A Union of Professionals

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More Than a Warm Welcome

SUPPORTING IMMIGRANT STUDENTS IN DEARBORN, MICHIGAN PAGE 4

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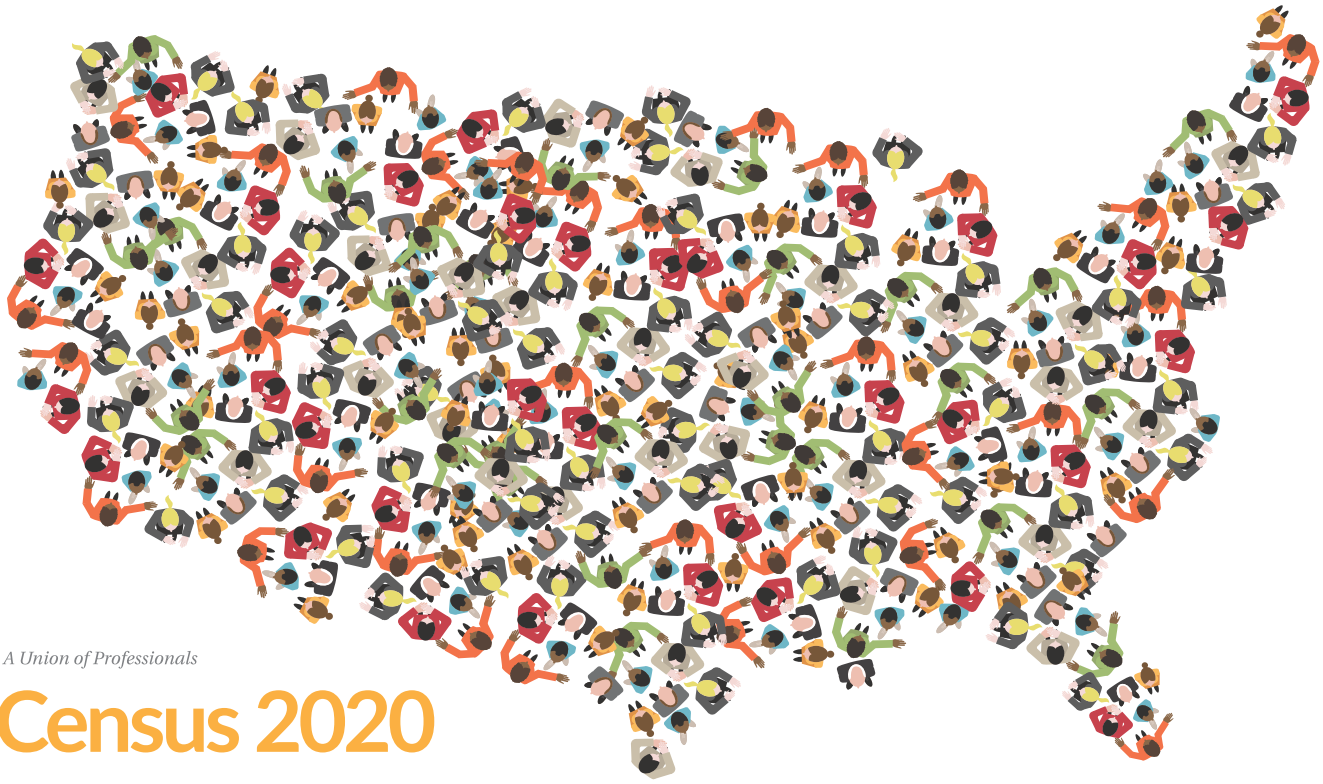

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Census 2020

The 2010 census missed more than 1 in 10 children under the age of 5. If we don't count children, the programs that support them—like child care, schools, health insurance, and public transportation—lose out on funds for the next 10 years, an entire childhood.

What Is the Census?

The U.S. Constitution requires a count of everyone who lives in the United States every 10 years. Every household will receive a mailing in March from the U.S. Census Bureau. If you don't reply by late April, a census employee will be sent to your home to help make sure everyone who lives there is counted.

Why Is It Important?

- Census information is used to distribute $1.5 trillion annually in federal money, including for schools, hospitals, and roads in every community in the United States.
- The count determines how communities are represented in Congress, in state legislatures, and even on school boards.
- The census influences how much money your school receives to pay for programs and teachers, offer free and reduced-price meals, and help students with special needs.

Is It Safe?

- Census information is used for statistical purposes only, to better understand our population.
- Federal law prohibits using census information for immigration enforcement or law enforcement.
- Census employees who disclose personal information can be fined $250,000 and sentenced to five years in prison.
- There is NO citizenship question on the census.

How Do I Participate?

- Count everyone who lives in your home, whatever their age or relationship.
- Complete the form by mail, by phone, or online. Forms are available in English and 12 other languages.

For more information, visit 2020census.gov and www.aft.org/census2020.

Supporting All Children as If They Were Our Own

RANDI WEINGARTEN, AFT President

AS AMERICA'S CLASSROOMS grow ever more diverse, each one a different kaleidoscope of cultures, languages, and experiences, it is an apt time for *American Educator* to focus on English language learners and the importance of community schools. The articles in this issue offer strategies to engage and uplift students academically. And, just as importantly, they acknowledge the importance of supporting students' social, emotional, and psychological well-being.

As Afrah Saleh, an English language development specialist featured in "More Than a Warm Welcome: Supporting Immigrant Students in Dearborn, Michigan," puts it, "Before we can even begin to talk about academics, we have to make sure [students are] emotionally OK." The partnership in Dearborn unites educators, administrators, the teachers union, social workers, and families to provide a range of social and emotional supports for students and families. Unfortunately, such robust supports are lacking in too many schools and communities, and, as a result, the mental health resources available for children, teens, and young adults don't come close to meeting their tremendous needs.

For millions of young people in America, childhood is not the joyful time it should be. Nearly half of the children in the United States experience at least one major traumatic event or circumstance. Every five days, a child under 13 dies by suicide. A majority of teens worry that a shooting could occur at their school. Children are growing up in a time when natural disasters that used to be "once-in-a-generation" catastrophes are alarmingly frequent. Increasingly, teachers and school staff are the first responders to students' social and emotional needs. America's children need help, and so do the educators responding to their needs.

America's mental health crisis is particularly acute for young people in marginalized groups. Low-income children and families are disproportionately affected by mental health challenges. Native American children have the highest rate of suicide in the country. Latino and African American youth have higher rates of depression than their white peers. And discrimination has taken a mental and physical toll on Muslim Americans, nearly one-fourth of whom suffer from depression.

The trauma that immigrant children endure can be especially severe. Many are terrorized in their native countries and again on their journey to the United States, then are further traumatized by the conditions in U.S. detention centers and when family members are separated from each other. Countless immigrant children live in fear that their family will be deported. The distress these children face can have a lifelong impact. Yet, despite all of this, immigrant children are less likely than other children to receive mental health services.

Fully half of the children and teens with a treatable mental health need do not receive treatment from a mental health professional. Out of necessity, public schools step into the breach, functioning as the country's de facto mental health system for children and adolescents. Educators are confronted daily with their students' social and emotional needs, yet schools across the country lack the social workers and counselors necessary to help our children deal with their trauma and difficulties.

While elected leaders too often neglect their responsibility to help people have a better life, my union and our members have made community our responsibility. The AFT has responded to the earthquakes in Puerto Rico—donating tents to use as schools and coordinating mental health providers to help survivors. Demands for social workers and other student supports were central to the recent teacher strikes in Los Angeles and Chicago. Educators from Tallahassee to St. Paul are focusing their contract and legislative agendas on these issues.

Increasingly, teachers and school staff are the first responders to students' social and emotional needs.

The AFT's most in-demand professional development resources concern trauma-informed practices. In El Paso, for instance, as others have moved on, we've brought these resources and other supports in the aftermath of the Walmart shooting. Educators know that children's emotional well-being is as important as their physical health—and that both are essential to effective learning. They know that, too often, when a child "acts out," and the school lacks the necessary resources, instead of getting help, the child is punished or inappropriately labeled. And we know that this is especially common for black, brown, and otherwise marginalized children.

One way to address the growing needs of our students is by investing in community schools, as "Classroom Teachers in the Community Schools Movement: A Social Justice Perspective" shows. The social, emotional, and academic benefits of the wraparound supports offered in America's 5,000 community schools are well-documented—and make the case for the AFT's and other advocates' goal of 25,000 community schools by 2025.

No childhood is without pain and struggle, but too many young people live with both every day. America is failing them, and only by investing in mental health services in our schools, healthcare systems, and communities can we help children in need to be healthy and happy. Community is our responsibility; we should support all children as if they were our own.

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SUPPORTING ELLs

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FLORIDA RISES UP FOR PUBLIC EDUCATION

The AFT's Fund Our Future movement is gaining momentum, with educators turning out by the thousands to win public school funding in Boston, Chicago, Los Angeles, New York, Virginia, and West Virginia. In January, the Florida Education Association led 15,000 public school supporters at a powerful and historic rally at the state Capitol, demanding more funds for public schools and amplifying the needs of their students. "This is a 'which side are you on?' moment," AFT President Randi Weingarten said. "It's time to make public schools the schools our children deserve—and the schools where our educators have the tools and respect they need for our kids to soar." Read more at http://go.aft.org/ae120news1.

DEFENDING COLLEGE STUDENTS AND PUBLIC EDUCATION FROM DEVOS

The AFT is part of a landmark lawsuit suing the Trump administration for stripping protections from students at for-profit and career college programs. *American Federation of Teachers et al. v. DeVos*, filed in federal district court in January, targets the illegal repeal of the "gainful employment" rule, a measure that requires colleges to show that their students have found stable employment after graduation. The suit accuses Education Secretary Betsy DeVos of violating federal law by pushing through a repeal riddled with errors, putting students at the mercy of for-profit schools with a history of leaving borrowers with worthless degrees and tens of thousands of dollars in debt.

Another case could have dire consequences for K–12 public education. In February, the Supreme Court heard arguments in *Espinoza v. Montana Department of Revenue*, which could mandate the use of vouchers for religious schools across the United States. Not only is this case a direct threat to the separation of church and state and religious freedom, it is an assault on public education bankrolled by wealthy right-wing donors. "Make no mistake, if a majority of the justices side with the petitioners, the Supreme Court will be responsible for unleashing a virtual earthquake in this country that threatens both religious liberty and public education," AFT President Randi Weingarten said. The AFT is among dozens of education, religious, and civil rights organizations and legal experts—along with 10 states—that have filed amicus briefs to protect the ban on religious school vouchers. Read more at http://go.aft.org/ae120news2 and http://go.aft.org/ae120news3.

MEMBERS RESPOND TO CRISIS IN PUERTO RICO

The recent earthquakes in Puerto Rico have done terrible damage. But they can't shake our determination to be there for our fellow members in the Asociación de Maestros de Puerto Rico—even if the federal government has failed them so far. AFT members and partners have raised more than $50,000 and donated necessities, including first-aid kits, tents, and solar-powered lights, being delivered at four ports by members of the Seafarers International Union. The tents and sidewalls, manufactured in America and provided by the Wisconsin-based company American Tent, will provide temporary classrooms for students and educators in some of the hardest-hit areas in the island's south, where thousands of homes, schools, and commercial buildings were destroyed and damaged. We've heard what a difference these supports are making—and we won't stop. Of course, we also will continue to urge the massive relief effort we should be seeing from the federal government. Read more at http://go.aft.org/ae120news4.

SUCCESS WITH COMMUNITY SCHOOLS

A new study of New York City's community schools program, *Illustrating the Promise of Community Schools: An Assessment of the Impact of the New York City Community Schools Initiative*, shows the program's success in improving student attendance, discipline, and grade promotion. The RAND Corporation studied 113 schools over the course of three years and measured their results against similar schools that were not in the program. Among the findings were "a reduction in disciplinary incidents for elementary and middle school students" and "a positive impact on credit accumulation for high school students." The United Federation of Teachers has a network of 31 schools in its successful United Community Schools program. Read more at http://go.aft.org/ae120news5.

More Than a Warm Welcome

Supporting Immigrant Students in Dearborn, Michigan

Left, teacher Jehan Haidarah helps a student at Salina Intermediate School. Right, teacher Welaya AlHaiki with Yussef Kady at Salina Elementary School.

PHOTOS COURTESY OF THE AUTHOR AND COLORÍN COLORADO

By Lydia Breiseth

On the wall outside her first-grade classroom, teacher Welaya AlHaiki has posted a letter to her students. It reads:

Dear Students,

You are important.
You are listened to.
You are cared for.
You are respected.
You can be or do
Anything
You put your mind to.
I support you.
You are in a safe place!

Love,
Ms. AlHaiki

Many elementary school teachers post welcoming or reassuring messages outside their classroom doors. But for some of AlHaiki's students, this message holds particular meaning.

As refugees from Yemen, a country torn apart by an ongoing civil war, many of these children have felt unsafe. In their homeland in recent years, many students were exposed to violence from the war as well as other hardships. At times, their schooling was interrupted.

Now the students are in a public school that many of them will soon consider a second home, where they will learn under the care and instruction of AlHaiki and her colleagues.

Their school, Salina Elementary, is in Dearborn, Michigan. In some ways, it's fitting they are learning what it means to become American in an industrial city in the middle of America, the home of the Ford Motor Company. Long a haven for immigrants, Dearborn has welcomed its latest newcomers with overwhelming support. The success of this effort comes in part from a strong labor-management collaboration between Dearborn Public Schools and the local union, the Dearborn Federation of Teachers (DFT), which has enabled educators to meet students' needs so that they can feel safe enough to learn.

Lydia Breiseth is the director of Colorín Colorado, where she manages content on ColorinColorado.org, multimedia production, outreach, and partnerships, including collaboration with its major partner, the American Federation of Teachers.

Last year, the team at ColorinColorado.org, the nation's leading website for educators and families of English language learners (ELLs), explored this collaboration in Dearborn. Through a partnership with the American Federation of Teachers and the DFT, we produced *You Are Welcome Here*, a 20-minute film about the Dearborn Public Schools' comprehensive efforts on behalf of this resilient student population. Throughout the course of our school visits, numerous interviews, and two intensive days of filming, we began to develop a deeper understanding of what's working in Dearborn and what other school districts can learn from its example.

The Salina Community

Salina Elementary School is located in the Southend neighborhood of Dearborn, which borders Detroit. More than 95 percent of the students are ELLs, with the vast majority coming from Yemen. Many of the students at Salina have older siblings who attend Salina Intermediate, the middle school across the street. At both schools, around 90 percent of the students receive free or reduced-price meals, an indicator of poverty.

In spite of the challenges facing many families, the hard work of both schools is paying off. Salina Elementary was recently nominated by the state's Department of Education for a national award for Title I schools, recognizing its success with ELLs. And in 2018, Salina Intermediate, which had been struggling just a few years before, was nominated as a finalist for the same award.

The schools' Southend neighborhood developed in the first half of the 20th century around a Ford automobile plant that would later become the company's largest industrial complex worldwide. At one time, it employed more than 100,000 workers. Many were immigrants from Europe, the Middle East, and Latin America. "The Southend is iconic in the sense that it's where every [immigrant] family started," says Rose Aldubaily, the director of ELL services for Dearborn Public Schools and herself a native of the community. "Before it was Lebanese American, it was Polish American. And before it was Polish American, it was Italian American." (Prior to filming our interview with her in the conference room of Salina Intermediate, Aldubaily noted that the room had once been her kindergarten classroom.)

In part because the Southend was isolated from the rest of the city—literally on the other side of the tracks—it was a strong, tight-knit community, and it remains so today. Alumni who attended the neighborhood schools still gather for reunions. "There was this sense of belonging that is hard to explain," wrote one former student on a local news website. "The common ground we had was that everyone was looking for a better life, whether you were Lebanese, Italian, Polish, Puerto Rican, or Yemeni."*

Today, Yemeni restaurants and shops line the small commercial strip in the heart of the neighborhood. The local mosque, the second built in the United States, now includes a school, library, and community center—proof the Yemeni community here has thrived.

Many of Salina's students have experienced violence, hardship, and long separations from family members.

Yet while many Yemeni immigrants historically have come to Dearborn in search of a better life, those who have come more recently are also fleeing a brutal civil war. Many of Salina's students have experienced violence, hardship, and long separations from family members. Afrah Saleh, the English language development specialist at Salina Elementary (who herself came from Yemen as a child), notes that, in recent years, students have been arriving from Yemen with less and less schooling, as the situation there has deteriorated.

The impact of such trauma can be wrenching. Sue Stanley, Salina Elementary's principal, recalls the arrival of one student in particular. "Any time there was a loud noise, this poor little kindergarten boy would just hit the floor and he would cry," she says. "We had to go get his third-grade brother to come down … and put his body over this little boy to help calm him down, because where he came from, there were bombs."

Rola Bazzi-Gates, one of the district's special education coordinators and a social worker, has worked in the Salina community for many years. She has a special appreciation for what it takes to work through hardship, since she and her family left Beirut in the 1980s for America. "I grew up with war, and it was very hard," she says. "So I know what it means to be without water, without electricity, and going to hide."

Over the years, refugees from many global conflicts have settled in Dearborn. In the 1990s, Iraqi families came to the city during the Gulf War. Back then, Glenn Maleyko, a young third-grade teacher

You Are Welcome Here

Colorín Colorado is the nation's leading website serving educators and families of English language learners. Resources include teacher tips, articles, book lists, classroom videos, and more. Colorín Colorado is based at PBS station WETA in Washington, D.C., and is supported by a grant from its founding partner, the American Federation of Teachers.

You Are Welcome Here is a 20-minute film from Colorín Colorado highlighting how the Dearborn public school district is helping its immigrant students succeed. The film features Salina Elementary School and Salina Intermediate School, which serve large populations of families from Yemen. It is available, along with extended interviews and recommended resources, at www.colorincolorado.org/dearborn.

*"The Other Side of the Tracks: A Trip Down Memory Lane Living in the South End of Dearborn," published September 17, 2012, is available at https://patch.com/michigan/dearborn/bp--the-other-side-of-the-tracks-936ea51a.

Hussein Kady walks his younger brother, Yussef, to school.

at Salina Elementary, found himself at a loss for how to respond when he saw a student's disturbing drawings in a journal. It turned out the student had seen his uncle killed in Iraq.

Today, Maleyko is the superintendent of Dearborn Public Schools. His years as a classroom teacher at Salina inform his work as a district leader. "I couldn't understand necessarily what the children or their families were going through," he says. "The one thing I could do was provide them with the highest-quality education I could so that they could break that poverty or break some of the traumatic experiences that they had in the past [to help] future generations of families."

To that end, the district continues to increase staff capacity around trauma-informed instruction* through training for teachers, administrators, support specialists, and mental health professionals. Topics in these trainings include the impacts of post-traumatic stress disorder, social-emotional health, and understanding mindfulness and meditation. "Before we can even begin to talk about academics, we have to make sure they're emotionally OK," says Saleh, "letting them know that they're in a safe place and that they will thrive with us here."

Educators are also learning how to make connections to students' experiences through their training on trauma-informed practice and culturally responsive instruction. Anna Centi, who teaches language arts at Salina Intermediate, has found a good match for her students in the novel *A Long Walk to Water* by Linda Sue Park, which tells the story of boys fleeing conflict in South Sudan. The discussions of long walks in the desert and no access to water spark personal memories from her students. It takes a teacher trained in trauma and cultural sensitivity to lead these conversations safely.

When Centi asks one of her students, Nabila, what it feels like to go without water, Nabila responds, "Like you're gonna die." It turns out that Nabila has lived this experience, as her family fled the bombings near her village. "When we went to the villages," she says, "there's no water. And they [are] selling some water, but it's a lot of money. And it's hard."

In our film, Centi says, "I'm always looking to try to find something that the kids will identify well with, so they would be able to dig a little bit deeper, and you could make the curriculum a little bit more rigorous with something they connect that well with." Asked what she thinks of *A Long Walk to Water*, Nabila responds, "I like the book. Ms. Centi picked the best book for us because we remember Yemen when we are in school."

*For more on trauma-informed instruction, see "Supporting Students with Adverse Childhood Experiences" in the Summer 2019 issue of *American Educator*, available at www.aft.org/ae/summer2019/murphey_sacks.

At Salina Elementary, the principal, social worker, and family liaison all work together to welcome students into the school and reassure families that their children are indeed safe. Adelah Saleh, a mother with students at the school, appreciates such reassurance. "The most important thing a child needs in his academic and everyday life is safety," she says in Arabic. "In school, my kids feel safe, secure, [and] maintain mental stability. And that is what helps them most."

The same collaboration around safety happens at Salina Intermediate, where Diana Alqadhi, the English language development specialist, knows firsthand the importance of building relationships with students. "If you build the connection with them, they don't want to let you down, so they'll work a little bit harder," she says. "If you make that personal connection with those kids, then they know who to turn to when they need to turn to someone."

The relationship with Alqadhi is making a difference for one of her students in particular, Hana, a middle schooler who has recently arrived from Yemen. She came here with her two brothers and without her mother. Asked how she was handling the separation, she responds in Arabic, as teacher Dalyia Muflahi translates for her in English: "When I was in Yemen, I lived a happy life because my mother was there, and everyone was there with me. Then, after I came here to America, I felt separated from them, and I lost hope. How can I say this? I felt lonely."

Fortunately, Hana has since bonded with Alqadhi. In our film, *You Are Welcome Here*, she smiles when asked about her favorite things at school. "I love Mrs. Alqadhi," she says. She pauses before continuing, "And I love eating pizza."

Although the connection between this student and teacher seems natural, the district doesn't leave it to chance. For one thing, throughout the district, the English language development specialists, who provide buildingwide support for ELLs, speak conversational Arabic (although not all teachers working with newcomer or ELL students are bilingual). Given the high number of Arabic speakers in the district, such a requirement makes sense. The district has also worked with the Dearborn Federation of Teachers to increase the number of classroom teachers with an ESL (English as a second language) credential, to make it easier for paraprofessionals to earn their teaching credentials, and to make it easier for administrators to make bilingual language skills (in Arabic and English) a hiring requirement where needed.

"We have to work toward solutions," says Chris Sipperley, the former president of the DFT. "I learned very quickly in this position that we have various needs for our EL students. And within the last 10 years, those have only increased."

Intensive Support

In the Salina community, Hana's experience of family separation is not unique. Alqadhi notes that at least half of her middle school newcomers are here in the United States without their mothers. In many cases, mothers have stayed behind in Yemen or other Middle Eastern countries awaiting visas while children have joined their fathers or other relatives in Dearborn. Often, older siblings have numerous responsibilities at home, including the care of younger siblings.

Such was the case of brothers Hussein and Yussef Kady. Hussein, now in middle school, recalls answering his little brother's repeated questions about when their mother would join them. "It's hard for him," he says. "And us, too."

"I was mad because my mom was still [in] Yemen," recalls Yussef, who came here in kindergarten and is now reading above grade level. "It wasn't that fun, and I missed her. I cried all the time."

Families who have made it to Dearborn may have also experienced long periods of hardship and uncertainty in Yemen and on their journey to the United States, including a lack of running water, food, and medical care, and extreme conditions—a situation common for many refugees.

Alqadhi recalls covering another teacher's class of newcomer students one day when the students started talking about cattle rafts. As she asked them to tell her more, she realized that multiple students had had the same experience. The quiet class suddenly became animated as they explained that they had traveled 10 to 12 hours standing on these rafts among cattle as they fled from Yemen to Djibouti to escape the war.

To help students deal with all they've been through, special education coordinator Bazzi-Gates and her colleagues take a holistic approach. "We look at the whole child and not just, 'Are they focusing in class, are they learning?' By listening to them, observing them, asking questions, you'll be able to know how to help them better."

Dearborn's Multi-Tiered Support System is designed to address students' complex needs. It's a robust process ensuring that ELL and bilingual educators, special educators, social workers, classroom teachers, administrators, and families are all part of the same conversation. The district also collaborates with local community agencies, such as ACCESS (the Arab Community Center for Economic and Social Services), to provide additional social-emotional support, including mental health training and services for both students and families around issues such as trauma, substance abuse, and suicide prevention. ACCESS also provides families with classes, job training, and school supplies, among other resources.

Once this intensive support has been established, it's also important to give the students some time to adjust. "We just let them be for a little bit," says Stanley, Salina Elementary's principal. "They have to feel comfortable and secure and grounded for a while."

Another way the schools build students' confidence is hands-on learning. At Salina Elementary, this includes makerspace, an annual STEAM (science, technology, engineering, arts, and math) fair, LEGO League, a dynamic arts program, and a school garden. Stanley notes that these kinds of activities are particularly important because they can help children start feeling successful even before beginning to learn English.

This was a lesson she says she learned firsthand after observing a kindergartner. "This little boy seemed sad for the longest time," Stanley says. Thanks to a program the school brought in called "robot garage," the student began to engage in his learning. "He had that robot put together before anybody gave him any directions," she says. "The look on this child's face really showed that we have to find ways to break the language barrier for kids, give them hands-on learning, do makerspace, do these kinds of things where you don't need language first."

In addition to engaging students, Bazzi-Gates says it is particularly important to establish trust with families early on so that they will be more open to recommendations from the school regarding support services, especially around confidential issues they may not wish to discuss with others. When visiting both Salina Elementary and Salina Intermediate, evidence of families' comfort is in full force, from the hugs between staff members and parents, to the groups of mothers who emerge in the hallways after classes for parents, to the big crowds who attend special events.

Hands-on learning activities can help children start feeling successful even before beginning to learn English.

Haidarah with students in her middle school classroom.

Norieah Ahmed, one of Salina Elementary's accounting secretaries, greets all school visitors with a radiant smile. Often, the families have been instructed to look for her specifically. "To be the first face that they see, I can immediately see some relief on their faces," says Ahmed, whose family is Yemeni and who also speaks fluent Arabic. After months or even years of adversity and displacement, "they feel like they're in a place that they belong, versus yet another strange place."

Another key person in this effort is the family liaison, Sana Hamade, a native of Lebanon. "Leaving a country—you were born there, your roots are there—it's not easy at all," she says. "So when they come here, the minimum we can do … [is] give them this attention, this love, this care."

On a practical level, developing partnerships with families includes translating all school communication, including letters and phone calls, into Arabic and other languages, such as Urdu, that families speak. Additional outreach initiatives include parent workshops, community meetings, a weekly coffee hour with the principal, home visits, classes, and special events for families to attend. Both schools are careful to respect cultural and religious norms, as well as families' schedules.

School administrators work closely with family liaisons and front office staff to establish these partnerships. This is a critical step for educators who are not from the culture of the

school's families or who don't know Arabic, the language that the majority of families speak. Stanley, Salina Elementary's principal since 2013, admits that she has made some mistakes and had some misgivings when she first visited the neighborhood. "I really was concerned about the language being a barrier," she says. "But I trusted the district when they gave me this position to know that we could overcome all of that. So it was a year of learning."

What made a difference? "I talked less and listened more my first year," she says, which helped tremendously.

Stanley also keeps her own family story in mind in her work with Salina families. "It's the same opportunity that my grandparents wanted for my parents back in the 1920s," she says. "They were coming over to give their children an education … [and] to make life better for everybody."

Hamade, the family liaison, recalls that when Stanley came to the school, she had lots of questions, so Hamade took her on a tour of the neighborhood, showing her restaurants and other places where signs are posted in Arabic. This was the kind of tour that Superintendent Maleyko's principal took him on when he was a new teacher at Salina in the 1990s. That trip included a visit to the local mosque. Soon, Maleyko, originally from Canada, was going on home visits. "One of the things I remember clearly is that the parents … were very appreciative of the work that you're doing to educate their children." It's an appreciation that Salina teachers experience regularly. "In our culture, a teacher is extremely valued," Alqadhi says. "We are held in high esteem. … They completely entrust us with their children."

The Dearborn Federation of Teachers has also played a crucial part in supporting such school-family partnerships. In collaboration with the union, the district's ELL department has provided professional development opportunities to teachers who are involved with the Parent Teacher Home Visits (PTHV) project.* This training was developed after receiving requests from union members who wanted to learn how to establish more effective partnerships with immigrant families.

According to Jane Mazza, president of the DFT (who got her start student teaching at Salina), the union has worked closely with the district since 2015 to ensure that the PTHV project has had funding in the school budget. The DFT has also held training classes and coordinated union members' expansion of the PTHV into other district schools. And it has paid to send members for additional training at PTHV conferences. "We strongly feel that working together on this project helps our students," Mazza says.

As for the home visits themselves, she explains that teachers ask families, "What are your hopes and dreams for your child?" Every culture can relate to this simple yet profound question. As a result, "We focus on building the relationship with the families so they understand we are trying to help them with this dream."

"A Second Home"

It is not surprising that, throughout the filming of *You Are Welcome Here*, many of the students, staff members, and families we spoke with in the Salina community refer to their schools as another home. "We are a family," says Jamel Lawera, the former principal of Salina Intermediate, whose own mother and other family members attended Salina.

Maleyko, the district superintendent, who previously served as principal of Salina Intermediate as well as a teacher, also shares the sentiment. "Salina is always going to be a part of who I am," he says. "It's tied to my heart as a person, as an educator, as a professional."

As AlHaiki, the first-grade teacher whose words we began our story with, likes to remind her students, their teachers at Salina Elementary and Salina Intermediate—and throughout Dearborn—know they can be anything, and the students themselves have big dreams. Asked about their goals, Nabila says she wants to be a doctor, and Hussein says he wants to be a businessman. Hana at first is undecided between becoming a doctor and a teacher, but then decides she would prefer to be a teacher because she is afraid of needles. And Yussef? "I want to be a police officer," he says, "but my dad said no. He wants me to be a doctor."

Just as Mazza notes above, the families know that great things are possible for their children, too. It is that belief that has

(Continued on page 40)

*For more on the importance of home visits, see "Connecting with Students and Families through Home Visits" in the Fall 2015 issue of *American Educator*, available at www.aft.org/ae/fall2015/faber.

Left, teacher Anna Centi leads students in a discussion of *A Long Walk to Water* by Linda Sue Park. Right, principal Sue Stanley greets students at Salina Elementary School first thing in the morning.

Students with Interrupted Formal Education

Understanding Who They Are

AP PHOTO/JIM MONE

By Brenda Custodio and Judith B. O'Loughlin

Students with interrupted formal education, also known by the acronym SIFE, are a relatively small proportion of recently arrived English language learners (ELLs), probably somewhere between 10 and 20 percent.[1] However, these students often represent the most challenging of our ELLs because of their limited first-language literacy skills, frequent gaps in academic knowledge and skills, and, sometimes, critical social and emotional needs. Also, many tend to arrive unaccompanied as teenagers, making their need to catch up academically even more urgent.

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Educators and other professionals who have the responsibility and privilege of getting to know these students, and who will be helping them to reach their full potential, need to have an understanding of where these students have been and why they may have certain gaps in their academic knowledge. Such an understanding will build empathy for these students, and it can also help classroom teachers discover the most effective methodologies and materials that will bridge the gap between what SIFE already know and can do, and what they will be expected to be able to do in their new academic setting. Since most ELLs spend the majority of their school day in mainstream classrooms, we hope that all teachers will see the value in knowing more about the background of their students and how their previous educational experiences (or lack thereof) impact their ability to perform on a daily basis.

So, who are these students, and where are they coming from?

The highest percentage of SIFE in the United States comes from Latin America, mainly Mexico, Central America, and the Caribbean. Refugee children make up the second highest number, with students from Asia, Africa, and the Middle East. Other smaller groups are composed of immigrant children from countries where schools were poorly equipped, teachers were inadequately

AP PHOTO/MAIL TRIBUNE, BOB PENNELL

Students with interrupted education need specialized programming and assistance, above and beyond what is normally provided to ELLs.

trained, or school was not accessible due to geography, economics, or religion.

Characteristics of SIFE

What specifically defines students with interrupted formal education and sets them apart from a "typical" English language learner? One list created by researchers[2] states that these students:

- Are overage for their grade-level placement due to their weak academic skills and limited or inadequate formal schooling;
- Have needs that traditional ESL (English as a second language) and bilingual programs can't or don't meet;
- Have low or sometimes even no literacy skills in their first language and/or in English, and have little academic content-area knowledge;
- Are socially and psychologically isolated from mainstream students;
- Need approaches and materials that will help them catch up to and compete with mainstream students; and
- Are at risk of failing or dropping out of traditional academic programs.

The final bullet point, the higher dropout rate of SIFE, is especially disturbing. Richard Fry, of the Pew Research Center, estimates that about 70 percent of immigrants with interrupted schooling drop out of high school![3] Why are we seeing this huge number? One strong possibility is that the support these students are currently receiving is not adequate to meet their needs.

In addition to the dropout rate, there is another possibility that many of these young people never bother to enroll in school at all. While our book, *Students with Interrupted Formal Education: Bridging Where They Are and What They Need*, from which this article is excerpted, looks at what educators can do to provide assistance and support for the students who enter our classrooms, a larger societal issue is the number of students who choose work over school, as Fry notes:

> The dropout rate for teens with school problems before migration is in excess of 70 percent, in comparison with 8 percent for other foreign-born youths. And their characteristics, especially for males, suggest that many of them are labor migrants. Their purpose in migrating was probably to seek employment in the labor market, and they may have never enrolled in U.S. schools. Recently arrived males who did not make adequate school progress before migration are twice as likely to be working as other foreign-born males, and nearly 40 percent of them are in the agriculture and construction industries, in comparison with 10 percent of other foreign-born youths. In contrast to the living arrangements of other foreign-born youths, the majority of recent arrivals with prior school problems do not reside with any parent in the household. Given their participation in the labor market and the degree to which they were behind in school, the prospects of enrolling these youths in traditional high school settings appear to be remote.[4]

Unfortunately, the programming designed for ELLs with academic skills and first-language literacy, as well as for the students who have been in Western schools for most if not all of their education, is not sufficient for most students with interrupted schooling. The gap between what students are expected to be able to do and the skill set that students have at their disposal is often too great, and students frequently give up.

Students with interrupted education need specialized programming and assistance, above and beyond what is normally

provided to ELLs. This belief is supported in a recent statement from WIDA (a consortium of 40 states whose education departments have joined together to develop English proficiency standards and assessments)* about SIFE: "Students with this background often need their emotional, psychological, and physiological needs to be met before they are able to engage fully in the educational setting."[5] Once these needs are met, schools must help students build literacy skills† in their home language and English, fill in the gaps in content knowledge, and support their social and emotional needs.

The Council of Chief State School Officers[6] created this list of supports it recommends for secondary school newcomers (including those with interrupted education):

1. Build environments that respond to the immediate social, cultural, and linguistic needs of immigrant adolescents with limited schooling.
2. Create structures that transcend high school academic departmental divisions to support simultaneous linguistic and academic development.
3. Form newcomer centers to ease transitions for newly immigrated students.
4. Implement flexible scheduling to reflect real needs and obligations of high school immigrants.
5. Align high school programs with higher education and adult education.
6. Use the full resources of the community to support immigrant students.

Identification of SIFE

One of the challenges of working with students with interrupted education is simply identification. Many school districts don't keep track of how much education students have received in their home country and their level of first-language literacy. Even when schools do ask, the answers are not always as helpful as it is assumed they would be. First of all, parents may state that their children have six or eight years of schooling, but attendance may have been sporadic; they may have attended one-room schoolhouses with poorly trained teachers; or school may have only been for a few hours a day.


AP PHOTO/DAVE KOLPACK

Sometimes, the parents do not want to admit that their child was not in school regularly out of fear that they may not be permitted to enroll. They may not want to admit that the child was not able to attend because of the inability to pay for required books or uniforms, or that the child stayed home regularly to provide needed income for the family. In some countries, children with learning issues are not able to be provided for in a regular school setting, and the child simply stays home. To guarantee that their child will be admitted to the new school, certain facts are not disclosed, or the parents may not realize how schooling is different in their new setting.

Many school districts don't keep track of how much education students have received in their home country and their level of first-language literacy.


AP PHOTO/ROSS D. FRANKLIN

As some researchers have written, "Gaps in school attendance are often due to sensitive matters; parents/guardians may be embarrassed, distressed, or feel threatened if they sense in any way that they are being censured or blamed for the lack of complete [and accurate] school records or their children's incomplete prior educational experiences."[7]

However, it is important that schools collect as much data as possible about each student and share that information with the classroom teacher. As long as schools are unable to collect accurate knowledge of previous literacy and content instruction, matching students with the best instructional program will remain an elusive goal. □

*For more on WIDA, visit https://wida.wisc.edu.

†For more on building ELLs' literacy skills, see "Educating English Language Learners" in the Fall 2018 issue of *American Educator*, available at www.aft.org/ae/fall2018/august.

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THE PROFESSIONAL EDUCATOR

Teaching Students with Interrupted Formal Education

Professional educators—in the classroom, library, counseling center, or anywhere in between—share one overarching goal: ensuring all students receive the rich, well-rounded education they need to be productive, engaged citizens. In this regular feature, we explore the work of professional educators—their accomplishments and their challenges—so that the lessons they have learned can benefit students across the country. After all, listening to the professionals who do this work every day is a blueprint for success.

By Christine Rowland

For 23 years, I had the good fortune to work with high school students from a wide range of language backgrounds and widely differing circumstances. What they all had in common was that they were developing competence and confidence in academic English. One of the challenges in teaching them was that some students had traveled back and forth between the United States and their country of origin, alternating between school systems and languages, and frequently missing periods of formal schooling entirely. Throughout my career in the Bronx, New York, I developed ideas on how to best support these students, commonly known as students with interrupted formal education (SIFE).

Although I am now retired from teaching, I still remember many of my former students extremely well. In addition to my work as a classroom teacher, I also facilitated professional development for a number of years, by supporting teachers of English language learners (ELLs) in helping their students succeed.

Student Variation

Among the challenges of supporting SIFE includes the fact that they come from vastly different backgrounds and experiences. For the purposes of this article, I will introduce four of my former students. To protect their privacy, I have changed their names.

Manuel was born in the United States and holds a U.S. passport. His family had decided to move back to Mexico when he was 6 years old. One of eight children, Manuel and his family lived in a rural area in Mexico. When he enrolled in high school, his walk to school took three hours each way. Deciding it was too long of a commute, his family sent him to the Bronx to live with a relative. Upon his arrival, Manuel entered the 10th grade. He had spent only first grade in the United States and had attended grades 2 through 8 in Mexico. But when he returned to New York to complete high school, he had effectively missed at least a year and a half of schooling. Also, his English was poor, and he lacked the academic English and content knowledge necessary for school success.

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ILLUSTRATIONS BY VIKTOR KOEN

Amira was born in Bangladesh and spoke Bengali as her first language. She attended school there for several years and learned to read and write in Bengali. But at the age of 11, she left school to help out at home. When she was 15, her family won the green card lottery and moved to the Bronx, where she entered high school after having missed three years of school completely.

Jorge was born in Ecuador and spent his early years there. He and his family moved to the United States for a couple of years, then returned to Ecuador for a couple more years, before ultimately returning to New York when he was 15. When he entered my class in the second semester of 10th grade, he tested at the fourth-grade level in Spanish.

Like quite a few of our students, Melita came from Kosovo. Because she and her family hid for periods of time amid the violence there, Melita had missed close to two years of schooling by the time she arrived in the Bronx.

Although Melita was technically a student with interrupted formal education, the reality is that her dedication to her studies and focus meant that there was no appreciable difference between her performance and that of her classmates. In fact, she often found herself near the top academically. She ultimately graduated with her high school class and went on to earn a bachelor's degree from Hunter College in Manhattan.

Supports for SIFE

Supports for these students come in two broad categories—systemic and academic. All four of my students benefited from both.

One of the challenges in supporting students who arrive at high school with little English is that the multiple class periods of English needed for language development present scheduling challenges in terms of fulfilling curricular requirements. In other words, if two or three class periods a day are taken up with English, then it becomes an increasing challenge to fit in everything else. The result is that the students who have the most to learn face the most challenging program, making it very difficult for the school to both structure their program and ensure students learn everything they need. This situation can cause students to feel overwhelmed at times. Without careful nurturing and support, they might also fail. Thus, a carefully thought-out system of support is crucial for these students.

Systemic Supports

At Christopher Columbus High School, where I worked, all teachers of ELLs met together twice a week during a professional period. As the on-site representative for the United Federation of Teachers' Teacher Center (school-based teacher support centers), I facilitated those meetings, which were a critical systemic support. The first meeting each week consisted of case conferencing, which was an opportunity for teachers to raise challenges, whether academic or behavioral, they experienced with specific students. During these meetings, we kept records of our conversations and the interventions and supports we were providing, which enabled us to see how specific students were working across the curriculum. Students were aware that we were working as a team, and I often felt that such knowledge alone made a significant impact. Students knew they were important to us, and that we were working together for their success.

Those meetings also gave us the time and access to look at report cards and transcripts, so we could examine students' overall academic progress, in addition to our own experiences in working with each student. We also followed attendance records and looked for any concerns related to absenteeism* and/or lateness. While a school counselor was not able to attend our meetings, we did coordinate with him as best we could.

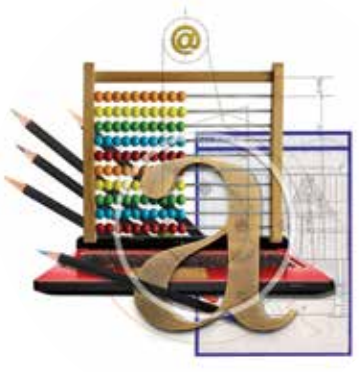
The second meeting of the week focused on instructional strategies to support ELLs, including those with interrupted formal education. The choice of strategy was typically informed by the case conferencing in addition to sheltered instruction strategies, designed to support ELLs in content-area classes. These included pre-reading, reading, and post-reading strategies.

We would also heighten teachers' awareness of the ways in which incidental vocabulary could become a stumbling block specifically for ELLs. For instance, in a lesson on World War II, I recall a sentence explaining that France was invaded by Germany. Melita did not know the verb "to invade," but she thought it looked like "invite." As a result, she and other English learners simply substituted one for the other, thus coming away with the mistaken impression that France had invited in Germany. Because this professional period was not long (often only 40 minutes), we tended to focus on one particular strategy at each meeting.

For these supports to work, it was essential that teachers of ELLs shared a common planning period. To that end, administrative support and investment is vital. Interventions we discussed at these meetings provided enough systemic support for students such as Manuel and Melita to succeed, while Amira and Jorge needed far more extensive support, especially with written responses to questions so they could demonstrate their learning.

An additional systemic support that we provided for Jorge was a native language arts class after school two days a week. Based on the research on language acquisition, we strongly suspected that his weakness in Spanish contributed to his challenges in learning English. This class, implemented for a handful of students with severe native language literacy issues, was created to strengthen language skills and academic knowledge. From our anecdotal observations, we could see such a class allowed Jorge to feel comfortable and less overwhelmed with learning.

The final systemic intervention we offered was afterschool tutoring in a range of subjects. For Amira, it was particularly helpful. She benefited from the extra time and attention that was not always available within a larger class. The small group and one-on-one support she received built her confidence in her work. Amira had her heart set on college and wanted to become a nurse. Ensuring she was ready for college meant she needed to produce academic papers that would give her a realistic sense of what a



*For more on poor attendance, see "Understanding Chronic Absenteeism" in the Winter 2019–2020 issue of *American Educator*, available at www.aft.org/ae/winter2019-2020/marsh.

finished product in college would be expected to look like.

One way I approached teaching these students in the same classroom as others was to create instructional units where all students worked on the same basic assignment, but expectations varied according to their English level. For this purpose, I used simple beginning, intermediate, advanced, and transitional designations. Assignment sheets clearly delineated the expectations by level, and rubrics were differentiated by level, in order to present an appropriate challenge to each student, and to afford each an opportunity to succeed, while acknowledging their different starting points.

I designed these units with the Understanding by Design framework, an educational design approach developed by Grant Wiggins and Jay McTighe. I typically began with the overarching understanding I wanted students to attain, followed by the essential questions they would need to answer. Also, I identified key points of learning and vocabulary for each unit. Next, I considered how students would demonstrate their understanding. To that end, I created two final products: a performance, usually with a range of options for students to select from, and a written paper.

In developing units, I also had to decide what skills and knowledge students needed to develop, what supports they would need, and how many lessons it would take to accomplish everything. Unit length varied tremendously from a few days to a few weeks. I invested considerable time in developing a unit, and I made judicious adjustments to improve them for future use. I also shared my favorites on AFT's Share My Lesson (www.sharemylesson.com). Posting my lessons was a great way to highlight my portfolio and to join a reflective community of committed professionals.

The final assignment in these units included both a written paper and an in-person presentation. The paper was developed, expanded, revised, and edited throughout the unit. Grouping within the class could be either homogeneous or heterogeneous, according to a specific purpose. Homogeneous grouping would allow me, upon occasion, to pull the students with the greatest needs (frequently those with interrupted formal education) around my desk to work together.

Also, we supplemented the practice of working with drafts and feedback with afterschool support for students who needed it. Amira, in particular, took extensive advantage of these opportunities—frequently staying for help in further developing her papers. Of course, I was careful not to correct her work for her but focused on giving her feedback and information on where weaknesses lay.

For both Amira and Jorge, the Comprehensive English Regents Examination, a New York state graduation requirement, was a huge obstacle. Jorge had the slight advantage of taking the examination while there was a "local diploma" option for students facing major challenges, which meant scoring 55 percent rather than 65 percent on the exam to graduate. After several tries, he did in fact achieve this score.

Entering the school system later than Jorge, Amira needed a grade of 65 percent, with listening, reading (both fiction and nonfiction), and writing skills tested, along with completing sections on literary response and analysis. Typically, students needed several tries to reach the passing mark, and Amira was no exception. Although she was unable to reach the target score with her cohort, she took an additional year to strengthen her skills sufficiently to make the grade for her to walk at graduation and achieve her dream of attending college.

Academic Supports

Before identifying specific academic strategies, it's worth mentioning a few basic practices in the classroom that support SIFE:

1. Create a warm and welcoming environment. Do your best to help all students feel welcomed and valued.
2. Remember that all students bring strengths with them. Try to find ways to draw these strengths out and build upon them.
3. Find ways to help students recognize and celebrate their progress.
4. Differentiate regularly—it helps to ensure that all students feel appropriately challenged and helps all to make progress.
5. Check comprehension regularly. Never consider a "yes" response an affirmation of understanding. Require instead a response that demonstrates understanding.

One of the most important considerations with specific instructional strategies is that they be well suited to the overall instructional purpose—not just used for their own sake. At one point, I was teaching a high school English class that consisted of ELLs at multiple levels (including several SIFE-designated students), both juniors and seniors, who needed to pass the English Regents exam to graduate. The exam consisted of reading and responding to and analyzing literature, among other things. One unit I developed for this class, "Reading and Analyzing *The Pearl* with ELLs," is freely available for download on Share My Lesson. The unit, a top-rated resource on Share My Lesson in 2019, includes specific lesson plans and handouts. I mention it here as an example of incorporating specific strategies for supporting ELLs into instructional planning.

The first challenge in tackling a work of literature with ELLs is actually having them read it. For this unit, I used John Steinbeck's novella *The Pearl*. I selected it for its broad universal themes, its relatively short length, and the fact that my students across the years had really loved it. So that students could read and comprehend the novella prior to beginning an analysis of it, I employed two basic reading strategies that helped them, which I describe below.

Although I do not claim to have developed these strategies, I have personalized various ones throughout my career. I trust that you will do the same, tinkering to find an adaptation that optimizes learning for your own students. If I were teaching a more advanced group of ELLs, I might speed up the initial reading stage of the unit by assigning more pages of the novella for homework, and asking students to complete double-entry journals or summaries to accompany their reading.

Read/Discuss/Write

For the first strategy, the class sits in a circle. As much as possible, I pair students whose English comprehension is stronger with

those at the earlier stages of English language development. Ideally, students work in pairs, but they can also work in threes when there are fewer stronger readers in the room. The teacher reads a passage of text, typically a paragraph in length, and reads with lots of emphasis and expression. Students have two minutes to discuss together what happened in that paragraph. Then, students have two minutes to write down the most important thing they heard in that paragraph. Then we move on, and I read the next paragraph. This process is typically repeated about five or six times in the course of a lesson. Students hand in their work as they leave the room, which serves as their classwork grade. It also informs me of their degree of text comprehension and where there may have been misunderstandings, allowing me to address them in the next class.

Additionally, I have found that it's important to give the students their work back at the beginning of the next class in order to have them buy into the assignment and understand and appreciate their own progress. Giving a classwork grade for this work strengthens student motivation.

I do vary this technique. Where I sense that a paragraph may be particularly challenging, I may elaborate a little or tackle it as a read-aloud/think-aloud activity, or use a smaller passage of text. Where the text is less complex, I may lengthen the passage I read. These choices are a matter of professional judgment, and I would strongly recommend reading ahead in order to determine the passage length and your approach to reading it in order to do the best possible job of presenting it to your students.

For students with interrupted formal schooling, this assignment also boosts their skills and confidence. The work allows them to participate with their classmates and enables the teacher to monitor their comprehension of the material. From the teacher's perspective, the combination of listening, speaking/discussing, and writing also generally helps address standards within a lesson, while the fairly disciplined timing keeps everyone focused on the task at hand.

Closer Reading

The second strategy I used was selecting a phrase or sentence that I believed needed particular attention because it unlocks a key idea or reveals an author's purpose, or just because, syntactically or in terms of vocabulary, it presents a higher degree of challenge. I would also pose questions and engage students in digging deeper to unlock the significance of this smaller part of text.

To illustrate, I'll use a line from chapter 3 of *The Pearl*: "The essence of pearl mixed with essence of men and a curious dark residue was precipitated."

With this sentence, note the potential questions around the author's use of figurative language. Particularly for newcomer ELLs, they would often struggle with the use of *residue*, *precipitated*, and, to a lesser degree, *essence* and *curious*.

First, I would read the entire paragraph utilizing the read/discuss/write strategy. I would ask students whether the essence of pearl and the essence of men are literal or figurative (having covered the difference between literal and figurative in previous lessons). Then I would ask them to think about what the "curious dark residue" might be. If they are unable to explain, I would ask them what strategies they might employ in order to answer that question. I'd hope they would be able to use the cues from the sentences beyond to determine that the "curious dark residue" equated to greed. Needless to say, wait time for an explanation is sometimes critical. Remember not to get too concerned if students are unable to come up with an astute response immediately. What matters is that they get there in the end. If they cannot answer a question at that point, make a note to return to the phrase later, when they may be better prepared.

To reiterate, I would not read the entire text in this way, but I would pre-select points of text. There are times when their written work from the read/discuss/write activity might reveal a significant gap in understanding that may require going back and looking at a particular section of text more closely. Occasionally I would engage students in close reading by reading student responses to the read/discuss/write strategy, especially if I realized that students completely misunderstood a particular passage or phrase.

One way to help SIFE is to be intentional about sharing their work with school administrators, specifically student work that demonstrates progress over time.

I would find that balancing these strategies made it possible to work through longer texts with ELLs in preparation for critical analysis. Also, when I taught literary works such as *The Pearl*, I wanted students to read and enjoy the story as much as possible before beginning the more analytical phase of the unit. In doing so, they could gain a better sense of the beauty of the language and the compelling nature of the story, and ultimately learn about reading for pleasure.

Educators teach in many different circumstances. While some of us are fortunate enough to work in environments in which our students are valued and well supported, others find themselves in settings where our students, and particularly SIFE, may be overlooked or, worse still, seen as a data problem.

One way to help SIFE is to be intentional about sharing their work with school administrators, specifically student work that demonstrates progress over time. Share the strategies that you have used to help them advance and offer to give a workshop for your peers, as I sometimes did. And maybe, while you're at it, suggest a few of the systemic supports mentioned earlier that would help your students make even more sustained improvements. Who knows? Maybe administrators will implement some of your ideas. If not, at least you know you have tried, and it's possible you have sown the seeds of an idea that will end up being implemented down the road. ☐

ELLs on the Cusp

Should We Reclassify?

By Angela Johnson and Claude Goldenberg

Juan and Abel are students in Ms. Taylor's fifth-grade class. Juan was born in the United States. He was classified as an English language learner, or ELL (the term used to identify students who are in the process of developing English proficiency), when he started kindergarten. Every year he's made adequate progress on his state's English proficiency test, and most recently he scored right on the cusp, just passing the threshold for being "English proficient." His standardized reading and math scores are not terrible, but not great either. He communicates easily in English with his teachers and classmates. Without looking at his school file, you wouldn't necessarily know that he is an ELL. Like many boys his age, Juan is energetic and sometimes distracted. Once in a while he forgets his homework or arrives a few minutes late to class.

Abel moved to the United States with his parents two and a half years ago. He spoke hardly any English and easily qualified for ELL services. He has made very good progress in a short amount of time, but not enough to be deemed English proficient. At school, he is quiet. His work is always neat and completed on time, and he has one of the highest math averages in the class. He often borrows books to read from the class library, so Ms. Taylor knows he is motivated. But his reading comprehension sometimes falters, which is reflected in reading test scores that are below grade level. This past fall, he was very close to the English proficient threshold, but the writing section held him back.

As the school year draws to a close, the principal invites Ms. Taylor and other teachers to meet and discuss the progress of ELL students in their classes. Ms. Taylor knows she will be asked if she thinks Juan and Abel should stay ELLs or be reclassified as English proficient and put in regular classes next year in middle school. Both their test scores are within a few points of the state's English proficient threshold, so they are "on the cusp" and could "go either way." What should a teacher do in this situation?

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ILLUSTRATIONS BY AGATA NOWICKA

Ms. Taylor's concern is that if they enter middle school as ELLs, they will be put into classes that don't challenge them and end up limiting their learning opportunities. Ms. Taylor has also heard that teachers sometimes underestimate the academic abilities of ELLs, particularly in middle or high school, where students are often placed in tracks at different academic levels. On the other hand, they might fail to get the support they need if their English and academics are not strong enough. In Juan's case, reading and math are challenges; in Abel's, writing is holding him back, and his reading is not as strong as it should be. Ms. Taylor is somewhat more confident about their English, but she's not quite sure how to respond. Going to the regular class would probably challenge the boys more and open new doors in terms of courses and classmates. But are they ready?

At the end of every school year, particularly as students move on to middle or high school, educators throughout the nation face the same question as Ms. Taylor: To reclassify or not to reclassify? We want students to receive the support they need *and also* have access to all the academic opportunities available. Can we have both? The reclassification decision is tricky because it sometimes feels as if there is an inevitable tradeoff between specialized support, on the one hand, and full academic access on the other.[1] In this article, we explore the complexities in the reclassification decision. We specifically focus on important recent research findings to help guide the decision-making process for ELLs whose English language proficiency (ELP) scores are right on the cusp between qualifying and not qualifying for reclassification. Students on the cusp could possibly be reclassified and placed in mainstream classes with mainstream students, but they might have some needs that would interfere with their ability to succeed in mainstream classrooms. Hence the dilemma faced by Ms. Taylor and many other teachers of ELLs.

Initial Classification and Later Reclassification

The process of initially classifying a student as an ELL is relatively simple compared with reclassification. Initial classification involves a home language survey and an English language proficiency assessment.[2] When a student enters school, her or his family answers a set of questions about languages spoken at home. The home language surveys used throughout the country vary from state to state, but all include a few questions about the child's first language, primary language, and any other languages used at home. Generally, students take an ELP test (sometimes called a "screener") if their parents report a home language other than English. If the test shows that a student is not proficient in English, she or he is then classified as an ELL.

ELL classification entitles a student to an array of services, most prominently, English language development (ELD) classes and linguistically accessible core content instruction (often referred to as "sheltered content instruction"). ELD is designed to help ELLs become proficient in English. Accessible, or sheltered, content instruction is intended to help ELLs learn core academic content while supporting their English development, particularly in the content areas. An annual ELP assessment monitors students' progress in developing English proficiency.

In addition to monitoring, the annual ELP test also determines whether ELLs can be considered for reclassification from ELL to English proficient—that is, whether their English proficiency is adequate to permit succeeding in an English-only classroom without additional supports. In most states, ELLs are reclassified as English proficient if the ELP test shows sufficient English proficiency. In other states, they become *eligible* for reclassification, pending additional factors, such as basic academic skills and teacher evaluations.[3] Because ELLs are not evenly distributed across the country—most are in a relatively small number of states—the majority of ELLs attend schools in this latter group of states.[4] They become eligible for reclassification based on an ELP test's proficiency rating, but the reclassification decision is made based on additional factors, such as academic achievement tests and/or teacher recommendations.

Reclassification has long been regarded as a key milestone in an ELL's academic experience.

The reclassification process varies substantially by state, and even by district within states (as we discuss in more detail below), but the basic idea is that students maintain ELL status for as long, and only as long, as they need additional support due to developing English proficiency. Once they gain English proficiency, according to their state's criteria, they are reclassified as English proficient, exit the ELL program, and, except for a four-year monitoring period, are treated the same as peers who were never classified as ELLs. After this point, there is no distinction between the programs, courses, monitoring, and expectations for former ELLs (now reclassified as English proficient) and for students who were never ELLs.

Reclassification has long been regarded as a key milestone in an ELL's academic experience. In schools we have observed or worked in, and confirmed in the research literature,[5] teachers often refer to "graduation from ELD" as a goal that students should strive for; teachers look forward to celebrating this accomplishment and encourage students and parents to do the same. Much policy research has focused on schools' reclassification rates and students' time to reclassification as measures of program success.[6] However, scholars are warning against a rush to reclassify, as research shows that certain groups of students who reclassify later actually end up with better academic outcomes down the road.[7] Federal regulations require districts to monitor ELLs for four years after they reclassify, but this time window may not be long enough. A large fraction of ELLs are reclassified during elementary school, which means they might no longer be monitored after middle school. But certain language and literacy issues may not arise until later.[8]

Reclassification in and of itself, however, might not necessarily be beneficial. If this is the case, it should not be treated as a

milestone with intrinsic value. Recent research is suggesting that what might actually matter is the quality of instruction and services students receive before and after reclassification. We return to this point after discussing the complexity and consequences of reclassification.

What Makes Reclassification So Complex—and Why Does It Matter?

As should be apparent, the reclassification process is even more complicated than initial ELL classification. Moreover, reclassification criteria vary greatly among states and even among districts within states. As of 2016, 30 states used scores from their annual state ELP test as the sole criterion for reclassification—but not necessarily in the same way. Some states consider only the overall composite score; others add a requirement that students reach a threshold in each language domain. As we noted previously, other states use academic achievement and other criteria, such as teacher judgment, in addition to ELP test scores.[9]

Decisions regarding attaining the threshold for reclassification are often not clear-cut, and particularly when factors in addition to ELP test scores are part of the decision-making process, they are prone to human judgment and therefore human error. Test scores are prone to error as well. None is perfectly accurate, and each ELP assessment measures somewhat different things. What constitutes "English proficiency," and therefore the threshold for reclassification, can depend on what test is used. Across the country, at least nine different ELP tests are used, each measuring ELP somewhat differently.[10] A student who qualifies for reclassification in one state or district might remain an ELL in another state or district that uses different tests and considers different factors.[11]

Layering additional requirements, such as teacher evaluation in particular, makes reclassification decisions more complex and reclassification even harder to attain.[12] It is no surprise that researchers have observed that while entering ELL status is easy, exiting can be extremely difficult. In some districts where students must meet multiple criteria for reclassification, fewer than 40 percent of students who score above the state ELP test threshold are reclassified.[13]

The problem with complex reclassification criteria and procedures is that reclassification can be delayed unnecessarily—that is, past the point when students actually need the additional supports. Delaying reclassification can be detrimental to students' subsequent academic experiences by limiting course options, access to core academic curriculum, and interaction with mainstream peers. Students who remain in ELL status may be placed in low tracks in middle and high school, segregated with little access to peers with fluent English proficiency, subjected to stigma associated with the ELL label, and confronted with diminished self and teacher expectations.[14] However, simply reclassifying students does not present a quick and easy solution. Exiting ELL status means losing language support and academic supports. For students who are not prepared to learn in an English-only environment, reclassification may do more harm than good, particularly if they are placed in low-track classes.

States set, and districts must follow, a specific threshold ELLs must attain on the annual ELP assessment in order to qualify for reclassification. If the threshold is too high, students who no longer need ELL services continue receiving them, but possibly at the cost of access to mainstream curriculum and non-ELL classmates. If the threshold is too low, students who still need ELL services don't receive them and are likely to have difficulties in mainstream classes. The heart of the matter is not solely whether the reclassification bar is set too high or too low, but rather where the reclassification bar is set *in relation to* the support ELLs might need and *combined with* adequate access to mainstream curriculum and peers.[15]

This is admittedly a lot to bear in mind. At the end of this article, we make some recommendations we hope will provide concrete guidance. The balance between adequate access to mainstream classes and necessary support is key. This is obviously an important educational issue. It is also a legal and civil rights issue: ELLs who are exited too soon are denied access to English language services, while ELLs who are exited too late may be denied access to parts of the general curriculum.[16]

Research on Reclassification and Its Effects

When we simply look at the average outcomes of ELLs and reclassified (i.e., former) ELLs, we see that ELLs reclassified to English proficient are more likely to take rigorous content classes, are more likely to take a full load of core content classes, have higher achievement and better behavior, and graduate from high school at higher rates.[17]

However, direct comparisons are misleading. ELLs reclassified to English proficient and students who remain ELLs differ in many ways, not least of which is that, by definition, reclassified students have higher levels of English proficiency and, in states with academic requirements for reclassification, higher academic achievement. They can also differ in terms of family socioeconomic background, parent education level, initial English proficiency level, and other factors. Since these factors are associated with academic outcomes down the road, simply comparing the academic performance of ELLs who are reclassified to the academic performance of those who remain ELLs will lead to inaccurate conclusions about reclassification's effects.

Instead, we must compare reclassified and not-reclassified students who resemble each other as much as possible in all respects other than reclassification. But randomly assigning similar students to reclassification or remaining ELLs is obviously not an option.

Researchers have developed a technique that allows us to make these comparisons without using random assignment. They do this by taking advantage of the randomness that is part of every educational measurement. These studies involve using the scores of students who took the annual ELP test and scored very close to the reclassification threshold—at, slightly above, or slightly below.*

Here is the logic underlying this research design: A student's test score comprises two components. The first represents what the student actually knows and can do—that is, her or his *true* level (proficiency, knowledge, skill—whatever is being measured). The second component comprises everything else that can influence a student's test score but is irrelevant to his or her true ability. These include, for example, the weather, traffic on the way to school, the quality of sleep the student got the night before, the lighting in the classroom, and other conditions. These factors are random and have nothing to do with the student's true ELP level. Yet they can influence test performance.

These random occurrences will cause students whose true ELP is at or close to the state-mandated score to fall on or on either side of the proficiency threshold. Even though their scores differ, for all intents and purposes these students have essentially the same true ELP level. Whether they were reclassified or remain ELLs is therefore due to random occurrences, almost as if it were a random assignment.

To illustrate these "random occurrences," imagine two students, Charlie and Sammy, with the same true English proficiency level. Both are scheduled to take their test during first period. Charlie arrived at school on time and was ready to take the test. Sammy's bus came late. After getting off the bus, she ran all the way to her classroom, not having time to catch her breath before starting the test. Charlie gets exactly the minimum score to be considered proficient; Sammy, having felt rushed and stressed during the test, gets one point lower and is therefore below proficient. Based on these test scores, Charlie is reclassified and enters the regular classroom the following year; Sammy stays an ELL.

Every year, thousands of students in each state, like Charlie and Sammy, score within a few points of the threshold for English proficiency. Their ELP levels—their true scores—are essentially the same, yet for random reasons, some score at the threshold or just above it and end up reclassified, while the rest score just below and stay in ELL status. Based on the two groups' essentially identical ELP levels, we would expect their future academic outcomes to be very similar—but for reclassification. If, as a group, their outcomes differ, it would very likely be because one group was reclassified and therefore experienced changes in curriculum and services, while the other group was not reclassified and therefore did not experience those changes.

A handful of recent studies have taken this approach to determine whether reclassification in and of itself has any effect on subsequent academic trajectories for students with ELP levels right around the threshold for reclassification. An important caveat is that the findings from these studies are only generalizable to students at the cusp, at or very near the cutoff for reclassification. This research does not apply to students who are far below the reclassification threshold.[18]

These studies, each of which looks at a single state or district, have found that the effects of reclassification can be positive, zero, or negative—meaning that students at or near the reclassification threshold who reclassify have better, the same, or worse outcomes in subsequent years, compared with students with equivalent ELP levels who do not reclassify. Why the wide variation?

*This is called a regression discontinuity design.

Students' progress in developing English language proficiency and academic skills and competence should be a steady progression, whether they remain ELLs or are reclassified to English proficient.

Whether reclassification has an effect on ELLs' subsequent achievement appears to depend not so much on reclassification per se, but rather on students' experiences before and after reclassification. Where un-reclassified ELLs on the cusp remain in or are placed in lower academic tracks with little chance of moving to a higher track, reclassification had a positive effect, probably because reclassified ELLs are more likely to be placed in a higher track and in classes with non-ELLs, free from whatever stigma the ELL label might carry, and they subsequently do better academically.[19] Moreover, where ELLs are required to take ELD and sheltered classes instead of mainstream content classes, the effects of reclassification were stronger.[20]

In contrast, in districts where ELLs are integrated with non-ELLs in math and English courses, even if they had not yet reclassified, no clear reclassification effect was found.[21]

These studies suggest that continued segregation into ELD and sheltered classes for ELLs who do not reclassify but are at or near the threshold for reclassification might explain the positive effect of reclassification for students who do reclassify. We cannot know for sure, since the research did not look deeply into within-school factors that could explain the findings. But it is distinctly possible that it is not reclassification per se that has an effect on ELLs' achievement trajectory, but rather the instructional, curricular, and social consequences of what happens as a result of being, or not being, reclassified.

The studies also raise an important question: What should be the effect of reclassification? Or should there be an effect at all?[22] Generally, we expect educational practices and procedures to have positive effects. But think about it: reclassification, while signaling that students have reached a certain level of English and academic proficiency, involves *removing* practices and procedures designed to help students not yet adequately proficient in English. If the effect of removing these services is negative, that means they were necessary, since student performance suffered following their removal. On the other hand, if the effect of reclassification is positive, that means ELLs were not served as well as their reclassified counterparts, whose performance improved when they exited ELL status.

Readers should keep in mind that we need to be cautious before making across-the-board recommendations based on a very small sampling of U.S. schools. If the studies we reviewed here were replicated across the country, we might see differences based on district size, region, composition, urbanicity, or other factors.

In any case, the evidence we do have—which comprises the only data to our knowledge that adequately address the specific issue of ELLs at the cusp of reclassification—suggests that the effect of reclassification should be *zero*.[23] That is, students' progress in developing English language proficiency and academic skills and competence should be a steady progression, whether they remain ELLs or are reclassified to English proficient. Reclassification should not be an event or a practice that disrupts that progress, either positively or negatively. Instead, ELL classification should provide the support needed for as long as—but only as long as—it is needed. Easier said than done, we know. So, how do we determine which students to reclassify?

What State Policymakers and District Leaders Can Do

Our first recommendation to state and district leaders is to *not layer on requirements for reclassification in addition to federally mandated ELP testing*. The federal government only requires "using a valid and reliable ELP assessment that tests all four language domains" (listening, speaking, reading, and writing).[24] We understand the importance of multiple indicators, but it is not known whether additional requirements, such as other academic criteria or teacher judgements, make reclassification decisions more valid.[25] Tests certainly have margins of error; they are known to be imperfect. But we have no idea of the margin of error for other criteria for making reclassification decisions.

What we do know is that when factors in addition to ELP scores are used to determine reclassification, reclassification rates go down.[26] But we don't know if the use of additional factors is affecting students similarly across the board, or if certain subgroups of students are remaining in ELL status longer than others as a result. In general, we don't know how consistently these additional factors are measured and weighted by teachers and schools. It is possible, and likely, that the same student would be deemed ready for reclassification by one school but unready by another school in the same district. Additional criteria inconsistently implemented across contexts increases the likelihood of inequitable treatment of ELLs, even in the same state or district.

If you are a policymaker in a state that requires criteria in addition to a reliable and valid ELP test, you should work to have the additional requirements removed. If you are a district policymaker, you must of course comply with state policies if they require additional reclassification criteria. But we urge that these criteria be no more stringent than the ELP testing criteria. There should be no criterion that overturns a reclassification decision made based on ELP test performance. Other criteria might be used to confirm what the ELP test results indicate, but an ELP test result should be overturned only when there is very clear evidence that it significantly overstates or understates a student's ELP level. And even in this case, retesting is probably the preferable alternative.

In some circumstances, it might be impossible to eliminate additional criteria. In these cases, we urge you *to make certain that ELLs who are on the cusp and not reclassified are exposed to as much mainstream curriculum and as many non-ELL peers as possible*.

Our other recommendations are aimed primarily at district policymakers. In brief:

- Be very clear on what the reclassification criteria are in your state;
- Look into your own data to see what effect current reclassification criteria are having; and
- Determine what changes, if any, are needed.

As a first step, *determine your state's reclassification criteria and procedures*. As per above, ideally the criteria involve only using a reliable and valid ELP measure that tests English listening, speaking, reading, and writing. By law, states must have procedures to make certain that ELLs receive the educational supports to which they are entitled.[27] If they do not, they can be sued. Make sure your district's criteria fully align with the state's. Criteria should be written out, very explicit, well-operationalized, and easily accessible on the district website and at school sites. Be sure all district faculty and staff who are involved in reclassification decisions are well-versed in the criteria and how they should be applied.

Once district reclassification criteria and procedures are in place, they should be followed consistently by schools. Similarly, all districts in a state should follow the state's reclassification criteria and procedures, even if a state permits individual districts to set their own policies.[28]

It can be hard to take ELP test scores at face value, especially for students just a point or two above or below the threshold. We understand the temptation to override these scores with your own beliefs and expectations. For example, you might believe that a student's true level is actually higher than her score and that she, like Sammy, just had a bad day on test day. Similarly, you might believe that a student's true level is lower and that he, like Charlie, just had a good day. The challenge is that our beliefs and expectations can be shaped by various biases and end up being even less accurate than tests of known reliability and validity. In order to ensure that all ELLs within the state are evaluated using equitable criteria, we need to rely on the state's test score threshold instead of individual judgment.

Next, *use data based on reclassification thresholds to help you evaluate how well the reclassification threshold is working in your district.*

Identify two groups of ELLs: (a) those who score at or just above the threshold and get reclassified, and (b) those who score just below and remain ELLs. Since tests, test scores, and student populations vary across contexts, what range of test scores (and thereby how many students) around the threshold to consider must be determined locally by individual school districts. Monitor the performance of those two groups over the next year and for as many years as possible. Note that it is already a federal requirement to monitor English-proficient students for four years post-

reclassification; we suggest you also monitor those students who just missed the cutoff. You will not know whether your cutoff is set too high or too low until you compare the downstream performance of ELLs who were reclassified to the performance of those with practically identical English proficiency levels who were not. As you do for all students, make sure everyone gets high-quality academic language and content instruction, regardless of whether she or he reclassifies.

Finally, *compare the performance of these two groups in order to help inform you about whether changes are needed in your reclassification threshold, curricular opportunities for ELLs on the cusp who are not reclassified, or both.*

If you see students who barely reached the reclassification criteria performing much better after reclassification than those who barely missed the threshold and stayed ELLs, that's a sign that something is not quite right. One possibility is that the threshold for reclassification is set too high and that more ELLs could benefit from reclassification than are actually being reclassified. The other is that students who do not reclassify remain in ELD and sheltered classes, which keeps them from accessing the full, rigorous core curriculum and being sufficiently challenged by the content of courses they take. Both factors could be at play. The district should follow up by determining whether the un-reclassified ELLs are in classes that prevent access to core curriculum and non-ELL peers. If so, that needs to be changed. If for some reason that is not possible, the reclassification threshold probably should be lowered.

If, on the other hand, students who barely reached the reclassification criteria perform much worse after reclassification than those who barely missed the cutoff and stayed ELLs, that's a sign that the threshold for reclassification might be set too low or students who are reclassified need better support in the mainstream classrooms.

However, if you see that reclassified students who just made the cutoff and students who just missed it and remained ELLs perform at about the same level, this is a pretty good indication that your reclassification criteria are set just about right. It does not necessarily mean that the academic performance of ELLs and former ELLs is satisfactory. It simply means that reclassification neither improves achievement for those who reclassify nor depresses the achievement of ELLs who do not.

Tailoring the reclassification policy to fit your own student population takes time and requires calibration. Start with your state's common definition and policy so that you have a steady baseline for comparison. Track your students' performance over time, and adjust local policies and services as necessary until you see students who just barely meet and students who just miss the ELP threshold perform the same. This will mean that reclassification has no effect, reclassified ELLs are transitioning smoothly to English-proficient classrooms, and the ELL curriculum is serving students in a way that is equivalent to the mainstream classes.

What's a Teacher to Do When an ELL Can "Go Either Way"?

No matter the reclassification policies determined at state and district levels, classroom and building educators are the ones who must implement them. Every decision in this decision chain matters.

ELLs who are on the cusp and not reclassified should be exposed to as much mainstream curriculum and as many non-ELL peers as possible.

In the school described at the beginning of this article, the teacher's input is considered in reclassification decisions. Whether Juan and Abel get reclassified is partly up to Ms. Taylor. Although Juan scored above the state's ELP test threshold, the school might not reclassify him if Ms. Taylor doesn't think he's ready. Abel missed the writing threshold, but the school might reclassify him if Ms. Taylor thinks he will succeed without further ELL services.[29]

If your state allows reclassification decisions to be made by the district or school, you might be asked to give your recommendation for students like Juan and Abel. If you live in a state that does not consider teacher recommendations, you can still help improve the chances that students' transition to the mainstream classroom will be successful. Whether or not teacher recommendation is factored into the reclassification decision, you can help ELLs receive the academic opportunities they need to succeed. Based on research, here are answers to some questions teachers might ask:

Q1. My state lets districts decide whether to reclassify ELLs. Should I recommend reclassifying students like Juan, who barely reached the proficiency score? How do I know that they are truly ready? I'm not sure the test is the best gauge of his English proficiency.

A. *Yes, you should reclassify students who have reached the state ELP threshold.* Students like Juan who have demonstrated a level of English proficiency required by the state need to be reclassified. Other factors, such as turning in homework late and being tardy to class, are irrelevant to the reclassification decision because they have nothing to do with English proficiency. Students like Juan should be reclassified and carefully monitored following reclassification. Reclassification would not harm them if they receive high-quality instruction and curriculum, as all students are expected to receive. Impeding reclassification, especially just before ELLs transition to middle school, can result in restrictions to academic access. If ELLs on the cusp who are going into middle school remain in ELL status for another year, they could get stuck in low-track classes. This could restrict their academic progress.

Q2. What about Abel? Should I recommend that he be reclassified? He's smart, motivated, and well-behaved. I think he'll be fine.

A. *You should use your state's reclassification test score threshold, so no, do not reclassify students like Abel.* We understand the temptation to reclassify students who scored just below the threshold. But

you should observe your state's ELP threshold. Following the state's test score threshold policy has two advantages. First, you and your district must comply with federal law requiring that ELLs be provided with necessary support services until they reach adequate English language proficiency. Basing the decision on the results of a valid and reliable ELP assessment, as required by federal law, protects you and the district. Second, following your state's test score threshold will increase equitable treatment of ELLs across the district and the state, making it more likely that ELLs who need services will receive them, and that those who don't will have full access to core curriculum and appropriate learning opportunities.[30] Teacher recommendation is valuable, but the difficult part is that teachers use different considerations (e.g., class grades, attendance, and what they determine to be indications of motivation) to arrive at their recommendation, and we really don't know how valid and reliable those considerations are.*

As we previously discussed, we know that tests are imperfect, but we also know their margins of error. In contrast, we have no idea what the margin of error is for teacher reclassification judgements. What we do know is that adding additional requirements means fewer students reclassify than the number of students who are in fact eligible for reclassification. Many, if not most, of these students would benefit from reclassification. Until we have a better understanding of whether teacher judgements and other factors lead to better reclassification decisions, a well-developed and normed ELP measure—imperfect as it may be—is likely to be the most fair and objective criterion available.

Q3. My state and district reclassify all ELLs who have reached the state-mandated ELP threshold. Since my opinion isn't factored into the reclassification decision, is there anything I can do to help my ELL students be successful before and after they reclassify?

A. *Yes, you should provide as much access as possible to mainstream curriculum and non-ELL peers.* Research shows that reclassification has no effect in contexts where ELLs at or very near the reclassification threshold shared curriculum and classroom space with non-ELLs.[31] Integration gives ELLs more exposure to higher-level English language, academic discourse, content materials, and English-proficient peers. The rule of thumb ought to be to provide ELLs with the opportunity to learn the same skills and academic content as their English-proficient peers.[32] Exposing ELLs to mainstream curriculum and peers is likely to help accomplish this. And of course, as we have already said, make sure all students get high-quality academic language and content instruction, regardless of whether they reclassify. ☐

*Some states (e.g., Pennsylvania) require teachers to use a common rubric to make reclassification decisions, but teachers might not have a shared understanding of the rubric. Again, the implementation on the ground has not been researched.

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Supporting English Language Learners

Many new teachers enter the classroom without much formal preparation or student-teaching experience with English language learners (ELLs). In fact, many teachers feel that their teacher preparation programs did not adequately prepare them to work with ELLs. Given that nearly one in four students in the United States speaks a language other than English at home, and increasing numbers of educators are working with diverse student populations, it is vital that both new and experienced teachers have access to resources to help ELLs succeed.

According to Education Northwest and Colorín Colorado, educators working with ELLs should keep in mind four basic principles and big ideas as they plan lessons and carry out instruction: (1) ELLs move through different stages as they acquire English proficiency; (2) there is a difference between conversational and academic language; (3) ELLs need instruction that will allow them to meet content standards; and (4) ELLs bring their own background knowledge to school.

Share My Lesson has resources available to help all teachers and paraprofessionals apply these principles in their schools. Below, we highlight several resources from Share My Lesson collaborator Colorín Colorado, the most widely used online resource for educators and families of ELLs and a partnership project coproduced by the AFT and PBS station WETA.

ELLs Move through Different Stages as They Acquire English Proficiency

An important first step for educators when meeting a new ELL student is to assess his or her current level of English proficiency. Then, each month, teachers should track students' progress over time. This is essential because learning a new language is a complex process, and each student learns at his or her own pace.

In order to ensure that instruction meets the needs of each ELL, educators should keep track of students' academic language usage and understanding. For resources on tracking academic language use, check out "ELL Starter Kit for Educators." This kit from Colorín Colorado includes lists of common classroom phrases in English and Spanish and cognates, as well as forms for measuring student progress.

There Is a Difference between Conversational and Academic Language—ELLs Need Instruction That Will Allow Them to Meet Content Standards

Sometimes educators may feel like their students are making progress because they are conversing more in English. While this is certainly something to celebrate from a social perspective, it's important not to lose sight of the need for students to learn the particular English phrases that will help them succeed academically. In "Encouraging ELL Student Language Use," a video from Colorín Colorado, ELL expert Kenji Hakuta helps teachers work with students on learning language for standardized assessments. Also, be sure to check out another Colorín Colorado resource, "Signal Words for ELLs," to aid students in their reading of academic texts.

ELLs Bring Their Own Background Knowledge

In addition to working on academic language acquisition, educators should acknowledge the background knowledge that ELLs bring to school. Teachers can create space for students to express and use their unique strengths and life experiences as either first- or second-generation students in American schools. To foster inclusive classrooms, "A Culturally Responsive Guide to Fostering the Inclusion of Immigrant-Origin Students," a resource from Re-imagining Migration, offers specific strategies for identifying ELLs' strengths and understanding the challenges they face.

Just as important, teachers can reach out to parents of ELLs, despite language differences. An educator toolkit from Colorín Colorado on this very topic offers suggestions on communicating with parents about supporting their children's literacy skills and academic success.

To see what other resources Share My Lesson offers to support teachers of English language learners, visit our entire collection of educator-generated lesson plans, resources, and activities specifically for ELLs. If you have additional ideas or requests, please reach out to us at content@sharemylesson.com.

–THE SHARE MY LESSON TEAM

Recommended Resources

What Teachers Should Know about Instruction for ELLs
http://go.aft.org/ae120sml1

Colorín Colorado
http://go.aft.org/ae120sml2

ELL Starter Kit for Educators
http://go.aft.org/ae120sml3

Encouraging ELL Student Language Use
http://go.aft.org/ae120sml4

Signal Words for ELLs
http://go.aft.org/ae120sml5

A Culturally Responsive Guide to Fostering the Inclusion of Immigrant-Origin Students
http://go.aft.org/ae120sml6

Educator Toolkit: Reaching Out to Parents of English Language Learners
http://go.aft.org/ae120sml7

English Language Learners: Lesson Plans, Resources, and Activities
http://go.aft.org/ae120sml8

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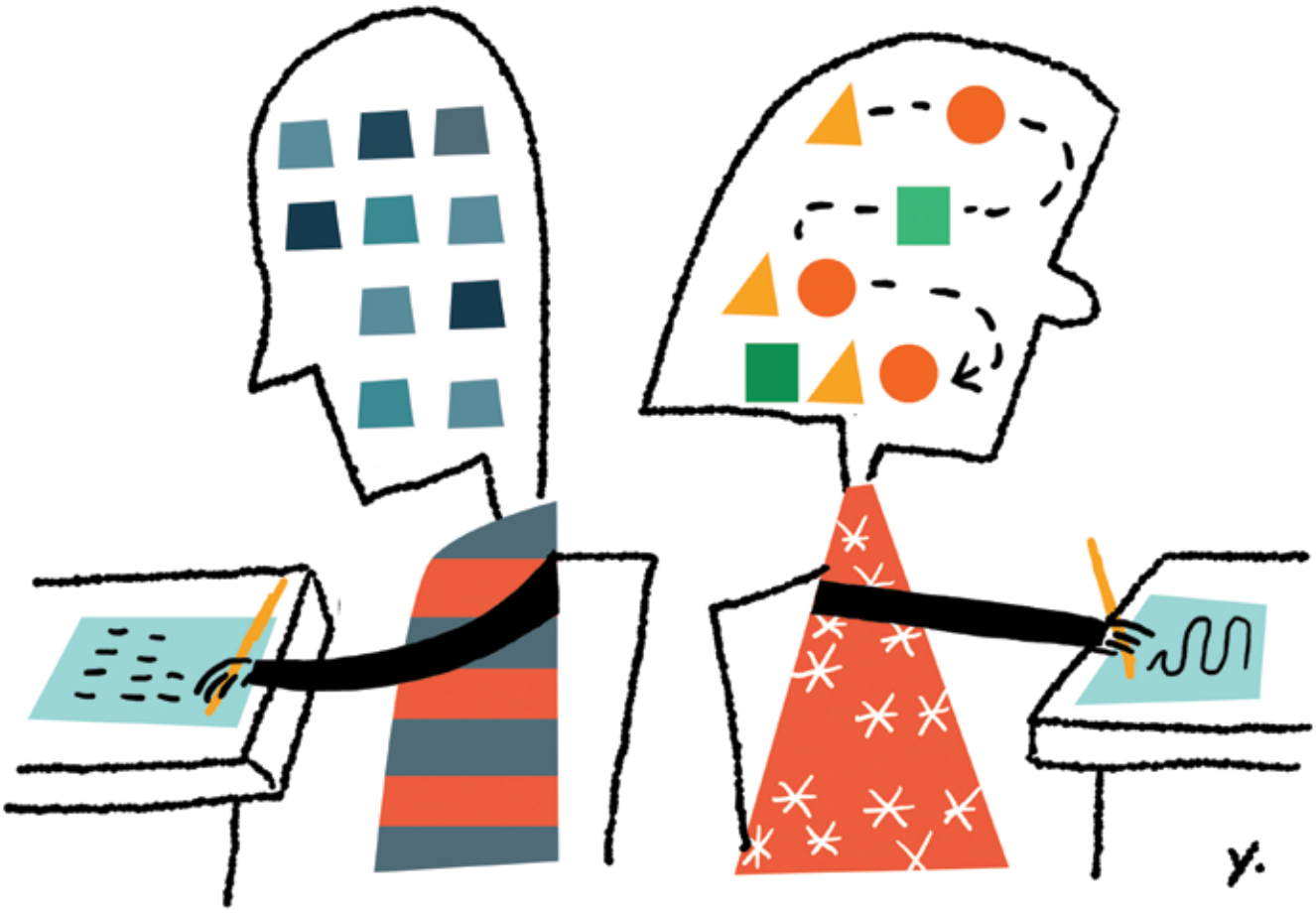
Interleaving in Math

A Research-Based Strategy to Boost Learning



By Pooja K. Agarwal and Anne Agostinelli

When the Common Core State Standards were introduced in Illinois in 2010, teachers became very adept at planning hyper-focused units that "dove deeply" into the content and worked to develop students' mathematical habits through the Common Core's Standards for Mathematical Practice. It was an exciting time; as a math teacher in Illinois, I (Anne) got to solve and learn about rich tasks, there were more opportunities for cross-school collaboration than ever before, and I spent time thinking about the "how" of facilitating problem solving in my classroom.

So why, then, were my students performing so well in the short term and so poorly in the long term, when their learning and understanding of the content seemed so deep? Why did students who I taught in seventh grade swear to me in eighth grade that they had never heard of similar geometric figures, when we spent six weeks studying them and they rocked every assessment at the end of the unit?

I had thought that because we had spent ample time on content and students were able to solve complex problems on the unit assessments, that we were good. What I later realized was that I had not created opportunities for students to continue retrieving the information over time to improve and deepen their learning.

From this realization, I began to look into memory research and tried to think about ways to weave in review. Everything I came across was labeled as "spiraling," and it seemed like a lot of work to put together things like daily warm-ups and then a lot of class time to dedicate to this separate piece of an already-packed class period.

Then, I started to notice a strategy called interleaving* in the research I was reading. After learning more about the science of learning and connecting with Pooja, a cognitive scientist, I began to understand both what the research has shown about this

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*For resources on interleaving, visit www.retrievalpractice.org/interleaving.

ILLUSTRATIONS BY JAMES YANG

research-based strategy and how to implement it quickly and easily in my classroom.†

Interleaving: Simply Mix It Up

One of the most fundamental strategies in mathematics instruction is practice problems. Why? Because, as we all know, practicing a skill improves the performance of that skill. At the same time, we also know that just because students can correctly answer practice problems doesn't mean they fully understand the concept or how to apply a formula—especially not in the long term. In other words, just because students understand a key concept in seventh grade doesn't guarantee they'll understand or remember the same concept in eighth grade.

How can we ensure that students are learning math and improving their skills, both in the short term and the long term? As described in the book *Powerful Teaching: Unleash the Science of Learning*, research by cognitive scientists demonstrates that interleaving, or the simple strategy of mixing up concepts to be learned, can increase (and even *double*) math learning.[1]

Think about a typical problem set from a textbook. A lesson on ratios, for instance, might be followed by a dozen ratio problems. This is a *blocked arrangement*, where problems on one concept are introduced all at once, followed by problems on a second concept, then problems on a third concept, and so on. In fact, an analysis of six popular middle school math textbooks found that more than 80 percent of the practice problems were blocked.[2]

Less common—but more powerful for learning—is an *interleaved arrangement*, where practice problems for multiple concepts are interleaved or mixed up across the problem set. For example, let's say that students from a fourth-grade mathematics classroom are learning about the number of faces (F), edges (E), corners (C), and angles (A) of prisms. After the four concepts are taught, students could practice their understanding in two different ways (with each letter below representing one practice problem):

Blocked Problem Set:	F F F F E E E E C C C C A A A A
Interleaved Problem Set:	F E C A F E C A F E C A F E C A

In the blocked problem set, students complete four practice problems on faces, then four on edges, then four on corners, and lastly four on angles. In the interleaved problem set, the different types of practice problems are mixed up. Importantly, both sets have the same type and number of practice problems; they've simply been rearranged. What's remarkable is that simply mixing up similar concepts in the interleaved problem set dramatically improves long-term learning compared with the blocked problem set.

Consider a simple example about baseball, from the book *Make It Stick: The Science of Successful Learning*. If a batter receives 10 fastballs, followed by 10 changeups (slower pitches), and then 10 curveballs, the batter will know she only has to change her batting strategy after 10 pitches. The batter literally knows what's coming. But, if the batter doesn't know which type of pitch is coming—if the pitches are mixed up or even random—the batter will have to choose which batting strategy works best for each pitch.[3]

†For more on interleaving and other strategies, see "Strengthening the Student Toolbox" in the Fall 2013 issue of *American Educator*, available at www.aft.org/ae/fall2013/dunlosky.

Interleaving, or the simple strategy of mixing up concepts to be learned, can increase (and even *double*) math learning.

Interleaving is not only powerful for learning; it's flexible, too. This strategy has been shown to improve the learning of math concepts as diverse as fractions, algebra, calculus, and geometry.[4] It promotes learning for students ranging from elementary and middle school to college. In fact, interleaving is also beneficial for nonmath skills, including learning foreign language vocabulary, remembering song lyrics, associating artists with their paintings, and identifying types of birds.[5]

I (Anne) assigned weekly homework to my eighth-grade classes, which consisted of five problems. The first two problems were related to what we were studying the current week, and the other three problems related to content learned last week, last month, and last year. By interleaving related problems from previous learning, students had to discriminate and select appropriate strategies to use to solve the problems.

Here are examples of interleaved problems we solved when working to connect number play with expressions and equations:

1. Who am I? Find the number described by this set of clues:
   A. I am a two-digit number.
   B. Both of my digits are even.
   C. I am the product of two consecutive whole numbers.
   D. The sum of my digits is greater than the product of my digits.
2. Choose a number. Add 3. Multiply by 2. Add 7. Subtract 15. Add 2. What is the result of this number trick? Generalize it.

3. Put a set of parentheses in each of the equations below to make it true:
   A. $3 \times 7 + 3 = 30$
   B. $25 - 5 + 4 \times 5 = 0$
   C. $25 - 5 + 4 \times 5 = -20$
4. Sergio says that using the distributive property *backwards* helps him solve equations. Explain what you think he means. You may use this equation to help illustrate your thinking: $2(x - 3) = 18$.
5. Jeremiah counts the quarters in his piggy bank. He has 24 more quarters than his sister, Eboni. If r is the number of quarters Jeremiah has, write an expression to represent the total number of quarters Jeremiah and Eboni have.*

As teachers and students know, when learning is challenging, it "sticks" and becomes more permanent.

The memories triggered by interleaving were perhaps best summed up by a student who wrote in a reflection, "I liked weekly homework because it reminded me of stuff I knew really well before but had kind of forgotten. When I remembered it, it made learning the new stuff easier and it made more sense."

We wish to emphasize that interleaving in math does not mean teachers must create problem sets from scratch. If you assign students practice problems from a textbook, assign related problems from previous chapters and the current chapter. *There is no need to change the problems*—simply mix up what you assign.

Research on Interleaving

In the example above, where fourth-graders were learning about prisms, researchers found that test performance immediately after practice problems was higher for the blocked condition. After just 24 hours, however, interleaved practice led to significantly greater test performance (77 percent) compared with blocked practice (38 percent).[6]

In another research study, seventh-grade students were learning about graphs and slope. After 24 hours, students who completed interleaved practice problems outperformed students who completed blocked practice problems by more than a letter grade (80 percent vs. 64 percent). Even more dramatically, after one month, test performance for the interleaved group was almost *double* compared with performance for the blocked group (74 percent vs. 42 percent).[7]

In a recent study, nearly 800 seventh-grade students in Florida completed math worksheets throughout the semester that contained interleaved problems or blocked problems related to circles, graphs, inequalities, and expressions.[8] On a final test one month later, students in the interleaved group scored significantly greater (61 percent) than students in the blocked group (38 percent). Across these studies, and many more, the evidence for interleaving is clear: simply rearranging practice problems can make a large impact on students' long-term mathematics learning.

Researchers refer to the benefits from interleaving as a "desirable difficulty." As teachers and students know, when learning is challenging, it "sticks" and becomes more permanent. When teachers interleave history concepts (e.g., key events from the French Revolution and Russian Revolution), science concepts (e.g., mitosis, meiosis, and fission), or concepts from other content areas, students must engage in "retrieval practice" to think carefully, pull information out, and practice what they know.

Keep in mind that because of these desirable difficulties, interleaving may lead to lower initial performance on practice problems, giving the impression that interleaving is ineffective. As we described earlier, what works best for learning in the short term (blocked practice) does not guarantee learning in the long term!

We surveyed hundreds of educators around the world about interleaving and asked the following question: "Why are interleaved practice problems (ABC ABC ABC) more beneficial for learning than blocked practice problems (AAA BBB CCC)?"† Here are some of the ideas that teachers shared:

- Blocked practice becomes repetitive about procedure. With interleaving, you have to switch gears when thinking about each type of question.
- Interleaving forces retrieving both what type of question it is and what to do with that type of question.
- With interleaving, greater effort is required for retrieval, and greater effort means greater learning.
- Interleaving helps students down the road when they need to decide which process to use in solving a problem.

*Answers to the set of problems beginning on page 25:
1. 20
2. The result will always be twice the starting number.
3. $3 \times (7 + 3) = 30$
   $25 - (5 + 4 \times 5) = 0$
   $25 - (5 + 4) \times 5 = -20$
4. Sergio means that solving equations is "undoing" the steps it took to set up the equation. In this example, he could divide by 2 first, then add 3 to get that $x = 12$.
5. $r + (r - 24)$

†This survey is available at www.retrievalpractice.org/interleaving-survey.

- Interleaving encourages deeper processing during each practice set, and also more accurate monitoring of your learning progress.
- Interleaving helps get rid of that familiarity that comes with repeated practice, minimizing the illusions of competence and mastery.

The Key to Interleaving: Discrimination

Why does the rearrangement of practice problems enhance mathematics learning? It's because interleaving promotes *discrimination*, and the key to interleaving is mixing up *similar* ideas.

Consider this first example, where two problems look similar yet require subtly *different* strategies:

Solve $x^2 - x = 1$ (requires the quadratic formula)
Solve $x^3 - x = 0$ (requires factoring)

In a second example, math problems could look different but require the *same* strategy. Below is a blocked assignment from an eighth-grade mathematics textbook.[9] After students solve problems 1–9, which explicitly require multiplication, students can correctly assume that problem 10 (a word problem) also requires multiplication.

1. $(\frac{3}{5}) - (\frac{5}{7})$
2. $(\frac{4}{5}) - (\frac{3}{8})$
3. $(\frac{6}{7}) - (\frac{7}{6})$
4. $(-\frac{1}{8}) - (\frac{4}{9})$
5. $(-\frac{2}{9}) - (\frac{3}{8})$
6. $(-1\frac{2}{13}) - (-\frac{2}{3})$
7. $(1\frac{1}{3}) - (5\frac{1}{2})$
8. $(2\frac{1}{2}) - (1\frac{2}{5})$
9. $(-6\frac{3}{4}) - (1\frac{7}{9})$
10. Rhode Island is the smallest state in the United States. Its area is about 1/6 the area of New Hampshire. If the area of New Hampshire is about 9,270 square miles, what is the approximate area of Rhode Island?

In this second example, students can solve the word problem *without reading any words*.[‡] If an entire problem set requires the same procedure or strategy, students can safely "plug and chug" without thinking about what they need to do.

For interleaving, it's not the format of the practice problems that matters; it's the underlying concepts. If you want students to discriminate carefully, interleave practice problems that look alike but require *different* strategies.[10]

Try interleaving for yourself. What are the answers for these problems?

- A bug flies 48 miles east and then 20 miles south. How far is the bug from where it started?
- A bug flies 48 miles east and then 14 miles north. How far is the bug from where it started?
- A bug flies 48 miles east and then 6 miles west. How far is the bug from where it started?

We posted these interleaved practice problems online, and of more than 250 responses, 65 percent of teachers got the first problem correct, 59 percent of teachers got the second problem correct, and 93 percent of teachers got the third problem correct.[§]

Did you notice what's different about the third problem? It requires simple subtraction! We're glad teachers in our survey didn't fall for the subtle switch from the Pythagorean theorem to subtraction, but chances are your students won't be as savvy without more interleaved practice.[11]

Interleaving promotes *discrimination*, and the key to interleaving is mixing up *similar* ideas.

I (Anne) also use problems from my curriculum (Illustrative Mathematics) to interleave opportunities for eighth-grade students to select strategies as part of their independent practice, like the problems below.[12]

1. When Han makes chocolate milk, he mixes 2 cups of milk with 3 tablespoons of chocolate syrup. Here is a table that shows how to make batches of different sizes.

cups of milk	tablespoons of chocolate syrup
2	3
8	12
1	3/2
10	15

×4 (2 → 8) ×4 (3 → 12)

Use the information in the table to complete the statements. Some terms are used more than once.

A. The table shows a proportional relationship between _____ and _____.
B. The scale factor shown is _____.
C. The constant of proportionality for this relationship is _____.
D. The units for the constant of proportionality are _____ per _____.

Bank of terms: tablespoons of chocolate syrup, 4, cups of milk, cup of milk, 3/2

2. A certain shade of pink is created by adding 3 cups of red paint to 7 cups of white paint.

A. How many cups of red paint should be added to 1 cup of white paint?

cups of white paint	cups of red paint
1	
7	3

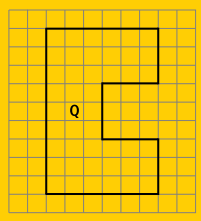
B. What is the constant of proportionality?

[‡]The correct answer for problem number 10 is 1,545 square miles. Calculating the answer requires the same procedure as problems 1–9: multiplication.
[§]The correct answers are 52, 50, and 42, respectively. For more interleaving practice problems, visit www.retrievalpractice.org/interleaving-practice.

3. A map of a rectangular park has a length of 4 inches and a width of 6 inches. It uses a scale of 1 inch for every 30 miles.

   A. What is the actual area of the park? Show how you know.
   B. The map needs to be reproduced at a different scale so that it has an area of 6 square inches and can fit in a brochure. At what scale should the map be reproduced so that it fits on the brochure? Show your reasoning.

4. Noah drew a scaled copy of Polygon P and labeled it Polygon Q.



   If the area of Polygon P is 5 square units, what scale factor did Noah apply to Polygon P to create Polygon Q? Explain how you know.

5. Select all the ratios that are equivalent to each other.

   A. 4:7
   B. 8:15
   C. 16:28
   D. 2:3
   E. 20:35

All of the problems in the above example are related to the broad topic of proportional reasoning, but they have nuances that call for different methods to solve. These nuances help students discriminate and tap into prior learning, and both my students—and I—saw a difference. Students were more confident about the current learning in this content strand and were more thoughtful about how they solved problems. This change was a huge shift for some students who previously relied on whatever method was discussed in class most recently to solve any problem they were given.

Keep in mind that mixing everything up doesn't mean it's always beneficial for learning. One study indicated that mixing up different course subjects—for example, chemistry and history—does not increase learning.[13] Why not? Simply because this doesn't involve discrimination; the content areas are too different. As another example, think of a fruit salad that's full of blueberries, strawberries, and raspberries. Would you add carrots or broccoli? Probably not! It's important to interleave *similar* concepts so students really have to think about the subtle differences. When students really have to think, this challenges learning—which boosts learning.[14]

Planning for retrieval practice became a regular part of my unit planning. I (Anne) worked to gather screenshots of freely available online problems and organized them into files that helped me quickly grab what I needed for specific content. The materials I formerly used to create graded quizzes, I repurposed for interleaving opportunities. I laid out my units with students' assumed prior knowledge in mind so that these power tools could help them access material they had stored somewhere in their memories.

Keep in mind that mixing everything up doesn't mean it's always beneficial for learning.

The key, for me, was to use what I had—just better. I had seen conversations about "spiral review" on Twitter and in instructional materials, but it always seemed like a ton of work to create all these new warm-ups, and purchasing new instructional materials was neither a desire nor an option. So, instead, I looked at how my students progress through grades 5–9 in my context and organized banks of problems I already had (and liked) so that they could be used for interleaving.

The changes I saw in our classroom culture and the shifts students made in long-term learning and the ability to demonstrate that learning were amazing, and it took remarkably little effort on my or their part. By organizing information in more meaningful ways, and applying power tools that are supported by cognitive science research, we can lessen the pressure and strengthen the confidence, joy, and performance in our classrooms. □

Endnotes

1. P. K. Agarwal and P. M. Bain, *Powerful Teaching: Unleash the Science of Learning* (San Francisco: Jossey-Bass, 2019).

2. D. Rohrer, R. F. Dedrick, and P. K. Agarwal, "Interleaved Mathematics Practice: Giving Students a Chance to Learn What They Need to Know," University of South Florida, 2017, www.retrievalpractice.org/interleaving.

3. P. C. Brown, H. L. Roediger, and M. A. McDaniel, *Make It Stick: The Science of Successful Learning* (Cambridge, MA: Harvard University Press, 2014).

4. D. Rohrer, R. F. Dedrick, and S. Stershic, "Interleaved Practice Improves Mathematics Learning," *Journal of Educational Psychology* 107 (2015): 900–908.

5. P. Carvalho and R. Goldstone, "When Does Interleaving Practice Improve Learning?," in *The Cambridge Handbook of Cognition and Education*, ed. J. Dunlosky and K. Rawson (Cambridge: Cambridge University Press, 2019), 411–436.

6. K. Taylor and D. Rohrer, "The Effects of Interleaved Practice," *Applied Cognitive Psychology* 24 (2010): 837–848.

7. Rohrer, Dedrick, and Stershic, "Interleaved Practice Improves Mathematics Learning."

(Continued on page 40)

Powerful Interleaving Strategies

Regardless of education level (e.g., K–12 or higher education), you don't need to alter your lessons to implement interleaving. Practice problems need only be rearranged, *without* requiring any rewriting of individual problems. If your textbook doesn't contain interleaved practice sets, you can still implement interleaving with minimal disruption to your lesson plans or grading methods. For instance, students could be instructed to complete the fifth problem from three different textbook chapters (as opposed to three problems from the same chapter).

How exactly should practice problems be interleaved? Actually, the choice between interleaved and blocked practice is a false dichotomy. In fact, a hybrid approach might be optimal for enhancing student learning.[1] For example, the first portion of a mathematics assignment might include a small block of problems on the concept or procedure learned that day, followed by interleaved problems drawn from previous lessons.

Below are additional interleaving strategies that require minimal planning (simply a problem set), create a fun and low-stakes atmosphere, and put students in charge of interleaving. It's important to keep these strategies low stakes or no stakes. They are not competitive activities. Interleaving challenges student learning, so remove any additional pressures like grades, points, or speed competitions.

Dice Game

1. Create an interleaved problem set.
2. Arrange students in pairs or small groups and give each one the problem set (or display it on the board).
3. One student rolls a die (or dice if there are more than six problems) and answers the problem corresponding with the die roll.
4. The other student provides feedback.
5. Switch turns.

The Fishbowl

1. Create an interleaved problem set.
2. Write or print the problems on slips of paper, cut up the slips, and put them in a fishbowl, a hat, a backpack, etc. (or use a tech tool).
3. Walk around the room. Have each student draw a slip and answer the problem individually (the "think" stage of think-pair-share).
4. Have students pair up and share.
5. Collect the slips, shuffle, and draw again.

Lightning Round

1. Create an interleaved problem set.
2. Hand the list to a student, who calls out one problem from the list at random.
3. Have all students solve the problem and write down their answers.
4. Give students feedback.
5. Pass the list to another student and continue.

Two Things

1. With a few minutes left in class, have students close their notebooks and texts.
2. Ask students to write down two things they have learned and want to remember from today's lesson (or from the previous day, or last week, etc.).
3. Once students have finished writing their two things, have them pass their paper to a classmate.
4. Classmates write one more thing and pass the papers back to the original author.
5. Now each student in the class has three things to remember and think about!

The 60-Second Summary

1. At the end of a class period, set a timer for 60 seconds.
2. Have students put away all class materials, notes, and texts.
3. Explain that they should write and/or draw continuously for 60 seconds, capturing the big ideas of that day's lesson.
4. If you'd like students to get feedback, they can stand up, find a partner, and take turns reading and responding to each other's summaries.

Endnote

1. V. X. Yan et al., "How Should Exemplars Be Sequenced in Inductive Learning? Empirical Evidence versus Learners' Opinions," *Journal of Experimental Psychology: Applied* 23 (2017): 403–416.

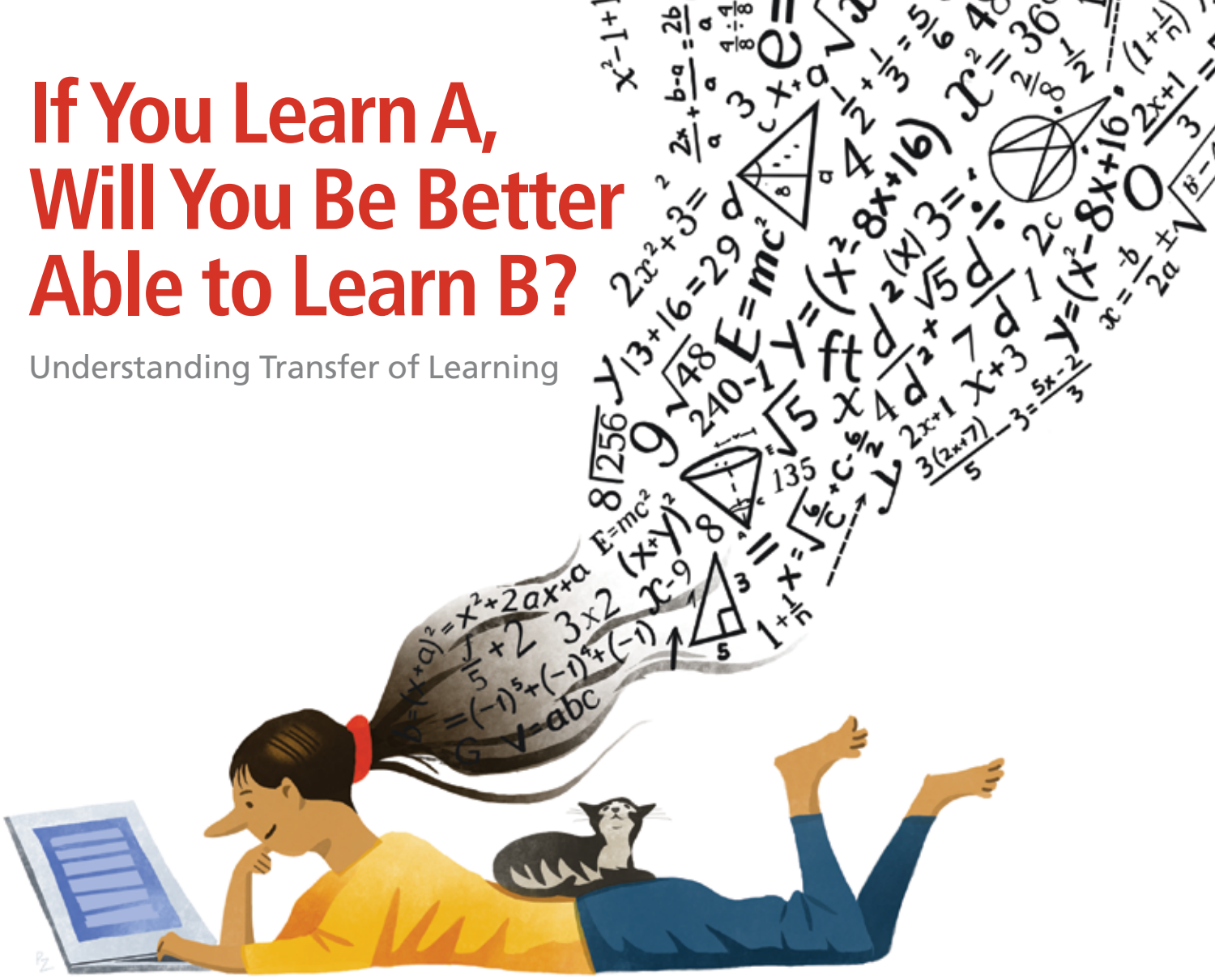
Tips for Powerful Interleaving

- Mix up related math problems to promote students' discrimination of concepts and strategies.
- Keep interleaved problem sets related. Adding completely unrelated problems won't further promote students' discrimination.
- Problem sets can take a variety of formats: numerical, word problems, formulas, etc. The key is to include problems that are related conceptually, regardless of format.
- Encourage students to stick with the desirable difficulty of interleaving. What works well in the short term (blocked practice) doesn't promote learning in the long term.
- Find technology tools and apps—especially with a shuffle feature—that students can use for interleaved practice. These low-stakes tools also include opportunities for immediate feedback.

–P. K. A. and A. A.

If You Learn A, Will You Be Better Able to Learn B?

Understanding Transfer of Learning



ILLUSTRATIONS BY PAUL ZWOLAK

By Pedro De Bruyckere, Paul A. Kirschner, and Casper Hulshof

In 2015, we published our book *Urban Myths about Learning and Education*.[1] An excerpt of one section of that book, "Technology in Education: What Teachers Should Know," was published in the Spring 2016 issue of *American Educator*. An unexpected effect was that after the book's publication, all three of us received a number of requests per week for new educational fact checks. At first, we blogged or tweeted our short answers to these queries, but at a certain point we decided to bundle the questions and expand upon our answers. This has resulted in a new book with all new "myths," *More Urban Myths about Learning and Education: Challenging Eduquacks, Extraordinary Claims, and Alternative Facts*, from which this article is excerpted. Here, we discuss some of the most often asked questions related to one basic principle in particular: *transfer of learning*.

Transfer of learning is seen as the use of knowledge, skills, and/or attitudes that you've learned in one situation in a different situation.[2] This new situation can be either a similar situation (near transfer) or a dissimilar situation (far transfer). In recent years, we've encountered numerous different forms that claim to be examples of far transfer:

- Learn how to program, so that you can more easily learn mathematics.
- Learn Latin, so that you can better learn other languages.
- Learn music, so that you can better learn arithmetic.
- Learn chess, so that you can better learn to do just about everything!

But are these claims justified? Are they really examples of far transfer?

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Near versus Far Transfer

Imagine that you've learned to drive. You quickly become accustomed to your own car: how the gears work, where to find all the right buttons on the dashboard, etc. If you need to drive a rented car on vacation, some of these things may be different, but your past experience in your own car will soon help you to get the hang of things. It will even help you if you ever need to learn how to drive a bus. This is what we mean by near transfer.[3] Many things from one situation are fairly similar to many things in the new situation, although there may be minor differences here and there.

Far transfer was an idea first examined in 1923 by Edward Thorndike.[4] It was Thorndike, for example, who discussed whether learning Latin could have a positive effect on logical thinking. Even in those days, it was apparent that this was not the case. According to him, it merely seemed that way because so many of the stronger students and thinkers were automatically encouraged to study Latin. In other words, it was more a question of a correlation than a causal relationship. Consequently, the result was the product of something else, namely smarter students or students from a higher social-economic background.

There is, however, another problem with the delineation of near and far transfer. Perhaps you've come across the following situations in your own classroom. During a geography lesson, students learn how to read a map, but then have difficulty in reading a historical map during a history lesson—which, at first glance, you might think should be an example of relatively near transfer. In a comparable way, mathematics is also used during physics lessons, but here the transfer is much easier to accomplish.

To explain such situations, Thorndike formulated his theory of identical elements, which posits that near and far transfer can best be regarded as a continuum. Or to paraphrase his basic conclusion: transfer is easier in relation to the extent that there are more similar or identical elements between what has already been learned and what needs to be learned in the future. Accordingly, he argued that near transfer is, by definition, much easier than far transfer.[5] If we were to take the precepts of this "old" theory at face value, the outlook for the advocates of far transfer might be fairly pessimistic. But is this really the case? Let's take a closer look at a number of examples.

Is Chess the Key to Success at School and in Life?

In 2011, chess became a compulsory subject in Armenian schools. Armenian authorities were convinced that chess is the key to success at school and in life. By making chess mandatory, they hoped to teach children how to think creatively and strategically. As a result, they will become more intelligent and be better able to solve problems. What's more, this does not just mean chess problems, but all problems in all other school subjects, as well as in later life. If true, this is extremely far transfer. There are indeed research studies that demonstrate a link between chess mastery and improved cognitive skills and work performance.[6]

In essence, what the Armenian Ministry of Education was saying is that learning how to play chess not only is the key to developing general skills (in particular, problem solving), but also has a crucial impact on general character traits, such as emotional stability, intellect, memory, alertness, and, above all, creativity.

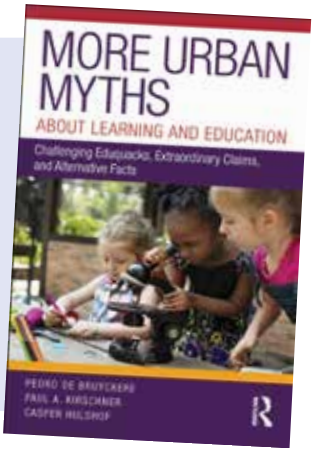
General Character Traits and Creativity

Creativity is not a skill, and it cannot be taught or learned. Creativity is a quality or characteristic that a person possesses. In other words, it's a trait and not a state. Researcher Charles Reigeluth explains it as follows: "Traits are student characteristics that are relatively constant over time, … whereas states are student characteristics that tend to vary during individual learning experiences, such as level of content-specific knowledge."[7] Viewed in these terms, it's not simply that creativity can't be learned; it's also very difficult to influence. All that teachers can do is to provide a learning climate that offers psychological safety—a climate in which learners feel sufficiently secure—so that they have the courage and the confidence to do things and say things that, at first glance, perhaps seem odd or not completely right. In other words, teachers can provide an environment that encourages students to take risks, safe in the knowledge that their mistakes will be tolerated with understanding. We call this psychological safety.

> Transfer of learning is seen as the use of knowledge, skills, and/or attitudes that you've learned in one situation in a different situation.

Memory is also a trait, so it, too, cannot be learned. This does not mean that it cannot be trained or improved, but such training needs to be highly focused and demands a huge investment in time. Consequently, this is not something that can be achieved "*en passant*" simply by learning to play chess.

If we look at this in the context of the Armenian claims about chess and creativity, a chess teacher who provides a psychologically safe climate may indeed be able to teach one or more children how to play chess creatively, but the basic starting point is that the child must possess both the necessary chess knowledge (moves, tactics, strategies) and the necessary chess skills (by using that



knowledge repeatedly in practice games and competitions). This has been known since 1946, when Adriaan de Groot wrote his famous doctoral thesis, *Het denken van den schaker* (*Thought and Choice in Chess*).[8]

In our previous book, we discussed the work of Sir Ken Robinson and formulated a number of reservations about his rather narrow definition of creativity (in his book C*reative Schools: The Grassroots Revolution That's Transforming Education*), but even this narrow definition is applicable in this present context. According to Robinson, creativity is "the process of having original ideas that have value." The key word here is "value."

Without knowledge and skills, it's impossible—except by sheer luck—to create something of value. In fact, if you don't have the requisite knowledge, you are not even in a position to assess the value of what you have done. If you don't know how to play chess, just see how far you get if you are ever asked to develop a creative and valuable solution to a chess problem!

The Effect of Learning to Play Chess on Other Skills

The ability (or otherwise) to change personality traits is still a matter of much discussion, but does chess perhaps have a positive influence on other disciplines and areas of study? This is a subject that has been intensively researched over the years. Some of the resultant studies do indeed suggest a positive effect,[9] whereas others have reached very different conclusions. To help clarify this situation (if we can), it's useful to look at the reviews of the various studies, also bearing in mind the quality of the research methodology used.

One review on the subject of chess and education came with a painful conclusion: "Research in psychology and education suggests that cognitive skills acquired in one domain are not easily transferred to another domain. Do the empirical results of chess research undermine this contention? Unfortunately, the answer is: no."[10] In other words, chess is not an exception to Thorndike's theory of identical elements. A more recent review also found very little real evidence for transfer, although the researchers' final assessment was somewhat milder.[11] They concluded that the test results show that learning to play chess can sometimes have a positive effect on student learning, but this is confined to arithmetic/mathematics in primary and secondary education.

Moreover, this positive effect is only for the short term; there is nothing to suggest more long-term, permanent benefits. And there is more bad news. They further concluded that there is a correlation between the quality of the research design and the level of the effect identified: the better the design, the smaller the effect. In fact, the most rigorous studies found almost no positive effect whatsoever.[12]

Finally, mention should also be made of a large-scale meta-analysis conducted in 2016 that investigated the possible link between intelligence and chess.[13] The conclusion could not be clearer: intelligent players play better chess. This causality follows the same direction that Thorndike established with regard to Latin.

Does Learning How to Program a Computer Encourage Problem-Solving Thinking?

Steve Jobs once said: "Everybody in this country should learn how to program a computer, should learn a computer language, because it teaches you how to think."[14] But was the Apple boss right? You might be excused for initially thinking that this is an area where very little research has been carried out, so that it's difficult to reach firm conclusions. And you would be right—up to a point. After all, it's only recently that a teaching module for programming was introduced in the United Kingdom, and computers like the BBC micro:bit, the Arduino, and the Raspberry Pi are all relatively new in education. That being said, in reality, these developments are merely the latest wave in the process of "programming in education," which actually stretches back over a number of decades and has repeatedly investigated the basic idea that Jobs reformulated. Consider, for example, Logo, the programming language developed for education as long ago as 1967 by Seymour Papert, with its characteristic "turtles." These turtle robots were first invented in the late 1940s by, among others, William Grey Walter,[15] but only became widely known in educational circles thanks to Papert, who used them as a means to promote Logo as a programming language for schools, with the specific aim of stimulating problem-solving capabilities.[16]

Without knowledge and skills, it's impossible—except by sheer luck—to create something of value.

The oldest research into such matters was conducted by Richard Mayer and dates from 1975. His work suggested that learning how to program could have a positive effect on problem-solving thinking, although in reality his study focused more on the best way to effectively teach programming.[17]

In contrast, a series of subsequent studies generally concluded that there is no such positive effect. A 1990 study based on a randomized controlled trial found no link between programming and the ability to solve problems.[18] This was also the conclusion of a comparable study by Mayer.[19] Other research suggested that programming might have a limited beneficial effect on divergent thinking, but this cannot be taken as evidence that it has a major beneficial effect on problem-solving capabilities.[20]

That being said, a review study carried out in 1985 that specifically looked at Logo and its effect on other domains added an important nuance. Just teaching students how to program with Logo had little or no effect. However, if teachers used Logo for specific tasks with a specific purpose, such as mathematics or problem-solving thinking, a "moderate" effect could be achieved. But the input of the teacher was crucial to generate this effect; the programming itself played only a marginal role.[21]

Similar conclusions were reached in a 1990 research project. The researchers found evidence of a clear benefit for problem-solving thinking as a result of learning how to program. Once

again, however, there was an important "but": their research focused on students in further education who all wanted to learn programming. Moreover, there was no control group.[22] Much the same applies to another study that found a positive effect but also concluded that simply teaching students how to program is not enough to generate this effect.[23] The only effective way that the learning of programming can stimulate problem-solving capabilities is for the teacher to give a clear focus on using those skills in a problem-solving context. And once again, there was no control group to compare, for example, the results of attempts to deal with the same problem-solving content without the benefits of programming skills.

It would be possible to carry on like this for quite some time, but we have probably already quoted enough research to make our point: perhaps the problem is not the teaching of programming; the problem is the idea that it's possible to teach students how to think in a problem-solving manner. Or, as researchers concluded in 2010:

> In over a half century, no systematic body of evidence demonstrating the effectiveness of any general problem-solving strategies has emerged. … There is no body of research based on randomized, controlled experiments indicating that such teaching leads to better problem solving.[24]

Does Music Help You Perform Better in School in General?

Since all three of us are music lovers, we need to be wary of possible confirmation bias when it comes to this particular subject: it's sometimes all too easy to search for evidence that confirms what you would like to be true! That being said, a very recent longitudinal study (i.e., a study that follows the same people for a number of years, here also using a randomized design with a control group) gives some grounds for optimism.[25]

More specifically, Artur Jaschke and his colleagues examined the effects of learning how to play music on executive functions, the higher cognitive processes that are necessary to plan and direct activities. Over the duration of the study, the scores periodically given to the intervention group for impulse suppression (inhibition), planning, and verbal intelligence all improved significantly. It's also possible that the improvements in these three qualities helped account for a similar improvement in general school results. The idea that music can have a positive effect on executive functions is nothing new,[26] although it's still far from clear how long this effect lasts.[27] The Jaschke study attempted to avoid the limitations and shortcomings of many previous studies. Consequently, there is hope that its conclusions will prove more reliable. And this hope is necessary because, in contrast, a previous meta-analysis found no evidence of far transfer as a result of learning how to play music.[28] Yes, it concluded that musicians are indeed often more intelligent than others (we love you, yeah, yeah, yeah), but this is more a correlation than anything else. As far as a possible causal link is concerned, in most studies this is negatively reflected in the quality of the study itself. The better the research, the smaller the link.

But is it actually a good thing to search for far transfer in relation to music? This is the question that the Organization for Economic Cooperation and Development (OECD) asked in its own review of the influence of art education in general and music education in particular.[29] By asking what value music has for improving performance in other disciplines, there is a risk that this effectively devalues music's worth as a discipline in its own right. This is a fair point: much far transfer thinking is based on the utility principle that makes one discipline subordinate to another. In wider cultural and educational terms, chess is less important than music. But perhaps chess also has the potential to make students better at something else. And perhaps it can do this more effectively than music. What then would be the future of music as an academic subject?

And it doesn't just have to be chess. Imagine that something else comes along—the use of classroom rituals, for example—that is proven to have a more significant impact on improved executive functions than music.[30] If music is regarded purely as a means to an end rather than as an end in itself, this might even lead to its removal from the curriculum! It's surprising that this issue should be raised by an economic organization like the OECD, but it's important that someone raises it. In art education, the desire for possible far transfer must remain subordinate to the wider cultural value of artistic disciplines—and not the other way around.

Does Learning Latin Help You to Learn Other Languages Better?

Apart from a huge fortune in the bank, what do *Harry Potter* author J. K. Rowling and Facebook guru Mark Zuckerberg have in common? They both learned Latin in school.[31] Various universities still use Latin names to add a certain cachet to the study of classics and classical languages. It is as though they seem to say that knowledge of Latin is the secret to success!

While in many countries (foreign) language education has given way to education based on the so-called STEM subjects (science, technology, engineering, and mathematics), in the Netherlands and Belgium, Latin is still an important part of the curriculum.[32] For centuries, Latin was the language of knowledge and erudition, and, consequently, also the language of the elite, as it was also an important key to the door that led to university. It was only when education became more readily accessible at the start of the 20th century, and when Latin gradually disappeared as the language of science and learning, that arguments for its teaching began to change. Latin was now seen as being important for the general education of students, which was effectively the same as saying that Latin was a good way to teach

students how to think. As a subsidiary argument, it was also suggested that learning Latin made it easier to learn other languages, such as French, Spanish, and/or Italian.[33]

But is this true? Does learning Latin teach you anything more than just Latin? During the past century, research has focused primarily on this second argument: Latin as a linguistic facilitator. A review study[34] found evidence supporting a weaker form of this argument, namely that learning Latin helped American children first and foremost learn their own language better. Unfortunately, many of the studies in this field lack reliability as a result of serious methodological shortcomings or due to a failure to properly check out all relevant related factors, such as the socioeconomic background of the students (see also Thorndike's conclusions on this matter). One small study that is both relevant and reliable monitored a group of German children learning Spanish. Some of the children also received lessons in Latin, others in French. The results showed that the children benefited more from first learning French, rather than Latin, before Spanish. In fact, the students who learned Latin made more grammatical errors in Spanish than those who had learned French.[35] Once again, Thorndike's identical elements theory would seem to hold.

As far as the second question is concerned—can learning Latin help you to think better?—very little meaningful research has been conducted, largely because it's so difficult to define what we mean by "thinking" to everyone's satisfaction. Be that as it may, one study[36] concluded that there was no relationship between the skills needed to learn Latin and the skills needed to learn other languages or mathematics. But that is more or less as far as the research goes at this stage. In other words, there is nothing to suggest a link between "learning Latin" and "better thinking."

If it's unlikely that Latin makes it possible to learn other languages more easily, and if Thorndike's theory suggests that far transfer is equally improbable, we can then reasonably ask the same question that we asked of music: Should Latin still be taught because of any intrinsic value of its own? Up to a point, the answer is yes. There are indications that learning Latin can lead to greater self-confidence and a deeper appreciation for other cultures,[37] although this can just as easily be said for many other foreign languages, such as Chinese.

The British classicist Mary Beard offers a more specific reason for learning Latin: it gives young people access to the literary tradition that forms the basis of Western culture.[38] Again, this might well be the case, but it's open to discussion as to whether that argument alone is sufficient to merit including Latin in the curriculum. In fact, all the "old" arguments in favor of Latin—that it has specific characteristics that make it easier to learn other languages and also improves a student's general ability to think—no longer seem relevant or credible in this modern day and age.

In this article, we investigated four popular examples of claims for far transfer, but in each case the results were disappointing. This is not to say that there is no evidence whatsoever for far transfer, but it's very clear that the level of reliable evidence decreases in relation to the quality of the research: the better the research, the scanter the evidence.

One insight—in fact, a slight irritation—that came to light during our investigation and writing is that Thorndike's theory—devised more than 100 years ago—still seems applicable. Throughout the past century, repeated efforts have been made to contradict his claim that the greater the number of identical elements, the greater the likelihood of far transfer. To date, no one has really succeeded, us included. Even so, it remains clear that far transfer is not the magic remedy for cross-discipline learning that many in education once hoped it would be. □

Endnotes

1. See P. De Bruyckere, P. A. Kirschner, and C. D. Hulshof, *Urban Myths about Learning and Education* (San Diego, CA: Academic Press, 2015).

2. D. N. Perkins and G. Salomon, "Transfer of Learning," in *International Encyclopedia of Education,* 2nd ed., ed. T. Husen and T. N. Postlethwaite (Oxford: Pergamon Press, 1992), 6452–6457. Mention is made of transfer or training, whereby the skills trained for in one domain have a positive effect in another domain.

3. Perkins and Salomon, "Transfer of Learning." Near transfer and far transfer have meant different things at different times. For example, J. M. Royer described the terms as follows: "I will use the term near transfer to refer to instances in which one classroom learned skill, or bit of knowledge, transfers to another classroom skill or bit of knowledge. I will use the term far transfer to refer to situations in which material learned in the classroom transfers to events or problems encountered outside of the classroom." See J. M. Royer, "Theories of the Transfer of Learning," *Educational Psychologist* 14, no. 1 (1979): 53–69.

4. E. L. Thorndike, "The Influence of First Year Latin upon the Ability to Read English," *School Sociology* 17 (1923): 165–168.

5. R. S. Woodworth and E. L. Thorndike, "The Influence of Improvement in One Mental Function upon the Efficiency of Other Functions," *Psychological Review* 8, no. 3 (1901): 247.

6. See, among others, I. J. Deary et al., "Intelligence and Educational Achievement," *Intelligence* 35 (2007): 548–555; and J. E. Hunter and R. F. Hunter, "Validity and Utility of Alternative Predictors of Job Performance," *Psychological Bulletin* 96 (1984): 72–98.

7. C. M. Reigegluth, ed., *Instructional-Design Theories and Models: An Overview of Their Current Status* (Hillsdale, NJ: Erlbaum Associates, 1983).

8. A. D. de Groot, *Het denken van den schaker* (Amsterdam: Noord-Hoolandsche Uitgevers Maatschappij, 1946).

9. There are two Armenian reports mentioning positive effects: R. Aghuzumtsyan and S. Poghosyan, "The Impact of Chess Lessons on Formation and Development of the Students," *International Conference Chess in Schools* (Yerevan: Zartprint, 2014), 87–97; and R. Mirzakhanyana et al., "Analysis of the Efficiency of Teaching Chess in Schools," *Sociology* 7, no. 1 (2017): 36–42. The first study shows correlations; the second illustrates how context plays a role.

10. F. Gobet and G. Campitelli, "Educational Benefits of Chess Instruction: A Critical Review," in *Chess and Education: Selected Essays from the Koltanowski Conference*, ed. T. Redman (Dallas: Chess Program at the University of Texas at Dallas, 2006), 139.

11. G. Sala, J. P. Foley, and F. Gobet, "The Effects of Chess Instruction on Pupils' Cognitive and Academic Skills: State of the Art and Theoretical Challenges," *Frontiers in Psychology* 8 (2017): 238.

12. G. Sala and F. Gobet, "Does Far Transfer Exist? Negative Evidence from Chess, Music, and Working Memory Training," *Current Directions in Psychological Science* 26 (2017): 515–520.

13. A. P. Burgoyne et al., "The Relationship between Cognitive Ability and Chess Skill: A Comprehensive Meta-Analysis," *Intelligence* 59 (2016): 72–83.

14. "Steve Jobs Says Everyone Should Learn to Program," YouTube video, posted by Scott Moss, July 5, 2012.

15. M. J. Mataric, *The Robotic Primer* (Cambridge, MA: MIT Press, 2007).

16. S. Papert, *Mindstorms: Children, Computers, and Powerful Ideas* (New York: Basic Books, 1980).

17. R. E. Mayer, "Different Problem-Solving Competencies Established in Learning Computer

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Classroom Teachers in the Community Schools Movement

A Social Justice Perspective

Pictured, from left: Jennifer Founds, Yancy Sanes, and Jason Torres-Rangel.

By Karen Hunter Quartz, Julia Daniel, and Anna Maier

Jennifer, Yancy, and Jason teach and learn at thriving community schools in San Francisco, New York, and Los Angeles, respectively. Their experiences challenge traditional ideas about what it means to learn and be a teacher. In their schools, teaching is a community effort where all the adults—teachers, social workers, parents, afterschool coordinators, mentors, and others—in students' lives contribute to their learning and development. As teachers, Jennifer, Yancy, and Jason embrace their role as one of many—united in disrupting long-standing educational inequities. Sharing their experience helps us answer three questions facing the growing community schools movement: What does it mean to be a community school teacher? How do teachers in community schools promote deeper learning for students? And how does collaborative leadership create sustainable and humane community school workplaces?

Too often, community schools are solely portrayed as a reform to provide wraparound services for students without adequate attention to the foundational role that educators play in creating and sustaining these schools. We wrote this article to elevate the often overlooked role of classroom teachers in the community schools movement.

Understanding the Community Schools Concept

Community schooling is a concept with broad appeal and a long history dating back to Jane Addams and John Dewey. As neighborhood hubs, community schools bring together families, educators, and community partners to provide all the opportunities and services young people need to thrive. The most recent reform wave launched in 1997 with the Harlem Children's Zone—a comprehensive, place-based anti-poverty initiative that established federally funded Promise Neighborhoods across the United States.

Since then, the growth of charter schools and the epidemic of neighborhood school closures have complicated the community schools landscape. For example, in cities such as Los Angeles and Oakland, teachers unions frame community schools as the public alternative to charter schools—poignantly captured in the 2019 Los Angeles strike poster: "Community schools build democracy!" The politics surrounding community schools underscore the need for a research-based foundation to guide the growth of this promising reform strategy.

Effective community schools are organized around four key pillars: (1) integrated student supports; (2) expanded and enriched learning time and opportunities;

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PHOTOS BY RUSS CURTIS, BRUCE GILBERT, AND ARMANDO ARORIZO

Community schooling is a concept with broad appeal and a long history dating back to Jane Addams and John Dewey.

(3) active family and community engagement; and (4) collaborative leadership and practice.[1] These pillars provide a framework that enables community school teachers and staff to create opportunities for deeper and engaged learning, rooted in the assets and needs of their particular communities.[2]

Tying the four pillars to teaching and learning is foundational, yet it is often overshadowed by the reform mill's focus on implementing new structures and programs. For example, adding a health clinic or weekend recreation program will not fundamentally transform student learning unless all the adults have a deep appreciation of students' interests, cultures, and prior experiences. Well-designed community schools knit together wraparound services and programs guided by the values of trust, care, and respect. These values translate into strong school cultures where all members feel that they belong and are engaged in relevant, purposeful learning.

We turn now to three school examples, chosen because they have been recognized as successful community schools and, as researchers, we happen to know them well. They are grounded by the four pillars and provide different contexts for the questions cited above. The first is a historic middle school in San Francisco that recently transformed into a community school. The second school was part of the small-schools movement launched 25 years ago in New York City. And the third was founded 10 years ago as a new community school in Central Los Angeles.

Dr. Martin Luther King Jr. Academic Middle School

Dr. Martin Luther King Jr. Academic Middle School (MLK) is located in San Francisco and serves approximately 500 racially diverse students, with nearly 75 percent of students qualifying for free or reduced-price meals. When principal Michael Essien joined the administrative team of this long-standing school in 2014, he brought with him a commitment to a community schools approach that integrates project-based learning (PBL)* as part of its strategy. Michael explains, "Often we simplify this conversation around opportunity gaps, as if we just need to focus on academic conversations and then we'll be fine. But this is a complex issue, and it has to have a complex solution. I think community schools is that complex solution to solve the opportunity gap that plays out in education."

The MLK community was certainly in need of a new approach to teaching, learning, and school climate at the time that Michael initiated this transformation process in partnership with community school coordinator Leslie Hu. Jennifer Founds, who teaches eighth-grade English and history at MLK, recalls that when she first started teaching at the school six years ago, she found a chaotic environment with students regularly climbing in and out of her classroom windows and getting into fist fights. "I realized, from day one, that I would be an ineffective educator if I continued acting alone with the traditional methods of education," she says.

Fortunately, the school environment was beginning to improve as support services were put into place, and teachers were deeply engaged as leaders in the school transformation process. Leslie led the process of creating a community school vision with MLK staff. She explains, "When you empower, create, and hold space for members of the school community to come together, that's when things happen."

When Leslie started working at MLK, her position was paid for through a combination of the school site budget and social work funds (she is also trained as a school social worker). It was clear to her that there was a need for sustainable funding to directly support community school coordination. This inspired her involvement in Close the Gap, a coalition of groups including the United Educators of San Francisco (which Leslie represents as an executive board member), the Service Employees International Union, Coleman Advocates for Children and Youth, LYRIC, the Chinese Progressive Association, and the Mission Economic Development Agency. Leslie describes how, together, these groups provided "backbone support, expertise, and people power" to successfully advocate for San Francisco taxpayers to approve a 20-year parcel tax in support of living wages for teachers and community schools (although this funding is currently held up in court). They also successfully negotiated two full-time community school coordinator positions (including Leslie's) to be fully funded by the superintendent's office in the San Francisco Unified School District.

Meanwhile, Jennifer and other teachers on the Instructional Leadership Team visited classrooms and identified schoolwide academic priorities. Another group of teachers formed a Culture Club to interview students and recommend ways to make instruction and discipline more culturally responsive. Leslie also worked with Michael to bring in the Peer Resources Program, breakfast in the classroom, and counseling and academic services provided by community-based organizations. With these changes, disciplinary referrals at MLK plummeted and student test scores began to rise.

However, Jennifer explains, "We still found that some of our students were disengaged. We started to explore PBL to go the extra mile." Leslie adds, "It's our job to hear students and respond accordingly to create meaningful educational experiences for them inside and outside of the classroom." It is clear, though, that MLK students could not successfully complete interdisciplinary projects without the support systems and structures of a community school. Although the dual PBL/community schools approach at MLK has taken time to evolve,

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

these two elements are integral to the school's success, as the presence of one facilitates the other. Jennifer explains, "PBL and community schools integrate really well because a lot of the same shifts that it takes as a teacher to embrace community schools, it also takes to embrace PBL. You're giving back some of your ownership to the students and community."

As an example of project-based learning in action at MLK, Jennifer's eighth-graders completed a project on immigration where they worked in groups to become experts on a current immigration issue and develop a recommendation to address it. They could also choose the method for sharing their work. Some groups worked with Jennifer's student teacher to take a walking field trip into the local community, where they used iPads to interview their family members and neighbors (such as local business owners) about their immigration issue and created videos highlighting their recommendations. Other groups created art projects symbolizing their analysis. Jennifer worked closely to coplan the art project with her colleague Katy Hugo-Holman, who is an integrated arts teacher at MLK and meets regularly with the eighth-grade team. Students presented their work to family and community members at an evening event focused on science, technology, engineering, arts, and mathematics (STEAM).

Jennifer has also collaborated with external partner organizations in designing project-based learning opportunities for her classes. As part of a government unit, her students picked social issues to analyze, such as homelessness. The Walt Disney Family Museum, which is located in San Francisco and partners with the school, coordinated with Jennifer on this project by providing her students materials for stop-motion animation videos. Jennifer's students were then able to create storyboards addressing their social issues and turned those into animations using the special equipment. The museum then contributed the final editing for students' completed videos.

Jennifer notes that one reason this external partnership was successful is that the museum staff made an effort to align their resources with her existing lesson plan. She has found that external partnerships can sometimes be challenging because she lacks time to fully create lesson plans with external partners. Staff from partner organizations may also come in with their own objectives and curricula that don't fully align with those of the classroom teacher. Therefore, Jennifer was very appreciative that the museum staff "put the needs of the students and the class first."

As the MLK story shows, the powerful project-based learning with which Jennifer's students are engaged occurs within a broader context of community school partnerships, supports, and structures. MLK benefits from strong administrative leadership as well as the support of key staff members, such as the community school coordinator and the integrated arts teachers. Jennifer says, "Things at MLK are far from perfect, but these projects stand as a reminder of the transformation that has taken place at our school."

Fannie Lou Hamer Freedom High School

Fannie Lou Hamer Freedom High School, a community school in the South Bronx, New York, focuses on building students' critical-thinking and research skills, using interdisciplinary lessons planned by teams of teachers. Community service and internships are also part of the weekly schedule. Founded in 1994 with the Coalition of Essential Schools, Fannie Lou serves a student body of 470 that is predominantly Latino and Black. The school participates in the New York Performance Standards Consortium,[†] in which students create a portfolio of exemplary work answering essential questions that they have focused on throughout the year, instead of focusing on standardized test performance. These portfolios are then presented to a committee, which includes two teachers who did not teach the student.

Teachers at Fannie Lou build this culturally sustaining and engaging curriculum in collaborative planning meetings that run for 2.5 hours every week. Teachers meet to reflect on past lessons and engage in curricular planning together. In these spaces, they share challenges and offer potential solutions; consider which texts, questions, and themes would draw out the richest student discussions; and create lesson plans. The principal, Jeff Palladino, often participates by offering helpful ideas and guiding questions.

Yancy Sanes, a former student at Fannie Lou who now teaches humanities and STEAM classes there, embodies the vision of community schools as growing and sustaining a strong community. He chose to come back to teach at his former school because he understood the importance of students seeing teachers to whom they can relate. "I think the diversity is important because [students] connect to people who look like them and have similar experiences like them," he says. Teaching at a community school is important for Yancy because he has time and resources to build relationships with students through the advisory process and receives added support for students through community partners. He can also use restorative practices,[‡] in which students engage in conversations with teachers and peers to work through problems and address specific issues that may arise in his classroom.

Walking into Yancy's classroom, one quickly feels the energy circulating as students debate different ways that power operated during the Haitian Revolution. They connect the history lesson to their lived experiences and understandings of how colonialism has functioned throughout the Caribbean and to the issue of machismo in their communities. Yancy's rapport with the students is familiar, enabling him to push them on hard topics in a language and style that is accessible and engaging. The conversations about colonialism and slavery within the Caribbean are complicated and nuanced, as students talk about the role

[†]For more on the New York Performance Standards Consortium, see "Putting the Focus on Student Engagement" in the Spring 2016 issue of *American Educator*, available at www.aft.org/ae/spring2016/barlowe-and-cook.

[‡]For more on restorative practices, see "Learning to Switch Gears" in the Winter 2015–2016 issue of *American Educator*, available at www.aft.org/ae/winter2015-2016/dubin.

of money and ideas in both reinforcing and dismantling oppressive systems.

Using Junot Díaz's satirical short story "How to Date a Brown Girl (Black Girl, White Girl, or Halfie)," the students discuss not only examples of machismo in the story, but also the ways in which the narrator, a Black Latinx man, navigates his own masculinity and the role that race plays in the book. Yancy encourages them to look for context clues in the text to discuss how the narrator's gender, race, and class might influence his relationships with the young women of different races in the book, prompting rich discussions of power and identity. In this bilingual classroom, Yancy or a student translates most of what is said from one language to the other so students can hear all perspectives within these lively classes. As Yancy shares, "Culturally relevant work is important for students to connect more to something that's currently going on, and we also want diversity in the works they're reading."

Beyond the classroom, students at Fannie Lou engage in community affairs in a number of ways. For example, students started a Black Lives Matter group based on issues of police brutality that they studied at the school and that had personally impacted them. Group members held meetings during lunchtime and organized peers to attend rallies. The school also arranged for a bus so that students and teachers could travel to the Women's March in Atlantic City that honored Fannie Lou Hamer, the school's namesake, for the speech she delivered at the 1964 Democratic convention. The students and teachers were celebrated upon their arrival and given a prominent role by carrying their banner at the march and conducting impromptu interviews.

At the local level, students are engaged in internships throughout the community. They also collect food to share with families in need through a student-organized food pantry and participate in a number of clubs that engage with local organizations. This kind of community-based learning provides rich, culturally sustaining educational opportunities for the young people at the school.

UCLA Community School

Ten years ago, Jason Torres-Rangel moved from Los Angeles High School, the city's oldest high school, to help create a new community school two miles away. The new

Embracing community schooling goes far beyond wraparound services.

school was built on the former site of the Ambassador Hotel on Wilshire Boulevard, part of a complex of six Robert F. Kennedy Community Schools. The K–12 complex serves 4,200 students in the adjacent immigrant neighborhoods of Koreatown and Pico-Union and relieved overcrowding at Los Angeles High and other city schools. The six community schools were granted local autonomy to innovate through a pilot school agreement with the union, district, and community. Jason's school, the UCLA Community School, partnered with a public university, and together they have forged the strong norms of collaboration and shared leadership essential to effective community schools.

Drop into Jason's English class, and you'll see animated students discussing the subtext of a Banksy mural or peer editing their personal statements for college. Jason is one of 45 accomplished educators who know students well and make learning come alive through the type of projects and activities described in the stories above. What's particularly instructive about Jason's story are the democratic processes that he and his colleagues have invented to define and sustain their work. The annual teacher turnover rate at the UCLA Community School is lower than the national average for Title I schools (11 percent vs. 16 percent).

Typical of many new schools, teachers sprinted out of the gate for the first five years, working long hours and wearing many hats. For Jason, this involved planning professional development as a lead teacher, teaching Folklórico dancing as an elective, serving as the union chair, planning senior graduation, and piloting assessments in collaboration with the UCLA Writing Project. An accreditation visit in year six sounded the alarm that the pace was unsustainable. This set in motion a concerted effort to scale back. And for Jason, this meant taking a break. After six years at the school, he—like many accomplished educators—was recruited up and out of the school to work for the National Writing Project. After two years, however, he decided to return to the classroom work he loved, being with students and belonging to a community school dedicated to social change. Jason remains an important part of the school community. He created a writing center for the school and continues to mentor students alongside his research work for the National Writing Project.

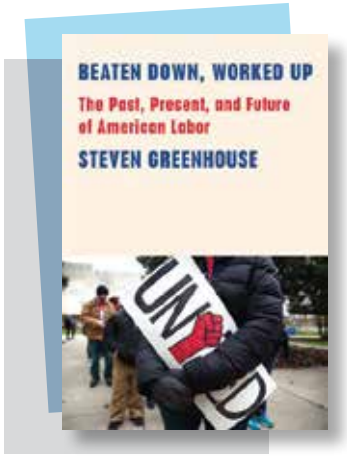
The teachers at the UCLA Community School share an identity as social justice educators, and they have designed the school to be democratic at every turn, supported by the deft leadership of principal Leyda Garcia. Teachers have created collaborative work groups and hiring processes, as well as a shared governing council, with several subcommittees, to ensure all members of the community make key decisions. To sustain time-intensive democratic processes, teachers rotate leadership roles and help each other step in and out when needed.

They also keep the big picture in view, to ensure their actions consider the larger systems and structural inequalities that define their students' lives. For example, when Rebecca Flynn helps her high school seniors choose internships, the backdrop is her applied economics course, in which she teaches students about worker rights, wage inequities, and other practical concerns that define working life. She also nurtures relationships with dozens of mentors from community-based organizations, local businesses, and UCLA who serve as role models for student interns.

(Continued on page 40)

BEATEN DOWN, WORKED UP: THE PAST, PRESENT, AND FUTURE OF AMERICAN LABOR

For the American middle class, it's been a demoralizing few decades. The cost of living has risen as wages have stagnated and blue-collar jobs have disappeared, devastating communities. While corporate profits and CEO salaries have exploded to record heights, the majority of jobs available are insecure and low paid. Simultaneously, the power of working people to come together and hold businesses accountable has also faded. All these trends are not coincidental, and as many Americans watch more money and power shift from the hands of the many to a privileged few, they are getting fed up.



In his book *Beaten Down, Worked Up: The Past, Present, and Future of American Labor* (Alfred A. Knopf), Steven Greenhouse explores how the labor movement over the last century has been essential to transferring power and dignity from elites back to working people. A former *New York Times* reporter on labor and workplace issues, he chronicles organized labor's greatest triumphs and its long decline starting in the 1980s. But he argues there is still reason to hope for a safe and secure future for every American—and that worker voice is the key.

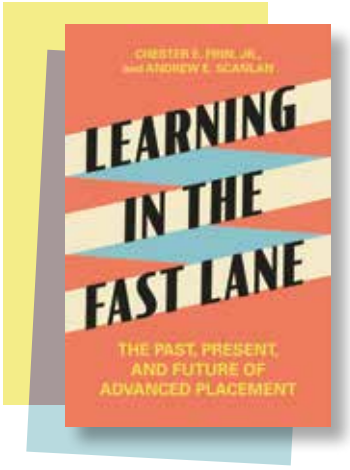
From the 1909 New York garment workers' strike for safer working conditions to the 1968 Memphis sanitation employees' fight for respect and dignity, Greenhouse highlights cases where workers have united. Interspersed with stories of families today struggling under multiple jobs, minimal pay, and unfair working conditions, Greenhouse emphasizes the ongoing need for organized labor, contradicting the claim that unions are outdated or unnecessary.

But Greenhouse doesn't shy away from the labor movement's mistakes either. The decline in labor power, he writes, was preceded by complacency among leaders, a lack of emphasis on organizing new members, and sometimes even racist or classist attitudes. "If a workers' movement is ever to rebound," he warns, in addition to all-out efforts to organize, it will need to place far more emphasis on "increase[d] opportunity, upward mobility, and economic security."

Despite past problems, Greenhouse cites grounds for optimism, like the multistate teacher strikes in 2018, the Fight for $15 campaign (spearheaded by the Service Employees International Union), and the effective labor-management model demonstrated by Kaiser Permanente. (For his chapter on the teacher strikes, visit https://aftvoices.org/were-not-going-to-take-it-anymore-81d9a667c790.) These cases reflect Greenhouse's final recommendations: that "labor should go back to first principles, and, as always, fight for fairness." In other words, social and economic justice for all workers.

LEARNING IN THE FAST LANE: THE PAST, PRESENT, AND FUTURE OF ADVANCED PLACEMENT

An enduring education program that has enabled myriad high school students to access a rigorous curriculum and earn college credit has a new book devoted to telling its story. *Learning in the Fast Lane: The Past, Present, and Future of Advanced Placement* (Princeton University Press), by Chester E. Finn Jr. and Andrew E. Scanlan, chronicles the rise of the 60-year-old Advanced Placement (AP) program. Run by the nonprofit College Board, AP began as a way for privileged students to engage with high-level coursework. Over the years, Finn and Scanlan write, "it has gradually evolved into a significant player in the longest-running and most compelling reform impulse of all: to widen educational opportunity and foster upward mobility for disadvantaged youngsters."



Although we don't agree with all of the authors' views of teachers and unions, the book is worth reading for its comprehensive account of the scope of AP's evolution. In a chapter titled "Growth Industry," the authors chart the increase in schools and students signing up for AP: more than a million exams were taken in 1998, and more than five million were taken in 2018. In the 1950s, when AP began, only 10 courses and exams were offered. Today, there are 38, in subjects such as calculus, world history, microeconomics, computer science, art history, and music theory, among others. For those interested in actual figures, the book includes an appendix detailing the number of AP exams taken globally in 2018 and shows, by subject, the percentage of exams that earned a qualifying score of 3 or higher.

But AP's expansion has not always resulted in increased access. Whether students have an opportunity to take AP classes can depend on where they live. Traditionally, wealthier schools and districts have offered more AP courses than their urban and rural counterparts.

On a positive note, a gap in participation rates since the program's inception has narrowed for students of color. "Black students, for example, took AP at about 24 percent the rate of white students in 1997, rising to 41 percent in 2017, even as white participation quintupled," the authors write. "Hispanic pupils participated in 1997 at just over half the rate of white students, but two decades later their rates were nearly equal."

What's disconcerting is that as participation rates for Black and Hispanic students have increased, their pass rates on AP exams have fallen. Although the authors contend that students can still benefit from taking an AP course without achieving a qualifying score, they urge everyone who cares about equity to redouble their efforts in preparing students who are minorities and from low-income families to succeed on AP exams.

More Than a Warm Welcome

(Continued from page 8)

enabled them to overcome so much in search of a better future for their families. When asked about her hopes for her children, Adelah Saleh shares two, the first of which is fairly modest. She'd like to see them take more field trips in school—perhaps to a science museum or to the state capital, Lansing. But she also has something greater in mind. "I want them to be successful in life, to finish their education, and to spread peace," she says in Arabic, as Hamade, the family liaison, translates into English. "We came from a country with no peace. This is what we miss, and this is what we wanted." ☐

ELLs on the Cusp

(Continued from page 22)

23. Robinson, "Evaluating Criteria."

24. U.S. Department of Education, *English Learner Tool Kit*.

25. Cimpian, Thompson, and Makowski, "Evaluating English Learner Reclassification."

26. Estrada and Wang, "Making English Learning Reclassification."

27. ACLU of Southern California, *DJ v. State of California*, 2019, www.aclusocal.org/en/cases/dj-v-state-california.

28. Estrada and Wang, "Making English Learning Reclassification."

29. By law, no student scoring below the state threshold should even be considered for reclassification. But in reality, some students are reclassified without the required test scores. See Robinson, "Evaluating Criteria"; and Johnson, "The Effects of English Learner Classification."

30. Estrada and Wang, "Making English Learning Reclassification."

31. Pope, "The Marginal Effect"; and Reyes and Hwang, "Middle School Language Classification."

32. D. August, "Educating English Language Learners," *American Educator* 42, no. 3 (Fall 2018): 4–9, 38.

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(Continued from page 28)

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Transfer of Learning

(Continued from page 34)

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24. J. Sweller, R. Clark, and P. Kirschner, "Teaching General Problem-Solving Skills Is Not a Substitute for, or a Viable Addition to, Teaching Mathematics," *Notices of the American Mathematical Society* 57 (2010): 1303–1304.

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Write to us!

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Community Schools

(Continued from page 38)

Jennifer, Yancy, and Jason have developed strong and distinctive identities as community school teachers. They see their work extending beyond the classroom, in partnership with others, in order to advance deeper learning as well as to further the cause of social justice within their communities. Learning in their schools is designed to engage students and ignite their passions. From Jennifer's focus on project-based learning to Yancy's bilingual teaching about identity and power, students in community schools have rich opportunities to connect their learning to the world and to their lives.

Making sure that community school teachers and other adults can sustain this work requires a deep commitment to the type of democratic work structures that Jason and his colleagues have established. As the stories of these powerful teachers attest, embracing community schooling goes far beyond wraparound services. At its heart, this is a movement to redefine teaching and learning. ☐

Endnotes

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AFTvotes

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—AFT PRESIDENT RANDI WEINGARTEN

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The AFT executive council recently adopted a resolution calling for stepped up engagement with the campaigns of the candidates who share our values and have forged real connections with our members. That and related resolutions and information are available at **aftvotes.aft.org/aft-endorsement-process**.

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- Make sure your friends, family members and colleagues are registered to vote.

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