



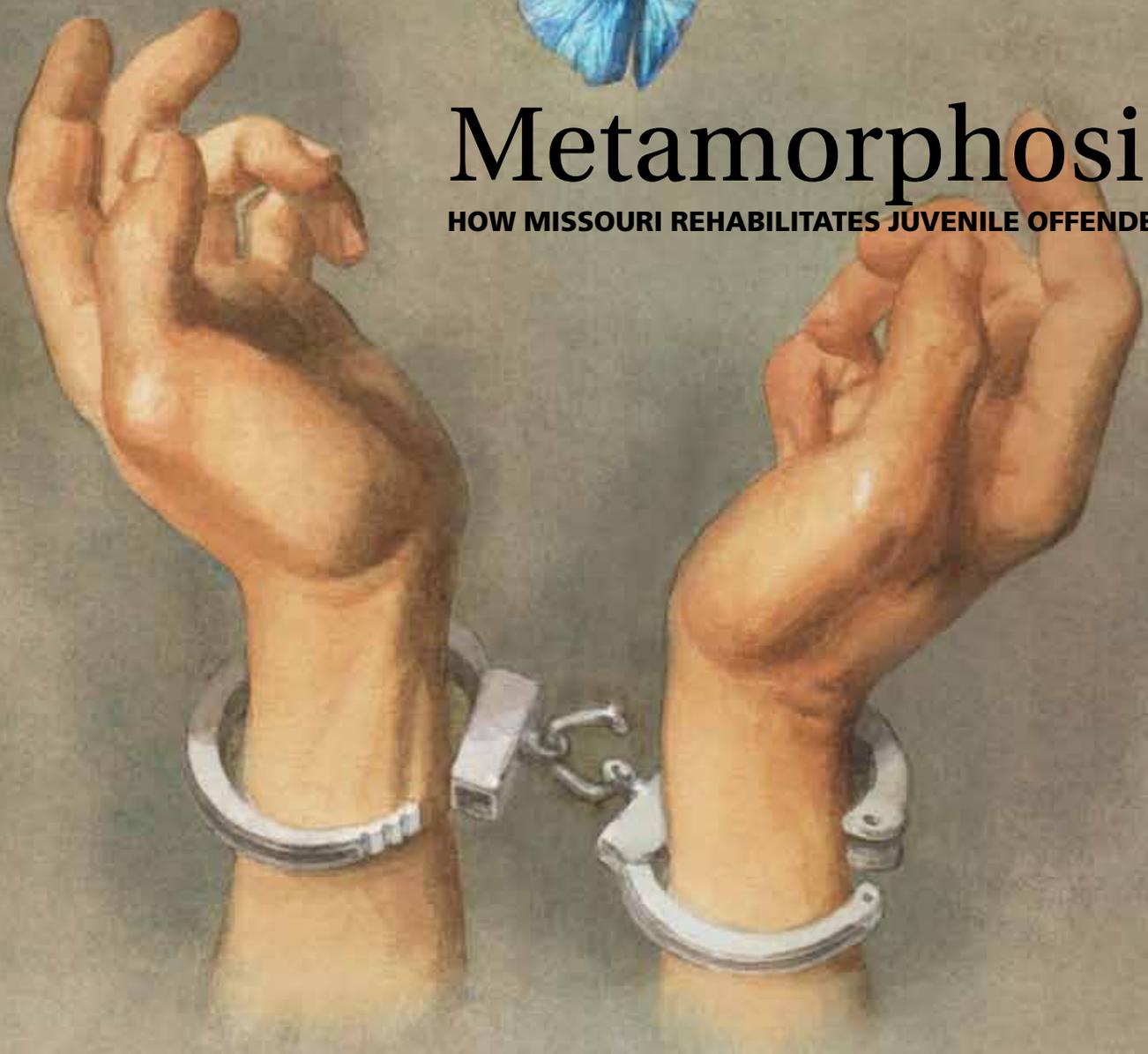
# AMERICAN Educator

A QUARTERLY JOURNAL OF EDUCATIONAL RESEARCH AND IDEAS



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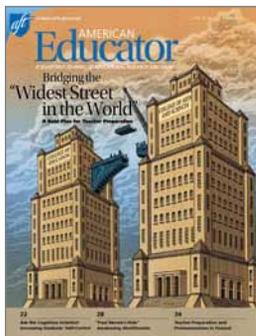
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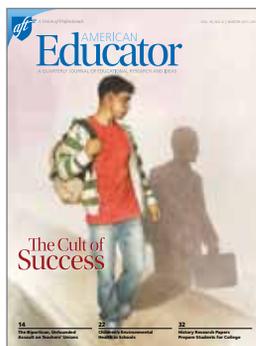
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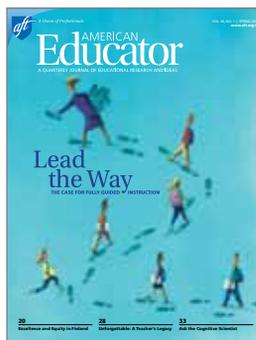
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Juveniles convicted of serious offenses usually end up in large correctional facilities that focus on punishment—not rehabilitation. The state of Missouri, however, has found a better way to help end the cycle of crime: by creating a network of small facilities that provide therapy and educational opportunities, it has dramatically reduced recidivism and helped thousands of youth make better choices in their lives. Tyler, Eric, and Jason are among those children. In their time at these state-run facilities, they have worked through their problems, earned academic credits, and renewed their interest in learning.

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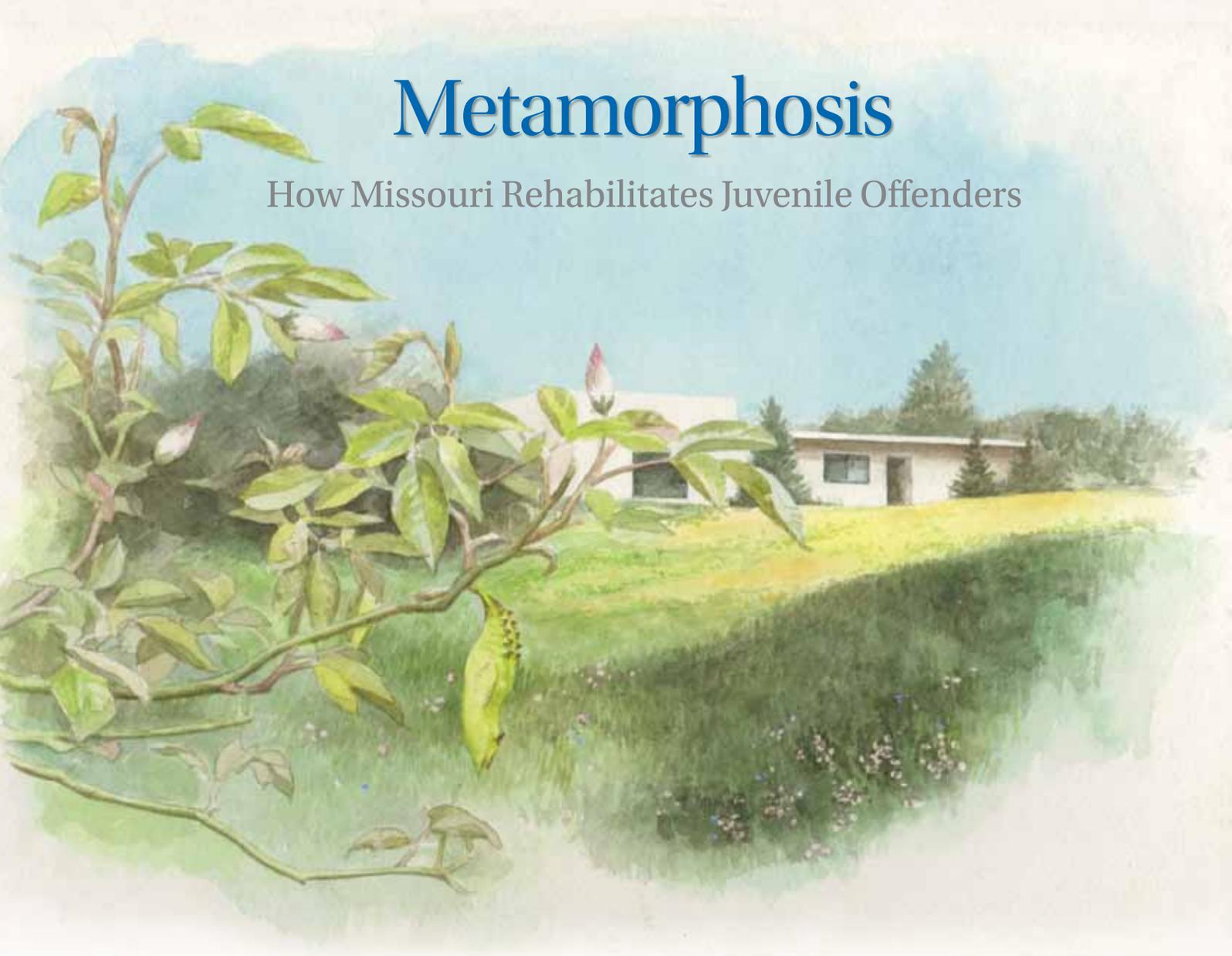
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# Metamorphosis

## How Missouri Rehabilitates Juvenile Offenders



BY JENNIFER DUBIN

**T** Tyler, 15, was arrested for breaking into cars. Eric, 16, got caught burglarizing homes. And Jason, 16, left a party drunk and got charged with driving while intoxicated.

Despite their tender ages, all three had long histories of drug abuse and run-ins with the law in the state of Missouri. Had they committed their crimes anywhere else in America, they likely would have been sentenced to large correctional facilities for juvenile delinquents.

Often referred to as reform or training schools, such facilities tend to house anywhere from 200 to 300 youth. Inside, juvenile offenders spend several months—sometimes years—in concrete cellblocks or large barracks with guards. They wear prison-issued uniforms, like the notorious orange jumpsuit. They spend several hours—sometimes days—in isolation if they act out. A few hours

each week, they attend “school,” often nothing more than a review of basic math and reading skills in a classroom crowded with behavior problems and special needs. Reports have shown that some endure abuse from each other and even from staff. They often learn nothing from their mistakes or about how to improve their lives. They learn only that society wants to punish them and then expects them to rehabilitate themselves with tons of idle time.\* (For more on the problems with common approaches to juvenile corrections, see “Juvenile Confinement in Context” on page 6.)

Missouri teaches youngsters like Tyler, Eric, and Jason a different lesson. In the early 1980s, the state closed its training schools and began to create a network of small facilities focused on

\*The Annie E. Casey Foundation advocates for juvenile justice reforms and has documented the horrendous conditions of many juvenile corrections institutions in the United States. For the foundation’s work on juvenile justice issues, visit [www.aecf.org/OurWork/JuvenileJustice.aspx](http://www.aecf.org/OurWork/JuvenileJustice.aspx). To learn more about specific problems plaguing juvenile corrections, see *No Place for Kids: The Case for Reducing Juvenile Incarceration*, available at <http://bit.ly/qOsV3U>.

*Jennifer Dubin is the assistant editor of American Educator. Previously, she was a journalist with the Chronicle of Higher Education.*

therapy and education, not punishment. Missouri's Division of Youth Services (DYS) runs the facilities, which include day treatment centers and group homes for youth who commit minor offenses, such as drug possession or theft, and residential centers with moderate to high levels of security for those who commit serious crimes, such as sexual assault, armed robbery, or arson. No facility holds more than 50 youth, and all staff members receive significant training.

Missouri's approach has helped thousands of juveniles (defined by the state as anyone 17 or younger) make better choices in their lives. Of the 2,200 youth committed to DYS each year, between 84 and 88 percent are productively engaged upon their release from the agency, which means they're working or attending school. Compared with juvenile offenders in other states, those in Missouri also have lower recidivism rates.<sup>†</sup>

Even in its residential centers, Missouri treats juvenile offenders as students, not criminals. Much like a well-run school, every minute is structured. Youth take classes in mathematics, science, social studies, English, physical education, and vocational education for six hours each day. They can earn their high school diplomas or GEDs. They can learn welding and woodwork. They eat breakfast, lunch, and dinner together with staff members, and they clean up after meals. In the mornings, they wake up and dress in their own clothes, usually T-shirts and jeans. In the evenings, they engage in group therapy to help each other understand personal problems and devise healthy ways to cope. They sleep in bunk beds with headboards that many personalize with pictures from home and inspirational quotes.

Tyler, Eric, and Jason committed crimes serious enough to land them in residential facilities. (To protect their privacy, I have changed their names.) During their confinements, they have shared past traumas with peers and have leaned on them for support. They have earned academic credits for school and renewed their interest in learning.

They may chafe at the idea, but despite their deepening voices and patches of stubble, Missouri knows they're still children. Deep down, they, too, realize they have a lot more growing up to do. "I wish I was sent here a long time ago," says Jason, with a level of maturity that would please his parents and his public school teachers. "I could have already been on the way to success instead of doing all the bad things I've done."

## Care after Crime

When a juvenile commits a serious crime in Missouri, he or she usually spends at least a month awaiting a court date in a local juvenile detention facility not run by DYS. For minor crimes, a youth may usually stay at home if the judge believes the youth will show up for court and does not pose a risk to the community. In detention, juveniles tend to sleep in individual rooms at night and spend much of the day in common areas. They may receive some type of academic instruction for part of the day, but mostly their day is unstructured.

A judge will commit a youth to DYS if the crime is serious

enough and if he or she has exhausted local interventions such as probation, family counseling, or community service. Once the judge commits a youth to DYS, the court loses jurisdiction and DYS provides treatment and education services. Girls tend to commit fewer and less serious offenses, and in residential facilities DYS treats them separately.

Within the first five days of commitment to DYS, a service coordinator meets the youth and his or her family. The coordinator conducts a comprehensive risk and needs assessment by looking at family history, prior referrals to the juvenile office, school records, and mental health history to determine the youth's placement within a DYS program. DYS is divided into five geographic regions with programs and facilities throughout the state, and officials make every effort to treat youth as close to their homes as possible. Although two-thirds of youth in DYS come

**Of the 2,200 youth committed to DYS each year, between 84 and 88 percent are productively engaged upon their release, which means they're working or attending school.**

from urban areas, those from rural parts of the state may still be a two-hour drive away from home.

For youth with minor offenses, the coordinator places them in one of 10 nonresidential treatment centers, where they spend weekdays in academic classes and counseling and then return to their homes at night. Treatment here can last anywhere from a month to a year. Offending youth who need more structure and support stay in one of seven group homes that typically house 10 to 12 youth for four to six months. They attend school within the group home, but they can hold jobs and participate in activities in the surrounding community.

Juveniles who commit more serious crimes and have a history of offending are placed in one of 19 moderate care facilities usually for six to nine months. Here, staff members closely supervise youth and allow them to participate in community activities and field trips.

A step above moderate care facilities are six secure care facilities that house juveniles who commit the most serious crimes. Unlike other residential facilities (with the exception of one moderate care facility), a fence surrounds secure care facilities, where juveniles usually stay for nine to twelve months and participate less often in outside activities.

One of these secure care facilities houses juveniles who have been tried and convicted as adults. They have committed the most serious felonies, such as armed robbery or murder. Still, they

<sup>†</sup>There is no documented national recidivism rate for juvenile offenders. But compared with other states that measure recidivism in similar ways, Missouri's outcomes for youth are far better. The Annie E. Casey Foundation has documented these outcomes and compared them with those of other states. See *The Missouri Model: Reinventing the Practice of Rehabilitating Youthful Offenders*, available at <http://bit.ly/HpQTO1>.

receive the same treatment and educational opportunities as youth in other DYS facilities. These juveniles, however, have received dual sentences in the state's dual jurisdiction program, in which the judge initially suspends the adult sentence and sends the youth to a secure care facility in Montgomery City. After the youth finishes his juvenile sentence, and before he turns 21, a judge decides whether to release him outright, place him on probation (if he has successfully completed the DYS program), or send him to adult prison.

No matter the facility, youth receive intense care. Within two to three weeks of entering a DYS program, a youth and his or her family usually meet again with the service coordinator. Together, they devise an individualized treatment plan. The plan outlines specific objectives, such as rebuilding family relationships and making healthy connections with adults, that the youth will work on during his or her stay. In DYS, families are vital to treatment; the organization studiously avoids placing blame. "We have a basic, core set of philosophies that people want to do well and succeed" and "that they're doing the best they can based on the resources available to them," says Tim Decker, the director of DYS. Poor behavior "is a symptom of unmet needs and often an inappropriate way that young people and families are trying to meet their needs."

To determine educational needs, DYS helps the youth and his or her family create an individualized education plan, which outlines academic goals—say, reading on grade level or earning a GED—that the youth hopes to achieve. Unlike many juvenile correctional systems in the United States, Missouri's DYS is an accredited school district. It has a statewide education supervisor who functions like a superintendent and reports to the DYS director. He oversees the work of regional education supervisors, who hire teachers and provide professional development. DYS employs 130 teachers, many of whom are certified in special education. Their expertise is crucial given that 30 percent of youth committed to DYS have special needs. Often, learning problems lead to frustrations with school that prompt them to commit crimes in the first place. Students attend class every day except weekends, and, unlike the majority of public schools, the DYS school year is 12 months.

In all DYS programs, juveniles receive treatment and education in small groups so staff can best meet their needs. In residential facilities, for example, youth both undergo therapy and attend school in groups of 10 to 12. During the day, each group works closely with a classroom teacher and a "youth specialist," a staff member who serves as a teacher's aide. That closeness is underscored by the fact that youth call all staff members, even teachers, by their first names.

Youth specialists tutor students in class and help manage classroom behavior. DYS does not group students by grade level or age, although they can range in age from 11 to 17. Instead, teachers and youth specialists typically teach all academic subjects and differentiate instruction. Some facilities divide English, mathematics, science, and social studies among teachers so that each teacher and youth specialist has to teach only two subjects. Despite the age variation, this one-room schoolhouse approach allows youth to receive individualized instruction and to develop

strong bonds with group members. In many cases, youth come to view their group as a family, making it easier to share hopes and fears.

In the evenings, after the classroom teachers and their youth specialists leave, each group participates in therapy with two other youth specialists, who do not work in classrooms. They work evening and overnight shifts and strictly focus on counseling and youth development. At every DYS facility, staff members closely interact with only a few juveniles at a time. "They work with one group of kids where they really get to know them and develop a healthy, adult-child relationship," Decker says. "That, of course, is based on structure and a rigorous schedule and discipline, but also there's an element of caring and concern."

## An Opportunity to Learn

The sign in front of the long, one-story brick building just off the interstate and around the corner from a gas station and a liquor store says Rich Hill Youth Development Center. A moderate care facility about 70 miles from Kansas City in southwestern Missouri,

the center sits on a road with no outlet in Rich Hill, a small, rural city with a population of about 1,500. It's best described as a farming town. Row crops, including corn, wheat, and soybeans, fill the largely flat landscape.

Nothing about the center's façade suggests that juvenile offenders live here. Neither a fence nor a guard secures the building's perimeter. But the front doors are locked, and visitors must be let in. Once inside, they hand their car keys to a staff member, who locks them up (employees here don't take chances).

A facility manager, three teachers, 18 youth specialists, a cook, a nurse, and two maintenance men work at the center. Rich Hill is one of the smaller moderate care facilities: it can house up to 24 youth. As of this writing, 23 boys, ages 11 to 17, are here. An extra space is held open for what's called "shelter status," in case a youth who has completed his stay in the program and has trouble making the transition home needs to return for more support.

At Rich Hill, the 23 youth are grouped into two teams called the Mustangs and the Titans. Years ago, a different set of juveniles grew tired of being referred to as Group 1 and Group 2 and came up with the names, which have stuck.

The teams occupy different sides of the building, which are identical. Each group has a day treatment room with couches and chairs and a phone the boys use twice a week to call home. Each group also has its own classroom. And each group sleeps in its own big, open dorm room, with bunk beds along one wall and wardrobes along the other. In front of the bunk beds, a youth specialist sits at a desk to keep watch over the boys throughout the night. At all DYS residential facilities, staff members supervise youth 24 hours a day, seven days a week.

Just past the desk is the bathroom: four toilet stalls and six shower stalls. The laundry room, with a washer and dryer, is a few steps away. The boys wash their own clothes, but as a safety precaution, detergents are locked in a closet, along with cleaning supplies, so they can't abuse any chemicals.

The cafeteria, a light-filled space with windows and walls half painted red and half paneled with wood, sits in the middle of the building. Together, the two groups and staff members eat meals



here. As another safety measure, knives are nowhere in the room, only forks and spoons.

An hour before lunch one January morning, the Mustangs sit in their classroom and listen to their teacher, Jim Kithcart, prepare them for an upcoming field trip. In February, staff members will take them 15 miles east to the Schell-Osage Conservation Area to observe eagles. So his students make the most of their visit, Kithcart introduces important background knowledge. He shows them a video, *Where Eagles Soar*, produced by the Missouri Department of Conservation, and gives each student handouts from the department. He discusses the animals' size and strength. And he has written words such as "eaglet," "endangered," and "extinct" on the board.

"Do you want to tell Edwin about eagles' strength?" Kithcart asks the class after a student walks in with a youth specialist in the middle of the lesson. When students need to come and go from the room for various reasons, such as a visit to the nurse's office, a youth specialist always accompanies them. "They can crush a baseball," one boy tells Edwin. "Think what an eagle can do to your hand," says another.

"How many of you guys have ever owned a snake?" Kithcart asks. All hands go up. "Do snakes have power?" Everyone immediately says yes. Kithcart notes that animals smaller than humans are sometimes surprisingly strong. Size alone, he explains, does not always convey strength. He knows his audience; the subject fascinates his students, all of whom are completely engaged in the lesson. "For most of our boys, it'll be their first up-close look at an eagle," Kithcart says later. "Every kid in the program will talk about it until he leaves."

For 14 years, Kithcart has worked at Rich Hill. A certified social studies teacher whose mother and several aunts and uncles teach in public schools, Kithcart teaches all academic subjects just like he would in elementary school. He's a native of Rich Hill who still helps out at his family's orchard. After college, he wanted to work with his hands before teaching full time, so he joined a laborers' union and poured concrete in Kansas City for two years. Then he

came home to Rich Hill. His booming voice and easy smile serve him well at the center where boys sometimes arrive shy and withdrawn. He chose to teach here instead of a regular public

school for the small class size and the chance to help troubled youth change their lives.

He takes pride in former students like Chris, now a Marine, whose picture he keeps on his desk. Kithcart taught the young man, convicted of a sexual offense, about 10 years ago. He describes him as bright, with an incredible memory. As part of a civics lesson one year, Kithcart asked his students to recite the name of every American president in less than 30 seconds. "He went all the way from Washington to Bush, and just to show me how good he was, he went backwards," he says. "He did it in just a little over the prescribed time. Everybody in the class jumped up like a home run was hit." Kithcart remembers how Chris, who came to Rich Hill quiet and reluctant to share, proudly smiled. "Those are the moments I teach for."

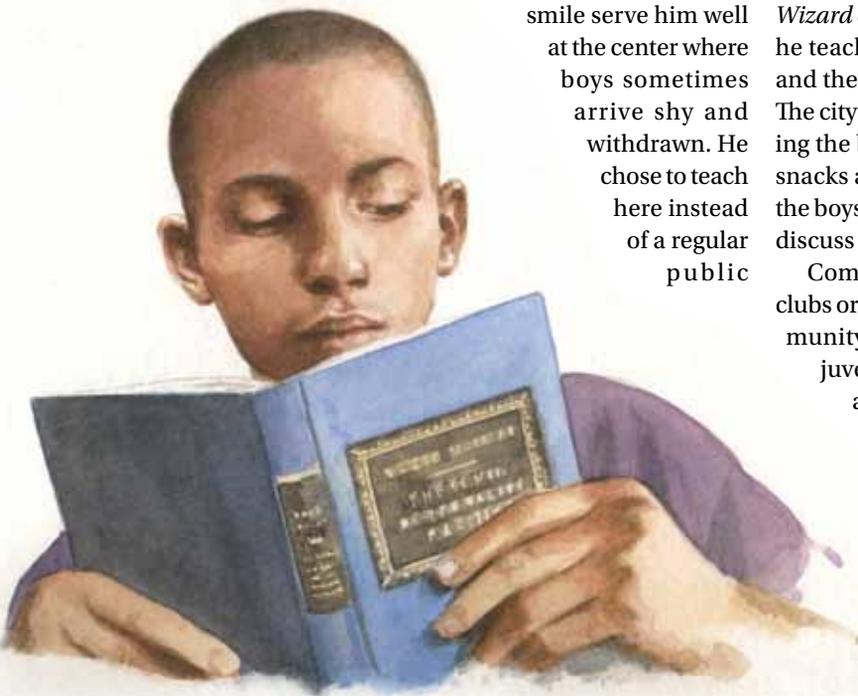
**Jim Kithcart, a certified social studies teacher, chose to teach at Rich Hill for the small class size and the chance to help troubled youth change their lives.**

To teach all academic subjects (the boys have a separate vocational teacher), Kithcart follows state curriculum guides. But like all DYS teachers, he chooses his own materials. He prefers to use textbooks for basic math and language arts. He also supplements instruction with novels, computer programs, and individual reading assignments. Paperback editions of *The Wizard of Oz* and *Treasure Island* fill his classroom's bookshelves; he teaches about 10 novels each year. In late January, Kithcart and the Titans' teacher, Clayson Lyons, are teaching *Old Yeller*. The city's community book club donated copies and is also reading the book. One evening in February, club members bearing snacks and drinks will visit the center to discuss the book with the boys. Each year, the club chooses a different book to read and discuss with them.

Communities tend to embrace DYS facilities. Besides book clubs or other community groups, each facility works with a community liaison council, whose members may bake cakes for juveniles on their birthdays or throw them holiday parties and barbecues. Staff members supervise the visits, which help youth practice social skills. In Rich Hill, relations between the center and the community are especially good. Besides teaching at the center, Kithcart is the mayor of the city of Rich Hill.

To prepare for the book club's visit, the students read *Old Yeller* aloud in class. Because they spend

*(Continued on page 8)*



# Juvenile Confinement in Context

BY RICHARD A. MENDEL

For more than a century, the predominant strategy for the treatment and punishment of serious and sometimes not-so-serious juvenile offenders in the United States has been placement into large juvenile corrections institutions, alternatively known as training schools, reformatories, or youth corrections centers.

Excluding the roughly 21,000 youth held in detention centers daily awaiting their court trials or pending placement in a correctional program, the latest official national count of youth in correctional custody, conducted in 2010, found that roughly 48,000 U.S. youth were confined in correctional facilities or other residential programs each night on the order of a juvenile delinquency court.<sup>1</sup> For perspective, that's about the same number of adolescents that currently reside in midsize American cities like Louisville, Kentucky; Nashville, Tennessee; Baltimore, Maryland; and Portland, Oregon. A high proportion of these confined youth are minorities. According to the most recent national count, 40 percent of confined youth are African Americans and 21 percent are Hispanics; non-Hispanic white youth, who comprise almost 60 percent of the total youth population, were just 34 percent of the confined youth.<sup>2</sup>

America's heavy reliance on juvenile incarceration is unique among the world's developed nations. Though juvenile violent crime arrest rates are only marginally higher in the United States than in many other nations, a recently published international comparison found that America's youth custody rate (including youth in both detention and correctional custody) was 336 of every 100,000 youth in 2002—

*Richard A. Mendel is an independent writer and researcher specializing in poverty-related issues in youth, employment, and community economic development. He has written extensively about youth crime prevention and juvenile justice issues, including three nationally disseminated reports published by the American Youth Policy Forum. He is also the author of five major publications for the Annie E. Casey Foundation, including The Missouri Model: Reinventing the Practice of Rehabilitating Youthful Offenders, a detailed study of the Missouri youth corrections system. This sidebar is adapted with permission from his latest report for the Annie E. Casey Foundation, No Place for Kids: The Case for Reducing Juvenile Incarceration, published in 2011. Both this report and the one on Missouri are available at [www.aecf.org/KnowledgeCenter/JuvenileJustice/DetentionReform.aspx](http://www.aecf.org/KnowledgeCenter/JuvenileJustice/DetentionReform.aspx).*

nearly five times the rate of the next highest nation (69 per 100,000 in South Africa).<sup>3</sup> As the figure below shows, a number of nations essentially don't incarcerate minors at all. In other words, mass incarceration of troubled and troublemaking adolescents is neither inevitable nor necessary in a modern society.

State juvenile corrections systems in the United States confine youth in many types of facilities, including group homes, residential treatment centers, boot camps, wilderness programs, or county-run youth facilities (some of them locked, others secured only through staff supervision). But the largest share of committed youth—about 36 percent of the total—are held in locked long-term youth correctional facilities operated primarily by state governments or by private firms under contract to states.<sup>4</sup> These facilities are usually large, with many holding 200–300 youth. They typically operate in a regimented (prison-like) fashion and feature correctional hardware such as razor wire, isolation cells, and locked cellblocks.

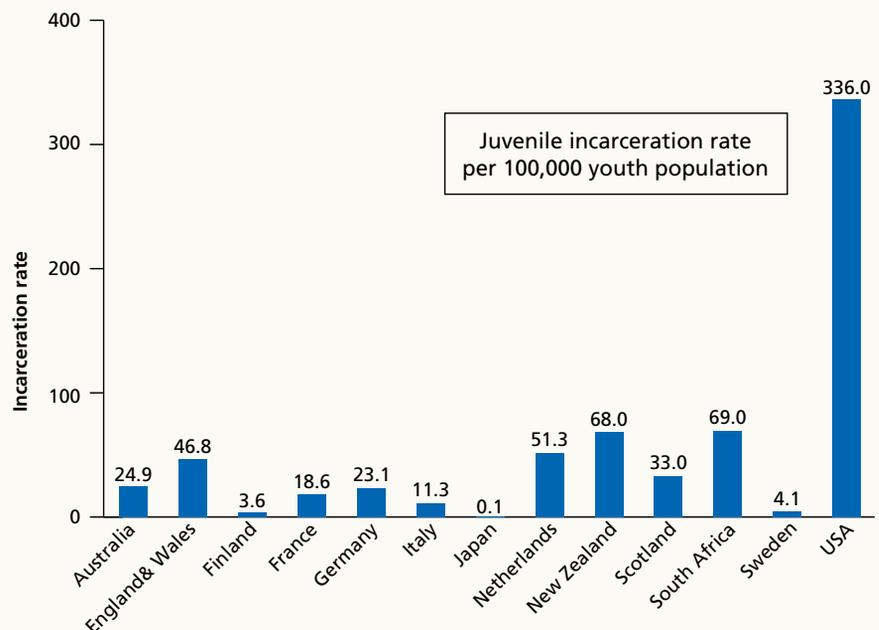
However, an avalanche of research has emerged over the past three decades about what works and doesn't work in combating juvenile crime. *No Place for Kids: The Case for Reducing Juvenile*

*Incarceration*, the report from which this sidebar is drawn, provides a detailed review of this research and comes to the following conclusion: we now have overwhelming evidence showing that wholesale incarceration of juvenile offenders is a counterproductive public policy. While a small number of youthful offenders pose a serious threat to the public and must be confined, incarcerating a broader swath of the juvenile offender population provides no benefit for public safety. It wastes vast sums of taxpayer dollars. And more often than not, it harms the well-being and dampens the future prospects of the troubled and lawbreaking youth who get locked up. Incarceration is especially ineffective for less-serious youthful offenders. Many studies find that incarceration actually increases recidivism among youth with lower-risk profiles and less-serious offending histories.

Large, prison-like correctional institutions are frequently:

1. Dangerous: America's juvenile corrections institutions subject confined youth to intolerable levels of violence, abuse, and other forms of maltreatment.
2. Ineffective: The outcomes of correctional confinement are poor. Recidivism

## Youth Incarceration Rate: United States vs. Other Nations



SOURCE: NEAL HAZEL, CROSS-NATIONAL COMPARISON OF YOUTH JUSTICE (LONDON: YOUTH JUSTICE BOARD, 2008), IN RICHARD A. MENDEL, NO PLACE FOR KIDS: THE CASE FOR REDUCING JUVENILE INCARCERATION (BALTIMORE: ANNIE E. CASEY FOUNDATION, 2011).

rates are almost uniformly high, and incarceration in juvenile facilities depresses youths' future success in education and employment.

3. **Unnecessary:** A substantial percentage of youth confined in youth corrections facilities pose minimal risk to public safety.
4. **Obsolete:** The most striking finding of recent research is that juvenile rehabilitation programs tend to work if, and only if, they focus on helping youth develop new skills and address personal challenges.
5. **Wasteful:** Most states are devoting the bulk of their juvenile justice budgets to correctional institutions and other facility placements when nonresidential programming options deliver equal or better results for a fraction of the cost.
6. **Inadequate:** Despite their exorbitant daily costs, most juvenile correctional facilities are ill-prepared to address the needs of confined youth, many of whom suffer with problems related to mental health, substance abuse, special education needs, and more. Often, these facilities fail to provide even the minimum services appropriate for the care and rehabilitation of youth in confinement.

For the small percentage of juvenile offenders who do need secure facilities, the superiority of small, community-based juvenile corrections facilities over larger, conventional training schools is widely recognized in the juvenile justice field. The advantages of smaller facilities include the chance to keep youth close to home and engage their families, greater opportunity to recruit mentors and other volunteers, and a more hospitable treatment environment.

The primary mission of small secure facilities, as well as group homes and other placement facilities, should be to help youth make lasting behavior changes and build the skills and self-awareness necessary to succeed following release. In pursuing this mission, states will do well to follow the example of Missouri,<sup>5</sup> which closed its long-troubled training schools in the early 1980s. Since then, Missouri's Division of Youth Services (DYS) has divided the state into five regions and built a continuum of programs in each, ranging from day treatment programs and

nonsecure group homes, to moderately secure facilities located in state parks and college campuses, to secure care facilities. None of the facilities holds more than 50 youth, and each of the state's six secure care facilities houses just 30 to 36 youth. In every Missouri facility, youth are placed in small groups that participate together in all education, treatment, meals, recreation, and free time. Throughout their stays in DYS facilities, youth are challenged to discuss their feelings, gain insights into their behaviors, and build their capacity to express their thoughts and emotions clearly, calmly, and respectfully—even when they are upset or angry. DYS staff engage the families of confined youth and work with family members to devise successful reentry plans. DYS assigns a single case manager to oversee each youth from the time of commitment through release and into aftercare, and it provides youth with extensive supervision and support throughout the critical reentry period.

Through this approach, Missouri has achieved reoffending rates that are lower than those of other states. For example, in states other than Missouri, available studies show that 26 to 62 percent of youth released from juvenile custody are reincarcerated on new criminal charges within three years, and 18 to 46 percent within two years. In Missouri, the three-year reincarceration rate is just 16.2 percent.<sup>6</sup> (To learn more about how Missouri rehabilitates youthful offenders, see the article that starts on page 2.)

**T**he time has come for states to embrace a fundamentally different orientation to treating adolescent offenders—an approach grounded in evidence that promises to be far more humane, cost-effective, and protective of public safety than our timeworn and counterproductive reliance on juvenile incarceration. Fortunately, we are seeing an encouraging shift away from juvenile incarceration in many states. From 1997 to 2007, the total population of youth in correctional placements nationwide declined 24 percent, and the total in long-term secure correctional facilities dropped 41 percent. Of the 45 states reporting data on the number of youth in correctional custody in both 1997 and 2007, 34 reduced their confinement rates.<sup>7</sup> Since 2007, 52

youth correctional facilities have been shuttered in 18 states nationwide, and several other states have closed units within facilities and reduced bed capacity without shutting down entire facilities.

However, while this wave of facility closures and bed reductions is important and long overdue, it offers little reassurance for the future. In many states, the primary cause for closures has been the short-term fiscal crisis facing state governments. In other states, federal investigations or private class-action lawsuits have been the driving force behind facility closures. The common thread has been that most decisions to shut down facilities have been ad hoc and reactive. The closures have not been based on any new consensus among policy leaders or any new philosophic commitment to reducing reliance on juvenile incarceration, and they have not been informed by evidence-based consideration of how states should best pursue the path toward reduced incarceration.

Looking to the future, we must build a youth corrections system that is rooted in best practice research. Not only do state and local justice systems have to offer a balanced mix of treatment and supervision programs, but they must also calibrate their systems to ensure that each individual youth is directed to the treatments, sanctions, and services best suited to his or her unique needs and circumstances.

For the first time in a generation, America has the opportunity to redesign the deep end of its juvenile justice system. The open question is whether we will seize this opportunity, whether we will not only abandon the long-standing incarceration model but also embrace a more constructive, humane, and cost-effective paradigm for how we treat, educate, and punish youth who break the law. □

## Endnotes

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6. Mendel, *The Missouri Model*.
7. 1997 data from Melissa Sickmund, T. J. Sladky, and Wei Kang, "Census of Juveniles in Residential Placement Databook," available online at [www.ojjdp.gov/ojstatbb/ezacjrp](http://www.ojjdp.gov/ojstatbb/ezacjrp); and 2007 data from Melissa Sickmund, *State Rates of Residential Placement of Juvenile Offenders by Placement Status, Facility Type, and Facility Size: 2007* (Pittsburgh, PA: National Center for Juvenile Justice).



*(Continued from page 5)*

evenings in group therapy, they are not assigned homework; they do all their schoolwork in class.

Kithcart says that most students, despite their ages, often read and do math at fifth- and sixth-grade levels. As a result, he can present most lessons to the whole class. For students further behind or ahead and who need more individualized instruction, he, or Jeff Tourtillott, his youth specialist, works with them one-on-one. But to a large degree, “we’re gap fillers,” he says.

This afternoon, Kithcart and Tourtillott fill in gaps with measurement. A handful of Mustangs, ages 13 to 17, have math textbooks open in front of them. Half of the students have left the room to attend their vocational class, while the rest measure various lengths with rulers.

For each textbook problem, Jason neatly records his answers. Wearing glasses and a Mizzou baseball cap, he sits in his seat, focused on his work—the picture of good behavior. It’s hard to believe that before he came to Rich Hill three months ago, the 16-year-old from Joplin routinely caused trouble. “I stole money from my parents,” he says. “I stole money from stores.” He drank excessively and used cocaine. He also fought with his classmates and did little schoolwork. The local juvenile office eventually placed him on probation.

A few months into probation, though, he calmed down. He drank less and made good grades. It seemed he had turned a corner. Then disaster struck. On May 22, 2011, Jason was at home with friends when a tornado tore his house to shreds. Though he and his friends were not hurt, Jason says the trauma of the event derailed his progress. “Every time wind would pick up, I’d freak out.” He had nightmares and drank heavily to cope.

After leaving a party in October, Jason crashed his car, in which two of his friends were riding. No one was hurt, but police charged him with a DWI and endangering the welfare of children; like him, his friends were 16.

After a month in detention, Jason was sent to Rich Hill. “The first night I got here, I started talking about the things I needed to talk about,” he says. “I just let everything out.”

### **Time to Share**

DYS has developed a treatment model that enables youth to share. Each facility may tweak certain aspects of the process, but all facilities approach it the same way. At Rich Hill, each boy memorizes the facility’s 11 expectations (for example, respect yourself and those around you, have a positive attitude, give sincere effort) and presents them to three staff members in his first seven days at the center. Then he writes and presents in group therapy his

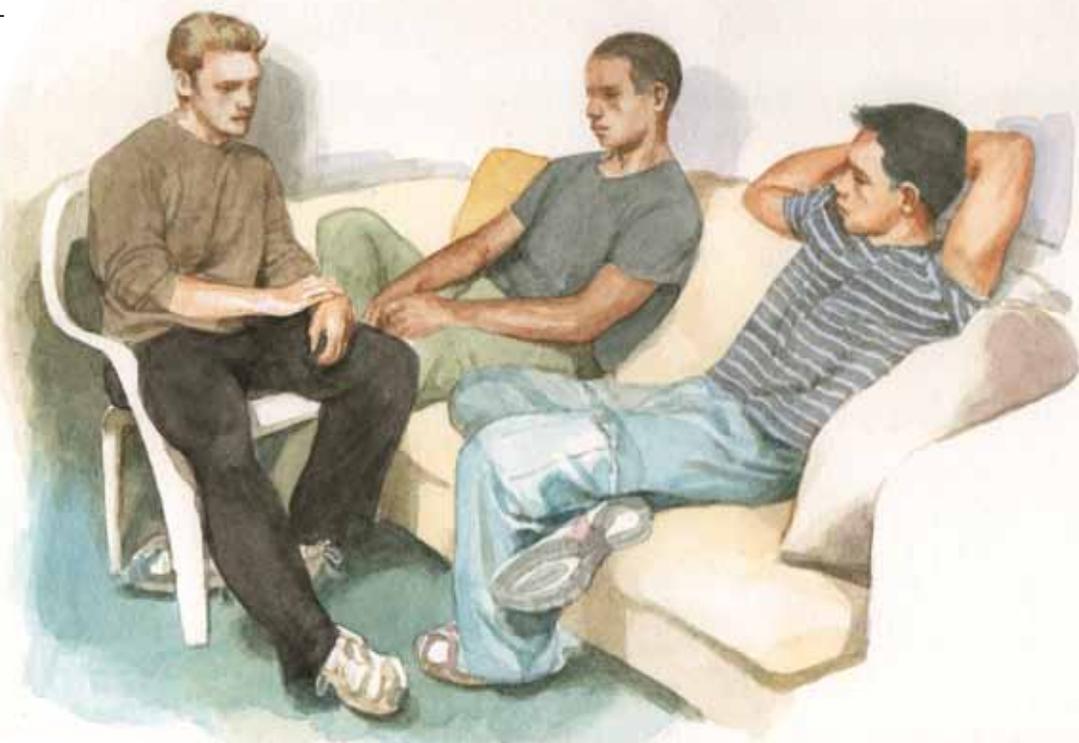
life story and a family tree. These include details of how he grew up and his relationships with family members. “No one knows more about them than they do,” says Danielle Rolph, Rich Hill’s facility manager. “That’s where they start.”

If boys discuss past abuse or deaths of loved ones, they tend to get emotional, Rolph says. In group therapy, it’s not uncommon to see tears. But the process, though painful, is important: family history gives the youth specialists insight into how each boy views himself and others. For instance, a youth who has been abused by family members may describe them as loving, Rolph says, so “his idea of relationships may be skewed.”

After detailing his family history, each boy chronicles the 24 hours leading up to his committing offense and presents it in group therapy. When he shares his “CO,” as the boys call it, he includes the events that led to his arrest, as well as his thoughts and feelings.

With the support of youth specialists, the boys identify their negative behavior patterns. Once they recognize their need for change, they spend the bulk of therapy learning how to regulate their emotions. Then they focus on the transition home. The boys create relapse prevention plans, which detail the steps they must take to succeed outside the facility. These plans include supports, such as a list of positive friends and family members the boys can rely on once they get home, as well as a list of people they should avoid.

After a youth specialist has signed off on the plan, the service coordinator, who assigned the youth to Rich Hill and has been meeting with him monthly, sets up a transition meeting with the youth and his family. They discuss what the youth needs—therapy or academic supports, for instance—to succeed back home. If the youth plans to return to school, the service coordinator will invite a school representative, such as a counselor or a teacher, to attend the meeting. Often, the service coordinator will help the youth find a job. DYS has partnerships with local businesses and non-profits willing to employ rehabilitated juvenile offenders. Even



after the youth leaves the facility, the service coordinator continues meeting with him for four to six months, routinely checking in to see how he's doing.

To prepare for the transition, boys go home on two- or three-day passes before they've completed their stays in the program, so they and their families can gradually readjust to living together. It would be an understatement to say the boys look forward to such visits. Just ask Tyler. One January afternoon, he anxiously stands inside Rich Hill's locked front doors with his hands jammed in the pockets of his jeans. He has lived at Rich Hill for five months and officially leaves in a couple of weeks. In that time, he says, he has learned how to treat his mother and sisters respectfully and live a drug-free life. In a few minutes, he will leave on his three-day pass. Tyler's service coordinator will save his mother a trip and drive him the hour and a half home. "I was counting the days," says the 15-year-old, excitedly.

Before he came to Rich Hill, Tyler abused pills, drank alcohol, and smoked marijuana. When his anger would get the best of him, he would curse at his family members and punch holes in the walls of their home.

The night of his arrest, he and his friends planned to "do shrooms." They were breaking into cars looking for money to buy the drugs and got caught. In therapy, he learned that he used drugs to escape memories of abuse. Tyler's father (who is now in prison) molested him when he was a child. "I didn't want to feel that pain," he says, looking down at his shoes. "I love my dad." He says this last bit quickly and uneasily. The giddiness of going home can't hide wounds that will take more than five months of group therapy to heal.

When Tyler goes home for good, he plans to focus on school. He has resolved to participate in class and turn in assignments on time. Before he came to Rich Hill, he earned 93 tardy notices in one semester. He regularly skipped classes, stared out the window when he did attend them, and hardly did homework.

Tyler has already begun to catch up with school. He's supposed to be in tenth grade. But because he has not earned enough credits, he will return to ninth. In his time at Rich Hill, he has worked hard to earn three and a half credits; before he came, he had only two.

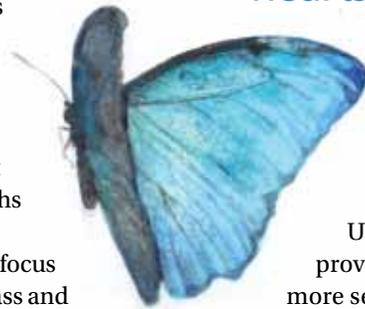
## Security in Relationships

Not everyone released from DYS can return to school. Missouri's Safe Schools Act prohibits a youth from reenrolling in any public school if convicted of first- or second-degree murder, forcible or statutory rape, forcible or statutory sodomy, first-degree robbery, distribution of drugs to a minor, first-degree arson, or kidnapping. For those youth, and others who choose not to return to public school, DYS has recently created a distance learning academy, which helps students complete their high school credits, prepare for their GEDs, or acquire career skills online. DYS began to offer the academy in April of this year. Tim Decker, the DYS director, says it will serve between 80 to 100 students each year.

Eric, 16, doesn't say whether he's allowed to return to school. He has earned his GED and dreams of joining the Marine Corps.

Six months ago, he arrived at the Waverly Regional Youth Center in Waverly. He was sent here after being convicted of robbery. He was also convicted of gun and marijuana possession. At 14, he began using methamphetamines to cope with his home life. His stepfather drank and treated him and his siblings poorly, and his mother ignored their complaints. "She'd believe my stepdad over us kids," he says bitterly.

Eric moved in with his uncle, who allowed him to stay on one condition: that they burglarize homes together. One night, they got caught. Eric spent three months in detention and was then sent to Waverly's center, a moderate care facility, in central Missouri, about 70 miles from Kansas City. Like the city of Rich Hill,



**Fences don't provide the best security; relationships do. "We tell our staff, 'Don't count on the fence. You need to provide the eyes-on, ears-on, hearts-on supervision,'" says Tim Decker, the DYS director.**

Waverly is small; its population hovers around 900.

Unlike Rich Hill's center, though, Waverly's facility provides more security. And because their crimes are more serious, youth here stay longer: six to nine months instead of four to six.

A low-slung building between two churches, and across the street from another church and a handful of residential homes, Waverly's facility is a former hospital built in 1956. It has been renovated to accommodate 45 boys. Inside, the center looks very much like a public school. Student work decorates classroom walls, and bulletin boards celebrate those who made honor roll. Outside, though, something strikes a visitor as different: a 13-foot-high chainlink fence secures the center's backyard. It is the only moderate care facility with a fence—and a history.

In June of 1992, a youth escaped from the center. He physically assaulted a woman in the community and set her house on fire. At the time, the facility had no fence. After the incident, neighbors demanded it. "The community had every right to expect changes," says Decker, the current DYS director, who was one of the regional administrators at the time. Decker moved into the facility for three weeks after the incident to help change the culture of the place so boys felt their needs were being met and would not run away. He also helped rebuild community relationships. Within six months, staff members had enlisted elderly residents to visit the boys. For the last several years, community members have baked birthday cakes for them. Even the woman who was victimized years ago bakes one. (According to Decker, DYS could not rehabilitate the young man who attacked her, and he is now in adult prison.)

Decker emphasizes that fences don't provide the best security; relationships do. "We tell our staff, 'Don't count on the fence. You need to provide the eyes-on, ears-on, hearts-on supervision.'" That supervision works so well that staff members do not need to use more extreme measures, like mace or isolation rooms, to calm youth.

Moderate care facilities such as Rich Hill and Waverly don't even have isolation rooms. Only five of the six secure care facilities have such rooms, which are used mostly for storage. Decker says that those sites may use the rooms only two to three times a year when a youth cannot be calmed any other way. A juvenile usually stays alone in that room for an hour, with a staff member right outside the door. "When we built those centers, the thought was we might have to use [those rooms] more often," he says. "But because of the treatment approach, we don't have to."

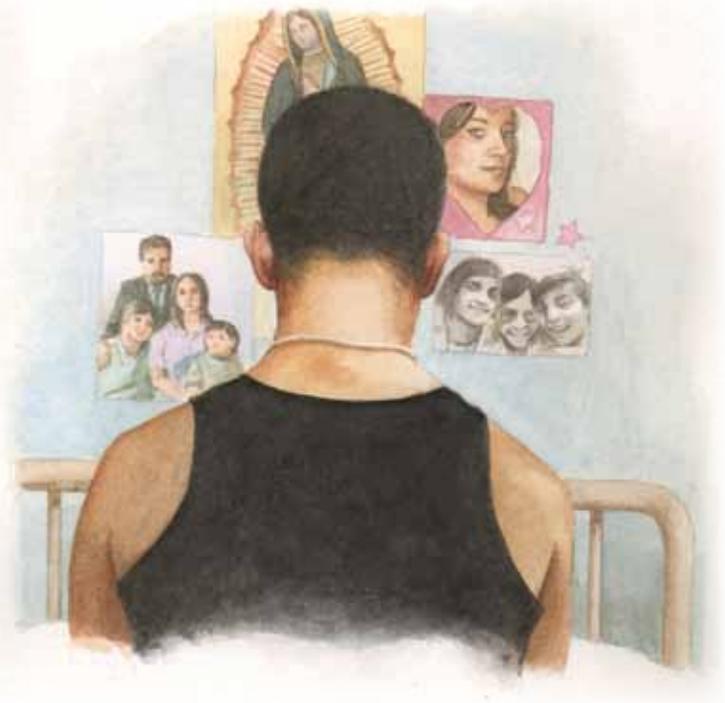
Treatment also includes helping youth deal with each other. Instead of letting problems between boys fester and possibly come to a head in a fistfight, DYS encourages them to share whatever is on their minds. So when they need to, they call a huddle. It looks just like it sounds: a group of boys stand in a circle, and the individual who called the huddle explains why he did so.

One January afternoon at Rich Hill, a boy named Ethan calls one. He says he's upset that another boy did not believe his answer to a question about whether the boy was allowed to move a lamp in the dorm and chose to ask staff instead. Ethan, who has been at Rich Hill for a longer period of time than the boy, is hurt that the newer resident did not trust him. After Ethan receives an apology, a youth specialist reminds the boys to listen to each other. Staff members stand with youth in huddles, but participate in the discussion only when necessary.

### Ready to Work

Sometimes juveniles initially resist treatment. His first day at Waverly, Eric remembers his group members making helpful suggestions: "Not to worry about my time, take it day by day, which I didn't listen to at the moment," he says. "I wanted to get out." But Eric says he never considered running. Instead, he tried to think of ways he could talk family members into convincing a judge to release him. When he realized that wouldn't work, he began to act out. He does not say exactly what he did. Mitch Bennett, Waverly's facility manager, says that Eric left Waverly for a short time to get psychiatric help the facility could not provide.

He returned with a new attitude. "I started buckling down on my schoolwork," he says. "I just started taking advantage of everything that got thrown at me." He paid attention in his academic classes and passed the Armed Services Vocational Aptitude Battery (the military's entrance exam) and the GED. He threw himself into his vocational class and developed a knack for woodworking and graphic design. On a tour of the facility led by Eric and staff members, he points proudly to the scoreboard in the facility's gym. Eric explains how he and a classmate refurbished it after someone donated it to the center. He adds that he himself designed the scoreboard's decals: Wildcats in white and blue.



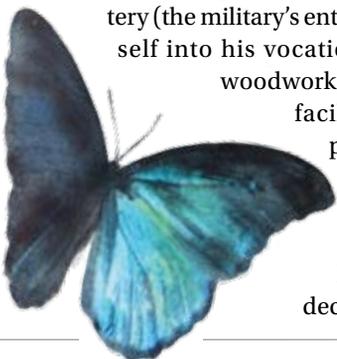
Like any public school, Waverly has a mascot. The boys take great pride—"paw pride," they call it—in being the Wildcats. Each fall, DYS sponsors an Olympics of sorts for its residential facilities. Within each region, youth from each facility compete in games designed to promote trust and teamwork. "It's awesome," says Eric, his face lighting up. "It's a whole day of group builders." He describes how in one activity his group quickly changed tires on a big wooden car while holding it in the air. In another, his group carried one of its members on a square piece of wood without dropping him.

Debbie Walker, who teaches math and English at Waverly, says that Eric worked through some difficult times. "When he first came in, he was very unsure of himself, very attention needy," and "just was not focused on his schoolwork." But one day, he earned an A on an essay she had assigned, and it surprised him. "He said, 'I can do this!'" Walker recalls. "He had the ability. He just had to find out that he could do it." All of her students, she says, are capable of learning. But many don't think they can because they've failed in school more times than they've succeeded.

Walker says that showing the boys they can achieve makes her job rewarding. A former special education teacher in a regular public school, she came to the center six years ago because she wanted a change. For several years, she had participated in a church group that visited the boys monthly. So when the opening to teach came, she applied.

Within a few weeks of working here, she realized the job was easier than she thought it would be. "I don't have the discipline problems in my classroom that I did in the public school," she says. "We have our youth specialists that take care of those immediately."

A visit to Walker's class reveals no discipline problems, just enthusiastic students. "Raise your hands, guys," says Diane Bradbury, Walker's youth specialist, after several boys call out answers to a question. Walker's math lesson one January morning includes a review of how to determine the areas of various polygons.



Eric sits off to the side, working independently. Although he has earned his GED, he must still attend class. But he, like all students who have earned GEDs, can work alone when the teacher covers material he has already mastered. He can also leave the room, with a youth specialist accompanying him, for scheduled meetings to discuss career plans. Those meetings are with Nicci Rasa, Waverly's Title I and GED teacher.

When she first meets individually with a student interested in taking the GED, Rasa administers a test to gauge his strengths and weaknesses. Then they focus on areas where the student needs to improve in order to pass the test. For those who earn GEDs, she helps them decide which jobs to pursue.

One January morning, Rasa meets with Eric; it's their first meeting since he earned his GED. She explains that since the military prefers recruits with high school diplomas, it's harder to enlist with only a GED. So he may need to delay his dream.

Instead of trying to enlist right away, Rasa suggests he register for ACT WorkKeys, an online career preparation program that tests applied reading and math skills. Completing the program may make him more attractive to potential employers. Eric agrees to consider it.

He reminds Rasa that he may have a child on the way—he'll need to take a paternity test upon his release—so he needs a steady income. He also needs money to pay \$2,200 in restitution, though he's not sure what it's for, maybe property damage.

He tells Rasa that construction and farm work interest him and that he learned how to operate backhoes on his grandparents' farm. "I can run farm equipment in my sleep," he says confidently.

He's also had experience logging, something he can see himself doing full time: "I'm familiar with it," he says. "It's good pay." "Is it something you enjoy?" Rasa asks.

Eric says yes.

"It's as important to know what you want to do as what you do *not* want to do," she says.

Eric takes in her advice. "I'm not someone to sit at a computer all day," he says.

Rasa asks him to list, before their next meeting, all the machinery he knows how to operate. "Be real about it," she says. She

explains that she doesn't want him embellishing his expertise. She also asks him to list his past work experiences. Then they can craft his resume.

**A**fter Eric leaves her office, Rasa says that many Waverly students around his age—soon he will turn 17—choose to earn GEDs rather than return to public school. For "so many kids, school was not their friend." A former special education teacher in a regular public school, she knows firsthand the discipline problems troubled students can cause. "To have these kids in the classroom, it's chaos," she says. But at Waverly, "they're different students. They're respectful and responsible. They take ownership of their education, and they begin to see the importance of it."

**At Waverly, "they're different students. They're respectful and responsible. They take ownership of their education, and they begin to see the importance of it."**

**—NICCI RASA  
TITLE I AND GED TEACHER**

Although many of them have worked through their problems, they are understandably nervous about returning to their communities. They do not look forward to the public scrutiny they will face. Another student Rasa met with that morning "was concerned because he had molested his brothers and sisters," Rasa says. "He's worried about what people in the community will think when he goes home."

She says the two of them discussed how he made some bad choices. But she reminded him that he's worked through his issues and must now let them go. "You're not that person," she told him. "You're not what you did."

The phone rings, and Rasa takes the call. It's someone she knows. The woman on the other end of the line says that a boy she cares about is being sent to Waverly. She wants reassurance that the facility will help him, and Rasa provides it. She tells the caller that the boy will be safe and that Waverly is a good place.

In a matter of weeks, the youth they discuss may sit where Eric sat moments ago. He may look out the window of Rasa's rectangle of an office, where red tulips sit sweetly on the sill. As he tells her his career interests and concerns, he may see the quote on the opposite wall: "I am not what happened to me. I am what I choose to become." Rasa has not posted the name of the famous psychiatrist who wrote these words long ago, perhaps hoping the boys at Waverly will make them their own. □



# An Evolving Controversy

## The Struggle to Teach Science in Science Classes



BY MICHAEL BERKMAN AND ERIC PLUTZER

Everyone from President Obama to the average parent seems to agree that the STEM fields—science, technology, engineering, and mathematics—are critical to the nation’s future. But, according to the National Research Council, “too few U.S. workers have strong backgrounds in these fields, and many people lack even fundamental knowledge of them.” The only solution is “a new approach to K-12 science education in the United States.”<sup>1</sup> Last year, the Council took the lead in developing that new approach when it released *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*.

Michael Berkman and Eric Plutzer are both professors in the Department of Political Science at Pennsylvania State University. Together, they wrote *Evolution, Creationism, and the Battle to Control America’s Classrooms* (New York: Cambridge University Press, 2010) and *Ten Thousand Democracies: Politics and Public Opinion in America’s School Districts* (Washington, DC: Georgetown University Press, 2005).

Like many researchers who are interested in K-12 education, we are overall very pleased with the proposed *Framework* and are eager to see it developed into a new set of standards to guide instruction.\* And yet, as political scientists who have studied America’s long-running debate over teaching evolution versus creationism, we bring a unique perspective to the question of implementing any new standards based on the *Framework*. We have not only examined the history of the evolution debate as well as ongoing polls of public opinion, but also conducted a nationally representative survey of how high school biology teachers deal with evolution in the classroom. We see a rough road ahead for teachers.

Our findings are relevant to all K-12 science instruction because the widespread adoption of standards based on the *Framework* will make evolutionary biology much more salient for many teachers who have never before had to teach it. The new *Framework* posits evolution as one of four core ideas in the life sciences. High school teachers will be expected to make evolution central to the biology curriculum. So important is evolution that

ILLUSTRATIONS BY SERGE BLOCH



\*That work is under way. To learn more, see [www.nextgenscience.org](http://www.nextgenscience.org). For a review of the *Framework*, see <http://bit.ly/zDLFC1>.

the *Framework's* building blocks for understanding evolutionary biology begin as soon as children enter school. By the end of second grade, for example, children are supposed to know that “Some kinds of plants and animals that once lived on Earth (e.g., dinosaurs) are no longer found anywhere, although others now living (e.g., lizards) resemble them in some ways.”<sup>2</sup> Because such early preparation is rare among state standards today, elementary and middle school educators have generally escaped the evolution wars that have ensnared many high school biology teachers; but once standards based on the *Framework* are implemented, these teachers will be expected to provide students with foundational concepts in preparation for studying evolution in some depth during high school.

Moreover, with increasing politicization in our society of astronomy (big bang), health (vaccines), and especially earth science (climate change), controversy could become the new normal for K–12 science study. That would be tragic. Understanding the challenges of teaching evolution has increasing relevance, therefore, across the science curriculum and speaks to more general debates concerning the importance of teachers having deep content knowledge.

### Evolution: From Darwin to Today's Consensus

Some teachers, we know, are taken aback by the confidence and apparent brashness of evolution's defenders. The National Academy of Sciences flatly states that “there is no controversy in the scientific community about whether evolution has occurred. On the contrary, the evidence ... is both overwhelming and compelling.”<sup>3</sup> More directly, biologist Jerry Coyne's popular book is simply titled *Why Evolution Is True*. Such a confident stance seems to conflict with many nonscientists', including many teachers', understanding of science. Many people think of science as a constant search for new information—and thus *always* subject to revision. Scientists themselves often contribute to this point of view. The American Association for the Advancement of Science's statement on the nature of science,<sup>4</sup> for example, notes:

Science is a process for producing knowledge. The process depends both on making careful observations of phenomena and on inventing theories for making sense out of those observations. Change in knowledge is inevitable because new observations may challenge prevailing theories. No matter how well one theory explains a set of observations, it is possible that another theory may fit just as well or better, or may fit a still wider range of observations. In science, the testing and improving and occasional discarding of theories, whether new or old, go on all the time. Scientists assume that even if there is no way to secure complete and absolute truth, increasingly accurate approximations can be made to account for the world and how it works.

In this light, some teachers have told us that the emphatic endorsement of evolution and the denial that there are “two sides” can seem immodest or arrogant. Yet such a view fails to appreciate that when a theory survives decades of rigorous testing—as evolution has and its opposing assertions have not—scientists are justified in their high confidence in the theory.

Today, most scientific research is conducted by teams and is supported by research funds obtained through tough competi-

tions subject to peer review. Initial findings from laboratory experiments or from field data are written up as scientific papers. Those papers, too, are subject to peer review; if published in scientific journals, they reflect both the insights of the authors and the confidence that qualified experts have in the methods and logic employed by the investigators. Anonymity allows peer reviewers to raise frank criticisms about findings whenever laboratory procedures, fieldwork, or statistical analyses are questionable. Yet, in spite of the high hurdles to winning research funding and publication, scientists *do* regard published findings as tentative; replication by other laboratories and scientific teams is encouraged and is, in fact, commonplace. It is only after findings have been replicated many, many times that scientists begin to consider them “facts.” Modern evolutionary science rests on a foundation of such facts.

With increasing politicization in our society of astronomy (big bang), health (vaccines), and earth science (climate change), controversy could become the new normal for K–12 science.

Indeed, there is no better example of how tentative individual findings can accumulate to highly confident conclusions than the work of Charles Darwin himself. His initial 1859 publication of *On the Origin of Species* went through many printings, editions, and translations; by 1900, most educated people in Europe and North America were familiar with its ideas. Meticulous in its presentation of evidence, written in a style that remains accessible to nonexperts, and rich in its description of the natural world, Darwin's compelling argument about common ancestry offered a theoretical understanding of what naturalists had long observed: dogs resemble wolves, housecats resemble tigers, and apes resemble human beings.

To read *On the Origin of Species* is to be invited inside the mind of a scientist who questions everything, responds fully to actual and anticipated challenges to his conclusions, and understands that his argument will not stand or fall based on any individual finding. Darwin had conceived the basic ideas of common ancestry and natural selection much earlier, but engaged in a 22-year process of accumulating evidence before publishing the work. He sought out and carefully analyzed evidence from mollusks, barnacles, and jellyfish; from ants, wasps, and snakes; from pigeons, mockingbirds, and flightless birds as well as the finches he had observed on the Galápagos Islands. He conducted his own experiments and corresponded with experts worldwide.

Natural selection was the most innovative idea of Darwin's

book and is based on three well-established processes that together lead to changes in populations of organisms. The first is that individuals within a population vary, and the variations can be inherited, so that the individuals of populations are genetically diverse. The second is that, since population growth is restricted by the resource availability in the environment, some individuals within a population are more likely to survive than others. The third idea ties these two together: those individual organisms best able to secure resources or cope with environmental conditions generally are the most likely to survive *and to reproduce*. The traits that favored these individuals will then be passed to their offspring.

Precisely how traits were passed on was not understood by Darwin or his contemporaries. That understanding took decades, beginning with the rediscovery of Gregor Mendel's 19th-century research on heredity: natural selection must act on hereditary determiners (genes) that, individually or in groups, produce traits that are advantageous in a particular ecological setting. The development of population genetics in the first third of the 20th century showed that the natural selection of individual genes could have profound consequences on the distribution of characteristics in populations of a particular species. That is, if the same traits prove favorable for many generations, the distribution of traits in the population as a whole changes.

During the middle third of the 20th century, scientists obtained good evidence that, under certain conditions, natural selection can lead to the emergence of altogether new species. For instance, if members of the same species become physically separated and are subjected to dissimilar environments—on different islands of an archipelago or on opposite sides of a mountain range—they may, over time, display different adaptations and diverge. Given enough time, these adaptive variations can produce organisms no longer able to breed with their distant cousins, and the earlier ancestral species may no longer exist in a recognizable form. "When forces divide a single species into two populations," writes biologist Kenneth Miller, "natural selection will act on each separately, until they have accumulated enough differences that each becomes a separate (and new) species."<sup>5</sup>

Today, evolutionary theory is a framework that integrates Mendel's laws of inheritance, the three principles of natural selection, our understanding of the process of genetic mutation, and population genetics, along with embryology and paleontology. It yields not only powerful explanations for the observed diversity of life, but also a cornucopia of testable hypotheses.

Striking examples of testable hypotheses come from the specialty of systematics—the specialty that produces branching diagrams that show how species are related to one another (phylogenetic trees). For more than a century, these diagrams represented hypotheses based primarily on comparative anatomy

(morphology). Most schoolchildren, using only their powers of observation, come to see that bats are more similar to mice than they are to birds, and that extinct mastodons were more similar to modern elephants than to modern rhinos. Experts in comparative anatomy, of course, can make much finer distinctions using such characteristics as the shape of teeth or the arrangement of bones in joints such as the knee, pelvis, or wrist. These relationships among species, depicted in a tree diagram, imply a series of testable hypotheses.

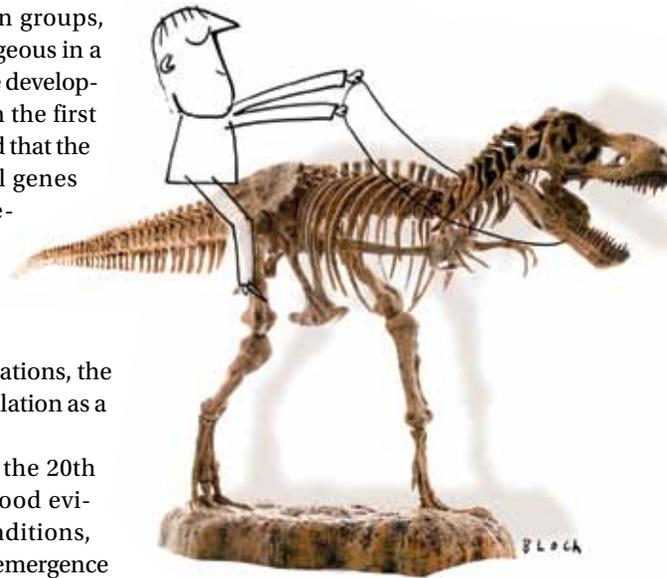
For example, phylogenetic trees in basic textbooks will show that starfish are older (assumed to have arisen earlier) than bony fish, which are in turn older than birds. This is clearly testable: if bony fish were found in older geological strata than starfish, then this portion of the tree diagram would be refuted. But the fact that there are thousands of starfish fossils independently dated to be older than the earliest known fossils of vertebrate fish provides strong evidence for this aspect of the hypothesized evolutionary tree.

Such diagrams also imply that there must have been species that shared features with two or more other kinds of animals. These transitional features must have emerged somewhere in time between the species shown. Hypotheses about *transitional features* can be challenging because not every species lived continuously in conditions favorable for preserving their remains and because transitional forms may have been short-lived. The absence of fossil evidence supporting a transitional feature is not sufficient cause to reject the

hypothesis that these species existed; it may just mean that fossils of transitional species have yet to be discovered or that such fossils never formed. Nevertheless, hypotheses concerning transitional forms represent an important consequence of evolutionary models, and biologists (as well as scientists in many other fields) find it quite exciting when transitional species are discovered.

Consider *Tiktaalik*, a fish, but with the first clear suggestion of wrists, elbows, and a neck. It was discovered in 2004 by biologist Neil Shubin and his colleagues, who had hypothesized that a species showing transitional traits between water and land animals must have lived between 365 and 380 million years ago near both land and water. As told in Shubin's engaging book *Your Inner Fish*,<sup>6</sup> fossils of *Tiktaalik* were found exactly where expected, by a team painstakingly searching 375-million-year-old rock in the Arctic in an area that at one time contained freshwater streams.

Hypotheses about common ancestry can also be tested through the genetic codes of living animals. By combining modern genomics data with observed rates of genetic mutation, powerful computer programs are able to infer patterns of relationships among species. These programs do not include any information based on analysis of fossils or radioisotope dating; they group species based, for example, on similarities in mitochondrial DNA.



By and large, however, the phylogenetic trees produced in this way are in remarkably close agreement with the traditional evolutionary trees based on observed anatomical traits.

Additional evidence comes from the field of developmental evolutionary biology, which examines embryos that often display vestigial features that do not appear in adults. Contemporary species grouped together in phylogenetic trees are hypothesized to share more developmental similarities than species classified as more distant. Again, many studies of animal embryos have provided independent and convergent evidence supporting these hypotheses.

Although the details are subject to revision based on new and better evidence, the fundamental hypothesis of common ancestry has been verified so many times, by so many independent kinds of experiments spanning different scientific specialties, that *there is no longer serious debate that evolution has occurred*. This justifies confidence in the claim that, as much as any sound scientific statement, evolution is true.

What is often unappreciated—even by many well-educated

## Federal courts have consistently held that states and school boards cannot introduce creationism or intelligent design into the public school curriculum.

citizens—is that the branching diagrams in high school or college textbooks typically reflect many cycles of hypothesis, experiment, modification of hypothesis, and further experiment. They represent scientists' best current understanding based on multiple and independent tests from the sciences of dating, comparative anatomy, embryology, and genetics. Over time, as knowledge increases and as hypotheses survive rigorous testing, revisions to such diagrams become less frequent and confined to small modifications. As a result, our confidence in these models increases and specific evolutionary paths become accepted as fact.<sup>7</sup>

### Public Skepticism of Evolution

By almost any yardstick, evolution science is thriving, and convergent evidence from multiple fields confirms its core ideas. And yet, many Americans continue to reject it. For years, the Gallup polling organization has asked people whether they believe that human beings were created “pretty much in their present form at one time within the last 10,000 years or so.” In a December 2010 poll, 40 percent of Americans chose this creationist response.<sup>8</sup> Similarly, the 2010 National Science Foundation's Science Literacy surveys found that 39 percent of Americans believe it is *not true* that “Human beings, as we know them today, developed from earlier species of animals.”<sup>9</sup> Using slightly different wording, a 2007 Pew Forum poll found that 45 percent reject the idea that “Evolution is the best explanation for the origins of human life on earth.”<sup>10</sup>

Much of the public also opposes teaching evolution in the classroom. Federal courts have consistently held that states and school boards cannot ban the teaching of evolution or introduce creationism, creation-science, or intelligent design into the public school curriculum. But significant segments of the public do not care. Many do not accept the science, do not want it taught, or prefer approaches that courts have repeatedly rejected as unconstitutional.

For example, a 2005 poll conducted by the Pew Research Center found that 57 percent of the public feels that creationism should be taught “along with” evolution in the public schools, and only 33 percent of the public opposes such a proposal. Indeed, among those opposing the proposal were many who feel it does not go far enough. Once we account for those who would like to see creationism taught “instead of” evolution, this poll suggests that only 22 percent of the public supports teaching evolution and only evolution.<sup>11</sup> Other polls using different question wording lead to the same conclusion.<sup>12</sup>

Given that public sentiment is at odds with the nation's scientific organizations and in direct conflict with the rulings of the U.S. Supreme Court, it cannot be easy to be a high school biology teacher. Nor will it be easy for elementary and middle school teachers to meet the *Framework's* expectation that they provide evolution's conceptual building blocks to younger students. Anti-evolution opinion does vary across states and school districts, but even in Massachusetts, the most pro-evolution state in the country, we estimate that less than 50 percent of the public thinks evolution should be taught alone.<sup>13</sup> In short, polls show that anti-evolution sentiment runs deep in the United States. Further examination shows that anti-evolutionism is closely linked to certain faith traditions—placing evolution squarely in the middle of contemporary culture wars.

### The Religious Roots of Anti-Evolutionism

In the mid-1800s, American Evangelicals were riven by divisions based on geography and race. These divisions would soon also extend to theology, leading many southern and midwestern Protestant churches to break away from their northeastern brethren. Their religious principles slowly crystallized and were published in a series of early 20th-century pamphlets called *The Fundamentals* (hence the label Fundamentalist). Among the key elements in Fundamentalist theology was the assertion that the Bible and its creation stories are not only a guide to spiritual life and salvation but also an authoritative textbook of human and natural history—a textbook apparently in conflict with scientific accounts of evolution.<sup>14</sup>

By the early 1920s, Fundamentalism was an energetic and thriving religious movement spreading well beyond its southern roots. At the same time, because of the rapid growth of school enrollments, Fundamentalists came to view evolution as an increasingly dangerous idea.<sup>15</sup> If evolution was in conflict with scripture, then its place in the public school curriculum was seen as a threat; this idea soon spread to individuals of other faiths. In a statement intended as the closing argument in the Scopes “monkey trial,” William Jennings Bryan argued in 1925 that in colleges, “Evolution is deadening the spiritual life of a multitude of stu-

dents” and would—if taught in secondary school—“poison the minds of youth” and “destroy ... religious faith.”<sup>16</sup> This idea remains central to anti-evolution politics today.

More than 80 years after Scopes, the legacy of the early Fundamentalists can be seen clearly in contemporary public opinion.<sup>17</sup> Most of the leaders of creationist organizations have come from this faith tradition,<sup>18</sup> and these doctrinally conservative churches are today among the fastest growing in the United States, keeping creationism in the vanguard of anti-evolution politics. It is a tribute to the energy and effectiveness of Fundamentalist clergy and laity that many of their ideas, including biblical inerrancy, are now embraced by individuals in other denominations.<sup>19</sup> Indeed, even though the clergy and leadership in Mainline Protestant and Catholic churches accept evolution, the data show that 35–45 percent of the adherents in these traditions consider evolution false.<sup>20</sup> Among the larger American religions, only adherents to Judaism are overwhelmingly accepting of evolution.

While doctrinally conservative churches are highly unified in their opposition to evolution, there is not much consensus in terms of what exactly they stand *for* when it comes to origins. Up until 1968, they fought to keep evolution out of public schools. But after the Supreme Court ruled such bans to be unconstitutional, creationism itself evolved.<sup>21</sup> For example, a small group of scientists have developed arguments for intelligent design. Intelligent design creationists argue that the odds are close to zero that natural selection and mutation alone could account for complex biological features. Like all estimates of probability, these inferences depend on sets of assumptions, such as the assumption that genetic mutations that confer advantages occur independently, which is simply at odds with mainstream evolutionary biology.<sup>22</sup>

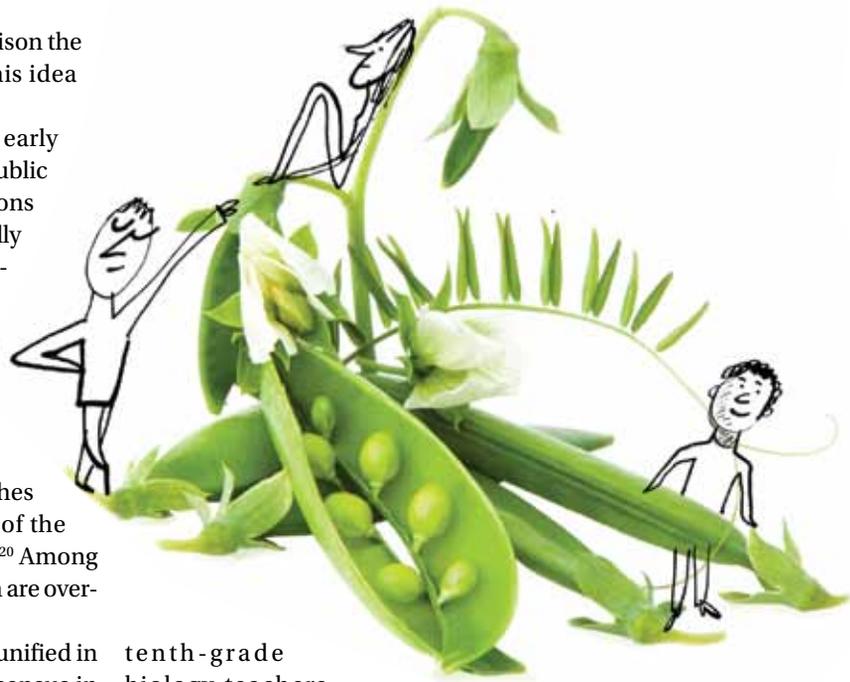
Today, we find anti-evolution activists promoting all varieties of creationism; it is opposition to evolution that brings them together. In no small part, this is because the federal courts have made it difficult to introduce any kind of creationism directly into the classroom through state legislation or school board directives. But it also represents a hope that successfully undermining evolution leaves creationism standing as the single and obvious alternative. Eugenie Scott of the National Center for Science Education writes that the idea that evolution is scientifically controversial is the first of the three pillars of modern creationism.<sup>23</sup> The second pillar is the effort to persuade religious Americans that evolution and religion are incompatible, and the third is the idea that “to be fair,” both sides must be taught.

These three pillars are evident in the tactics of creationist activists and politicians. Apparently, they have been successful: we have found that the three pillars of creationism are frequently adopted by high school biology teachers, including many who would not consider themselves members of the anti-evolution movement.

### Teaching High School Biology

Clearly, many science teachers work in communities with large numbers of people opposed to evolution. How do teachers navigate such a difficult situation?

To find out, in 2007 we surveyed more than 900 ninth- and



tenth-grade biology teachers.

Our survey is representative of schools across the country, and includes teachers from 49 states and 599 school districts. We asked each teacher about his or her classroom practices, personal beliefs, and pre-service education. And we gave all teachers the opportunity to share their experiences in their own words.<sup>24</sup>

Our survey allows us to benchmark actual teaching practices to recommendations from the major scientific and science education associations. Of course, the new *Framework* did not exist in 2007, but even then, the National Research Council (NRC), the National Science Teachers Association, and the standards issued by a few states endorsed a rigorous treatment of evolutionary biology. Based on teachers’ answers to our questions, we are able to sort teachers into three broad groups: advocates of evolutionary biology, advocates of creationism, and a group we call the “cautious middle.”

### Advocates of Evolutionary Biology

Slightly more than a quarter of the teachers (28 percent) are clear advocates of evolutionary biology. These teachers gave pro-evolution responses to three questions that tap important recommendations from the NRC (and the strongest possible pro-evolution answer to at least two):

1. “When I do teach evolution (including answering student questions), I emphasize the broad consensus that evolution is fact even as scientists disagree about the specific mechanisms through which evolution occurred.” (Agree or strongly agree)
2. “Evolution serves as the unifying theme for the content of the course.” (Agree or strongly agree)
3. “I believe it is possible to offer an excellent general biology course for high school students that includes no mention of Darwin or evolutionary theory.” (Disagree or strongly disagree)

Strong advocates confront each of the three pillars of modern creationism. For one, they do not present evolution as a theory in crisis in any way; they recognize and teach that evolution is an

established scientific finding supported by evidence so overwhelming it has taken on the status of scientific fact. And consistent with the NRC's recommendations (and those of its new *Framework*), they lace evolution throughout their courses. To do this, advocates of evolution spend, on average, 18.3 hours of classroom time on evolution. Their commitment to a thorough treatment of evolution came through in their comments. One Indiana teacher, for example, wrote that "I tell students that I teach evolution as a topic in biology because all other biological functions are based in evolution," while a Pennsylvania teacher stressed how evolution is a unifying theme when she said that "the natural selection process is interjected into almost every topic I cover."

Many of these advocates use evolution to show how science and religion ask different questions and how the aims of each differ, therefore directly countering the idea that evolution is atheistic and incompatible with religious beliefs (the second pillar of creationism). They do this in different ways. Some use evolution as a window into science more generally, while drawing contrasts with religion: "We compare the process, knowledge, societal value and types of questions that are answered by both organized religion and science," wrote one Ohio teacher. "We recognize each serves a different purpose and they do not conflict."

Others, well aware of student sensitivities, confront potential opposition directly and proactively early in the academic year. A teacher from Indiana summed up this approach: "I have been able to present an extensive unit on evolution in an ultra-conservative rural school with minimal negative feedback. I have done this by 1. trying to teach what science is, 2. how science and religion ask different questions and 3. by presenting evidence that science and religion are not in conflict. I do this before exploring the history of evolutionary theory and evidence that evolution has/and is occurring." And still others draw on their personal faith: "My mother is a minister and I'm very familiar with the Bible and have strong religious beliefs myself," an Arizona teacher told us. "I believe this helps me talk with my students about their faith (outside of regular class time) and gives me some extra credibility when I explain that you can believe in your religion AND evolution."

Overall, strong advocates for evolution teach evolution not only as the NRC recommends, but in a way that gives little support to modern creationists. They clearly articulate evolution as an accepted scientific fact. Many contrast it with religion in a way that

suggests to students that one can find ways to reconcile religion and science. And none teach that creationism is an alternative explanation requiring any kind of equal time.

### Advocates of Creationism

We classified 13 percent of the teachers as advocates of creationism because they spend at least one hour of class time on intelligent design or creationism and use that time to present it in an affirming manner, as indicated by their agreement with at least *one* of these two questions:

1. "When I do teach about creationism or intelligent design (including answering student questions), I emphasize that this is a valid, scientific alternative to Darwinian explanations for the origin of species."
2. "When I do teach creationism or intelligent design (including answering student questions), I emphasize that many reputable scientists view these as valid alternatives to Darwinian theory."

**Given that public sentiment is at odds with scientific organizations and the U.S. Supreme Court, it cannot be easy to be a high school biology teacher.**

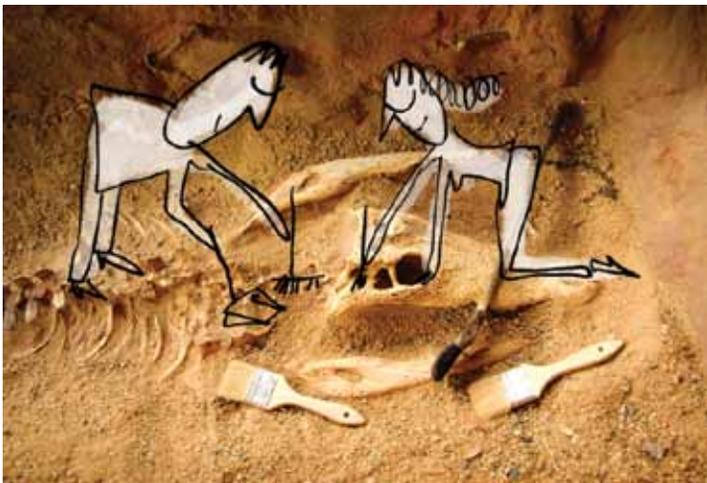
Advocates of creationism both teach some creationism (at least one hour) and minimize instruction in evolution. This is, of course, consistent with the modern creationist objective of undermining evolution. So teachers who advocate creationism spend, on average, only 11.6 classroom hours on evolution, and some spend considerably less. As one Minnesota advocate for creationism explained, "I don't teach the theory of evolution in my life science classes, nor do I teach the Big Bang Theory in my earth science classes. There is just too much science and inquiry that we do not have time to do something that is at best poor science."

An Illinois teacher both undercut evolution and spoke to the modern creationist arguments that evolution and religion are incompatible and that evolution cannot be studied scientifically:

I am always amazed at how evolution and creationism are treated as if they are right or wrong. They are both belief systems that can never be truly or fully proved or discredited as man was not present at the beginning to satisfy his or her curiosity as to the nature of the situation.

Of course, as the discovery of *Tiktaalik* teaches us, science *can* most certainly be used to confirm hypotheses about what hap-

*(Continued on page 20)*



# World-Class Ambitions, Weak Standards

## An Excerpt from The State of State Science Standards 2012

Since Sputnik shot into orbit in 1957, Americans have considered science education to be vital to our national security and economic competitiveness. The impact of the Soviet satellite launch on American science classrooms was almost immediate. Shirley Malcom, a leader in the field of science education (and presently head of education programs for the American Association for the Advancement of Science), was a young student in Alabama at the time. She described the swift and palpable shift in the way science was taught:<sup>1</sup>

We stopped having throwaway science and started having real science.... All of a sudden everybody was talking about it, and science was above the fold in the newspaper, and my teachers went to institutes and really got us all engaged. It was just a time of incredible intensity and attention to science.

The impact on public opinion was just as

*The State of State Science Standards 2012*, published by the Thomas B. Fordham Institute, is available at [www.edexcellence.net/publications/the-state-of-state-science-standards-2012.html](http://www.edexcellence.net/publications/the-state-of-state-science-standards-2012.html).



profound—and national concern over the quality of American science, and science education, has continued for the past half century. According to a 2011 survey, 74 percent of Americans think STEM (science, technology, engineering, and mathematics) education is “very important.” Only 2 percent say it’s “not too important.”<sup>2</sup>

Yet this strong conviction has not translated into strong science achievement. The 2009 National Assessment of Educational Progress (NAEP) found barely one-third of fourth-graders in the United States at or above the “proficient” level in science, with those proportions slipping to 30 percent in eighth grade and a woeful 21 percent in twelfth grade.<sup>3</sup>

Why is this? How can it be that, for more than five decades, Americans have voiced so much concern about science education yet made so little progress in delivering it? There are, of course, multiple explanations, starting with the blunt fact that few states and communities have taken concrete action to build world-class science programs into their primary and secondary schools. Without such programs in place to deliver the goods, our Sputnik-induced anxieties remain fully justified some 55 years later.

A solid science education program begins by clearly establishing what well-educated youngsters need to learn about this multifaceted domain of human knowledge.

Here, the first crucial step is setting clear academic standards for the schools—standards that not only articulate the critical science content students need to learn, but that also properly sequence and prioritize that content. In the light of such standards, teachers at each grade level can clearly see where they should focus their time and attention to ensure that their pupils are on track toward college and career readiness. That doesn’t mean it will happen, of course. As we at the Thomas B. Fordham Institute have repeatedly noted, standards alone cannot drive outstanding achievement. But they are a necessary starting point. They are the score for conductors, musicians, instrument makers, and more. They are the foundation upon which rigorous curricula and instructional materials and assessments are built. They are the template for preparing science teachers for our classrooms.

Fordham has a long-standing interest in science standards and a history of reviewing them with care and rigor. We published our first analysis of state science standards in 1998 and a follow-up review in 2005. Unfortunately, the findings from both evaluations were not good. In 1998, just 36 states had even set standards for science, and only 13 of those earned grades from our reviewers in the A or B range. By 2005, though every state except Iowa had

## Undermining Evolution

### Where State Standards Go Wrong

According to *The State of State Science Standards 2012*, four problems were found frequently among the mediocre to poor standards: undermining evolution, including vague standards, failing to integrate inquiry skills with content, and avoiding mathematical formulae and equations. To complement the main article’s study of how high school biology teachers approach evolution (see page 12), the following is an updated version of the report’s discussion of how evolution is undermined.

—EDITORS

“Nothing in biology makes sense except in the light of evolution.” So wrote famed biologist Theodosius Dobzhansky in 1973.<sup>1</sup> And so it is today. Yet controversy continues to envelop the teaching of evolution in American schools. One wonders, indeed, how much progress we’ve made in this realm since the Scopes trial in 1925. Six years ago, our science reviewers noted:<sup>2</sup>

The attack on evolution is unabated [since 2000], and Darwin’s critics have evolved a more subtle, more dangerous approach. A decade ago, the anti-evolution movement ... argued vigorously

for explicit teaching of the evidence for intelligent design....

The claim now is that evidence against “Darwinism” exists, that curriculum-makers should include it as an exercise in critical thinking, and that “freedom of speech” or “fairness” requires that they do so. The hidden agenda is to introduce doubt—any possible doubt—about evolution at the critical early stage of introduction to the relevant science.

While many states are handling evolution better today than in the past, anti-evolution pressures continue to threaten state science standards. In April 2012, for example, Tennessee passed a law that enables teachers to bring anti-evolution materials into the classroom without being challenged by administrators. This law is similar to the Science Education Act passed in June 2008 in Louisiana, which is ostensibly an “academic freedoms act” meant to give teachers and students legal cover to debate the merits and veracity of scientific theories. In practice, such measures push a pro-creationist agenda—and give cover to those looking to teach intelligent design creationism. Though both acts are freestanding statutes with no

articulated K–12 science standards, the results were equally disheartening: just 19 earned honors grades, and the overall average was barely a C.

This, our third review, provides analyses of the K–12 science standards currently in place in all 50 states and the District of Columbia, as well as the framework that undergirds the NAEP science assessment. The results of this rigorous analysis paint a fresh—but still bleak—picture. A majority of the states’ standards remain mediocre to awful. In fact, the average grade across all

assessment framework. And seven states earn grades in the B range. But this also means that just 13 jurisdictions—barely 25 percent, and fewer than in 2005—earn a B or better for setting appropriately clear, rigorous, and specific standards.

Of course, as one of our reviewers noted in 1998:

When it comes to academic standards ... even a “B” ought not be deemed satisfactory. In a properly organized education system, standards drive

academic achievement. Several states with exemplary science standards still aren’t serious about setting high proficiency bars on their assessments. Others don’t hold students (or their teachers) properly accountable for learning (or successfully imparting) important content. And still others haven’t provided (or directed teachers to) the curricular and instructional resources that teachers need to drive achievement. But, while standards alone won’t drive achievement, they are an important place to start.

Of the 44 jurisdictions that have revised, replaced, or created their science standards since our 2005 analysis, 11 have shown some improvement, and some of that improvement has been dramatic. Kansas, for example, moved from an F to a B, and Arkansas moved from a D to a B. The District of Columbia rose from a mediocre C in our last analysis to a best-in-class A this time.

By contrast, 16 states managed to make their standards worse since 2005. In fact, five of them—Colorado, New Jersey, North Carolina, Tennessee, and West Virginia—dropped from Bs to Ds.

Note, however, that our criteria have changed since 2005. Therefore, changes in a state’s grade could be due to changes in the quality of the standards, changes in our criteria, or both.\* On balance, the combination of improvements and worsenings had little impact on our national average. □

(Endnotes on page 40)

\*For more information on our grading metric, see Appendix A of the report.

## A majority of the states’ science standards remain mediocre to awful. In fact, the average grade across all states is a low C.

states is—once again—a thoroughly undistinguished C. (In fact, it’s a low C.) In 27 jurisdictions, the science standards earn a D or below. Yet this very weakness in what states expect of their schools, teachers, and students in science suggests that a purposeful focus on improving—or replacing—today’s standards could be a key part of a comprehensive effort to boost science performance.

Two jurisdictions—California and the District of Columbia—have standards strong enough to earn straight As from our reviewers. Four other states—Indiana, Massachusetts, South Carolina, and Virginia—earn A-minuses, as does the NAEP

everything else. If they are only “pretty good,” then “pretty good” is the best the system is apt to produce by way of student learning. No state should be satisfied with such a result. Hence, no state should be satisfied with less than world-class standards in a core academic subject such as science.

States looking to improve their standards, however, need not start from scratch. They can look to places like California and the District of Columbia, and also to the NAEP assessment framework, for models of excellence.

Let us repeat that even the finest of standards alone will never yield outstanding

direct link to the states’ academic standards, they do damage by allowing for the introduction of creationist teaching supplements—thereby affecting classroom instruction.<sup>3</sup>

Tennessee and Louisiana are not the only states that have tried to undermine the teaching of evolution through legislation. In 2011 alone, anti-evolution bills were introduced in seven state legislatures.<sup>4</sup>

Of course, most anti-evolution efforts are aimed more directly at the standards themselves. And these tactics are far more subtle than they once were. Missouri, for example, has asterisked all “controversial” evolution content in the standards and relegated it to a voluntary curriculum that will not be assessed. (Sadly, this marks a step back from that state’s coverage of evolution in 2005.) Tennessee includes evolution only in an elective high school course (not the basic high school biology course). And Maryland includes evolution content in its standards but explicitly excludes crucial points from its state assessment.

Other states have undermined the teaching of evolution by singling it out as somehow not quite as “scientific” as other concepts of similar breadth. A common technique—used to a greater or lesser extent by Colorado, Missouri, Montana, and West Virginia—is to direct students to study its “strengths and weaknesses.”

Far too often, important evolution content is included, but minimally. Some states mention evolution just once in their standards and never revisit it. Others—including Indiana, Iowa, Kansas, Kentucky, Michigan, and Nebraska—unnecessarily delay it until high school.

Even some of the nation’s best standards subtly undermine the teaching of evolution. In California, for example, students are told to “understand science, not necessarily [to] accept everything taught.” In New York, students learn that “according to many scientists, biological evolution occurs through natural selection.” (This is not according to “many” but, in fact, all true scientists.)

Finally, conspicuously missing from the vast majority of states’ standards is mention of human evolution—implying that elements of biological evolution don’t pertain to human life. This marks a subtle but important victory for creationists: even states with thorough and appropriate coverage of evolution (e.g., Massachusetts, Utah, and Washington) shy away from linking the controversial term with ourselves. Only four states—Florida, New Hampshire, Iowa, and Rhode Island—openly embrace human evolution in their current science standards. (Pennsylvania, which referenced human evolution in its previous standards, has omitted it from the more recent version.) □

(Endnotes on page 40)

(Continued from page 17)

pened in the past. By saying that a scientific discipline is a “belief system,” teachers retreat from the idea that scientific methods are how we learn about the natural world and reject the idea that science and faith speak to distinct and nonoverlapping domains.

And yet, teachers who are advocates of creationism also support teaching both sides. This is implicit in the fact that they spend at least one hour on creationism and some time on evolution, but it comes through in their comments as well. One creationist teacher from Indiana, for example, told us that “in teaching biology, I do not impart my belief on this subject to my students, I present each idea as a theory and let the students decide which one they want to believe in.” And a teacher from South Dakota who devotes eight hours to creationism and ten hours to evolution explained: “I teach evolution/creation as an inquiry process. I use classroom text as well as other sources backing evolution/creation. I have several useful videos backing both areas. My goal is to make students analyze and think to arrive at their own educated decisions.”

### The Cautious Middle

Sixty percent of the teachers who completed the survey do not fall into either group of advocates. These teachers are in the cautious middle—a large and diverse group that utilizes a range of strategies to navigate the challenges posed by the sometimes competing expectations of state standards, administrators, school board members, students, and parents. About one in ten is a cautious or closet creationist: they do not qualify as “advocates” of creationism because they do not incorporate it into their lesson plans or spend as much as an hour on the topic. However, these closet creationists tell us that they validate creationism as credible science when prompted by student questions or comments.

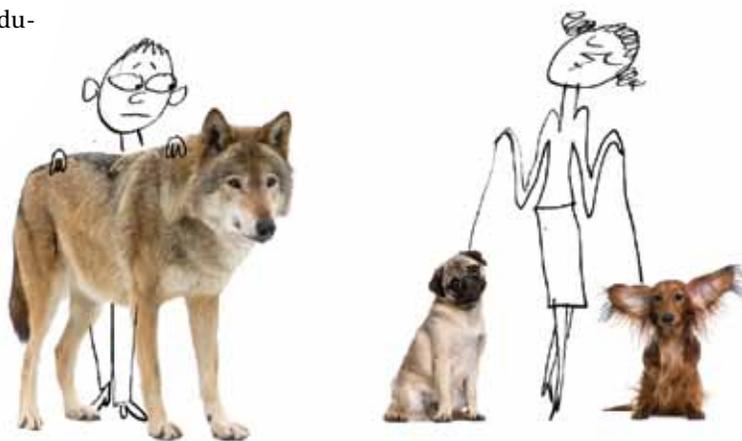
Most teachers in this middle group, 85 percent to be exact, accept evolution. What they have in common is that they cannot or will not teach what the major scientific organizations expect: that evolution is central to all biology, that evolution has occurred, and that hypotheses from evolutionary theory have been confirmed by many scientific studies. Instead, they employ a suite of techniques that reduce the likelihood of sparking some kind of controversy. In most cases, however, these are very nearly the same approaches taken by explicit creationist educators in support of the three pillars of modern creationism—approaches that undermine students’ confidence in science more generally and undercut their broader science education. Three controversy-avoidance techniques were mentioned often enough to merit some discussion: distinguishing between micro- and macroevolution, teaching to the test, and encouraging students to make up their own minds.

*Micro- vs. Macroevolution:* One common strategy to avoid stirring the deep feelings associated with evolution is to teach evolutionary biology as though it only applies to *within-species* change—often called microevolution. Teachers adopting this tactic deny their students exposure to a large body of evidence showing how natural selection leads to speciation and to the central concept of common ancestry of contemporary species.

For the anti-evolution movement, the micro-macro distinction serves to directly undermine the status of the major findings of evolutionary biology. “I distinguish microevolution as fact,” wrote an Indiana advocate of creationism, and “macroevolution as theory.”

However, most teachers in the middle group do not teach this way in order to narrow the scope of instruction; rather, they use the micro-macro distinction to make the material less controversial. So, for example, a teacher in California who offered sound pedagogical reasons for beginning with microevolution made it clear that she finds it less controversial to focus on this aspect of evolutionary theory:

I teach evolution through a cellular and molecular approach. I find students are less offended by it. The minute you start off with evolution showing primates or fossil evidence, students immediately shut down. On the other hand, when I



teach students the mechanisms of cells and that all cells basically are similar, then I can suggest evolution without so much opposition.

Pursuing this strategy may well limit exposure to angry parents and skeptical students. But this approach also lends credence to a creationist claim that there is no evidence for one species giving rise to others, and in doing so sacrifices a rich understanding of the diversity of life. One of modern creationism’s three pillars is that evolution—at least macroevolution—is not well-established science.\* Excluding macroevolution, or teaching it as less scientifically established, plays directly into creationists’ hands.

*Teaching to the Test:* Statewide biology examinations are used in a growing number of states. In general, these examinations will promote more rigorous instruction in evolution so long as they are aligned with fairly rigorous standards.<sup>26</sup> And a teacher may enjoy some protection to teach the topic if the standards and tests require it.<sup>†</sup> But teachers in the cautious middle can also use these tests as a means to disassociate themselves from the very material they are expected to teach. In different ways, they defend their

\*The well-known creationist Henry Morris put this well when he said that “the fact that macroevolution (as distinct from microevolution) has never been observed would seem to exclude it from the domain of true science.”<sup>25</sup>

<sup>†</sup>For an interesting news feature about how a Georgia teacher used state standards to navigate community pressure and teach evolution, see <http://nyti.ms/GLmw6b>.

teaching of evolution as a necessary evil, something students just need to get through. One Michigan teacher tells her students that they need to understand evolution because the biology curriculum “is organized as if evolution is true.” A New York teacher said, “I have always started the evolution unit by telling the kids that I don’t care if they believe in evolution or not.... Just understand it enough to answer the Regents test questions.” Like many explicit creationist teachers, this teacher treats the acceptance of evolution as something students can choose to “believe in” and—intentionally or not—undercuts the principle that scientific methods are how we learn about the natural world.

More generally, when teachers disassociate themselves from the science by invoking the test, they undermine evolution in students’ minds. After all, a teacher would never tell students that he or she did not care if they actually believed that light simultaneously has the properties of waves and of discrete particles, or that the movement of massive plates is the cause of earthquakes.

## It is not realistic to expect that students are equipped to assess and perhaps reject the thousands of scientific papers that form the empirical foundation of evolutionary theory.

Among established scientific principles, only evolution is so frequently approached as something that students need to know for the test, not because it is solid science. Indeed, an explicit advocate for creationism—a teacher from Texas—used nearly identical language when she told us that “I tell my students to learn the information for purposes of only passing the state test to graduate.”

Students are no doubt smart enough to pick up the message that underlies “just learn it for the test.” And we expect that in the future, some teachers will be tempted to use the same tactics of disassociation in order to avoid controversy concerning topics like climate change.

*Students Should Make Up Their Own Minds:* A third strategy used by teachers in the cautious middle is to argue that students should be exposed to explanations other than evolution—scientific or not. This, more than any other coping strategy, plays directly into the creationists’ hands. Bills and policies requiring or encouraging teachers to “teach the controversy” or to teach the “gaps” in evolution are an increasingly popular creationist tactic to undermine evolution. In many cases, these arguments are advanced as supporting “critical thinking” or “critical analysis.”<sup>27</sup> Students should make up their own minds, explained a Pennsylvania teacher, “based on their own beliefs and research. Not on what a textbook or on what a teacher says.”

This approach of letting students decide is used by advocates

of creationism as well because the “fairness” of teaching both sides is one of the three pillars of modern creationism. An Oklahoma teacher who was clear about her creationist beliefs and teaching policy was emphatic about this: “To be a true scien[tist], you have to present both evolution and creationism!” Another teacher, from Iowa, described her approach this way: “I let the students know up front that I have a creationist view point of how life was created. I use the word ‘model’ to explain evolution (‘evolution model’). I bring in the ‘intelligent design model’ to question the ‘evolution model.’ ”

Whether the teacher is trying to introduce creationism, hoping to avoid controversy, or simply manifesting great confidence in students’ ability to learn by exploration, the effect is the same. One teacher put it this way: “I encourage students to gather as much information as possible and make their own conclusions.” But it is simply not realistic to expect that, with only 10–15 class hours devoted to evolution, students are really equipped to assess and perhaps reject the thousands of peer-reviewed scientific papers that form the empirical foundation of evolutionary theory. This approach tells students that science is not a cumulative body of highly technical knowledge, but is instead something that has some element of personal preference, like whether Claude Monet created more beautiful paintings than Paul Cézanne.

We have argued in the past that the cautious 60 percent may play a far more important role in hindering scientific literacy in the United States than the 13 percent who are explicit creationist advocates.<sup>28</sup> The strategies of emphasizing microevolution, justifying the curriculum on the basis of statewide tests, or “teaching the controversy” are precisely the tactics employed by advocates of creationism. Creationists use these approaches because they undermine the legitimacy of findings that are well established by the combination of peer review and replication. They make it difficult for students to reconcile their religious beliefs with the established science. And they have the veneer of fairness. Afraid of doing anything that might upset student sensibilities, many of these cautious teachers may not fully explain the nature of scientific inquiry; as a result, they undermine the authority of established scientific experts and promote creationists’ political goals, even if unintentionally.

### Sources of Ambivalence and Conflict Avoidance

If most teachers in the cautious middle accept evolution personally, why do so many employ pedagogical approaches championed by the anti-evolution movement? Our research suggests that many teachers do not feel like they have the expertise they need to confidently teach evolutionary biology in a rigorous and unapologetic manner.<sup>29</sup> Those with inadequate content knowledge find that teaching evolution makes their jobs even more stressful; therefore, they gravitate toward strategies that reduce the likelihood of generating controversy. We can see evidence of this when we compare the responses of our three groups with a variety of questions pertaining to teachers’ pre-service education and personal assessments of how well they understand evolution.

## Teachers' Content Knowledge

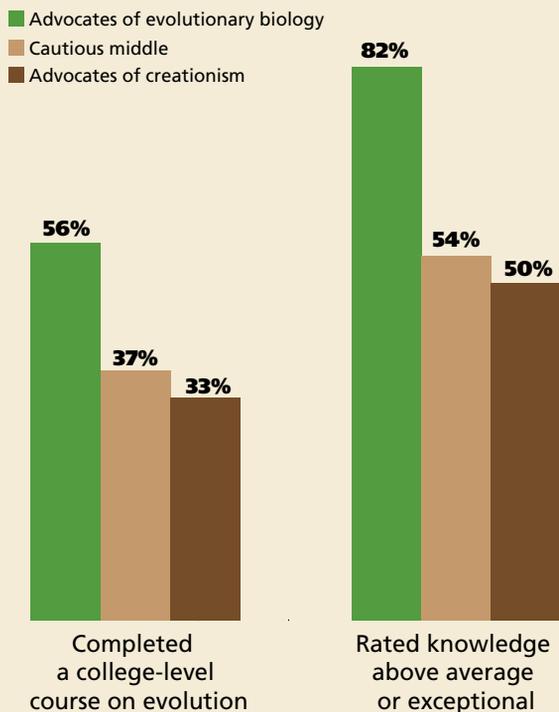
States' wide variety of certification requirements virtually ensures that not all science teachers are equally knowledgeable about evolutionary theory or science generally. A study of Indiana biology teachers, for example, found that many do not "possess a thorough knowledge of evolutionary theory and its place in the discipline of biology."<sup>30</sup>

In our survey, we asked teachers about their pre-service college education. In the figure below, the set of bars on the left shows the percentage of teachers in each group who have completed a standalone course in evolution. This one indicator of teacher knowledge has a dramatic effect. More than 50 percent of the teachers who advocate evolution (green bar) have taken a college-level course in evolution. Only a third of the teachers who advocate creationism, on the other hand, took such a course. Teachers in the cautious middle look much like creationists, with slightly more than a third having completed a course in evolution (the small difference is not statistically significant).

Additional evidence is found in the set of bars on the right in the figure. For this, we asked each high school teacher to rate his or her "knowledge of the scientific evidence bear-



### Percentage of teachers in each group who completed a college-level course on evolution and who rated their knowledge of evolution as above average or exceptional.



ing on the validity of evolutionary theory as": "Exceptional, on par with many college-level instructors"; "Very good compared to most high school biology teachers"; "Typical of most high school biology teachers"; or, they could admit, "I know less about this topic than many other high school biology teachers."

The question produces something of a "Lake Wobegon" effect, as 61 percent rated their knowledge as "above average" or "exceptional" and only 2 percent rated themselves below average. Nonetheless, the self-assessments of teachers form a striking pattern: teachers in the cautious middle are, once again, statistically indistinguishable from creationism advocates.

We also found that more science training in general makes a difference. For example, we found that the higher the number of college credit hours in biology, the more that teachers keep up with scientific advances by visiting science education websites, noting changes in new additions of their textbooks, and browsing scientific journals.

Not surprisingly, these related experiences are more common among teachers who rated their knowledge of evolution as exceptional. Teachers with more extensive content-based preparation are also much less likely to agree with the statement that "I have paced my class so that the evolution chapters in my textbook would be covered only minimally at the end of the academic term," another common avoidance strategy.

Why did we find that completing a college-level evolution course is so strongly related to teaching practices? Part of the answer is that many pre-service teachers who do not accept evolution will not select such a course as an elective. Overall, we have found that teachers who expressed creationist beliefs completed fewer courses in biology, were slightly less likely to major in a scientific field, and were considerably less likely to hold a graduate degree in a scientific discipline.<sup>31</sup> However, for the 85 percent of teachers in the cautious middle who accept evolution, the completion of an evolution class provides content knowledge that translates directly into self-confidence. In many districts, teachers understand that each additional class hour devoted to evolution increases the likelihood of offending a student or getting an angry visit from a parent or local minister. Self-confidence is an important factor in how teachers approach these classes.<sup>32</sup> While evolution can be a highly stressful topic, educational psychologists Joyce Griffith and Sarah Brem have shown it is less stressful for those teachers who are more confident and comfortable with the material.<sup>33</sup> So, taking evolution classes before beginning their teaching careers can directly increase teachers' self-confidence, which lowers their levels of stress heading into the course, and makes them much more likely to teach in ways that live up to the expectations of the National Research Council (and many other scientific societies).

One teacher from Illinois summed up these findings well: "After my undergraduate studies my perception of evolution was inaccurate. It wasn't til after I received a master of science that I felt like I had a good and accurate understanding of evolution and how natural selection happens." A master's degree in biology would probably be useful to biology teachers<sup>34</sup>—but such a goal

cannot be accomplished right away. In the meantime, our research suggests that future teachers would benefit from a more rigorous pre-service education in biology and content-rich continuing education.

## Preparing Teachers for the Coming Science Wars

In the coming decade, the United States will have to make important choices about energy policy (e.g., the safety of extracting oil and gas from shale deposits or of commissioning new nuclear reactors), the environment (e.g., the costs and benefits of policies to reduce carbon emissions), the wisdom of increasing our production of genetically modified foods, and much more. Because the disciplines of evolutionary biology, paleontology, climate science, and astrophysics each share similar methods with all

**Teachers with creationist beliefs completed fewer courses in biology, were less likely to major in a scientific field, and were less likely to hold a graduate degree in a scientific discipline.**

sciences, any undermining of children's trust in science—intentional or not—will have important consequences. If students come to think that science is simply a matter of one's opinion, and that those opinions come from our values and faith, then it will be impossible for science to provide trusted, unbiased information to citizens and policymakers.

What can be done to reverse this trend? In the case of evolution, we concur with the National Center for Science Education that “the most effective way for scientists to help to improve the understanding of evolution” is at the pre-service level.<sup>35</sup> Simply requiring a pre-service course in evolution is likely to provide cautious but well-intentioned teachers with the tools to address and minimize pressure from their communities with a greater degree of confidence.

Some have viewed our call for a required evolution course as nothing more than a call for indoctrination. But we believe the charge is misplaced. Indoctrination is requiring students to accept what they are taught whether or not there is evidence for it. But we are calling for pre-service teachers to learn what the evidence for evolution really is. This is the only way they can be expected and empowered to teach their students about that evidence when they are in the classroom. This is not a panacea, of course; research shows that evolution education has little impact on conservative Christians whose faith is a barrier to accepting evolution.<sup>36</sup> But our research suggests that completion of an evolution course can help teachers who already accept evolution do a better job of dealing with anti-science elements in their communities and of teaching evolution with both integrity and confidence.

More generally, the most effective long-term solution is for all future high school biology teachers to be expected to have considerably more training in biological and all other science. Likewise, pre-service teachers intending to teach at the primary and middle school levels would also benefit from additional opportunities to expand their content expertise.

Our hope is that educators will be supported by their administrators and community members so they can teach evolution, climate change, the antiquity of the universe, and any other socially controversial subject with the same commitment to scientific accuracy as when they teach other topics in science. We would never ask students to debate or make up their own minds about whether the atmosphere of Venus contains sulfuric acid, whether protons and electrons have opposite charges, or which gene on chromosome 11 is linked to sickle cell disease. Rather, to the extent possible at each grade level, we expect students to learn both scientific facts and what constitutes scientific evidence. As their knowledge and sophistication increase, so too will their understanding of the overwhelming evidence supporting evolution. Of course, teachers should emphasize that scientific findings (and even scientific theories) are always subject to revision, and are indeed sometimes revised—but not just in the case of evolution! However, this openness should never be a blank check that allows students to debate highly technical questions based on values and beliefs that come from outside the science classroom. To the extent that students are not convinced by the evidence before them, they should simply be encouraged to explore the available evidence further, in the reputable, peer-reviewed literature, and by enrolling in higher-level courses. If students' questions are met with opportunities for further learning, the next generation not only will have improved access to the STEM fields, but will become curious, thoughtful, and engaged citizens. □

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# Knowing Ourselves

## How the Classics Strengthen Schools and Society



BY PETER DODINGTON

**Y**ears ago, when I was an assistant principal at a large urban high school in New York, I spent a good deal of time talking with students who had been sent to me for discipline problems. My usual strategy was to ask them to tell me about their personal goals. What did they want in their own lives? I tried to establish some kind of a foundation about what they intended to do, and then see if we could work back to how doing their schoolwork and not cursing at their teachers might help them get closer to that goal.

I am reminded of these sessions when I consider how we should respond to the many complaints today about public schools. Nearly everyone finds fault with them. Elected officials, such as state legislators and mayors, exhort us to crack down

*Peter Dodington, who is currently an adjunct professor of Latin and mythology at Montclair State University, has taught at least one class every year since 1968 (the year after he graduated from college). For most of his career, he taught high school Latin.*

on incompetence and boost productivity by paying teachers according to how well they raise the test scores of their students. Writing in the *American Spectator*, Andrew Coulson complains that, “while every other service or product has gotten better, more affordable, or both, public school productivity has collapsed. It is now costing us more to teach kids less.”<sup>1</sup>

If I could sit down with these critics, I would try to go back to their personal feelings about public education. What do they want from the schools? What do they want for their own children? Then, we might find goals for the schools that parents, teachers, and the general public all share. Once we agreed on those common goals, we could begin to discuss how the schools might achieve them.

Deciding what we truly want for our children—what we hope they will want for themselves—is no easy task. It can’t just be a matter of happiness and success. Many end up with neither, yet live what all would agree is a good life. There has to be some consideration of what the children themselves want, what they believe are important goals.

I would go back to the ancient Greek maxim: “Know thyself.” This, for me, is the key to the kind of success I would want for our children. After all, knowing oneself is the first step in achieving success in areas one truly cares about. If we want our children to achieve not just success, but a success they truly want, we must help them first understand themselves. Then, they will know what they value and can focus on success in that area, whether it involves wealth, fame, or other less measurable but no less important achievements. One of the central goals of the school system, then, ought to be instruction in self-knowledge.

Studying the ancient Greek and Roman world provides students an excellent opportunity to work on this goal of self-knowledge. The ancients dedicated themselves to figuring out what “the good life” is, and they did so in a way that is clear and comprehensible to students. Studying them in our schools helps students think deeply about who they want to become and how they can achieve that.

In my work teaching high school Latin and classical studies, I have found two subjects particularly helpful in prompting

students to learn more about themselves: Homer and Latin. Homer's works give great insights into the process of self-realization. His epics are full of young people telling us about their highest goals in life. Perhaps this is why reading the *Iliad* and the *Odyssey* was also one of the major components of the school curriculum for the ancient world. Likewise, learning Latin, even beginning Latin, helps students realize they can change themselves for the better. The combination of a difficult topic and a well-ordered, step-by-step curriculum allows even otherwise weak students to succeed, and gives them a new understanding of their own strengths and talents.

Studying Homer and Latin is also particularly well suited to our public school curriculum. These subjects set the highest academic standards but still are appropriate for a wide range of students: the weaker and the stronger, the richer and the poorer. This makes them an excellent way to fulfill the need for both equity and excellence in our public school system. Such studies are often seen as primarily private school subjects, but their real strength is their ability to improve the public schools.

I have spent most of my life teaching these courses. I began teaching English on an Indian reservation in Montana, but soon wanted to learn more about the classics. I think that working with Native Americans, who understood their traditions so well, sparked my interest in learning about my own roots. I set out to learn Latin and Greek and teach them at the secondary level. In the course of my career, I worked at some of the "best" and "worst" schools in the country, from private and selective public schools that sent almost all their graduates to the Ivy League, to public schools in low-income urban settings that ranked near the bottom academically in their cities and states. I started out teaching middle school Latin, then taught eleventh-grade Advanced Placement Latin for 10 years, and ended my career back in the sixth grade in the South Bronx. In all my classes, I always taught a good deal of Homer, and I even made time to teach courses on the *Odyssey* when I was an assistant principal.

If we could incorporate more work on Homer and Latin into the public school

curriculum, we would be taking a major step toward increasing educational excellence and equity, and solving the problems critics of public schools raise. These courses are well suited to our public schools and provide the kind of education in self-knowledge that I—and I hope others—want for our children.

### **Ideals for the Young in Homer**

There are many places in Homer where the young warriors share what is important in their lives. In the sixth book of the *Iliad*, for

## Homer and Latin set the highest academic standards but still are appropriate for a wide range of students.

example, the Trojan prince Glaucus meets the Greek Diomedes on the battlefield. Diomedes has just dispatched several Trojan warriors and is amazed that one more has come out to face him. "Who are you?" he calls out to Glaucus, who replies at some length and ends with the following:<sup>2</sup>

Hippolochus bore me, I am proud to say,  
And sent me to Troy, and told me many times  
To be the best, always, and to keep myself above the others,  
And not bring disgrace on the race of my fathers.

Glaucus strives to be the best, not for himself alone but for his father and his ancestors. It is not his achievement that defines who he is, but the education he has received from his forefathers.

In aiming for this kind of excellence, Glaucus opens the door to a level of skill that is not tinged with conceit. He is not saying that he himself thinks he should be the best, but that this is what his father and ancestors want of him. What he thinks about his own abilities he does not say. Keeping his ancestors in the forefront of his mind allows him to strive to be the best while retaining his humility.

In our modern world, we often shy away from this idea of "being the best." It seems

so self-centered. No one wants to admit he or she is trying to be number one. We say, rather, that we should merely "do our best." Glaucus, though, shows us a better way. There is nothing wrong with saying that one has been taught to be the best. Then, no one is being self-centered; child and parent are actually working together to achieve the highest goals for each other.

The passage also conveys the love Glaucus feels for his father and the love he has received in return. His father wants only the best for him, but the implication is that he does not demand this of Glaucus. The passage makes no mention of force or compulsion, only advice. Glaucus is free to choose another path, yet he is also aware of the consequence—to "bring disgrace" on his family. His respect and love for his father lead him to do what is best.

Isn't what Hippolochus wants for his son what we all want for our children: that they attain the heights of whatever careers they choose, yet not let their success distort their views of themselves, and that they listen to our wishes and advice, and use both to further their own goals? We don't want them to say, "I am the best," but rather, like Glaucus, "My father taught me to strive to be the best."

Another expression of a young person's ideals is voiced by Hector, the best of the Trojan fighters. Later in the sixth book of the *Iliad*, he and his wife, Andromache, argue about why he must always fight in the front of the battle, where it is most dangerous. He mentions the shame he would feel if he ever pulled back and notes that he has simply grown accustomed to this kind of effort. He says:<sup>3</sup>

Nor does my spirit urge me (to pull back), since I have learned  
Well to be the best, and to fight in the front of the Trojans  
Winning great fame for my father and myself.

Hector has trained himself so well that he no longer has any interest in fighting anywhere but in the front lines. His heart and spirit bid him to do this; one could even say he likes it.

My students often say this is selfish. Hector admits he is simply doing what feels

good, even though it causes Andromache so much pain. But who would say putting your life on the line for the safety of others is selfish? It only seems so because Hector is brutally honest about it. He tells his wife exactly why he does what he does, regardless of how it might sound. To this honesty she has no answer, and she soon stops arguing with him.

It is a worthy goal to work hard, and to work hard on a task that benefits the community is even better. But to do this so well and for so long that it becomes second nature, that is something special. Hector has moved beyond simply believing in what he does; he has become a part of it. His self-sacrificing work has become his pleasure.

For another place where a Homeric hero shares what is best, I turn to a scene in book 12 of the *Iliad*. There, two Trojan princes, Sarpedon and Glaucus, discuss why they have become leaders of the Trojans. Sarpedon, the elder of the two, explains his feelings to his young friend. He says:<sup>4</sup>

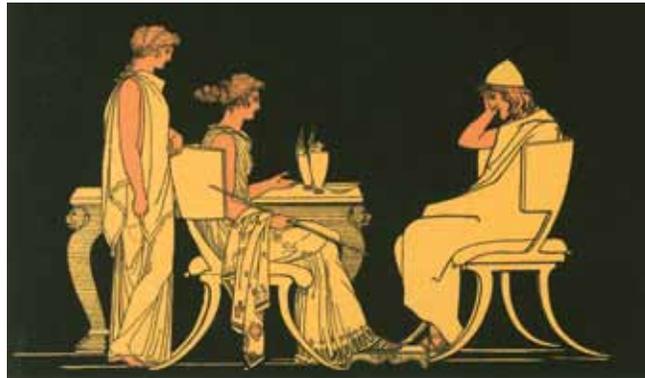
My friend, if you and I, escaping from this war,  
 Could live forever, ageless and immortal,  
 Neither would I myself fight in the front lines,  
 Nor would I send you out into the fame-winning battle.  
 But as it is, the fates of death stand all around us,  
 Thousands, which we cannot flee nor duck under;  
 So come, let us go, and win glory from someone, or let them win it from us.

Sarpedon is not saying that risking one's life in battle is good in itself; he would avoid death if he could. But since immortality is not an option, the next best thing is to summon the courage to fight his best, so that either he, or the one who defeats him, achieves greatness.

What a good way to view conflict. No one wants it, but if it cannot be avoided, then fight your best, pushing the level of the contest to a higher plane, so that either victory or defeat will bring someone a higher level of success. Sarpedon shows

how even engaging in conflict can work for the common good. By fighting well, he helps both himself and his enemy.

If there is a theme to these passages, it is that the characters know themselves. Glaucus, Hector, and Sarpedon all understand why they have chosen the lives they are living. Knowing themselves allows them to explain themselves clearly to those close to them. They have looked into themselves and thought about why they act the



One of Homer's best lessons for our world is that courage is not just for the battlefield or witch's cave. Often, it appears in our daily lives.

way they do. Whether it is the connection to their parents, or the unavoidable fates, or just their own pleasure, they understand the forces that shape them. Their self-knowledge allows each to see what would be the best life and freely choose it. This theme of self-knowledge figures prominently in two other great scenes in Homer: Odysseus's confrontation with Circe in the *Odyssey*, and the final meeting of Achilles and Priam at the end of the *Iliad*.

On his travels home from the war, Odysseus meets the witch Circe, who changes his men into pigs but fails to change him. The traditional analysis of the poem often says she fails because Odysseus has been given a special flower by the god Hermes, which protects him. This is not how Circe herself sees it, though. In the scene where she meets Odysseus, she does not mention the flower (neither does Odysseus), but attributes his power to his own abilities. She understands, so to speak, why the gods gave him that special flower.

Odysseus makes those abilities clear in the previous scene. One of his men, having escaped from Circe, runs back and tells him they must flee; the witch is too powerful, he says, and they will certainly be killed if they return to her. Odysseus replies that this man may stay behind if he wishes, but he himself must go back and try to save his men. There is no other way, he says.

Then, when he meets Circe, and her potions and charms fail, she ascribes this immunity to the fact that Odysseus must be a special man whose mind cannot be manipulated. She says:<sup>5</sup>

What kind of a man are you? Where is your city and your people? How can it be that in drinking that potion you were not charmed?... There must be some kind of unchangeable spirit in your breast.

According to Homer, Odysseus's power lies in remaining who he is: someone who does not abandon his friends. Because he refuses to change when he decides to help his men no matter what, Circe cannot change him. He is a man

who lives by his own ideals; he knows who he is. Staying true to his nature is precisely what protects him and his men.

His men, in contrast, are eager to change. They hope to "lose themselves," as we say, in their pleasures with Circe. In their minds, they are already turning to their animal appetites as they sit down to her feast. She only helps them along. Odysseus, though, is not there for pleasure. He has come simply to do what he always does: rescue his men. He has chosen to remain who he is and so is free of the temptations of that place.

One of Homer's best lessons for our modern world is that courage is not just something for the battlefield or the witch's cave. Often, it appears in our daily lives. It may be as simple as making a difficult phone call or finding a way to confront a powerful boss. For our students, courage may be raising a hand to contribute to a class discussion or refusing to give in to a playground bully's demands. What mat-

ters, as Homer shows, is not how strong you are, or ready to take risks, but how you have decided to live your life. Once you decide, for example, that you are a person who always helps your friends, courage naturally follows.

One of the best scenes of introspection and self-understanding in Homer comes at the end of the *Iliad*, when the aged Trojan king Priam comes to the Greek warrior Achilles to ask for the body of his son Hector, whom Achilles has killed. Throughout the story, Achilles has been the typical type A warrior: he knows he is the best and revels in it. He argues with his general, Agamemnon, and then sulks in his tent, refusing to fight for an unjust leader; but then he returns to the battle with a vengeance when Hector kills his best friend. After Achilles kills Hector, he childishly refuses to allow the body to be buried or returned to the Trojans, taking out his anger by dragging the body around camp behind his chariot. Like many exceptionally talented people, Achilles is selfish, hot-headed, and alone.

The old king, Priam, then takes it into his head that he will go at night to Achilles, in his tent in the middle of the Greek camp, and beg him to return his son's body. As he tells his wife, Hecuba, he wants only to hold his dead son in his arms one more time. The gods pity the old man and help him get across enemy lines and into Achilles's tent. There, he falls on his knees and begs Achilles to remember his own father, who must also miss his son far away. Achilles thinks of his father, whom he has not helped for all these years. The two men sit and weep—one for his son, the other for his father and his dead friend.

Achilles then reminds Priam of two jars in Zeus's hall—one holding blessings, the other miseries—and how Zeus takes some from each when he parcels out the fate of men. His father, Peleus, was surely blessed in many ways, Achilles says, with wealth, honor, and even a goddess for a wife. But Zeus gave him sorrows, too, for there was no powerful race of children born to him, but only one son, who soon left for the

war. Achilles continues:<sup>6</sup>

And so I give him no care in his old age,  
Since I sit here far from my fatherland  
In Troy, causing pain to you, and to your children.

For all his selfish posturing and conceit, Achilles has a heart. And Priam has hit on the key to opening it: the one man in the



What matters is how you have decided to live your life. Once you decide, for example, that you always help your friends, courage naturally follows.

world with whom Achilles has a loving relationship, his father. When Achilles is reminded of this relationship, he is led to consider his other relationships and finally comes to see the negative role he plays in all of them. Yes, he is the best fighter, but his prowess on the battlefield also means he causes the most pain. In his life, he has exchanged the love he could be sharing with his father for the pain he now inflicts on Priam's children.

When Achilles looks inside himself and reflects on what he sees, he opens himself up to a caring relationship with Priam and, one suspects, many others. He sees that the pain Priam's family has caused him, through the killing of his friend by Hector, resembles the pain he himself has caused. Achilles finally joins the ranks of the other Homeric heroes who, like Sarpedon, realize that all warriors, friend and foe, are fighting for the same kind of excellence, or who, like Hector, are attuned to the feelings of family and community. At

last, Achilles has matured into a caring and even loving adult.

In all these examples, self-knowledge leads to the kind of behavior we want for our children. Glaucus understands that much of who he is comes from his father, and thus he can set his sights on being the best without losing his humility; Hector understands fully how his training has formed his desires so they conform with his ideals of self-sacrifice; and Sarpedon knows that fate comes for us all eventually and so is free to choose a noble life and help others do the same. And, of course, Odysseus has the courage to defeat Circe because he knows who he is, and Achilles learns how to care about others by looking within himself. Their self-knowledge is the key to their success and satisfaction.

Similarly, our children's self-knowledge will enable their success and satisfaction. For them to succeed at the things they truly care about, they must look within themselves and decide what they want. It is this introspection and self-definition I would want them to master first, with the hope that outcomes such as courage, caring, and public success would follow. Self-knowledge, then, ought to be an essential element of what both educators and critics want for our children.

Reading about these ancient heroes, though, is only the first step. Learning an ancient language, like Latin, can take our children to the next level. When my students made progress in learning Latin, they began to see themselves as people who could face challenges and succeed. Studying Homer and Latin together, they truly learned to strive to be, as Glaucus says, "the best."

### Challenging Oneself with Latin

I have often felt the real change in students' sense of themselves and their own worth comes when they try to learn Latin. It is a way of re-creating oneself to accomplish a difficult and meaningful task. It is one thing to read about how Hector learns to be a courageous fighter so well that it becomes second nature to him; it is another to actu-

ally be Hector, mastering a noble task so well that it changes you and your view of yourself. This transformation is one of the central goals in teaching Latin.

Of course, this transformation only works if the task is difficult enough to make you reach for it. If it is already in your grasp, or you are just naturally good at it, succeeding will not tell you much about yourself. It's the effort that brings about the self-knowledge, or more exactly, the increase in effort. It's the realization that you have it within you to change yourself enough to complete the task, that you can mold your habits to fit your desires.

There are other difficult subjects that lead to self-knowledge when mastered; it's just that Latin is one of the best. Its combination of difficulty and seeming uselessness\* makes it a preeminent example of study that leads to self-discovery.

In my career as a Latin teacher, I have seen many students find themselves in Latin class, but two particular instances stand out. The first was my experience as the Latin department chairman at Martin Luther King Middle School in Kansas City, Missouri, in the early nineties. Kansas City had won a large settlement with the state, and so had upgraded and restructured all its schools. One of the improvements included introducing Latin at several neighborhood middle schools.

At King, we had eight Latin teachers and required all 800 students to take Latin. We used the same standard *Cambridge Latin Course* textbooks used in many private schools, and we entered all the state and national Latin competitions. King had been the worst middle school in the city when we started teaching Latin; I remember students coming to school literally barefoot. After three years, our scores on the state tests in reading and mathemat-

ics ranked the best in the city. Our students even beat one of the local private schools in a Latin contest.

None of this came easily. Many times, we were not at all sure we would succeed. I can remember numerous talks with frustrated teachers threatening to quit after a long day of difficult Latin classes. Many students were barely literate in English, let alone a foreign language. Still, we kept at it, convinced we could teach Latin to anyone. In time, we made progress.

I don't think simply teaching Latin transformed that school (we also had one of the best principals in the city), but I do



**That we offered Latin to students in the lowest-performing school said something about what we thought they could do.**

think teaching Latin helped raise those math and English scores. The fact that we taught it at all brought about a change in the students' views of themselves. That we were offering a course like Latin to students who were in the lowest-performing school in the city said something to them about what we thought they could do. They knew it was a difficult subject and they struggled with it, but they knew we thought they could learn it. In a way, our frustration when they didn't learn enough helped them believe in themselves.

Then, as they slowly made progress, they began to change their own views of themselves and, I think, took all their courses more seriously. As they succeeded in Latin, even at an elementary

level, they began to believe they might do well on any academic task, even the opaque questions on the state exam. As Thomas Jefferson noted long ago, good schools teach students "how to work out their own greatest happiness, by showing them that it does not depend on the condition of life in which chance has placed them."<sup>7</sup> This is what was happening at King. Like Glaucus's father, we expected them to "be the best," and they were beginning to see that they could rise to the challenge, that they didn't have to submit to the chance conditions of life.

My second experience helping students find themselves with Latin occurred in another low-income school. In 2004, I joined the staff of Bronx Latin just as it opened. It was one of the new small public schools carved out of bigger ones in the New York City school system, though it was not a charter school. Here, too, we required Latin of all middle school students. The school had no entrance requirements; it enrolled the neighborhood kids from the Morrisania section of the South Bronx.

The school did well from the start. It consistently received As on city report cards, and students did well on state tests. Seventy percent of my ninth-graders passed the New York State Regents exam in Latin, even though this is considered an eleventh-grade test. Even some of my eighth-graders passed it. Bronx Latin still faced the usual urban middle school problems, including fights on and off school property and the shooting of one of my students, but the students had no problem learning Latin.

When I think of how our Latin classes helped those students, I am reminded of a conversation I had with some students as we were returning on the subway from a Latin contest. We had done well, but won no awards. Our best showing had been against another school in the Bronx, a specialized high school that had a competitive admissions test. "You know," said one of the students, "we knew just about as much as the kids from that school, yet none of us got in there. We all took the test."

\*Latin helps our students learn many valuable skills, from vocabulary and grammar of English (as well as of French, Italian, and Spanish), to the history and culture of the Western world. How better to understand the ideas of such figures as Newton, Jefferson, and Milton than to study the language they studied? These benefits are well established among academics but often are not well known to students—thus the seeming uselessness of the language.

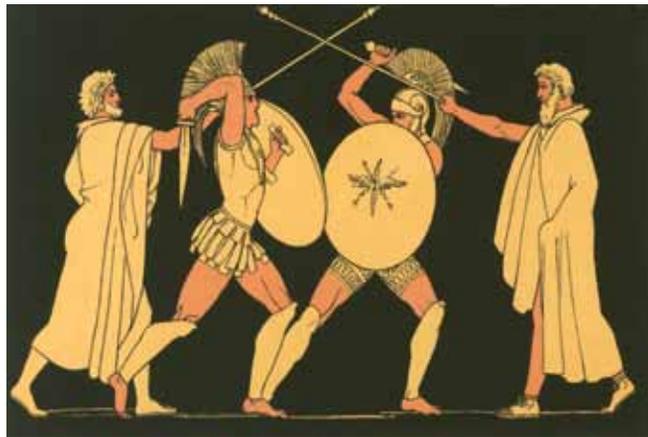
I asked her what she thought was the reason. “They cheated on the test?” was her first thought, but I assured her this was unlikely. We continued this discussion the next day in class and eventually came up with the following: the Latin contest proved they were the academic equals of the students accepted by that other school, so there must have been something wrong with the way the admissions test was judging them; either they were not preparing for such tests correctly, or the test itself was inaccurate, or both.

This was another way Latin helped my students learn about themselves. They had assumed that anyone accepted by a high-level school was “smarter” than they were, and they had never questioned that the problem might be in the testing process itself. Latin, though, gives students, especially those from poorer neighborhoods, a good way to gauge their abilities. It levels the playing field, so to speak, since it is a new subject for every student. That minimizes the impact of their previous educational backgrounds and makes it a good way to judge who can do well. In a way, it is like chess or fencing, which also work well in low-income areas. Neither activity depends on the kind of past educational problems that often hinder low-income students in other subjects. By learning Latin, my students were also learning about their own true abilities.

Latin, then, is also an excellent means of improving students’ knowledge of their self-worth. It draws them in, step by step, until they realize their success does not depend on others; they can change themselves. Latin enables them to achieve a new level of academic success if they are willing to do the work involved. Like the study of Homer, it gives them self-knowledge.

Just as Latin works well in low-income schools, it also works well with weak students. One often hears that only elite students (rich or poor) can learn Latin, but there is nothing about Latin that makes this inherently true. In even my most advanced Latin classes, I always had a few very weak students, and Latin worked quite well with

them. The subject is sometimes even taught as a special education class. Students who fail out of other foreign languages often end up in Latin. It is so clearly organized and proceeds in such incremental steps that virtually all students can master it. Being quick-witted, of course, does help, but one can come up with the right answer just by laboriously following all the rules. The pedagogy of Latin, having been perfected over literally millennia, has been worked out so carefully that it can be mastered by students of any ability, given enough diligence and patience by the student and the teacher.



Latin levels the playing field since it is a new subject for every student. That minimizes the impact of their backgrounds.

We might say, in fact, that the study of Latin is a particularly “American” solution to our public school problems. This is because Latin accomplishes our American insistence on both equity and excellence. It both challenges our students to attain the highest levels of intellectual skill and also provides a way for all of them to succeed.

This goal of offering the best to every student is never easy to achieve. It places an incredible burden on the public schools to devise an educational program fit for our best leaders and yet still open to all. When it becomes too difficult to offer such an education, there is a natural tendency to lower standards so more students can more easily attain them. Soon, excellence is only expected of those for whom it comes

easily, and equality is abandoned.

To fight against this tendency, Latin is one of our best weapons. It sets the standard of achievement at the highest levels, yet provides opportunities for even the lowest-level students with its simplicity and clear structure. Latin is difficult, but all it actually requires is diligence. Isn’t that true of so much in life? If we truly believe in the goals of public education, and want not only to better our children but our society as a whole, we must push for courses like Latin. It is the path to equal opportunity and excellence.

In public education, we take the goal of having our children succeed and extend it to the entire society. Public education aims not just to teach our children, but to improve our world. What we pay for in public education is the public benefit we all receive when these better graduates become adults. That’s why we all share in the cost of it, not just the parents of the children in school. The ultimate goal of the public schools is a society that is better, and more self-aware, than the previous one.

In the end, we all, educators and critics alike, want the same things for our children: that they succeed at the things they care most about, and mature into responsible and successful adults. To do this well, they need to understand themselves. As Hector, Odysseus, and Achilles show us, this introspection can lead to the kind of courage, satisfaction, compassion, and achievement we want for them. The study of Latin and the classics gives students a perspective on their own strengths and abilities. It can be the starting point of a good life for all our children. □

#### Endnotes

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# Labor's Untold Story

A Textbook Case of Neglect and Distortion



AP PHOTO/JACK THORNELL

He who controls the present, controls the past.  
He who controls the past, controls the future.<sup>1</sup>

BY THE ALBERT SHANKER INSTITUTE

Imagine opening a high school U.S. history textbook and finding no more than a brief mention of Valley Forge, the Missouri Compromise, or the League of Nations. Imagine not finding a word about Benjamin Franklin, Lewis and Clark, Sitting Bull, Andrew Carnegie, or Rosa Parks. That is what has happened to labor's part in the American story, and to most of the men and women who led the labor movement.

*The Albert Shanker Institute is committed to four fundamental principles: vibrant democracy, quality public education, a voice for working people in decisions affecting their jobs and their lives, and free and open debate about all of these issues. This article is drawn from American Labor in U.S. History Textbooks: How Labor's Story Is Distorted in High School History Textbooks, which the Institute published in 2011. Several experts in labor history contributed to this report: Paul F. Cole, director of the American Labor Studies Center; Jeff Hilgert, doctoral student in industrial and labor relations at Cornell University; Lori Megivern, Fulbright Fellow and American Councils for International Education Teacher of Excellence; and Jeff Mirel, professor of education and history at the University of Michigan. Christina Bartolomeo, a freelance writer (who has since joined the AFT staff), assisted with researching, writing, and editing.*

In the high school history textbooks our children read, too often we find that labor's role in American history—and labor's important accomplishments, which changed American life—are misrepresented, downplayed, or ignored. That is a tragedy because labor played (and continues to play) a key role in the development of American democracy and the American way of life. This article, and the more detailed report\* from which it is drawn, examines four high school textbooks developed by some of the leading publishers in the country: *The American Vision*, published by Glencoe/McGraw-Hill in 2010; *American Anthem: Modern American History*, published by Holt, Rinehart, and Winston/Harcourt in 2009; *United States History*, published by Prentice Hall/Pearson in 2010; and *The Americans*, published by McDougal Littell/Houghton Mifflin in 2009.<sup>2</sup> Together, these books represent a significant percentage of the purchasing market for high school history textbooks.

Spotty, inadequate, and slanted coverage of the labor movement in U.S. history textbooks is a problem that dates back at least to the New Deal era. By the late 1960s, a number of scholars had begun documenting the biased treatment of organized labor in high school curricula. In a 1966 study, *Labor in Learning: Public School Treatment of the World of Work*, University of California researcher and high school history teacher Will Scoggins found that the history and government textbooks used in most high



\*To read the full report, go to [www.shankerinstitute.org/publications/american-labor-in-textbooks](http://www.shankerinstitute.org/publications/american-labor-in-textbooks).

schools either ignored or inadequately treated topics such as collective bargaining, unfair labor practices, company unions, strikes, right-to-work laws, and the role of government in labor dispute mediation and conciliation.<sup>3</sup>

Scoggins and other scholars understood that high school textbooks had come to reflect a negative view about unions that was prevalent in the American business community, as well as in politics—often expressed by various business-oriented and ultra-conservative factions of the Republican Party. In a sense, as Scoggins and others found, American history textbooks have taken sides in the nation’s intense political debate about organized labor—and the result has been that generations of students have had little concept of labor’s role in American history and the labor movement’s contributions to American workers’ rights and quality of life.

One illustration of this trend: in the late 1930s and early 1940s, conservative, business-oriented groups launched a highly successful attack on the supposedly “left-wing” textbook series written by Harold Rugg, a professor at Columbia University’s Teachers College.<sup>4</sup> Among other complaints, the books’ critics denounced Rugg’s “positive” depiction of the 1936–1937 Flint Sit-Down Strike against the Gen-

## A Note on Methods

We selected the four leading textbook companies (Glencoe/McGraw-Hill; Holt, Rinehart, and Winston/Harcourt; Prentice Hall/Pearson; and McDougal Littell/Houghton Mifflin) and reviewed the most detailed high school U.S. history textbook from each publisher. We limited our review to the hard copy student editions. We made this decision because these editions are the actual books to which students are exposed in the classroom. We did not investigate or assess any materials from the teacher editions, nor did we review any supplemental teaching materials. All of the textbooks we examined were written for high school U.S. history classrooms.

Data on the exact market share of these books is not in the public domain, but it appears that these four publishers may have a combined market share of more than 80 percent of the U.S. high school textbook industry. In an effort to get as accurate a picture as possible, we approached representatives of each publisher at a curriculum conference in June 2009 and asked them for their company’s nationwide market share in the U.S. history textbook market. Each of the four textbook publishers’ representatives said their company’s share was greater than 25 percent of the nationwide market in U.S. history.

—ASI

eral Motors Corporation as union propaganda designed to convince students that there was nothing wrong with the sit-down strike. (The Flint Sit-Down Strike led to the unionization of the U.S. auto industry, enabling the fledgling United Automobile Workers to organize 100,000 workers almost at a stroke.<sup>5</sup>) In the early 1940s, these criticisms of Rugg gained traction and his books disappeared from public schools.<sup>6</sup>

After the Second World War, the business community continued to devote significant resources to the development and promotion of a high school social studies curriculum that promoted its vision of society and its perspective on U.S. history. This vision was skeptical of government programs and wary of organized labor.<sup>7</sup>

More recent studies of organized labor’s treatment in U.S. textbooks have found similar biases.<sup>8</sup> For example, in a 2002 article in *Labor History*, labor historian Robert Shaffer found that U.S. history textbooks totally ignored the

organization of public employee unions, one of the most important union trends in the past half century. Shaffer declared that there is an “absence in virtually all survey textbooks, as well as in textbooks of the recent (post-1945) U.S., of any mention of the upsurge in public employee



Left: Dr. Martin Luther King Jr., in Memphis to support the striking sanitation workers just a few days before he was assassinated, believed labor and civil rights were inextricably linked. Above: Participants in the Flint Sit-Down Strike, which led to the unionization of the auto industry, living in a Fischer plant. Right: The Women’s Trade Union League, which encouraged women to form unions, counted Eleanor Roosevelt (sixth from the left) as a member.



COURTESY OF THE NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

unionism in the 1960s and 1970s. This silence serves all of our students poorly, and reflects a lack of perspective about what has been one of the more important legacies of the 1960s to contemporary life.”<sup>9</sup>

Public employee unionism has been a focus of intense political conflict and media attention in recent months, with attacks on public employees’ union rights and the public sector labor movement arising in Wisconsin, Michigan, Florida, New Hampshire, Ohio, and other states. Because of the lack of information in history textbooks, most citizens are probably not prepared to fully understand these attacks.

### How Today’s Leading Textbooks Shortchange Labor

Today’s major high school history texts do not ignore unions and the labor movement altogether. Each of the books we reviewed presents a modicum of important information, including facts about organizations such as the Knights of Labor, the American Federation of Labor (AFL), and the Congress of Industrial Organizations (CIO). We should note that there are several instances in which the textbooks get it right—for example, two of the textbooks include descriptions of the too-often-forgotten Women’s Trade Union League, which encouraged women to form trade unions, fought for laws to protect the rights of women factory workers, and is credited with establishing the nation’s first strike fund.<sup>10</sup> Another example: *The Americans* contains an excellent two-page spread on *NLRB v. Jones and Laughlin Steel Corp.*, the 1937 Supreme Court case that affirmed the authority of the National Labor Relations Board and gave some protection to workers’ right to organize.<sup>11</sup>

Still, these textbooks provide what we believe to be a narrow and sometimes seriously misleading view of what unions

are and have done in the past; they neglect the labor movement’s role in shaping and defending American democracy, and they pay hardly any attention to organized labor in the past half century.

The textbooks fall short in their coverage of labor in three specific ways. First, they devote little space to the labor movement and the development of unions generally. Second, when they do cover the development of unions, the textbooks’ accounts are often biased against the positive contributions of unions to American history, focusing instead on strikes and “labor unrest.” Third,



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## Working for Freedom

For a more balanced discussion of the role of labor during industrialization, see “Working for Freedom,” which is webisode 9 in *Freedom: A History of US*. Created by PBS based on Joy Hakim’s *A History of US* textbooks (see [www.joyhakim.com/works.htm](http://www.joyhakim.com/works.htm)), this 16-webisode series makes the struggle for freedom the central topic in American history.

For the series homepage—and links to extensive teaching guides, photos, timelines, and other resources—see [www.pbs.org/wnet/historyofus/index.html](http://www.pbs.org/wnet/historyofus/index.html). To jump to labor during industrialization, see segments 6–8 of “Working for Freedom” at [www.pbs.org/wnet/historyofus/web09/segment6.html](http://www.pbs.org/wnet/historyofus/web09/segment6.html).

—EDITORS



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Above left: Members of the Transportation Workers Union, who were employees of New York's Triborough Bridge and Tunnel Authority, picket the office of the New York City construction coordinator in 1950. Left: The president of the American Federation of Labor, William Green, testifies in favor of President Franklin D. Roosevelt's Economic Security Bill, which became the Social Security Act of 1935. Above: Child laborers, like these Pennsylvania coal miners in 1911, were quite common before unions helped win passage of child labor laws.

their discussions of other important social, political, and economic movements (such as the civil rights movement or the Progressive movement) and their gains often downplay or ignore the important role unions and their members played in these movements.

The following are some of the most significant examples of these problems, drawn from the four textbooks. The books:

- often implicitly (and, at times, explicitly) represent labor organizing and labor disputes as inherently violent;
- virtually ignore the vital role of organized labor in winning broad social protections, such as child labor laws, Social Security, Medicare, Medicaid, the Occupational Safety and Health Administration, and the Environmental Protection Agency;
- ignore the important role that organized labor played in the civil rights movement; and
- pay scant attention to unionism after the 1950s, thus completely ignoring the rise of public sector unionization, which brought generations of Americans into the middle class and gave new rights to public employees.

Giving the union movement its proper place in the teaching of our history is not simply special pleading for the cause of labor, as some critics might assert. Our central argument is that the study of American history itself is incomplete and inaccurate without labor history. Regardless of their personal values, serious scholars of American history do not deny that the labor movement has played a major role in our nation's development.

Whether in light of labor's championship of universal social programs or its formative role in the industrial and postindustrial workplace, labor has changed our nation's history, its economy,

and the development of the American social structure as it exists today. There is little disputing that the labor movement has been a key actor in our country's history, inarguably as important as scores of other figures and movements that cross the stage in history class, from Whigs to prohibitionists, from Daniel Boone to Joe McCarthy.

Here are five specific reasons why not telling labor's story deprives students of the real American story and leaves them ignorant of forces that continue to shape their lives today.

*1. Labor played a vital role in the establishment and growth of democracy in America.* Few high school history textbooks demonstrate that

the labor movement in America sprang directly from the movement's understanding of Americans' constitutional rights. For example, the Bill of Rights protects "the right of the people peaceably to assemble." From this right to freedom of assembly arises workers' claim to the right of freedom of association—the crucial right to meet together, to organize a union. Along with the right to bargain contracts with employers, freedom of association is a central element of both American and international labor rights and standards.\*

Unfortunately, not one of the American history textbooks we reviewed illustrates that the right to freedom of association springs directly from the right to freedom of assembly—i.e., that labor rights spring from constitutional and human rights as envisioned by the Founders.

Labor activists understood this principle from the movement's earliest days. In the 1830s, female textile mill workers in Lowell, Massachusetts (often known as the Lowell Mill Girls), fought for a living wage and a 10-hour day. In an 1834 proclamation urging other mill workers to join them in a walkout to protest a wage cut, the women wrote:<sup>12</sup>

Our present object is to have union and exertion, and we remain in possession of our unquestionable rights. We circulate this paper wishing to obtain the names of all who imbibe the spirit of our Patriotic Ancestors, who preferred privation to bondage, and parted with all that renders life desirable—and even life itself—to procure independence for their children.

All the textbooks we assessed provide extensive coverage of the formulation and adoption of the Constitution and enactment  
*(Continued on page 36)*

\*Labor's source of inspiration from the First Amendment right of association is aspirational. The rights contained in the First Amendment provide protection against government action that would limit the exercise of the right of association. The First Amendment does not apply to the actions of private parties. Nonetheless, many of the values imbedded in the First Amendment right of association became the foundation for the National Labor Relations Act, which was adopted by Congress and does apply to the private sector. See *Jacksonville Bulk Terminals, Inc., et al. v. International Longshoremen's Association, et al.*, 457 U.S. 702 (1982).

# Distorting the Historical Record

## One Detailed Example from the Albert Shanker Institute's Report

Perhaps the most glaring error in these textbooks is the treatment of the role that unions and labor activists played as key participants in the civil rights movement. For example, while coverage is thin on the relationship between organized labor and the civil rights movement in the 1940s, it is virtually nonexistent from the 1950s on.

In general, the textbook coverage of the civil rights movement is quite good, but the omission of organized labor's contribution to that movement is deeply problematic

and organized the United Rubber Workers during and after World War II.<sup>5</sup>

can workers into nonsegregated unions. In addition, organized labor provided crucial support to the civil rights movement from the 1940s through the 1960s, most of which the textbooks ignore.

The textbooks do mention A. Philip Randolph (the founding president of the Brotherhood of Sleeping Car Porters, who led the union's 12-year fight for recognition by the Pullman Company and won the union entry into the AFL) as both a union leader and a civil rights leader.<sup>4</sup> The books

Likewise, none of the textbooks mentions E. D. Nixon, a leader in the Brotherhood of Sleeping Car Porters and an associate of A. Philip Randolph. Nixon was also a leader of the NAACP in Alabama and the initial organizer of the Montgomery bus boycott and the Montgomery Improvement Association, which managed the boycott. There is no mention in the textbooks of the role of union support for the boycott.<sup>6</sup> Finally, none of these texts introduces students to Bayard Rustin, a master strategist and hero of both the labor and civil rights movements, and the chief organizer of the 1963 March on Washington. Throughout the 1960s and 1970s, and into the '80s, Rustin was instrumental in linking organized labor and the civil rights movement.<sup>7</sup>

Moreover, the textbooks simply fail to reflect the extent and depth of organized labor's support for the civil rights movement, and how closely the two movements—labor rights and civil rights—were intertwined. This close relationship between labor and civil rights is often called “civil rights unionism.”<sup>8</sup>

Just a few examples of omitted content on labor and civil rights can demonstrate the extent to which textbooks ignore labor's contributions to the modern civil rights struggle. Consider the contributions of just a few of the many unions that supported civil rights that are not covered in history textbooks. For example, the United Auto Workers (UAW) sent money to support the Montgomery bus boycott led by Dr. Martin Luther King Jr., endorsed a national boycott of Woolworth stores to integrate their lunch counters, and funded voter registration drives in predominantly black areas. In 1963 alone, the union donated \$100,000 to King's Southern Christian Leadership Conference.<sup>9</sup> King worked out of the national UAW headquarters when he and Rustin were planning the March on Washington. Two months before the March, some 150,000 supporters of civil rights marched in Detroit, led by UAW President Walter Reuther and King. UAW members bused in large numbers of marchers.<sup>10</sup>

Early in its history, the International Brotherhood of Teamsters would not allow Southern locals to follow the practice of segregation, and threatened to pull charters in cases where this rule was



**Above: As these signs remind us, the 1963 March on Washington was for jobs and freedom. The ties between labor and civil rights were so strong that while planning the march, Dr. Martin Luther King Jr. worked in the United Auto Workers' headquarters in Detroit.**

and seriously distorts the historical record. To be sure, unions have their own troubled history of racial discrimination,<sup>1</sup> with many unions banning the inclusion of African American members through the 19th and early 20th centuries.<sup>2</sup> Nonetheless, African American workers understood quite well that they needed to organize to protect their rights. Accordingly, in New York City in 1850, black workers formed the American League of Colored Laborers, the first organization of black workers.<sup>3</sup>

Beginning in the 1930s, however, most large unions began to recruit African Ameri-

concentrate on Randolph's 1941 plan for a march on Washington to protest racial discrimination in the military industries and to propose the desegregation of the American armed forces, which led to the Fair Employment Act, an early success for civil rights advocates. When the textbooks move into the 1950s, however, they ignore other strong links between leaders of organized labor and the civil rights movement.

The textbooks do not cover the extent to which many civil rights activists were also labor activists and leaders, and how closely intertwined the struggle for African American workers' labor rights was with the struggle for civil rights. Consider union leaders such as Clarence Coe, who played a key role in building the National Association for the Advancement of Colored People (NAACP) in Memphis in the 1930s, worked at Firestone Tire and Rubber Company,



Above: Bayard Rustin, the architect of the March on Washington, joins Albert Shanker, president of New York City's United Federation of Teachers, for a rally in support of paraprofessionals in 1970.

violated. By 1906, editorials in the *Teamsters'* magazine were making impassioned pleas for all local unions, but especially those in the South, to organize African American workers. The union supported the work of King and provided money and supplies to many civil rights groups, including more than 700 families living in "Freedom Village," who faced retribution for registering to vote in 1960.<sup>11</sup> And, few Americans today know of Viola Liuzzo, a civil rights activist and the wife of a Teamster business agent; Liuzzo was shot and killed on March 25, 1965, by Ku Klux Klansmen while driving a Selma marcher home. King, Teamster leaders (including Teamster General President James R. Hoffa, who offered a \$5,000 reward for the capture and conviction of those who murdered Liuzzo),<sup>12</sup> and other labor and civil rights leaders attended her funeral.<sup>13</sup>

Another example of union support for the civil rights movement: in 1960, when the Woolworth store sit-ins began in the South, the New York Central Labor Council organized picketing at the Woolworth

stores in New York City. Such unions as the International Ladies' Garment Workers' Union contributed upward of 800 picketers per day.<sup>14</sup>

There are many more examples of union participation in the area of civil rights. For instance, the American Federation of Teachers and its locals supported the civil rights movement in many ways, including by filing an amicus brief in support of *Brown v. Board of Education* in 1954, by actively supporting the 1963 March on Washington for Jobs and Freedom, and by giving King more than \$40,000 worth of station wagons to be used in the voter registration drive in Selma, Alabama. In 1963, AFL-

CIO President George Meany paid \$160,000 in bail to release King and 2,000 protesters being held in a Birmingham jail.

Other omissions reveal selective bias quite clearly. One glaring example: King was murdered in Memphis in 1968 while he was aiding a unionization effort of black Memphis sanitation workers under the auspices of the American Federation of State, County and Municipal Employees. The Southern Christian Leadership Conference made the Memphis struggle a focal point of its Southern cities organization effort. King believed that unionization was a key part of the struggle for civil rights. Yet, while the textbooks mention the reason why King was in Memphis, none mentions the specific union involved in the strike—clearly a central actor—by name. Worse, not one mentions King's strong belief that labor rights and civil rights were inextricably linked.

In 1961, King spoke to the AFL-CIO on the shared values of the organized labor and civil rights movements. This speech should be included in all U.S. history textbooks. In the speech, King declared:<sup>15</sup>

Negroes in the United States read the history of labor and find it mirrors their own experience. We are confronted by powerful forces telling us to rely on the goodwill and understanding of

those who profit by exploiting us. They deplore our discontent, they resent our will to organize, so that we may guarantee that humanity will prevail and equality will be exacted. They are shocked that action organizations, sit-ins, civil disobedience and protests are becoming our everyday tools, just as strikes, demonstrations and union organization became yours to insure that bargaining power genuinely existed on both sides of the table.

We want to rely upon the goodwill of those who oppose us. Indeed, we have brought forward the method of nonviolence to give an example of unilateral goodwill in an effort to evoke it in those who have not yet felt it in their hearts. But we know that if we are not simultaneously organizing our strength we will have no means to move forward. If we do not advance, the crushing burden of centuries of neglect and economic deprivation will destroy our will, our spirits and our hope. In this way, labor's historic tradition of moving forward to create vital people as consumers and citizens has become our own tradition, and for the same reasons.

Finally, there is no mention in the textbooks of labor's role in supporting the Civil Rights Act of 1964 and the Voting Rights Act of 1965.<sup>16</sup> In short, the picture painted by U.S. history textbooks simply airbrushes labor out of this vital historical period and, in the process, paints an incomplete picture of both the labor and civil rights movements. □

## Endnotes

1. As Wade Henderson, president and CEO of the Leadership Conference on Civil and Human Rights, put it in congressional testimony: "Although many unions attempted to defy workplace racial hierarchies, others acquiesced and focused primarily on organizing white workers, while either neglecting African Americans or relegating them to the worst job classifications. Notably, the United Auto Workers (UAW) stood bravely athwart some of its own members in demanding equal treatment of African-American workers within Detroit's auto plants." See Wade Henderson, "A Strong Labor Movement Is Critical to the Continuing Advancement of Civil Rights in Our Nation" (testimony before the U.S. Senate Committee on Health, Education, Labor, and Pensions, March 10, 2009).
2. For example, the American Railway Union, which was at the center of the 1894 Pullman strike, did not admit black railway workers. See Louis Menand, *The Metaphysical Club: A Story of Ideas in America* (New York: Farrar, Straus, and Giroux, 2001). See also James Gilbert Cassidy, "African Americans and the American Labor Movement," *Prologue* 29, no. 2 (Summer 1997).
3. For more on the American League of Colored Laborers, see "American League of Colored Laborers (1850-?)," *BlackPast.org*, [www.blackpast.org/?q=aah/american-league-colored-laborers-1850](http://www.blackpast.org/?q=aah/american-league-colored-laborers-1850).
4. For a biography of A. Philip Randolph, see "Gentle Warrior: A. Philip Randolph (1889-1979)," *A. Philip Randolph Institute*, [www.apri.org/html/d/sp/1/225/pid/225](http://www.apri.org/html/d/sp/1/225/pid/225).
5. See William P. Jones, "Black Workers, Organized Labor, and the Struggle for Civil Rights," *Left History* 8, no. 2 (2003), 145-154.
6. For a biography of E. D. Nixon, see "E. D. Nixon," *Encyclopedia of Alabama* online, [www.encyclopediaofalabama.org/face/Article.jsp?id=h-1355](http://www.encyclopediaofalabama.org/face/Article.jsp?id=h-1355).

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of the Bill of Rights, and the importance of rights like free speech as America's democracy developed. Yet, not a single textbook provides an analysis of the relationship of freedom of association to freedom of assembly as articulated in the First Amendment. Nor do the textbooks cover the labor movement's long history of fighting corporate and government attempts to deprive American workers of their constitutional rights to freedom of assembly, freedom of speech, and due process. Without this aspect of labor's history, students lose a key narrative about how our democracy was shaped and tested.



Labor unions were strong supporters of Solidarity, the trade union movement that brought freedom to Poland. Above: In 1980, Lane Kirkland, president of the AFL-CIO, receives a movement T-shirt from Stanislaw Walesa, the stepfather of the movement's head, Lech Walesa. Left: A Solidarity rally in Warsaw in 1982.

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2. Labor has been a crucial force for social progress in America. As a result of the glaring deficiencies in how labor is treated in standard high school U.S. history textbooks, students are likely not to understand that unions have played a crucial role—far beyond benefiting their own members—in helping to achieve decent living standards and vital social programs for all Americans. Most textbooks cover significant social legislation but rarely mention the contribution of the labor movement in its advocacy and adoption.

American labor was central to winning child labor protections, unemployment insurance, workers' injury compensation, Social Security benefits, the minimum hourly wage, the eight-hour day and other limits on working hours, the Occupational Safety and Health Act, the Family and Medical Leave Act, Medicare, and Medicaid. Yet the textbooks are largely silent on labor's role in these achievements. For example, no mention is made of continual union advocacy efforts on behalf of the Social Security Act of 1935, a key social reform of the second New Deal establishing old-age pensions, unemployment insurance, and disability relief. In the textbooks, these laws are credited essentially to President Franklin D. Roosevelt, not portrayed as the result of diligent, nationwide, grass-roots mobilization of American workers and their unions. For example, *The Americans* notes: "During the Second New Deal, Roosevelt, with the help of Congress, brought

about important reforms in the areas of labor relations."<sup>13</sup> The passage goes on to discuss the Fair Labor Standards Act (FLSA) of 1938, in which the 40-hour week was finally achieved for many workers. Labor was the key player in the fight for the 40-hour week, and supported the FLSA, but is given no credit for decades of advocacy and activism.

Through their role in winning progressive social legislation, unions brought generations of American families into the middle class and kept many Americans out of poverty.<sup>14</sup> Yet the central facts about unions' economic and social contributions to American life are given short shrift in high school history textbooks. If, while driving to school, students happen to see the bumper sticker "Unions: The Folks Who Brought You the Weekend," that may be more exposure to American labor's historic role as a force for social progress than they will ever get in the classroom.

3. Labor has been a leader in the fight for human rights at home and abroad. U.S. labor has a long-standing history of supporting human rights in our country and globally, but little of that history is acknowledged in high school textbooks. Perhaps the most glaring error in the textbooks we reviewed is their failure to cover the role that American unions and labor activists played as key participants in the civil rights movement. While labor leader and Brotherhood of Sleeping Car Porters founder and president A. Philip Randolph is mentioned as an inspiration for Dr. Martin Luther King Jr. in two of the books,<sup>15</sup> nowhere else in the textbooks do we see a description of the remarkable support that labor then poured into the civil rights movement. (For details on how labor supported the civil rights movement, see page 34.)

The textbooks also fail to mention the many other contributions made by American labor to the human rights struggle around the world—from the work of the International Ladies' Garment Workers' Union (ILGWU) with the Jewish Labor Committee and its outspoken opposition to the Nazi terror, to the active role played in the 1930s and 1940s by organized labor in the United States in fighting against totalitarian regimes abroad (both Communist and Fascist), to unions' and the AFL-CIO's active support for the Solidarity trade union movement in Poland in the late 1980s, to the labor movement's efforts to aid anti-apartheid groups in South Africa. In its account of President Ronald Reagan's opposition to the Soviet empire, *American Anthem* describes the success of the Solidarity movement in Poland, for example, but

fails to mention the extensive support American labor unions gave to Solidarity.<sup>16</sup>

Today, the American labor movement continues to fight for human rights worldwide: for the rights of oppressed workers, women, children, trade unionists, and journalists, from Iran to China to El Salvador. This story largely fails to make it into the high school history classroom.<sup>17</sup>

4. *Labor is one of the major American political and social forces of the 19th and 20th centuries—and continues to be a political and social force today.* High school history textbooks also simply do not convey the scale and significance of labor as a political and social force in American society for two centuries, and as a continuing force in those areas today. Many students will never learn that, as recently as the late 1960s, around 30 percent of nonagricultural workers in America were union members,<sup>18</sup> and an American might identify him- or herself as a Teamster, Ironworker, or ILGWU member just as readily as he or she might self-identify as a Democrat or a Methodist. Many American communities once centered around the union hall as much as they did around the church or the town hall. Yet the textbooks, which cover other social institutions and movements with some detail, from the American film industry to the conservation movement, give short shrift to labor's decades-long centrality and continuing importance in American life.

The textbooks also fail to portray the role of labor as a political force: as a decisive force in electing presidents, in passing legislation, in energizing political parties, in shaping events in our political history. For example, the American labor movement played a key role in supporting the Marshall Plan in the late 1940s. It supported U.S. efforts in two world wars. It helped pass the Civil Rights Act. And, despite a decline in membership, organized labor's political voice is still strong. For example, in the 2008 election, 21 percent of voters were from union households—despite the fact that organized labor represented only 12.4 percent of workers. Yet, in the textbooks, the labor movement virtually disap-

pears in chapters covering the decades since 1950, except (in three of the textbooks) for a brief and in some cases admiring mention of how Reagan fired air traffic controllers in the Professional Air Traffic Controllers Organization strike of 1981.

5. *Learning about labor is part of students' civic education.* "In every democracy, the people get the government they deserve," wrote Alexis de Tocqueville, a famous early observer of the fledgling American democracy. History class is one place where students learn what it means to be a citizen of our democracy—and teaching labor history is a way to educate students to be questioning, active citizens in that democracy.

Labor unions possess an encompassing vision of an authentically democratic life that is arguably broader and more inclusive than almost any other force or constituency in American society, and they have worked hard to realize that vision for members and nonmembers alike. When we give students a full and accurate account of labor's history, we are illustrating that it is possible to challenge established social and economic systems and structures and act collectively to bring about change—just as when we teach them about the American Revolution, the Progressive and Populist movements, the civil rights struggle, and the fight for women's suffrage. The textbooks cover all these in detail, but too often leave out the accomplishments and struggles of American labor. This is unfortunate because labor is a strand without which the American narrative of principled dissidence and the struggle for social progress by activist citizens is incomplete.

**W**e undertook this review in a spirit of hope that American history textbook publishers will meet the challenge of covering the labor movement more fairly, accurately, and extensively going forward. We have seen the textbook publishing industry make similar changes in other key areas of American history. For example, as a result of demands from leaders of the civil rights movement and others over the last 40 years, textbook publishers today produce books that more accurately reflect the contributions of Americans of all races and origins to the country's narrative, history, and life. We urge them to consider textbooks' coverage of labor in the same critical light, to ask the same questions about labor's contribution to the American story: Are there voices missing? Are there key American events and great American themes being left out? □

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3. Will Scoggins, *Labor in Learning: Public School Treatment of the World of Work* (Los Angeles: Institute of Industrial Relations, 1966).

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Above: Nelson Mandela in Chicago in 1993, just a year before he was elected president of South Africa, at a union-sponsored rally in support of his tireless efforts for free multiracial elections.

AP PHOTO/FRED JEWELL

# Why Teach a 100-Year-Old Strike?

## The “Bread and Roses” Centenary

BY NORM DIAMOND

Today’s movement in support of the 99 percent is a reminder that throughout U.S. history, a major engine of change has been grass-roots organizing and solidarity. As an old Industrial Workers of the World song goes:\*

“An injury to one, we say’s an injury to all,  
United we’re unbeatable, divided, we must fall.”

Major history textbooks, however, downplay the role of ordinary people in shaping events—especially those who formed labor unions and used the strike to assert their rights. One of the most significant strikes in U.S. history occurred 100 years ago, in the Lawrence, Massachusetts, textile mills, and yet it merits barely a mention in the most widely used U.S. history textbooks.

It was known as the “Bread and Roses” strike because underlying the demand for adequate wages (“bread”) was a demand for dignity on the job and in life more generally (“roses”).

Until this strike, the U.S. Congress was indifferent to working conditions. The Wool Trust was as powerful as the Oil Trust and the Steel Trust. William Madison Wood, chairman of the American Woolen Company, was mentioned in the same breath as John D. Rockefeller, Andrew Carnegie, and J. P. Morgan. With the largest and most modern textile mills in the world and more than 30,000 workers, Lawrence was the epicenter and symbol of the new industrialization.

It had been founded only six decades earlier, a planned city derived from a utopian vision. The mills themselves were to provide cultural opportunities and education, refining the young women and men

attracted from surrounding farmsteads and rural communities. Housing was to be airy and spacious, with grass yards and limits on the number of tenants, and wages were to be adequate for a healthy diet.

By 1912, the drive for profits had destroyed the vision. Workers lived in fetid, crowded tenements. Working nine- and ten-hour days, six days a week, their main meal was usually little more than bread and molasses. The drinking water inside the mills was foul; supervisors developed a lucrative sideline selling water that was actually potable. Life expectancy for mill workers was 22 years less than for non-mill worker residents of Lawrence.

“If the women of this country knew how the cloth was made in Lawrence and at what price of human life they would never buy another yard,” said Vida Dutton Scudder, a professor at Wellesley College who spoke at one of the strikers’ rallies.

The workforce was one that unions and bosses alike thought impossible to organize. Mostly unskilled, a majority of them women, kept apart by more than a dozen languages, mill workers were both vanguard and victims of the new U.S. industrialization. The textile industry was the first to use new sources of power to drive its machines. It led the way in subdividing jobs into limited, repetitive movements, making workers interchangeable and replaceable. Hundreds of thousands were enticed from poor areas of Europe by posters and postcards showing happy mill hands leaving work with smiles and sacks of gold. But once mill owners had a surplus of workers desperate for jobs, they drove down wages and sped up the work.

They also experimented with different techniques to divide workers. In some mills, they deliberately placed workers together who spoke different languages. In others,

they allocated work by ethnicity so that particular jobs were given only to Lithuanians, or to French Canadians, or to the Irish. Supervisors used ethnic and racial slurs and sexual harassment as intentional means of control.

When individual states attempted regulation, companies threatened to move. There was a race to the bottom (which is being repeated today on an international scale), with states competing to offer companies the best deal, the least oversight. Companies claimed they could not act to improve conditions on their own; doing so would put them at a competitive



**Above:** When conditions became especially difficult, with food and heating fuel scarce and attacks by hired thugs and the state militia increasing, strikers sent some children to families of supporters in New York and Boston.

disadvantage. The responsibility, their spokespeople said, was not theirs: it was that of the economic system that bound them together and produced all the marvels of modern life.

### The Strike Begins

On January 12, 1912, the owners of all the Lawrence companies suddenly cut workers’ pay, and this seemingly docile workforce walked out. With no preparation and little prior organization, 23,000 workers went on strike. They set up communal kitchens and

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\*“Dublin Dan” Liston, “The Portland Revolution.” See Joyce L. Kornbluh, ed., *Rebel Voices: An IWW Anthology* (Chicago: Charles H. Kerr Publishing, 1998), 34.

created a committee structure responsible to daily mass meetings that took place in each of the ethnic constituencies.

In the beginning, men led the strike committees as well as the picketing and demonstrations. As the strike wore on, some of those early leaders faltered while women's participation and confidence grew. Sometimes having to overcome resistance from their husbands and fathers, women joined strategy discussions, chaired committees, and took the lead in picketing.

And they sang, women and men alike. Songs became a common language, the means of uplifting their spirits and forging solidarity. For those who couldn't read, singing provided a political education, a way of learning about the world and putting their own struggles in a larger

context. Composer and singer Bernice Johnson Reagon called songs of the civil rights movement "the language that focused the energy of the people who filled the streets."<sup>†</sup> The same was true in Lawrence.

About 14,000 mill workers, half the workforce, held firm for nine and a half weeks. Despite repression, cold, and hunger, they won. They gained a raise in pay, with the largest increases for the lowest paid workers, as well as a higher rate for working overtime and a fairer system for calculating wages. After one last joyous march, on March 18 they went back to work.

They won because the mills couldn't function with so many workers showing no signs of coming back. They won because

they forced congressional hearings and focused national outrage on living and working conditions and child labor. They won because wool industry profits were based on a tariff against foreign competitors, and mill owners feared that public outrage would prevent Congress from renewing the tariff. Most of all, they won because of their own solidarity.

## Lasting Lessons

Historic change is continuous but seldom smooth. More often, it happens the way tectonic plates grind together, lock under increasing tension into seeming stability, then spasm into a new configuration. It is in these times of spasm when people find

their old ways of understanding the world around them no longer making sense. These are the times when people reach for new ideas and new forms of social organization. These are the times we learn most about human aspiration and capability.

The Lawrence strike of 1912, the "singing strike," was an exceptional product



Left: A woman spins yarn in a Lawrence mill. Above: The state militia guards the approach to Lawrence's textile mills.

of them had joined the chorus and personally participated.

For the workers, the strike was also about experiencing democracy in their own lives and awakening the nation's conscience to the exploitation of children and other vulnerable workers. It was about new and effective tactics: "We will win this strike by keeping our hands in our pockets," said one of their leaders, meaning that the strikers should ignore provocations and not respond to violence with violence. And it was about defending labor rights under attack. When a striker was killed—eyewitnesses said by a policeman—two of the strike leaders were charged as accomplices in her murder, even though the prosecution acknowledged they had been addressing a rally miles away at the time. According to the prosecutor, it was their militant pro-union speech that incited the crime. When a Lawrence jury found those leaders not guilty, all who value the First Amendment's provisions for free speech and freedom of assembly were the beneficiaries.

of one of those times. We should teach Lawrence because it opened possibilities that continue to resonate. Because it was important in building some of our freedoms that are now endangered. And because there are parallels and lessons for the challenges we face today.

There were dueling narratives during the strike, with some of the attacks on strikers framed in ways familiar to us a hundred years later. According to the Lawrence Citizens' Association, formed during the strike and composed of the local business and political elite, outside agitators were to blame for riling up the otherwise docile and responsible workforce. (Their actual words were "godless, unpatriotic outsiders.") Somewhat in contradiction with that characterization, they also faulted their own workers, calling them "illegal immigrants" who had come to this country just to ship their rich wages back to their families abroad.

For the workers, the story was different. It was about human solidarity across race, ethnicity, and gender. It was about community support and the possibility of new forms of workplace organizing. The industrial-type unions we have today, founded in the 1930s and '40s, grew directly out of the struggle in Lawrence. Not only did later union activists take inspiration from the "singing strike," some

We should teach Lawrence for its victorious solidarity and for its contributions to democracy. We should teach it because it is the gritty underpinning for topics that we do teach: populism, the Progressive Era, settlement houses, immigration, female suffrage, movements for public health and civil rights, and naturalism and realism in literature. Most of all, we should teach Lawrence because it was an exceptional historical event whose lessons still reverberate. In this time of renewed popular activism, we must revisit this country's rich history of social movements, labor struggle, and solidarity. □

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- For details on Tennessee's new law, see <http://wapp.capitol.tn.gov/apps/BillInfo/Default.aspx?BillNumber=HB0368>; for details on Louisiana's law, see "Bulletin 741—Louisiana Handbook for School Administrators," published by the Louisiana Board of Elementary and Secondary Education, at [www.doa.louisiana.gov/osr/lac/28v115/28v115.doc](http://www.doa.louisiana.gov/osr/lac/28v115/28v115.doc). Section 2304 stipulates how the Science Education Act is to be administered by school administrators and teachers at the parish and local levels.
- "Antievolution Legislation Scorecard," National Center for Science Education, April 8, 2011, [www.ncse.com/evolution/antievolution-legislation-scorecard](http://www.ncse.com/evolution/antievolution-legislation-scorecard).

## Labor's Untold Story

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- See Joseph Moreau, *Schoolbook Nation: Conflicts over American History Textbooks from the Civil War to the Present* (Ann Arbor, MI: University of Michigan Press, 2003).
- During the strike, corporate and police brutality against the strikers led Michigan Governor Frank Murphy to send in the National Guard, not to attack strikers or to evict them from the GM plant they had occupied (ways in which the National Guard was often used against strikers), but rather to protect them, both from the police, who used tear gas against the strikers, and from corporate strikebreakers.
- Moreau, *Schoolbook Nation*, 245.
- Elizabeth A. Fones-Wolf, *Selling Free Enterprise: The Business Assault on Labor and Liberalism, 1945–60* (Urbana: University of Illinois Press, 1994).
- For example, Jon Bekken's 1994 analysis of journalism curricula found unions to be neglected or unrepresented. See Jon Bekken, "The Portrayal of Labor in Reporting Textbooks: Critical Absences, Hostile Voices" (paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Atlanta, GA, August 10–13, 1994), [www.eric.ed.gov/PDFS/ED375414.pdf](http://www.eric.ed.gov/PDFS/ED375414.pdf).
- Robert Shaffer, "Where Are the Organized Public Employees? The Absence of Public Employee Unionism from U.S. History Textbooks, and Why It Matters," *Labor History* 43, no. 3 (2002): 315.
- See Appleby et al., *The American Vision*, 435; and Lapsansky-Werner et al., *United States History*, 558.
- See Danzer et al., *The Americans*, 708–709.
- From the proclamation, printed in the *Boston Evening Transcript*, February 18, 1834. See also, Thomas Dublin, "Women, Work, and Protest in the Early Lowell Mills: The Oppressing Hand of Avarice Would Enslave Us," *Labor History* 16 (1975): 99–116, [www.invention.smithsonian.org/centerpieces/whole\\_cloth/u2ei/u2materials/dublin.html](http://www.invention.smithsonian.org/centerpieces/whole_cloth/u2ei/u2materials/dublin.html). As Dublin notes, "At several points in the proclamation the women drew on their Yankee heritage. Connecting their turn-out with the efforts of their 'Patriotic Ancestors' to secure independence from England, they interpreted the

wage cuts as an effort to 'enslave' them—to deprive them of the independent status as 'daughters of freemen.'" Dublin points out that this proclamation (and, we believe, many of the group's other writings) makes clear that the women saw their right to band together to fight for better pay and working conditions as a natural outgrowth of the rights defended by their ancestors in the American Revolution and enshrined in the Constitution.

- Danzer et al., *The Americans*, 705.
- See David Madland, Karla Walter, and Nick Bunker, *Unions Make the Middle Class: Without Unions, the Middle Class Withers* (Washington, DC: Center for American Progress, April 2011).
- Appleby et al., *The American Vision*, 864; and Danzer et al., *The Americans*, 911.
- Ayers et al., *American Anthem*, 703.
- For examples, see the international labor activism website LabourStart at [www.laborstart.org](http://www.laborstart.org).
- For a chart of union membership rates historically, in the United States and several other countries, see Gerald Friedman, "Labor Unions in the United States," *EH.Net Encyclopedia of Economic and Business History*, ed. Robert Whaples, March 16, 2008, [www.eh.net/encyclopedia/article/friedman.unions.us](http://www.eh.net/encyclopedia/article/friedman.unions.us).

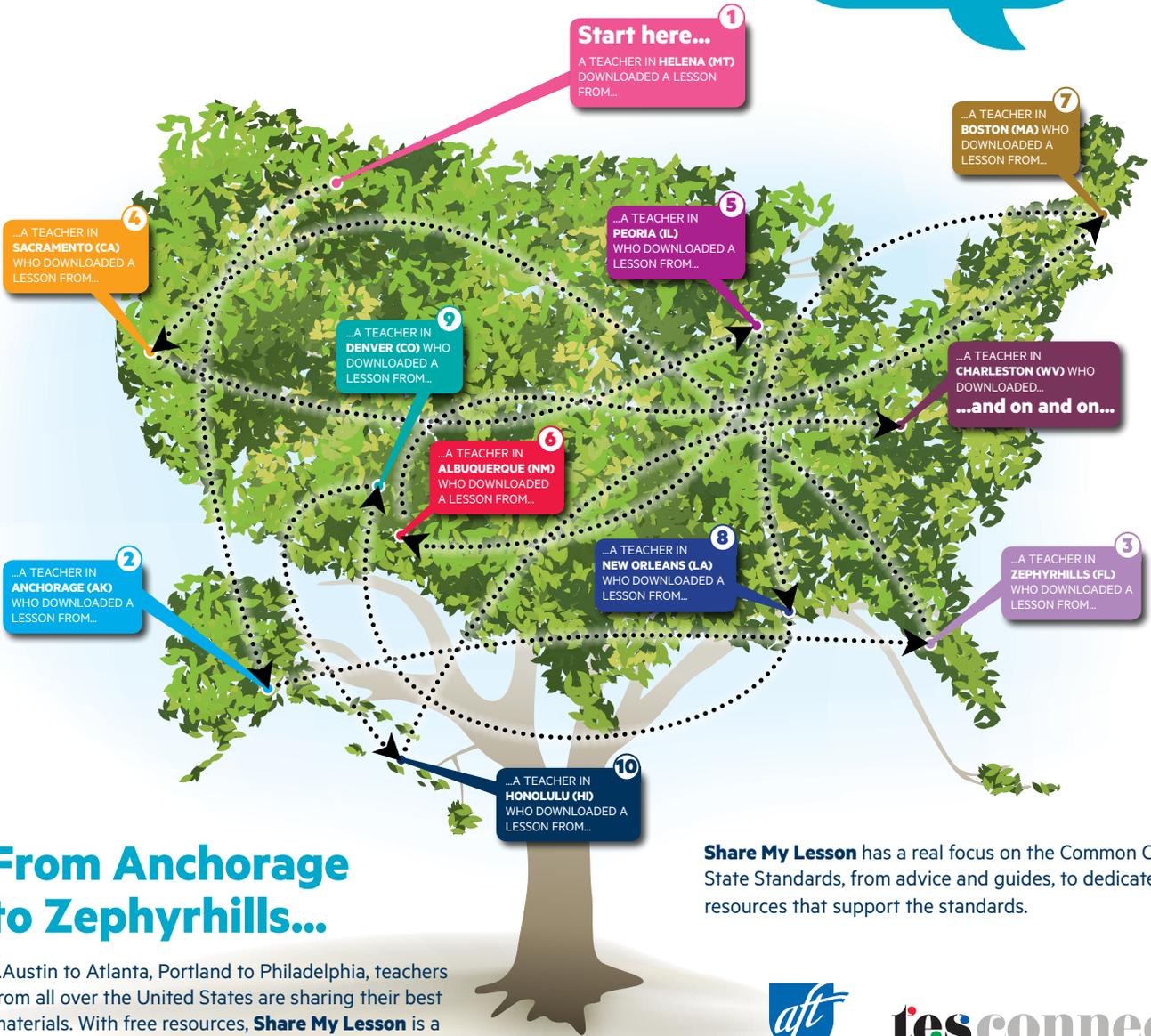
## Distorting the Record

(Continued from page 35)

- For more on Bayard Rustin's life and the new award-winning documentary *Brother Outsider: The Life of Bayard Rustin*, see [www.rustin.org](http://www.rustin.org).
- For an analysis of civil rights unionism and the forces that shaped it, see Michael Honey, "A Dream Deferred," *The Nation*, May 3, 2004. Honey, a professor at the University of Washington, writes: "It is crucial to remember that *Brown* was as much the product as the precipitator of mass movements. Yes, the decision resulted from the incredibly hard-working and astute battle led by Charles Houston, Thurgood Marshall and others in the NAACP. But it also resulted from mass movements and a vast shift in status among poor and working-class African-Americans, millions of whom moved out of rural areas and into cities and mass-production industries in the 1930s and '40s. They created an expanding membership base for the Congress of Industrial Organizations (CIO), the NAACP and an American left that challenged segregation at every level. Domestic workers, sharecroppers, day laborers, factory workers and other poor people, especially the women among them, organized economic boycotts, picket lines, marches, sit-ins, strikes, church and community groups, unions, consumer cooperatives and mass meetings. Their role as workers, soldiers and activists in the fight against white supremacy at home and fascism abroad created vast social changes that set the stage for *Brown*. As one example, in the Deep South city of Memphis, African-Americans, who had been organizing unions since after the Civil War, provided the main support that made the rise of the CIO possible, at a time when supporting a union could cost one's life. The purge of the interracial left from the CIO during the cold war undermined civil rights unionism, yet a number of black industrial unionists continued to challenge white supremacy in the 1950s and '60s. Union wages also made it more possible to send children to college, and some of those students led sit-ins and demonstrations against Jim Crow."
- For a more detailed account of the UAW's history in supporting civil rights, see "UAW History," United Auto Workers, [www.uaw.org/page/uaw-history](http://www.uaw.org/page/uaw-history).
- Kevin Boyle, *The UAW and the Heyday of American Liberalism, 1945–1968* (Ithaca, NY: Cornell University Press, 1998), 176.
- For more on the Teamsters' support of civil rights, see "Teamsters and Civil Rights," International Brotherhood of Teamsters, [www.teamster.org/history/teamster-history/civil-rights](http://www.teamster.org/history/teamster-history/civil-rights). See also [www.teamster.org/content/teamsters-honor-black-history-month](http://www.teamster.org/content/teamsters-honor-black-history-month).
- See "This Day in History," International Brotherhood of Teamsters, [www.teamstermagazine.com/day-history](http://www.teamstermagazine.com/day-history).
- An all-white jury acquitted the men accused in Viola Liuzzo's slaying. For more on Liuzzo, see "Civil Rights Martyr Viola Liuzzo," International Brotherhood of Teamsters, March 11, 2010, [www.teamster.org/content/civil-rights-martyr-viola-liuzzo](http://www.teamster.org/content/civil-rights-martyr-viola-liuzzo).
- Peter B. Levy, *The New Left and Labor in the 1960s* (Urbana, IL: University of Illinois Press, 1994), 17.
- James M. Washington, ed., *A Testament of Hope: The Essential Writings and Speeches of Martin Luther King Jr.* (New York: HarperCollins, 1991), 202–203.
- See "Major Features of the Civil Rights Act of 1964" on the CongressLink website, available at [www.congresslink.org/print\\_basics\\_histmats\\_civilrights64text.htm](http://www.congresslink.org/print_basics_histmats_civilrights64text.htm).



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