, no. 4 (Winter 2010–2011): 44–46, 54.

6. Dan C. Lortie, *Schoolteacher* (Chicago: University of Chicago Press, 1975).

7. Lortie, *Schoolteacher*.

8. Deborah Loewenberg Ball and David K. Cohen, "Developing Practice, Developing Practitioners: Toward a Practice-Based Theory of Professional Education," in *Teaching as the Learning Profession: Handbook of Policy and Practice*, ed. Gary Sykes and Linda Darling-Hammond (San Francisco: Jossey-Bass, 1999), 3–32; and Deborah Loewenberg Ball and Francesca M. Forzani, "The Work of Teaching and the Challenge for Teacher Education," *Journal of Teacher Education* 60, no. 5 (2009): 497–511.

9. Teacher Education Initiative Curriculum Group, *High-Leverage Teaching Practices* (unpublished manuscript, School of Education, University of Michigan, 2008).

10. Magdalene Lampert, *Teaching Problems and the Problems of Teaching* (New Haven, CT: Yale University Press, 2001).

11. Pamela Grossman, Christa Compton, Danielle Igra, Matthew Ronfeldt, Emily Shahan, and Peter Williamson, "Teaching Practice: A Cross-Professional Perspective," *Teachers College Record* 111, no. 9 (2009): 2055–2100.

12. Pam Grossman and Morva McDonald, "Back to the Future: Directions for Research in Teaching and Teacher Education," *American Educational Research Journal* 45, no. 1 (2008): 184–205.

13. Carol D. Lee, *Culture, Literacy, and Learning: Taking Bloom in the Midst of the Whirlwind* (New York: Teachers College Press, 2007).

14. Deborah Loewenberg Ball, Mark Hoover Thames, and Geoffrey Phelps, "Content Knowledge for Teaching: What Makes It Special?" *Journal of Teacher Education* 59, no. 5 (2008): 389–407.

"Paul Revere's Ride"

> It seems to me the last line as it stands above is stronger than the end as it now remains in the proof.
> What do you say?

Longfellow said yes.

"Paul Revere's Ride" is a poem about waking the dead. The dead are Northerners, roused to war. But the dead are also the enslaved, entombed in slavery—another common conceit: Frederick Douglass once wrote about his escape as "a resurrection from the dark and pestiferous tomb of slavery."

Soon after "Paul Revere's Ride" was published, Longfellow wrote in his diary, "The dissolution of the Union goes slowly on. Behind it all I hear the low murmur of the slaves, like the chorus in a Greek tragedy." Listen, and you shall hear. □

Sources

Longfellow's papers are at the Houghton Library, Harvard University, and see *The Letters of Henry Wadsworth Longfellow*, edited by Andrew Hilen, 6 vols. (Cambridge, MA: Harvard University Press, 1966–1982). Excerpts from Longfellow's diaries are available in *Life of Henry Wadsworth Longfellow: With Extracts from His Journals and Correspondence*, edited by Samuel Longfellow, 2 vols. (Boston, 1886). Letters between Longfellow and his editor have been compiled by James C. Austin in "J. T. Fields and the Revision of Longfellow's Poems: Unpublished Correspondence," *New England Quarterly* 24 (1951): 239–250. Excerpts from Longfellow's account books have been transcribed by James M. Shea, director and museum curator, Longfellow National Historic Site, Cambridge, Massachusetts. For Longfellow's poems, see *Henry Wadsworth Longfellow: Poems and Other Writings*, selected by J. D. McClatchy (New York: Library of America, 2000) and *Henry Wadsworth Longfellow: Selected Poems*, edited with an introduction by Lawrence Buell (New York: Penguin Books, 1998). An excellent exhibit catalog is Christoph Irmscher's *Public Poet, Private Man: Henry Wadsworth Longfellow at 200* (Amherst: University of Massachusetts Press, 2009). For newly discovered and never before published stanzas from Longfellow's "Paul Revere's Ride," see the detective work of Charles Bahne, "One Hundred and Fifty Years of 'Paul Revere's Ride'—A Sesquicentennial Observation," *Revere House Gazette* 99 (Summer 2010): 1–4, 6.

Biographical and critical studies of Longfellow include Newton Arvin, *Longfellow: His Life and Work* (Boston: Little, Brown, 1962); Charles C. Calhoun, *Longfellow: A Rediscovered Life* (Boston: Beacon Press, 2004); Christoph Irmscher, *Longfellow Redux* (Urbana: University of Illinois Press, 2006); Frederick J. Blue, "The Poet and the Reformer: Longfellow, Sumner, and the Bonds of Male Friendship, 1837–1874," *Journal of the Early Republic* 15 (1995): 273–297; Daniel Aaron, "The Legacy of Henry Wadsworth Longfellow," *Maine Historical Society Quarterly* 27 (1988): 42–66; and Virginia Jackson, "Longfellow's Tradition: Or, Picture-Writing a Nation," *Modern Language Quarterly* 59 (1998): 476–477. For a discussion of Longfellow's career in the classroom, see Angela Sorby, *Schoolroom Poets: Childhood, Performance, and the Place of American Poetry, 1865–1917* (Durham: University of New Hampshire Press, 2005). David Hackett Fischer discusses the relationship between Longfellow's poem and the historical Revere in *Paul Revere's Ride* (New York: Oxford University Press, 1994). On Charles Sumner, see David Herbert Donald, *Charles Sumner and the Coming of the Civil War* (New York: Knopf, 1960); and Frederick J. Blue, *Charles Sumner and the Conscience of the North* (Arlington Heights, IL: Harlan Davidson, 1994). Sumner's papers are at the Houghton Library. A fine selection of his correspondence is *The Selected Letters of Charles Sumner*, edited by Beverly Wilson Palmer (Boston: Northeastern University Press, 1990).

These issues are available at **www.aft.org/newspubs/periodicals/ae/issues.cfm**.

AFT TEACH
A Union of Professionals

Together Educating America's Children

As an educator, you face extraordinary demands—and we are putting together extraordinary resources to provide you with the practical tools, professional knowledge, and inspiration to meet them. Follow us at **www.facebook.com/ AFTteach** to connect with colleagues, join discussions, and link to resources.