Cultivating Opportunities to Thrive

Equity Flourishes When the Whole Community Comes Together
Launch a $5 million “Back to School for Everyone” national campaign to connect not just with teachers and school staff but also with families and communities to communicate the importance of in-school learning and build families’ trust and confidence in children returning to school.

Form school-based committees of staff, parents and, where appropriate, students to plan for and respond to safety issues and to conduct safety “walk-throughs” in school buildings.

Align health and pedagogical best practices by reducing class sizes to reflect the CDC’s 3-feet social distancing guidance. Eliminate simultaneous in-person and remote instruction.

Designate “office hours” and clinics for AFT affiliates and others to call in and discuss ideas and get technical support.

Roll out recovery programs this summer that provide academic support, help students get back into routines and offer lots of ways for kids to have fun.

Promote community schools to build trust and remove obstacles to getting kids and families the support and services they need.

Increase the emphasis on civics, science and project-based learning, to nurture critical thinking and bring learning to life.

Commit funds from the American Rescue Plan to fill shortages of school teachers, school counselors, psychologists and nurses.

Encourage Education Secretary Miguel Cardona to form a task force to rethink how we assess student learning and how to measure what really counts.

Engage stakeholders—families, educators and community partners—to ensure funds in the American Rescue Plan and other federal funds for schools are spent equitably and effectively.
Let’s Seed a Renaissance in Our Public Schools

RANDI WEINGARTEN, AFT President

WE ARE ALL yearning to move forward after this difficult year. For our young people, that means being back in school this fall, in person, five days a week. With their peers and caring adults, with all the supports they need, and with the space and facilities to do so safely.

We know that’s how kids learn best and that prolonged isolation is harmful. School is where children learn. It’s where they work together and play together. It’s where they form relationships and learn resilience.

Throughout the pandemic, teachers scrambled to redesign lessons and projects, and to create virtual field trips and labs to keep kids engaged and learning from afar. Teachers also yearned to be back in school, with their students. They only asked for two things: a safe workplace during this pandemic and the resources they and their students need to succeed.

Creating safe conditions in schools during a public health crisis is not an obstacle to reopening classrooms; it is the pathway to going back, staying back, and creating trust throughout the school community.

But we must do more than physically return to schools: we must also put in place the supports to help students recover—socially, emotionally, and academically. And we must reimagine teaching and learning to focus on what sparks students’ passions, builds confidence, nurtures critical thinking, and brings learning to life—so all students reach their heights, preparing for college, career, civic participation, and life.

We can seed a renaissance in America’s public schools that will change young people’s lives and change the course of our country. We can make every public school a place where parents want to send their children, educators and support staff want to work, and students thrive.

Recently, I gave a speech chock-full of research-based ideas and real-world examples from AFT locals for how we can accomplish this; you can watch or read my speech by visiting aft.org/renaissance.

And this issue of American Educator features in-depth discussions of a few of the keys to this renaissance: instruction that is both culturally responsive and based on the science of learning and development (page 4), social and emotional learning that centers equity and excellence (page 12), and community schools that provide wraparound services to students and families—and free teachers to teach (page 18).

Students will enter our schools this fall with an array of social, emotional, and academic needs. And schools must meet those needs. (The good news is that President Biden’s American Rescue Plan provides the necessary funding.)

There was an epidemic of anxiety and depression among young people even before the stress and isolation caused by COVID-19. The pandemic has intensified the existing inequities in the United States, with people of color suffering higher rates of infection, serious illness, and death from COVID-19, and anti-Asian hate incidents surging after being stoked by the last administration.

Let’s be honest: inequity and bias are built into our education system—from history textbooks that glide over oppression; to the systemic underfunding of inner-city, tribal, and rural schools; to the over-representation of Black and brown children in special education, and their under-representation in gifted and college-track programs. All of this is traumatizing.

Culturally responsive practices, social-emotional learning, and community schools are not add-ons. Culturally responsive education values the knowledge and skills students bring from their homes and communities, and it develops students’ agency as powerful learners and problem solvers. Social and emotional learning—especially when grounded in project-based learning that combines positive identity development with intellectual development—is fundamental for all youth. And community schools help level the playing field by integrating academics, enrichment, nutrition, and medical and mental health services.

I truly believe we have a rare chance to seed a renaissance in American public education—a time of a flowering in culture and learning, as in the Harlem Renaissance and the European Renaissance. It’s a once-in-a-lifetime opportunity not only to reopen and recover, but to reimagine our schools so they are anchored in the daily life of their communities and enable students, families, educators, and staff to thrive. This is our moment.

The AFT is seeding a renaissance in America’s public schools. President Randi Weingarten laid out a path from reopening to thriving in her May 13 speech: aft.org/renaissance.
Cultivating Opportunities to Thrive

After a year of overwhelming trauma, we look ahead with hope. When we offer culturally responsive learning opportunities that embrace the whole community and that center students’ social and emotional needs, equity flourishes.

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What We’re Reading: aft.org/ae/summer2021/wwr
Reflecting on America’s Past, Teaching for a Better Future

As our country celebrates the 4th of July, this is an opportune time for students to reflect on America’s past and consider how we can live up to our ideals of equality and opportunity. With President Biden striving for this year’s July 4th holiday to be a turning point in our fight against COVID-19, and with the American Rescue Plan Act delivering desperately needed funds to families and local and state governments, let’s think carefully about the America we want to build together. Here, we highlight materials available through Share My Lesson to help students understand America’s fight for freedom and carry that fight into the future.

Analyzing the Declaration of Independence
Crucial to any study of America’s aspirations is the Declaration of Independence. See “The Revolutionary Declaration of Independence,” a 90-minute lesson plan created by Share My Lesson partner ConSource, to engage high school students in a close reading of the declaration and to help them understand the colonists’ vision for a new form of government. Students discuss this challenging question: “Is the Declaration of Independence a positive statement of rights, or is it instead simply a response to British tyranny?”

For high school students who need additional assistance, particularly with behavior, check out “The American Revolution.” Created by the Cincinnati Federation of Teachers (CFT), this four-week lesson plan supports the Managing Behavior in School Communities professional learning course created by the AFT and offered by CFT. Using primary sources, students learn about the European countries that explored and colonized North America and the road to American independence.

For students in grades 11–12 who are ready for a less scaffolded approach, Share My Lesson partner What So Proudly We Hail offers “A Lesson on the Declaration of Independence.” Designed for a 60-minute class period, the lesson was created by a high school history teacher and challenges students with a series of questions to analyze the document’s structure and meaning. Extension activities include reading Thomas Jefferson's letter to Henry Lee, which explains the declaration’s purpose and principles, and writing essays.

Fulfilling the Promise of Freedom for All
Despite freedom rhetoric, many people in America were not free. A lesson for grades 11–12 that examines this point is “What to the Slave Is the Fourth of July?,” which takes its name from an address that Frederick Douglass, the abolitionist leader who escaped enslavement, gave on July 5, 1852. Created by the National Humanities Center, a Share My Lesson partner, the lesson explores the address, in which Douglass compares the abolitionists of his time with the patriots of 1776.

To introduce middle and high school students to Douglass’s speech, and for two resources that relate his words to present-day America, see “Protest Is Patriotic,” by Share My Lesson partner Learning for Justice. Published in June 2020 during intense protests against systemic racism and police brutality, the post shows how the July 4th “holiday and its symbols are tied to a long tradition of protest and demands that our nation make good on its promise of freedom for all.”

A resource delving into protest with students in kindergarten through third grade comes from Share My Lesson partner the Anti-Defamation League. Its discussion guide for Enough!: 20 Protesters Who Changed America, a picture book by Emily Easton, helps children learn about an array of American leaders devoted to freedom. Among those featured are Samuel Adams, a signer of the Declaration of Independence, and Harriet Tubman, who led many enslaved people to their freedom.

Finally, Get to Know Bernardo de Gálvez, by Guillermo Fesser, tells the story of a Spanish general who was critical to helping the patriots win the Revolutionary War. Available in English and Spanish, this book for upper elementary students highlights the role that Hispanic people played in creating this country.

For more Share My Lesson resources on Independence Day, see the collection at sharemylesson.com/collections/independence-day-activities. If you have additional ideas or requests, please reach out to us at content@sharemylesson.com.

–THE SHARE MY LESSON TEAM

Recommended Resources
To access these free resources, visit aft.org/ae/summer2021/sml.

The Revolutionary Declaration of Independence
The American Revolution
A Lesson on the Declaration of Independence
What to the Slave Is the Fourth of July?
Protest Is Patriotic
Enough!: 20 Protesters Who Changed America
Get to Know Bernardo de Gálvez
n August 2020, I welcomed 400 educators into my Culturally Responsive Education (CRE) by Design Online Professional Learning Community (PLC). This nine-month deep dive into redesigning instruction through a culturally responsive lens went beyond gimmicks and one-off activities. Then, in January 2021, we welcomed another 600 teachers, instructional coaches, and site leaders who wanted to participate. The CRE by Design virtual platform was a few years in the making, long before the pandemic.

I started playing with the idea in 2017, two years after I published Culturally Responsive Teaching and the Brain. I wanted to share how the principles of cultural responsiveness, when coupled with the science of learning, can be leveraged for liberatory education—which means positioning students to be the leaders of their own learning by helping them increase their ability to actively improve their cognition.

This is something I learned firsthand when teaching writing to high school students and college freshmen. All of my classroom teaching career was devoted to expository writing. In my credential program, I focused only on writing instruction and reading development. Literacy was (and still is) personal to me. Why? My maternal grandparents who fled the Deep South in 1940 to California were illiterate. Because of Jim Crow segregation, they never got the opportunity to learn to read.

In my early days as an educator, as passionate as I was about helping students become powerful writers, I struggled to help my lowest-performing students of color improve their writing. Many came into my class with skill and knowledge gaps that made critical reading and effective academic writing hard. There was no amount of red ink on their papers that easily changed that reality.

So, I did two things. I stopped using my red pen to correct papers, and I began my own inquiry as teacher-researcher. I leaned into Lisa Delpit’s seminal essay, “The Silenced Dialogue,” which addressed equity and literacy issues for historically marginalized students. I wanted to understand how to use the funds of knowledge my underprepared students brought with them as an asset to accelerate their growth as writers. I read Linda Christensen, a teacher-scholar with the Oregon Writing Project who went on to author Reading, Writing, and Rising Up, to help me reimagine what a writing class could look like for students of color that centered their language experiences and ways of learning.
rooted in collectivist cultural principles. Over time, with more responsive structures, processes, and routines in place, my writing students slowly became the leaders of their own learning. It was an outcome I went on to replicate over and over again as a writing teacher. When I left the classroom to support equity efforts, I shared this knowledge as a coach and curriculum designer.

Now, this body of knowledge is at the core of the CRE by Design Online PLC. Our primary goal has been to use collaborative inquiry to deepen the effective implementation and impact of culturally responsive practice directly on student learning. We asked the bold question: How do we support historically marginalized students—particularly Black, Latinx, Pacific Islander, and Indigenous students—to be truly independent learners, not just compliant ones? Yet, try as we might, our conversations kept going back to remote learning issues, such as: Should students be able to have cameras off during instruction?

One day during a Zoom Q&A session, a teacher asked the question for the 100th time: “How do I get my students to turn on their cameras?”

“How is that important to you?” I asked in the spirit of inquiry, trying to get to the real concern behind the question.

“Because it is,” she said adamantly. “I want to make sure they are doing what they are supposed to be doing—otherwise, they will fall behind.”

We then began to talk about how we can spark their intellectual curiosity instead of demanding cameras on. Curiosity, as I shared in Culturally Responsive Teaching and the Brain, stimulates neurotransmitters like dopamine that can entice students and pull them into learning rather than having us cajoling students to engage or making our interactions punitive. Still, there it was: the concern that students were falling behind, especially for students of color and students from under-resourced communities. This concern was coupled with the belief that doubling down on compliance was going to prevent what’s been dubbed “learning loss” during remote learning.

Fast forward to this moment, as we prepare for full-time in-person teaching and learning again. It feels like every day there has been a new national report about the damage done to student achievement as a result of “learning loss” during remote learning. Many believe that the academic impact of distance learning will have far-reaching effects that will likely exacerbate long-standing opportunity gaps and resulting inequities in academic achievement. Many school districts are preparing post-COVID-19 plans that are aimed at helping students not lose any more academic ground.

The Racialized Nature of the Learning Loss Conversation

Ironically, early in the pandemic, closing school buildings and sheltering in place (for all but essential workers) laid bare systemic racial inequities in education for children of color across grade levels. As a result of the racial justice reckoning happening alongside the COVID-19 pandemic, more educators were able to see the impact of gross inequities in education. The educational disparities went beyond the digital divide and access to technology: the more insidious gaps were in the ability of students to be independent learners during distance learning.

We had not prepared all students equally to be powerful self-directed learners. In some cases, we had relied too heavily on over-scaffolding instruction in the name of equitable access for our neediest students, who are disproportionately children of color growing up in chronically and systemically under-resourced communities. For the students most in need of enriching learning experiences, we all too often impose a pedagogy that prizes orderliness and completing work over getting to understanding. This point was highlighted in a recent report, The Opportunity Myth, that summarized a study in which almost 1,000 lessons in five school districts were observed. It found that although 71 percent of students were doing what was asked in their assignments (with more than half receiving As and Bs), they were meeting grade-level standards only 17 percent of the time—mainly because the assignments did not ask for grade-level work.

It is clear that prior to the pandemic, we failed to help the most marginalized, underperforming students strengthen their cognitive muscles through the process of productive struggle so they could carry more of the cognitive load, which left them unprepared for asynchronous learning situations (and for challenges beyond high school). A majority of these students are children of color and from low-income families and neighborhoods.

How do we support historically marginalized students to be independent learners, not just compliant ones?

This reality became painfully obvious during the pandemic, when high numbers of African American, Latinx, Pacific Islander, and Indigenous students learning online from home (or wherever they could find an internet connection) found themselves in their zone of frustration rather than in their ideal zone of proximal development. Many simply disengaged from remote learning by turning their cameras off. Others, especially middle and high schoolers, stopped logging in altogether.

Now, COVID-19 learning loss is being compared with summer learning loss, in which some students appear to lose about 25 to 30 percent of their content knowledge and skill between June and September (despite some recent analyses questioning the widely accepted concept of summer slide). My fear is that because of the way we talk about the problem, we will respond as we have in the past (particularly under No Child Left Behind) to disparities in academic achievement: double blocks of literacy and added time for mathematics, while dramatically reducing arts, science, social studies, and, in extreme cases, recess—all in the name of increasing literacy and math scores.

*As explained in “Suppressed History: The Intentional Segregation of America’s Cities” in the Spring 2021 issue of American Educator, Black families were prevented from buying homes and building wealth; see aft.org/aespring2021/rothstein.
How do we avoid post-COVID-19 instructional planning becoming a pedagogy of compliance in an effort to get students “caught up”?

Our dominant narratives around learning loss reveal that we are still oriented around a banking model of learning for Black and brown children; we see their minds as empty accounts into which we must deposit knowledge.15 We have framed these students as “behind,” while blaming their teachers and families for not making enough standards-based content deposits. This narrative of learning loss takes a deficit view of home-based and community-based learning. It disregards what students have learned in other contexts and what they have learned in class that does not show up on standardized tests. It disregards their existing funds of knowledge and thus fails to recognize the strong foundations on which we could be building.

We Need a Counter-Narrative to the Idea of Learning Loss

From cognitive science, we know that this banking model is not how learning works.16 Learning is the brain’s prime function—and all of us are wired for high intellectual performance and expansive, self-directed learning, if given the right conditions. Even when we are not aware of it, we are learning all the time—including outside of school. In addition to taking in new information and experiences, we integrate those new bits and pieces of information into our existing background knowledge and mental models (or what cognitive scientists call schema). Realizing that learning happens everywhere, maybe we should be asking different questions: As students devoted less time to traditional classroom-based learning, what did they gain from their home- and community-based learning? What they learned no doubt differs, but have students actually lost anything?

Our counter-narrative to learning loss begins with reframing this period as a time of family- and community-based learning. Children learned something. We need to welcome this new “off topic” knowledge back into the classroom as an asset. If we don’t, we send a dangerous message to students that “real” learning only happens in school. That message robs diverse students of the chance to recognize their own agency as learners. In contrast, our counter-narrative embraces the notion of redesigning teaching and learning for liberatory education.

A Path Forward

What are the implications of liberatory education? How do we reimagine what teaching and learning can be as a result of the new bodies of knowledge students will bring with them? How do we avoid overcompensating with compliance-based practices just because our students’ funds of knowledge do not clearly meet a standards-based learning target? A recent white paper from the Aspen Institute proposes five principles* to guide post-pandemic school planning.17 Here, I elaborate on three that are particularly relevant for us to keep in mind as we create instructional plans to revitalize learning and provide the enrichment all students need to reach their potential:

- View student success over multiple years.
- Use the science of learning to guide us.
- Set an agenda for innovation and continuous improvement.

View Student Success over Multiple Years

Let’s start with viewing student success over multiple years instead of grade by grade. We must prioritize helping students continue to grow as learners before focusing on covering particular grade-level content. Helping diverse students who are historically marginalized become more powerful learners is the endgame of equity. And, that is not going to happen if we are not making room in our curriculum and pacing guides for students to engage in the type of learning behaviors, like productive struggle and academic conversation, that grow the brain’s neural pathways.18 Over time, the brain’s complex network of neural pathways—what we have come to know as “background knowledge”—helps struggling learners do more rigorous and complex work. In short, the more you know, the easier it is to learn.19

Our long view of student success has to be twofold: helping students learn grade-level content while simultaneously coaching them to master essential “learn-how-to-learn” moves that allow them to accelerate their own knowledge and skill mastery over time. We cannot simply give these learn-how-to-learn moves to students. They are cultivated by the students over several years with the coaching support of the teacher and in the context of grasping challenging academic content (i.e., content that is worthy of students’ efforts).

Use the Science of Learning to Guide Us

To succeed in this acceleration, we will have to be guided by the science of learning. Based on my experience, it seems that many elementary school educators are familiar with the science of reading,‡ but fewer have heard about the science of learning and development (though American Educator’s readers have long had the benefit of Daniel T. Willingham’s column, “Ask the Cognitive

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*The five principles are: “ensure equity and engagement,” “take a holistic view to set a coherent strategy,” “ground the work in the science of learning,” “take a long-term view of student success,” and “embed an innovation and learning agenda.” The white paper is available for free at aspeninstitute.org/publications/recovery-and-renewal-principles-for-advancing-public-education-post-crisis.

†To ensure your knowledge of the science of reading is up to date, see Teaching Reading Is Rocket Science, 2020, by Louisa C. Moats: aft.org/sites/default/files/Moats.pdf.

‡For the latest installment, see page 34. For the free online archive, see aft.org/ae/subject-index.
Scientist”). It might seem like the new kid on the block in education circles, but its research foundation stretches back several decades. This body of knowledge we are calling the science of learning is summarized from cross-disciplinary studies highlighting the social and cognitive science behind how young people learn, develop, and grow their brain power to master complex skills.

One particularly compelling synthesis of emerging and established findings is offered by the Science of Learning and Development (SoLD) Alliance.20 This growing partnership of education leaders, researchers, cognitive scientists, and their organizations is united in the belief that these findings present powerful lessons to transform our education systems (and other child-serving systems) to help young people reach their fullest social, emotional, and academic potential. To elevate the essential understandings from this rich body of research, the SoLD Alliance has articulated eight core findings (see “Core Findings for Transforming Education” on page 9).21 Four of these core findings—malleability, context, meaning-making, and integration—have immediate implications in our post-COVID-19 school design planning, so I draw on them in the discussion that follows, as we build a vision of liberatory education.

**Set an Agenda for Innovation and Continuous Improvement**

The first of SoLD’s core findings—malleability—is critical for acting on the Aspen Institute’s principle of continuous improvement and innovation as we plan for liberatory education. Malleability reminds us that the brain is highly adaptable and resilient. One’s ability to learn does not stop, and adversity in life is not predictive of one’s cognitive capacity. Our plans for moving past the effects of the pandemic should be inspired and energized by this understanding. While we will need to be sensitive to rebuilding community, repairing relationships with students and families, and helping some families and even whole neighborhoods process the trauma brought on by all the disruption, students are still able to embrace learning when it is purposeful, is joyful, and sparks curiosity.

**Liberatory Education = Science of Learning + Culturally Responsive Practice**

Although this social-emotional regrounding is essential for healing, it is not sufficient for achieving liberatory education, in which students lead their own learning. We also have to plan for more opportunities for accelerated learning. When I speak of accelerated learning, I am referring to the process of coaching students to expand their ability to process information more effectively and do more complex academic work in order to get more than a year’s academic growth in a year’s time. The ability of a student to learn new content at faster rates with deeper understanding is the hallmark of liberatory education.

It is only through powerful teaching that we can apprentice students to be active agents in their own learning. This process is going to require them to build and braid together multiple neural, relational, and experiential processes to produce their own unique learning acceleration process.22 I like to think of it as “watering up” instructional practices with the science of learning instead of watering them down with the compliance-oriented deficit views.

That is why any effort to accelerate learning to achieve greater equity and help all students reach their potential has to couple the science of learning with culturally responsive practice. These two together create a synergetic effect that promotes more equitable outcomes; their combination helps humanize and empower marginalized learners so that they have the social-emotional capacity to level up their learning. The SoLD Alliance’s core finding of integration reminds us that learning depends on far more than the brain. The brain is nested within the body, and both are nested in a young person’s physical, cultural, cognitive, and emotional environment. Feeling a sense of belonging and intellectual safety free of racial microaggressions is essential.

**Connecting Culture and Cognition**

Beyond just relationships, we will have to make the culture-cognition connection explicit.23 Too many teachers (as well as professional development providers, professors of education, administrators, etc.) think of culture erroneously in terms of superficial multiculturalism; their intent is well-meaning, but their actions are often limited to promoting racial and social harmony in the classroom by offering a feel-good “It’s a Small World” environment. Others see the limits of multicultural education and focus on social justice education. They add literature or topics to diversify the content in hopes of increasing diverse students’ outcomes; their combination helps humanize and empower marginalized learners so that they have the social-emotional capacity to level up their learning. The SoLD Alliance’s core finding of integration reminds us that learning depends on far more than the brain. The brain is nested within the body, and both are nested in a young person’s physical, cultural, cognitive, and emotional environment. Feeling a sense of belonging and intellectual safety free of racial microaggressions is essential.

**Master Moves for Liberatory Instruction**

Our ultimate goal is to design learning so students become self-aware and self-directed as learners.
Teaching and the Brain, I offer instructional “master moves” that have a strong connection to the science of learning keys of context and meaning-making as training ground for accelerated learning. Of these master moves, the following three are critical for students to be knowledgeable, not just information filled:

- Expand background knowledge in context.
- Cultivate information processing skills with cognitive “studio” habits.
- Enrich word wealth through contextualized word study.

One of the fastest ways to accelerate learning is to authentically build students’ background knowledge. Here’s the rub: all new learning must be coupled with and integrated into existing knowledge by the learner, because only the student can build background knowledge.

To cultivate that expansion of background knowledge, teachers can create a variety of opportunities for students to learn new things that might interest them that can be related to the grade-level content they will be covering in future units. And to help broaden students’ interests, teachers can provide space in the curriculum for them to follow their curiosity, with a little scaffolding:

- Create a Netflix-like resource list of developmentally appropriate documentaries, nonfiction books, nature shows, and the like that are linked to the content standards. Ask students to offer titles of movies, graphic novels, and documentaries that they’ve devoured.
- Let students choose content from the resource list once or twice a month.
- Gamify the process to encourage intellectual curiosity that will keep students motivated. For example, use a 30-day challenge format or turn it into a scavenger hunt. Keep it nongraded (learning for the joy of learning).
- Create fun ways for them to process the new information. Ask them to relate it to what they already know using a thinking routine like “I Used to Think, but Now I Think.”

Cultivate Information Processing Skills with Cognitive “Studio” Habits

Although the expansion of background knowledge sounds simple enough, experienced teachers know that this process of integrating new and existing information and understandings is quite challenging. As the thinking routine described above hints at, sometimes prior knowledge is not accurate, which can hinder comprehension and integration of new knowledge. And, even when prior knowledge does not need to be corrected, often new knowledge is only partially understood, which also may hinder assimilation. To help the process of integrating new content with students’ funds of knowledge, teachers need to coach students to develop internal cognitive routines for processing new content that are grounded in the craft and techniques of deep learning.

Building background knowledge and understanding new content requires turning inert facts and figures into usable knowledge. This calls for what I call “cognitive chewing” on the part of the student. In cognitive science, it’s called information processing, and it is at the heart of liberatory education. Students need a set of learning-how-to-learn “studio” habits that help them with the business of learning, just like artists develop a set of studio habits to sharpen their craft and technique around their chosen art forms—writing, sculpting, painting, etc.

Too often, when we deem students behind academically, we increase compliance measures and actually decelerate learning. We over-scaffold rather than coach students to engage in productive struggle to process the content. In contrast, liberatory practices grounded in the science of learning focus on building

Expand Background Knowledge in Context

One way that so-called learning loss shows up is in shallow background knowledge. We have to resist thinking that the solution is just about feeding students more random, decontextualized facts and figures. For instruction to be truly liberatory and for learning to be sticky, it has to help students expand what they know, make deep connections across disciplines, and integrate new content into their existing funds of knowledge. This idea of expanding background knowledge is tied to the culturally responsive principle that says: All new information must be coupled with existing funds of knowledge in order to be learned. This is why we have to honor the things students have learned informally during the pandemic. New learning won’t stick if we don’t help students integrate it with their current understandings.

But, helping them make connections isn’t enough. We also need to focus on helping students build and expand their existing background knowledge consistently. Why? The science of learning tells us that background knowledge plays a significant and fundamental role in learning—including in critical thinking and reading comprehension. When building a tall skyscraper, the taller the building, the deeper the hole for the foundation must be. The same holds true in education. The more rigorous and complex the learning, the deeper general background knowledge needs to be. Background knowledge is essentially about meaning-making.

The National Research Council’s findings in the seminal report How People Learn shows that having background knowledge is not the same as having a collection of disconnected facts. Background knowledge is connected and organized around important concepts (reinforcing this key distinction is why I often use the terms funds of knowledge and schema).

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Although the expansion of background knowledge sounds simple enough, experienced teachers know that this process of integrating new and existing information and understandings is quite challenging. As the thinking routine described above hints at, sometimes prior knowledge is not accurate, which can hinder comprehension and integration of new knowledge. And, even when prior knowledge does not need to be corrected, often new knowledge is only partially understood, which also may hinder assimilation. To help the process of integrating new content with students’ funds of knowledge, teachers need to coach students to develop internal cognitive routines for processing new content that are grounded in the craft and techniques of deep learning.

Building background knowledge and understanding new content requires turning inert facts and figures into usable knowledge. This calls for what I call “cognitive chewing” on the part of the student. In cognitive science, it’s called information processing, and it is at the heart of liberatory education. Students need a set of learning-how-to-learn “studio” habits that help them with the business of learning, just like artists develop a set of studio habits to sharpen their craft and technique around their chosen art forms—writing, sculpting, painting, etc.

Too often, when we deem students behind academically, we increase compliance measures and actually decelerate learning. We over-scaffold rather than coach students to engage in productive struggle to process the content. In contrast, liberatory practices grounded in the science of learning focus on building
Core Findings for Transforming Education

BY THE SCIENCE OF LEARNING AND DEVELOPMENT (SOLD) ALLIANCE

All children can learn and thrive. Many people who work with children believe this to be true. But the science of learning and development shows that this idea is more than just a belief. It’s a scientific truth—and, more importantly, it’s a foundation upon which we can design and build learning environments and educational systems so that every young person can achieve their full potential.

In recent years, the science of how young people learn, develop, grow, and come to master complex skills has advanced substantially. This knowledge is critical for the education of all children, but it is especially powerful in creating educational equity where we have fallen short in the past. We may profess to believe that all children are capable of learning, but our educational practices and policies too often reflect the opposite, including marginalizing those who don’t respond to “traditional” K–12 educational approaches.

The Science of Learning and Development (SoLD) Alliance has articulated eight initial core findings, shown in the figure below, that have significant implications for our education systems. It should be emphasized that these findings are overlapping and need to be understood together in an integrated way. This list of key findings is, and always should be, a work in progress. As the science of learning and development advances, and our work expands, we will learn and say more about these and other findings, and their implications.

The science is clear and full of promise: all children can learn and thrive if we transform how we educate and develop them. This transformation will take considerable thought, effort, and courage. However, with science guiding our path, there is no reason we cannot rise to the challenge and create education systems that help all children reach the heights of their enormous potential.

There is tremendous promise in the work being done on many fronts by leaders and practitioners within the research community and in the education and youth-serving fields that demonstrates what is possible for all children. If we build the right systems—with the best knowledge and stakeholder engagement, and continuously improve based on what we know about how children learn and develop—then each young person can not only succeed in school but also find their path in life. The opportunities they find will match their individual talents and interests, and they will thrive in and contribute to their communities, benefiting us all. Building these systems is an urgent, immediate, and long-term venture, and the science of learning and development can help show the way.

This sidebar is adapted with permission from the SoLD Alliance paper How the Science of Learning and Development Can Transform Education: Initial Findings. To learn more about each of these core findings, see the full report at soldalliance.org/resources.
student independence through developing their own repertoire of studio habits.

Note that cognitive studio habits differ from the typical set of disposition-oriented “habits of mind” many teachers are familiar with. Those are generalized dispositions toward thinking that are mindfully employed by characteristically intelligent, successful people when they are confronted with challenges during learning.

To help students to cultivate their own studio habits, and thereby improve their information processing skills, teachers can:

- **Coach students to be meta-strategic.** While the popular notion of metacognition focuses on being an observer of one’s thinking in the moment, being *meta-strategic* focuses on cognitive planning and task analysis in order to size up the task and select the right cognitive tools and strategies for the job.

- **Provide adequate time for processing.** Cognitive scientists have long known that working memory (i.e., the mental space in which information processing happens) is limited—but what does this mean for teaching? Simply put, it means we need to pause active learning to give students time to chew on the new information and make connections with their existing knowledge. Honor this processing time. With our youngest students, it’s helpful to pause and process every few minutes. With adolescents and young adults, pause and process at least every 20 minutes.

- **Provide visual processing tools.** Effective pausing and processing often requires more active manipulation of the content than we can provide students in a brief turn-and-talk structure. Common processes that add visual supports to ongoing verbal work, like sketchnoting, thinking maps, or thinking routines (such as “Parts, Purposes, and Complexities”), can be external tools students add to their internal cognitive toolkit. Over time, these are used less often as external scaffolding tools, and the thinking routine or processing tool becomes a permanent internal cognitive structure in their brain for turning facts and figures from inert information into usable knowledge. The added benefit is that these visual processing tools become part of their lifelong toolkit for thinking through complex problems.

- **Offer students the option of choosing from a variety of tools.**

**Students have been learning during the pandemic at home and in their communities. We have to honor this new knowledge.**

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*Combining visual and verbal processing, while avoiding the pitfalls of accidentally distracting students, can be tricky. For guidance, see “Sparking Interest, Reducing Learning?” in the Fall 2020 issue of American Educator: aft.org/aeFall2020Sundar.

### Distinctions of Equity

It is important to distinguish between multicultural, social justice, and culturally responsive education when engaged in equity work to avoid confusing their particular purposes. Too often, these concepts are used interchangeably, but the distinctions outlined here show that they are neither equivalent nor a continuum. Educators cannot begin with multicultural education and believe it will lead to culturally responsive education (CRE). Why? CRE is focused on the cognitive development of underserved students. Multicultural and social justice education play supporting roles.

<table>
<thead>
<tr>
<th>MULTICULTURAL EDUCATION</th>
<th>SOCIAL JUSTICE EDUCATION</th>
<th>CULTURALLY RESPONSIVE EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focuses on celebrating diversity.</td>
<td>Focuses on exposing the social-political context that students experience.</td>
<td>Focuses on improving the learning capacity of diverse students who have been marginalized educationally.</td>
</tr>
<tr>
<td>Centers around creating positive social interactions across difference.</td>
<td>Centers around raising students’ consciousness about inequity in everyday social, environmental, economic, and political situations.</td>
<td>Centers around the affective and cognitive aspects of teaching and learning.</td>
</tr>
<tr>
<td>Concerns itself with exposing privileged students to multiple perspectives, and other cultures. For students of color, the focus is on seeing themselves reflected in the curriculum.</td>
<td>Concerns itself with creating a lens to recognize and interrupt inequitable patterns and practices in society.</td>
<td>Concerns itself with building cognitive capacity and academic mindset by pushing back on dominant narratives about people of color.</td>
</tr>
</tbody>
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Social Harmony

Critical Consciousness

Independent Learning for Agency
Everyone doesn’t have to use the same cognitive tool at the same time—though everyone should have the same opportunities to master a variety of tools. For liberatory education, each student is building a customized set of studio habits. When teachers have created time and space for this, it is easier to manage.

Enrich Word Wealth Through Contextualized Word Study

The way the brain organizes and maintains its schema is deeply related to authentic vocabulary development. Think of vocabulary richness as the brain’s Google search engine. Deep background knowledge and word wealth go hand in hand. That is why our third master move is robust, contextualized word study.

When teaching vocabulary development, we have to resist the old school (pun intended) practice of only creating a word wall and not interacting with it or merely front-loading vocabulary without ever talking about those words during a lesson. That’s not how we learn words. We learn them actively in context. Our brain uses the three branches of word study for this process: word play, word consciousness, and word knowledge. This is where the science of learning intersects with the science of reading. When our vocabulary expands, we become better thinkers, stronger readers, and more powerful writers. Why? Because words themselves are a form of background knowledge. When word wealth is developed in context, students are mastering terms that represent whole bodies of knowledge. These are known as “concept words.” Take the word democracy, for example. A second-grader may learn about democracy with a teacher who engages the children in deciding what their classroom rules will be or by connecting to community norms they are learning at home. An eighth-grader in a US history course may come to understand the complicated aspects of democracy from America’s Jim Crow era through the passage of the Voting Rights Act in 1965. And a 12th-grader in an American civics course may grapple with the strengths and weaknesses of our democracy today in light of globalization.

We have to help students build “word wealth” as part of an ongoing process of building cognitive capacity. The key is making it fun and letting students own the process as their curiosity takes them down different paths based on their own community context. Here are some key tenets of word learning:

- **Play with words** to stimulate intellectual curiosity about how words work using games like Taboo and providing time for students to explore the words that catch their interest.
- **Introduce morphology** to students to highlight word knowledge and help them tune into roots, prefixes, and suffixes. Make it a regular practice with each new unit. Begin with word curiosities to spark interest.
- **Build word consciousness** through the study of word evolution in engaging ways. For example, students can trace the evolution of slang terms across generations and regions through oral interviews (or Zoom chats) with aunts, uncles, and cousins in different age ranges and parts of the country or world.
- **Create explicit bridges between vocabulary development and the other master moves** described earlier. Coach students to always notice and name similarities and differences in how language is used between their community and school contexts. As students consume the offerings from the Netflix-style resource list for expanding their background knowledge, get them to track new words as well as how familiar words are used in new ways. Teach them to use visual tools specifically for word learning, like a Frayer Model graphic organizer or concept mapping, as part of their cognitive studio habits to capture words into their own personal dictionaries.

Above all, cultivate a culture of word learning that builds collective word wealth over time.

Conclusion

Many schools will be looking to the science of learning and culturally responsive practice to improve teaching and learning and ameliorate post-COVID-19 learning loss. Yet, so many existing pre-COVID-19 structures, processes, and supposed “best practices” run counter to what we understand about information processing and the eight core findings from the science of learning and development. In addition, there are still myths and misconceptions about culture and the role it plays in learning. We too often reduce culturally responsive teaching to relationships, motivation, or engagement. In reality, it carries the blueprint for liberatory education by helping historically marginalized students who are underperforming to engage in deeper learning by expanding their brain power. We don’t want to miss the moment. Students have been continuously learning during the pandemic at home and in their communities. We have to honor this new knowledge. We have to learn to leverage it wisely.

This simply means that as classroom teachers, instructional coaches, and school site leaders, we will need to be in a continuous process of unlearning, relearning, and reflecting in ways that empower students to be the leaders of their own learning.

**Endnotes**

Imagine a school community in which: All children and youth have equal opportunities to thrive. Social and cultural markers no longer negatively predict young people’s academic, social, and emotional outcomes or their life chances. Adults honor and elevate a broad range of perspectives and experiences by engaging young people as leaders, problem solvers, and decision makers. Youth and adults engage in an ongoing process of cultivating, practicing, and reflecting on their social and emotional competencies. Learning environments are supportive, culturally responsive, and focused on building relationships and community. And families, school staff, and out-of-school-time staff have regular, meaningful opportunities to build authentic partnerships and collaboratively support young people’s social, emotional, and academic development, while continuing to deepen their own social and emotional competencies.

This is the community we aspire to build—and we ask you to join us on this journey. In 2019, the Collaborative for Academic, Social, and Emotional Learning (CASEL), long known to many educators as a leading research center and advocate for social and emotional learning (SEL), adopted an ambitious three-year strategic plan that prioritized advancing SEL in service of equity and excellence, elevating the criticality of SEL for adults, and ensuring integration of SEL throughout the instructional process. The pandemic brought our society’s systemic racism and economic inequity into sharper relief and further energized our work. As some return to a “normal” that we find unacceptable, we remain committed to this journey. We are striving to identify and contribute to the types of educational experiences that foster personal and collective growth and well-being for young people, especially those our society has long underserved. These are typically, but not only, Black, brown, and Indigenous youth and those from under-resourced communities. It is increasingly evident that addressing these inequities and related challenges also necessitates attending to the social and emotional learning of young people and adults who are white and/or reside in better-resourced communities. It is increasingly evident that addressing these inequities and related challenges also necessitates attending to the social and emotional learning of young people and adults who are white and/or reside in better-resourced communities as well. Many of us in the field understand that we are at an inflection point. We have an opportunity to invest in viable strategies to reimagine the purpose of education and to more fully appreciate the nature of the learning experiences we are creating and delivering.

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of learning, where and how it occurs, and its relevance to a more equitable and vibrant civil society.¹

Our commitment and contribution to supporting meaningful, sustained change in the US education system is rooted in recent revisions to our definition of SEL, as well as to our tools and resources.⁸ We have also launched a research-practice partnership strategy allowing our teams to work more systematically and collaboratively with a subset of our district and school partners. Our work necessarily focuses on both youth and adult SEL in school and community contexts, and on how to fully integrate academic, social, and emotional instruction.

In this article, we first share our revised definition of SEL and our focus on identity, agency, belonging, collaborative problem solving, and curiosity. We then describe some considerations and directions for ongoing action research with some partnering school communities. These include co-constructing equitable learning environments via project-based learning and SEL for adults. We conclude with some thoughts about next steps in our ongoing research-practice partnership efforts.

**Our Evolving Definition Supports Transformative SEL**

In order to achieve the conceptual expansion necessary to center equity and excellence, CASEL’s revised definition of SEL places greater emphasis on affirming the strengths, experiences, and identities of all students—most especially those who have been marginalized and minoritized by our society:

Social and emotional learning (SEL) is an integral part of education and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.

SEL advances educational equity and excellence through authentic school-family-community partnerships to establish learning environments and experiences that feature trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation. SEL can help address various forms of inequity and empower young people and adults to co-create thriving schools and contribute to safe, healthy, and just communities.⁹

This new definition sets a vision for what high-quality systemic SEL is and how it might be achieved. CASEL is also refining a specific form of SEL implementation that concentrates SEL practice on inequitable settings and systems, and promoting justice-oriented civic engagement—we are calling this transformative SEL. This form of SEL is aimed at redistributing power to promote social justice through increased engagement in school and civic life. It intentionally points to competencies and highlights relational and contextual factors that help promote equitable learning environments and foster desirable personal and collective outcomes. Transformative SEL is a process whereby young people and adults build strong and respectful relationships that facilitate co-learning to critically examine root causes of inequity and to develop collaborative solutions that lead to personal, communal, and societal well-being. This form of SEL is necessary to meet the growing political, economic, and health challenges we face in the United States and around the world.

Many educators are familiar with CASEL’s long-standing, overlapping domains of competence: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. As we center equity, we are highlighting the importance of identity, agency, belonging, collaborative problem solving, and curiosity. These focal constructs are most germane to well-being and promoting thriving among diverse groups in a raced, classed, and gendered society.

**CASEL’s revised definition of SEL places greater emphasis on affirming the strengths, experiences, and identities of all students.**

- **Identity** implies understandings and sensibilities associated with multifaceted personal and social group statuses (often discussed in terms of intersectionality and positionality). It suggests self-reflection and self-respect.
- **Agency** confers the wherewithal to impact positively on this psychological and social reality. It reflects hope and self-direction.
- **Belonging** suggests the sense of connectedness and trust needed to engage in co-constructing an equitable, thriving local community and vibrant civil society. It enhances self-worth.
- **Collaborative problem solving** acknowledges and helps realize the collective rights and responsibilities of full citizenship in local, national, and global community contexts. It is a critical feature of efforts to pursue equity and excellence.
- **Curiosity** reflects the deep need to continuously surface and curate information about oneself in relation to others and the physical world. It prioritizes informed decision making based on open-minded investigation that sparks self-development and careful social analysis.

**Focal Constructs for Transformative SEL: A Closer Look at the Keys to Equity**

Each of our focal constructs has a strong foundation in research and practice, which we summarize below. Like the domains of competence in which they are nested, they are related and potentially mutually reinforcing. For example, in many respects, collaborative problem solving can provide a context for leveraging and cultivating identity, agency, belonging, and curiosity among young people and adults.

**Identity** is focal among self-awareness competencies and refers to how students (and adults) view themselves. Identity is multidimensional (e.g., race/ethnicity, socioeconomic status, gender, religion, values, interests, etc.), with each dimension having a level of importance and emotional tenor (positive/negative) that may...
change over time. These dimensions also intersect with each other (e.g., Latina teacher dedicated to a chronically under-resourced school, Indigenous transgender boy leading his school’s yearbook club). Having a healthy sense of identity is important developmentally across the lifespan because it buffers against negative or traumatic experiences (e.g., stereotype threat or discrimination) and contributes to positive academic, social, and emotional outcomes.

Agency is focal among self-management competencies and signifies perceived and actual capacity to effect change through purposeful action. This may include having voice and making choices about learning and career goals to pursue, overcoming personal challenges, and engaging in collaborative problem solving. Agency is key to young adults’ success, allowing them to take intentional actions to shape the course of their lives. Agency also includes collective efficacy, which has been shown to improve teachers’ abilities to improve school outcomes for students from under-resourced communities and to increase coordinated actions among adolescents and adults that contribute positively to civic life.

Belonging is focal among social awareness competencies and connotes experiences of acceptance, respect, and inclusion within a group or community. It implies not only feeling recognized but also being fully involved in relationship-building and co-creating learning spaces. Having a sense of belonging is critical to students’ and adults’ cognitive, social, and emotional well-being, as well as school and work satisfaction and academic motivation and achievement.

Collaborative problem solving is focal among relationship skills competencies and reflects a complex skill set in high demand in our increasingly multifaceted local, national, and global contexts. Distinct from collaborative learning and collaborative decision making, collaborative problem solving is defined as the capacity of an individual to effectively engage in a process whereby two or more people attempt to solve a problem by sharing the understanding and effort required to come to a solution and pooling their knowledge, skills, and efforts to reach that solution. Despite its recognized importance as a developmental imperative, international studies of adolescents indicate that only one-third of 15-year-olds are proficient at collaborative problem solving—but students in racially and culturally diverse schools and those participating in group-based extracurricular activities (e.g., sports teams, band) are more likely to be proficient than their peers.

Curiosity is focal among responsible decision-making competencies and can animate critical self- and social analysis and action. Curiosity has both cognitive and affective elements that contribute to an enduring tendency to pursue knowledge and new experiences. As such, it appears to be essential to attention, engagement, and learning. A recent study of Black and Latinx adolescents found a positive association between the growth over time in curiosity and increased societal analysis and involvement.

Co-Constructing Equitable Learning Environments
CASEL’s SEL framework includes classrooms, schools, families, and communities as learning contexts that can support the types of human growth and development we envision. Our work engages states, districts, and schools in the process of implementing systemic SEL by (1) building foundational support and planning, (2) strengthening adult SEL competencies and capacities, (3) promoting SEL for students, and (4) practicing continuous improvement. While presented separately, these four areas are overlapping and interrelated. For example, the planning team should include education leaders, students, families, and community stakeholders. Similarly, continuous improvement is intentionally featured in the initial effort to build foundational support and plan so that all stakeholders are actively learning and adjusting throughout the implementation process.

This interest in collaboratively and continuously improving the learning environment is an essential feature of our emerging work that is not unique to CASEL. Recent research points to a movement in education away from adopting “best practices” and toward addressing local challenges by adapting evidence-based strategies and practitioners’ promising practices. Across the country, continuous improvement is being pursued through a range of approaches that share the following characteristics:

- Grounding improvements in local problems or needs
- Empowering practitioners to take an active role in improvement research
- Engaging in a cyclical process of action, assessment, reflection, and adjustment
- Striving to stimulate change in individual classrooms as well as across schools and systems

Historically, our work has focused primarily on supporting and tracking the efforts of key state and district administrators to enact organizational improvements, with less attention given to schools’ communities. To realize the principles and goals of transformative SEL, we are now also pursuing opportunities for collaborative inquiry with local practitioners (e.g., teachers and youth workers), families, and youth. We have framed our emerging work primarily in terms of research-practice partnerships, with a particular focus on design-based implementation research. This will allow us to honor, leverage, and blend the expertise of local stakeholders with what we have learned over the years.

The Promise of Project-Based Learning as a Driver of Transformative SEL
A key implication of our commitment to transformative SEL and what students, families, and educators require has to do with recommendations for the selection of school- and classroom-based SEL programs. Instead of creating our own program or curriculum, CASEL serves as a neutral body in the field, evaluating programs for pre-K through high school against our rigorous criteria to determine which are high quality and evidence-based. As part of revising all of our resources to support implementation of transformative SEL, we continue to update our inclusion criteria for programs and approaches.

We believe that key features of culturally responsive education and youth-guided approaches—like project-based learning and youth participatory action research—are essential for transformative SEL. We have particular interest in student-led project-based learning, since these programs and practices tend to feature collaborative problem solving and thus effectively integrate aca-
Student-led project-based learning tends to integrate academic, social, and emotional learning.

Despite the challenges, we see benefits in supporting PBL, YPAR, and other student-driven approaches that feature collaborative problem solving, and also leverage and scaffold academic content, to examine issues of interest to young people. To catalyze transformative SEL, we hope to learn more about the levels of curiosity fostered, connections to aspects of current and prospective identities, how agentic participants become, and the sense of belonging that might ensue.

Transformative SEL for Adults

Our revised definition of SEL highlights family-school-community partnerships. So, in order for transformative SEL to become systemic—to fully take root in schools and other learning environments—we see a need to prioritize adults’ learning about and critical reflection on their own social, emotional, and cultural competencies. After all, this pursuit of equity and excellence cannot be done to students—it can only be accomplished through collective youth and adult action. There are several entry points for this work: adults in schools, families, and communities.

Adults in Schools

Although all of the adults in a school matter, we begin with principals because of the power they have to shape the learning environment. Principals are largely white, and the extent of their professional experience has declined, especially in under-resourced schools. Thus, there are growing representation and experience gaps that are most likely to have a detrimental impact on students of color.
Principals can build an equitable climate by hiring more teachers of color, working with teachers to support the implementation of culturally responsive education, and managing student discipline in a supportive manner, especially with students of color. But anti-racist, equity-focused educational leaders are often challenged by district, teacher, and family stakeholders seeking to maintain the structures and practices that perpetuate the status quo. Currently, such work is more likely to be taken up by principals of color than white principals.21

The hiring of teachers of color may make an especially important contribution to a school climate that advances equity and excellence. For example, compared with their white colleagues, teachers of color are preferred by students from all backgrounds.22 Further, there is evidence that having more Black male teachers is predictive of more positive educational outcomes for Black boys.23 However, it would be naive to conclude that racial group membership and race-matching are sufficient to improve educational experiences and outcomes. We know, for example, that Black people vary greatly in their racial identities (e.g., the degree to which they view being Black as important and positive or their preferred ways of engaging in US society). As such, the key, likely, is not racial group membership alone, but also the competencies and practices Black educators commonly use to produce these positive relationships and student outcomes. We imagine our focal constructs (identity, agency, belonging, collaborative problem solving, and curiosity) are relevant in this connection.

Regardless of their own backgrounds, essential actions for adults in schools include replacing deficit-oriented perceptions with more affirming views of students as change agents, respecting and striving to learn about families’ and communities’ funds of knowledge, understanding one’s own culture, and approaching learning about others’ cultures and communities with curiosity and humility. Additionally, educators have a responsibility to conduct (and administrators have a responsibility to support) a critical analysis of their textbooks and other materials to ensure they are rigorous, are relevant to and respectful of their students, and engage students in high-level practices.24

The vast majority of classroom teachers are white (and primarily women). And there is a substantial literature on racial bias (implicit and explicit) that indicates that we as a country have a long way to go in addressing teacher attitudes and practices that have negative effects on the school outcomes of students of color.25 Such attitudes and practices are inconsistent with culturally responsive education and student-led project-based learning. As such, we are interested in surfacing effective ways to mitigate racially biased mindsets and practices, and to promote anti-oppressive educational practices as part of advancing transformative SEL.

Some scholars have suggested that book clubs, curriculum labs, and professional learning communities provide means to develop a constructive white racial identity, reducing microaggressions and enacting greater cultural, ethnic, and racial literacy.26 Research indicates, however, that relying solely on beliefs-focused professional development has no appreciable, sustained impact on teaching practices; worse, it could foster resentment among some white teachers.27 Fortunately, moving from beliefs to actions is effective. For example, research indicates that active co-learning opportunities—like community walks, project-based learning, and youth participatory action research—improve teachers’ attitudes and instructional practices with students from diverse backgrounds.28

There are, of course, additional struggles faced by teachers who try to launch and sustain this or any other type of transformative educational work. These include structural challenges associated with an overemphasis on testing and administrators’ discomfort with students’ critiques of schooling. Teachers also have reported instructional challenges such as vulnerability and loss of power, student apathy, and discomfort with discussions of race. Based on this research, teachers interested in pursuing this type of work are advised to develop allies among colleagues and community stakeholders and to experiment with the practices to adapt and improve applications to the local context.29 Implied here is the critical need for teacher identity work and for communities of practice that support collaborative problem solving and the sense of personal and collective agency teachers need and deserve to advance transformative SEL.

Adults in Families

The pandemic has raised our awareness of the various places and ways in which learning happens—the developmental ecosystem for children, adolescents, and adults. CASEL has long asserted that family-school-community partnerships are essential to realizing the potential of systemic SEL.30 With our revisions and transformative SEL, we now separate families from communities as distinct contexts for SEL. This provides for a more focused and nuanced approach to our work in the family context. Families play an integral role in the social, emotional, and academic development of children and youth and are essential to creating, informing, and sustaining educational equity initiatives—including transformative SEL. Parents and other primary caregivers value the development of these life skills and view the home as the first place SEL occurs. However, it is clear that most families of color require modifications in the learning environments typically provided by districts and schools.31

The family context can function as a safe and open environment where children and youth can be themselves while practicing social and emotional norms, cues, and skills needed to effectively navigate and contribute to a range of social interactions and settings. As such, the ways in which families socialize children and youth about emotions (i.e., their messaging and modeling) often intersect with racial pride. In fact, one question we are exploring is the heightened importance of civic activism socialization in fostering transformative SEL as young people develop.32

Fostering more authentic family-school partnerships is a priority in our collaboration with districts, schools, and practitioners.
We anchored this work in a framework that outlines the need for family-school partnerships to surface challenges, establish essential conditions (organizational and procedural), and pursue policy and program goals that foster capabilities (skills and knowledge), connections (networks), cognitions (shifts in beliefs and values), and confidence (self-efficacy). The model views this as a recipe for dual capacity building for authentic partnering and constructive collaboration.

<table>
<thead>
<tr>
<th>Educators develop the capacity to:</th>
<th>Families develop the capacity to:</th>
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<tbody>
<tr>
<td>Engage with families as co-creators</td>
<td>Engage with educators as co-creators</td>
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<tr>
<td>Connect family engagement to learning and development</td>
<td>Be supporters and encouragers</td>
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<tr>
<td>Honor families’ funds of knowledge</td>
<td>Serve as monitors</td>
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<tr>
<td>Create welcoming cultures</td>
<td>Shape the work as advocates and models</td>
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Toward this end, we have engaged in collaborative work to facilitate a discussion series among educators and caregivers. An initial pilot study with a community organization serving Latinx families found the discussion series informative; families used their new insights to become active participants on schools’ SEL advisory committees.

Adults in Communities

Communities have always represented an important context for the cognitive, social, and emotional development of children, youth, and adults. The ongoing national crises—from quashing the pandemic to reckoning with racism to addressing climate change—have made it even more evident that families, schools, and communities must work together to ensure collective well-being and thriving. For transformative SEL, key community partners include a range of youth-serving organizations that offer structured learning opportunities.

These organizations, the programs they offer, and youth workers who staff them are typically overlooked in conversations about how and where to best promote academic, social, and emotional growth among young people. But they are crucial for achieving our vision of SEL in the service of equity and excellence. Several studies have found positive outcomes among Black and Latinx youth from low- and middle-income families. A meta-analysis of SEL implemented in afterschool settings revealed that programs that are well-designed and well-implemented can have a positive impact in an array of academic, social, and emotional competencies.

Community-based youth-serving organizations often feature culturally relevant education and other affirming, youth-centered strategies. As such, we are particularly interested in the degree to which they foster ethnic and racial identity development, voice, and autonomy—especially through youth participatory action research.

The majority of these organizations’ workers are people of color; their professional development (and that of organization leaders) could prove informative. While community-based educational spaces offer a fertile context for culturally and developmentally appropriate relationships and locally grounded learning experiences, there is typically no formal infrastructure for staff recruitment and training. Understanding whether and in what ways youth workers come to understand and enact engaging, transformative practices might be instructive for school personnel and the field (which is yet another avenue we are exploring with some of our partner schools and districts).

We certainly want to illuminate and learn from the bright spots in classroom, family, and community settings where adults and young people are thriving. Our work with adults will benefit from formative data to help us understand the contributions of adult competencies and supports (e.g., professional development and caregiver discussions) that make this so. In the school context, this includes separate but related work with administrators and teachers. We are especially interested in how school staff, parents, and youth workers can align their efforts to maximize opportunities for the academic, social, and emotional growth and well-being of children and youth.

Some Concluding Thoughts

We committed a few years ago to a program of work aimed at advancing SEL in the service of equity and excellence. As we engage in this work, we maintain an abiding interest in organizational improvements, so we will examine the roles that state policies and education agencies can play in framing and enabling work in school districts.* We also have narrowed our focus to a subset of districts for deeper work on transformative SEL, as we quickly recognized how intensive this effort needs to be. As a result, we are paying greater attention to district readiness to commit leaders from key divisions to this work in a sustained way and are streamlining the onboarding process. Finally, we have created space to co-learn and co-design, with districts, models of transformative SEL that best support systemic and sustainable implementation to impact student outcomes.

Looking ahead, we realize that much more needs to be understood about what happens in school communities. Our revised definition has encouraged us to also pursue opportunities for collaborative inquiry with local practitioners, families, and youth. This requires hard-earned relational trust, but it is well worth the effort because it has the potential to make the focal problems and practices more germane to those closest to the work. We hope this will result in greater interest in, facility with, and use of co-generated data.

One of our primary goals is to identify programs, approaches, modules, and practices consistent with the promotion of equity-focused social and emotional competencies, especially identity, agency, belonging, collaborative problem solving, and curiosity. Together, with youth, families, practitioners, and communities, we look forward to collaborating to advance transformative SEL.

*For details, visit casel.org/partner-district and casel.org/state-page.
Building Community with Community Schools

How a Union-Driven Effort Supports Students and Families in Central New York

By Jennifer Dubin

Devina Love moved to Rome, New York, in August last year after fleeing domestic violence in Massachusetts. She enrolled both of her young sons at Francis Bellamy Elementary—and soon their world started to brighten. Bellamy, which became Rome’s first community school in 2015, offered an array of services. From food to school supplies to a staff genuinely tuned in to families’ emotional needs, Bellamy offered far more than an education to Love and her sons.

Love felt it right away. “We come with kind of an array of issues and a complex situation that required a lot of love and compassion and a lot of empathy from people we honestly don’t know,” she says. Joe Renzi, a school counselor at Bellamy, told Love about a variety of supports provided through the local community schools initiative. Soon, Renzi was offering counseling to her sons in school, while Love was receiving mental health supports from an outside agency.

Love recalls the time this past winter when the community schools operations manager asked her what specifically her family could use. Besides food, Love said her younger son needed a snowsuit. Her older son had gotten one for Christmas, but she didn’t have the money to purchase one for her 6-year-old. Soon after, the manager came to Love’s apartment with a brand-new snowsuit. She also arrived with two new pairs of snow boots. “They were so excited,” Love says. “They were like, ‘Mommy, now we can go play in the snow!’”

Community schools like Bellamy show what’s possible when we all band together to prioritize healthy youth development and family well-being. Bellamy’s extensive and customized array of services was seven years in the making—and is still being refined and enhanced.

Back in 2013, Joe Eurto first heard of community schools at a conference in New York City that was held by the AFT’s Center for School Improvement, which focuses on creating labor-management partnerships to foster sustainable changes. A longtime middle school English teacher in Rome, Eurto could not stop thinking about all the good community schools would do for his students.

At the conference, he learned that community schools serve as the hubs of their communities by providing wraparound services and enrichment opportunities to students and families in need. He learned that if children lack eyeglasses, dental care, mental health counseling, school supplies, winter coats, sufficient food, or stable housing, a community school would connect students and families to organizations that provide those supports. He also learned that someone other than a busy classroom teacher coordinates these supports so that teachers can focus on their students’ academic, social, and emotional development.

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*Asking a family what specific supports they need would normally be the job of the community schools coordinator. Because the coordinator position at Bellamy Elementary School was vacant when Devina Love’s children enrolled, the operations manager for the nonprofit organization that supports community schools in Rome and in three neighboring school districts stepped in to help.

†For recent research on community schools, see the online sidebar at aft.org/ae/summer2021/dubin. To access additional articles on community schools, see the American Educator subject index: aft.org/ae/subject-index.
At the time, Eurto was secretary of the Rome Teachers Association (RTA). He had attended the conference with the RTA’s president, Rob Wood, thanks to a grant from the state affiliate, the New York State United Teachers. On the four-hour train ride back to Rome after the conference, “Rob and I were kind of dreaming about the possibilities of community schools,” Eurto recalls. The union and the district had been in extensive and impassioned talks about how best to support students and teachers, and this approach offered a way forward.

**Launching a Teacher-Led Nonprofit**

Wood, who has been the RTA’s president since 2011, was born and raised in Rome, a medium-sized city with a population of about 32,000 residents. He remembers Rome’s economic heydays in the 1960s when the population reached a high of over 50,000, unionized factory jobs were plentiful, and many families felt secure, with good wages and benefits. Long known as the Copper City, Rome boasted a strong manufacturing sector in copper and wire—but today, only a few such employers remain. By 1980, the population had declined by almost 10,000, as manufacturing jobs were beginning to dry up. This trend intensified, resulting in such jobs decreasing by 53.4 percent between 1980 and 2005 in the Utica-Rome metro area.¹ Then, when Griffiss Air Force Base pulled out of Rome in 1995, the city lost another 10,000 residents.²

The combined impacts of the loss of solid manufacturing jobs and the base closure hurt the economy and, in turn, the schools. In the early 1990s, around 8,000 students attended Rome’s public schools. Today 5,800 students are enrolled in the district’s 10 schools. More than half of the student body qualifies for free or reduced-price meals, and now all students in the district benefit from them. That’s because this past fall, spurred by the pandemic, the district began participating in the US Department of Agriculture’s Community Eligibility Provision program, which allows school districts enrolling more than 40 percent of students from households that rely on social services (such as Supplemental Nutrition Assistance Program benefits) to provide students with meals at no charge to families.³

In recent years, a growing technology and business sector located at the former Griffiss base has brought good-paying jobs to Rome and breathed new life into the city.⁴ Even so, many families still struggle. Those employed by the restaurant industry and smaller retailers have been hit particularly hard by the pandemic. For families who faced difficulties before COVID-19, their financial challenges and emotional stressors have become even more acute.

Joe Eurto has seen the economic disparities up close in his classroom. For 22 years, he has taught English to seventh- and eighth-graders at Lyndon H. Strough Middle School. “There really is some kind of dividing line in Rome, maybe as in most places,” he says. With community schools, “what was appealing to me was trying to level the playing field.”

**Striving to Level the Playing Field**

Wood recalls, “Eurto and I were kind of dreaming about the possibilities of community schools,” Eurto recalls. The union and district had been in extensive and impassioned talks about how best to support students and teachers, and this approach offered a way forward.

Community schools like Bellamy show what’s possible when we prioritize healthy youth development.

Eurto and Lattimore, then the RTA’s incoming secretary, wrote the application for the Innovation Fund grant. They also led the same core group in creating a nonprofit, the Rome Alliance for Education, to further support the community school model. Peter Blake, Rome’s superintendent, collaborated with them, offering guidance on setting up a nonprofit. The alliance launched in 2017, with Eurto serving as its president until 2019, after which Lattimore took over. (Opperman, Bellamy’s former principal, continues her involvement in the community schools effort by serving on the alliance’s board.) Soon after, the alliance hired Melissa Roys as its executive director. With a background in nonprofit organizations and children’s mental health, Roys had already established relationships with community partners in the area and was eager to forge new ones to support Rome’s community schools. Her main goals were to establish a single point of access for services, coordinate community partners to support such services,
agencies that normally compete with each other for dollars and for work inside schools and brought them together and said, ‘Look, we’re all trying to do the same thing. Let’s work together ... and get more bang for the buck,’” Blake says. “That’s really where she’s been phenomenal.”

“Melissa [Roys] has taken agencies that normally compete with each other ... and brought them together.”

—PETER BLAKE, ROME’S SUPERINTENDENT

Seeing impressive work and even greater potential, the AFT Innovation Fund continued to invest in the alliance, providing $100,000 in 2018 and $350,000 in 2019. The latter grant supported the expansion of community schools into Dolgeville, Waterville, and Webb, three neighboring rural districts. To reflect this growth, the Rome Alliance for Education renamed itself the Community Alliance, and its entire community schools effort is now known as Connected Community Schools (CCS).*

Coordinating Services

Originally from nearby Utica, Roys remembers the first time she attended a family-school engagement event in Rome. “Families came up to me throughout the night and really talked to me about their individual struggles,” she recalls. “For instance, they said, ‘We’re going to be homeless, we have no food.’ I turned around and asked myself, ‘Is the school fully equipped to address all of these family needs?’” She quickly realized that despite the best intentions, the district was not efficiently connecting families with resources.

So Roys reached out to Jane Vail, executive director of the Central New York Health Home Network (CNYHHN), an agency that contracts with more than 50 partners—such as hospitals, doctors’ offices, and mental health and substance abuse providers—to begin coordinating care for at-risk youth through the community schools. Roys and Vail then formalized an agreement for CNYHHN to work directly with Rome’s students. A year later, Roys officially partnered with Safe Schools Mohawk Valley, a nonprofit led by Anne Lansing that works to keep students engaged in school while supporting their social and emotional well-being. Together, Roys, Vail, and Lansing bring a wealth of experience and knowledge to CCS. With their hard work, along with the valuable resources of each of the three agencies, the CCS initiative has only continued to grow.

Roys brought the vision of an online referral system for services to her initial interview, and CCS provided the perfect platform to bring it to life. Known as LINK (which stands for Leaders in Networking and Knowledge), the referral system has been invaluable. Miranda Majewicz, CCS’s operations manager, oversees LINK, which principals, community school coordinators, school counselors, and families can use to request supports. It typically takes less than 72 hours for a student or family to receive information, Majewicz says. She and Roys attribute the quick turnaround to their well-defined operational model, which they continue to develop and refine with the help of Danielle Martin, who plays an integral role on the CCS administrative board. CCS constantly stays in touch with its community, which is ready to help. (As is Majewicz—she’s the dedicated staffer who brought the snowsuit and boots to Devina Love’s children."

The fact that each school in Rome has both a building-specific LINK team and a site committee of teachers, principals, and community partners working hand in hand to assess students’ needs and provide supports has also contributed to their success. And so has their work with New York’s Teacher Centers, which offer professional development throughout the state. CCS works with these centers to also provide professional development and learning opportunities based on trends extracted from LINK and needs assessment data.

Jessica Lattimore, who directs the Teacher Center in Rome, says having CCS coordinate referrals and resources has alleviated the pressure on teachers to find supports for students outside of school. In the past, when the sixth-grade teacher at Bellamy Elementary had a student whose attendance was spotty and who needed counseling related to personal issues at home, it could take weeks for Lattimore to help coordinate services for them. “Now I hand it off, and within two days, there are people taking care of what needs to be taken care of,” she says. “And I did nothing except say he needs it, so I can focus on the academics in the classroom.”

School counselors like Kareem Jones, also at Bellamy, credit LINK with freeing them to focus more on supporting students in school. Before LINK, Jones remembers having to reach out to a counseling agency to set up an appointment for a student’s parent. Then he had to call the parent and share when and where the appointment was, and finally, a week later, Jones would follow up with a call to the agency to see if the parent had attended the appointment. “It was just too much.”

Between July 2019 and March 2021, more than 1,500 LINK referrals were made for students and families across all CCS districts, 750 of which came in since the pandemic. The bulk of these requests were focused on mental health supports, help with food and hous-
ing insecurity, support for domestic issues such as custody and relationship challenges at home, and help with academics, such as tutoring and internet access. For many of these families, the implementation of care coordination was the first step in ensuring their children had the ability to sit and engage in their education.

Before the pandemic, educators and CCS staff saw a need for more mental health counseling, so Roys partnered with agencies to establish mental health satellite offices in six of Rome’s 10 schools. This way, students can attend appointments in school; without having to travel as far as 30 minutes away, they miss far less instructional time.

To address the growing food insecurity among students in Rome, Roys established food pantries in 2018 and 2019 in two elementary schools where many students from low-income families are enrolled. These pantries also stock free snacks for hungry students during the school day. And to relieve the burden of classroom teachers personally buying food for their students, bulk snacks are available for teachers to share in their classrooms.

To offer even more services, Roys has begun conversations with organizations about establishing medical and dental clinics in Rome schools at some point in the future. (Such clinics are a feature of many community schools, but the start-up costs are significant.) The Waterville School District has already built space for two health centers in schools, and CCS is now contracting with an existing health clinic to provide care.

**Focusing on Families**

While there are many ways CCS engages families, one especially popular program (that will return postpandemic) is a “Homework Diner” held at schools a couple of times each year. Teachers, students, and families eat dinner together after teachers help students with homework and explicitly show parents and caregivers how to support their children’s education at home. To mark the specialness of the evening, “we set the cafeteria tables with linen tablecloths, with real plates and silverware and linen napkins,” Opperman, the former Bellamy principal, says. Outside organizations (which CCS coordinates) cater the dinner for free, and teachers are paid to tutor students during the evening’s homework session. To build a sense of community, teachers sit down to eat with students and families, and they get to know each other in a relaxed atmosphere. Lattimore, who has attended several Homework Dinners, says it really is “a great way to be with people.”

Before the pandemic, parents also appreciated a summer drop-off program held at one of Rome’s elementary schools (which CCS expects to offer in 2021). The six-week program is open to any student in the entire district. Staff members hired by the alliance play games with and organize activities for students, whose parents need childcare for the day. There is no charge for families, since grants from the city fund the program, which hosts 40 to 50 children each day. Families value the program for its accessibility and the range of enrichment options, which include students spending time in the school’s computer lab, engaging in arts and crafts, playing sports in the gym or on school grounds, and participating in field trips to Peterpaul Recreation Park in Rome, the Wild Animal Park in Chittenango, and the Museum of Science and Technology in Syracuse.

During the school year, Roys and her team also offered (and plan to restart) educational opportunities for parents. Typically twice a week, parents from across the district attend classes in the Adult Learning Center at Gansevoort Elementary. These include technology classes sponsored by Jervis Library, vocational education classes sponsored by the state, and budgeting classes run by First Source Federal Credit Union.

By January 2020, the relationships that Roys had cultivated since her arrival three years earlier were paying off for the community, as programs were becoming increasingly well attended. Students and families were connecting to services with ease, and CCS was running like a well-oiled machine. In March 2020, the pandemic ground everything to a halt—but not for long.

**Responding to the Pandemic**

Within hours of school buildings being forced to close last spring, the CCS team quickly adapted. They focused on the most immediate need, which was distributing food. CCS consolidated its supplies—not only food but also toilet paper, diapers, shampoo, and laundry detergent—and housed them at George R. Staley Elementary, the district’s most centrally located school. “We went from serving about 100 families a month with food to about 400 families a day,” Roys recalls. Teachers volunteered in droves to help stock, organize, and hand out supplies throughout the spring and summer as families pulled their cars into the school parking lot and popped their trunks to take home donations.

CCS maintained its LINK referral service and also implemented a ConnectLINE to answer pandemic-related questions and provide assistance. In the first eight weeks of the pandemic, the line received more than 450 calls related to mental health concerns, food insecurity, unemployment information, and general questions.

Given the statewide stay-at-home order, CCS also quickly pivoted to engaging with community members virtually. In a matter
of weeks, it stayed connected to students and families by using Google Classroom, Facebook, and Zoom, among other platforms. More than 3,000 individuals since then have engaged with CCS content online.

From the start of the pandemic, CCS had a food distribution day once a week for several months. Then in November, as other agencies in the community increased their own food drives, it switched to a monthly giveaway. By the middle of December, CCS had distributed 1 million pounds of free food.

Roys calls the response a true grassroots effort. “We had zero budget for this,” she says. But with the support of the Rome Teachers Association, word spread throughout the community that CCS needed money, and the checks started coming. CCS raised a total of $40,000 to fund its food distribution, which has continued throughout the school year.

Roys calls the response a true grassroots effort. “We had zero budget for this,” she says. But with the support of the Rome Teachers Association, word spread throughout the community that CCS needed money, and the checks started coming. CCS raised a total of $40,000 to fund its food distribution, which has continued throughout the school year.

By Miranda Majewicz

Ensuring families had enough food was also a priority for Katie Rockwell, the site coordinator in Dolgeville, a nearby rural district that became part of CCS in 2019. A 2006 graduate of the district’s only high school, Rockwell had been in the position for less than a year when the pandemic hit. She immediately took on the responsibility of signing up families for breakfast and lunch deliveries.

And she worked closely with the superintendent, the district’s head of food service operations, and the transportation department to ensure no student went hungry. Because the community school concept there was still so new in Dolgeville, the food delivery effort was “a way for me to get my name out there to students and families,” she says.

Rockwell takes pride in the one-stop shop of school supplies she has been able to grow despite the pandemic, with the help of CCS. “It’s beautiful,” she says, as she ticks off the items that fill the room: backpacks, folders, binders, pencils, crayons, erasers, glue, and notebooks, as well as a bunch of winter coats donated by a local car dealership.

Beyond meeting basic needs, CCS has also delivered enrichment through a virtual summer program that it held for students in 19 neighboring school districts last summer. Because of COVID-19, CCS transformed its summer drop-off program into a six-week online camp, complete with a magician who entertained campers. CCS transformed its summer drop-off program into a six-week online camp, complete with a magician who entertained campers.

Miranda Majewicz, the operations manager, says CCS provided paper, crayons, markers, paint, and glue sticks, among other supplies, to more than 200 students, ages 4 to 17, who attended the virtual camp Tuesdays, Wednesdays, and Thursdays. CCS partner agencies took turns staffing the online camp, which featured a different theme (e.g., superheroes, dreams, the Olympics) each week. Plans are now in the works to offer students an in-person camp this summer.

“The way they’ve been able to sustain their operation has been very impressive,” Rome’s mayor, Jacqueline M. Izzo, says of CCS. “They really haven’t missed a beat.”

Reconnecting and Looking Ahead

Although supporting community members’ physical needs by providing food and emergency supplies was absolutely critical, educators and CCS staff alike have a strong desire to do more to alleviate the emotional challenges students and families have faced throughout the pandemic. Many young people have felt isolated with remote learning, and some have increasingly struggled with online attendance. “We’re getting them reconnected,” says Amanda Jones, the director of counseling services for the Rome City School District. “That’s been a big lift this year, getting our students back on track with their mental health appointments and doing them via telehealth while at home.”

CCS is focusing on these students with laserlike support. “We moved our efforts to the middle and high school levels,” where students face the most challenges with attendance, Roys says. “This is where the value in their partnership with Safe Schools Mohawk Valley really shone through. Two of her staff members work strictly on student engagement; each has a long list of students they reach out to almost daily, asking why students aren’t attending classes and what CCS can do to help. At times, they have even visited students outside of their homes to encourage their engagement in school. Roys acknowledges that reestablishing relationships is going to be difficult. “This will be a long-term issue,” she says, but it’s one that CCS staff members are striving to address.

Their efforts throughout the last year and a half show how the community school model can lay the groundwork for a successful collective response to whatever crisis unfolds. While CCS has helped thousands of students and families with challenges exacerbated by COVID-19, the nonprofit has never lost sight of each individual’s unique circumstances and the care that they need. “When we do our team meetings and our training and our coaching with our staff, we have a big focus on the kind of language we use, and the way we approach this with families,” Majewicz says. This customized approach shows that they really care—just ask Devina Love.

Endnotes

Counting on Community Schools in New York’s North Country

When Paula Wilson read the letter, she started to cry. Her son, John Empey, had enrolled in a natural resource management course at the Seaway Career and Technical Education Center in Norwood, New York, and the letter explained that he needed the following: a helmet, work overalls, and steel-toe boots, among other gear. Wilson knew the boots alone typically cost $200, and the overalls close to $100. “There was no way I could afford it,” she said.

She called the center, and administrators there suggested she contact her son’s high school, Massena Central, where John was a junior. Soon, Wilson and her son were meeting with Kristin Colarusso-Martin, the community schools director for the Massena Central School District. Colarusso-Martin walked them to a pantry down the hall from her office where clothing, books, and food are stored. “Whatever you want, John, you can take it,” Colarusso-Martin said. She handed him a pair of boots in his size that looked almost new, and he found some name-brand hoodies that he liked. “He was just so happy to be able to get those things,” Wilson, a single mother, recalls. Colarusso-Martin also gave her two of the $50 gift cards she keeps in her office so that Wilson could purchase the helmet, work overalls, and any remaining supplies John needed for his course.

The meeting with Colarusso-Martin took place in the summer of 2019. At the time, Wilson was struggling financially. She and John had been living in public housing, out of her van, and with friends since she lost her job as a waitress; she had a heart attack in 2008 and hasn’t worked since then because she has chronic obstructive pulmonary disease. Last year, her financial situation improved when her disability claim was finally approved. In October 2020, she bought a two-bedroom house for herself and John.

This story of support for one student’s educational opportunity was made possible by a well-coordinated districtwide effort designed to help families navigate life challenges. Educators all know students like John who need resources outside the classroom so they can succeed inside the classroom. As the article on page 18 shows, community schools provide those resources by partnering with youth-serving organizations, food banks, social service agencies, health clinics, and businesses to support the academic and nonacademic needs of students and their families. The result? Teachers can focus on teaching, and students can focus on learning.

In the last 20 years, the movement to establish community schools has grown significantly. While community schools hark back to the idea of the one-room schoolhouse as the center of a rural community, many of the early community schools were established in urban settings. Today, rural areas like Massena, a town in St. Lawrence County in upstate New York—known as the North Country—are increasingly implementing the community school model to connect members of their geographically dispersed and isolated communities so that teachers, students, and families can thrive.

Educators all know students who need resources outside the classroom so they can succeed inside the classroom.

Finding Inspiration in Reconnecting McDowell

A once-bustling industrial town, with employers such as Reynolds Metals and General Motors long gone,3 Massena in recent years has become known for its economic woes—and for its residents banding together to confront them. When Alcoa, an aluminum manufacturing plant in Massena, announced in 2015 that it planned to close and lay off 500 workers after downsizing in previous years,4 the community leapt into action. Various labor groups, including the United Steelworkers, the AFT, and the New York State United Teachers (NYSUT), worked with community members to convince Alcoa to remain.

Grassroots efforts and union mobilization culminated in a “People Over Profits” rally5 in December 2015 that Erin Covell, then president of the Massena Federation of Teachers (MFT), helped organize. Hundreds of people attended the event, and labor leaders such as AFT President Randi Weingarten spoke about the plight of workers in Massena and plans to advocate for them. As a result of union and community pressure, the state paid Alcoa $70 million to keep the Massena plant open and preserve 600 jobs for three and a half years, thus averting the latest labor crisis.6 Knowing they needed to spend those three and a half years mobilizing and organizing, the effort to strengthen Massena’s economy and make life better for its residents officially became known as the St. Lawrence County People Project in 2016. A grassroots coalition of unions, businesses, community members, and organizations, the People Project focuses on supporting economic development, education, and health and wellness. Their efforts are paying off—for students and the economy. In March 2019, the community scored another win for its workers when Alcoa and the New York Power Authority announced a seven-year deal in which Alcoa pledged to keep its plant open after the state gave it a significant discount on electricity from the hydropower dam on the St. Lawrence River.7
Communication between schools and outside agencies has improved, and it’s now easier for counselors to connect families with resources.

Patrick Brady, Massena’s superintendent, says the need to provide more targeted supports to the district’s 2,793 students was and remains considerable. With more than 60 percent of the student body qualifying for free or reduced-price meals, the purpose of implementing community schools was “really to try and level the playing field,” he says.

Facing the COVID-19 Crisis as a Community

With a background in youth development and nonprofit work in the region, Kristin Colarusso-Martin was the right person to coordinate Massena’s community schools. Originally from Potsdam, about 20 miles away, she knew the challenges families faced in a rural area with limited access to jobs and opportunities, and the self-reliant culture that sometimes keeps people from seeking help. She immediately built systems to support students and developed relationships with community partners—the very heart of her work. So when the pandemic hit last spring, and schools moved to online learning, all that preparation paid off. The district’s community school infrastructure and relationships were strong enough to meet dire needs to provide food and internet access.

Randy Freiman, a chemistry teacher at Massena’s high school and the current MFT president, recalled that last spring a father was driving his daughter to the high school parking lot every afternoon so she could access the internet and complete homework in the car. “Teachers got wind of that and brought it to Kristin’s attention,” Freiman says. “She jumped right on it and said what can we do?” Colarusso-Martin worked with the Salvation Army to set up a hot spot near the family’s home. But when the location was too remote for it to work, she connected the student with tutors and free Wi-Fi at the Boys and Girls Club. As of March 2021, 20 other families were using hot spots the district was able to get installed, Freiman says.

When families needed food last spring, Colarusso-Martin directed them to food pantries and churches providing free meals. Throughout the summer, for an extended school lunch program, she worked with the district’s director of transportation and the head of food service to coordinate food deliveries to students lacking transportation. “We had volunteer drivers dropping off bags of food for a week,” she says. “It was pretty incredible.”

Since the winter, when the district implemented a hybrid model with students learning both in person and remotely, breakfast and lunch has again become available during school. To ensure no student goes without food, students can also pick up a free lunch at schools every Monday (the district’s fully remote day), and a school bus driver delivers lunches to 51 students at home. In January, the district received a $50,000 grant from No Kid Hungry, a national campaign committed to ending child hunger, to continue coordinating these efforts.

Colarusso-Martin also notes the importance of the district’s Rapid Response Team, which she helped develop two years ago. A group of 95 people—including administrators, counselors, school psychologists, food pantry directors, and law enforcement officials, among other community partners—belong to the team and meet monthly (via Zoom since the pandemic) to discuss the needs of students and families and to resolve challenges. If, for instance, a family needs housing or furniture (such as a desk for remote learning), a member

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1Thankfully, all students in the district have been eligible for free meals this school year because of the US Department of Agriculture’s pandemic-driven waiver.
of the team sends an email to the group asking for help. Typically, someone offers a solution in a matter of hours and specific support ensues. Colarusso-Martin recalls one mother who needed safe housing after leaving a domestic violence situation, but an outstanding bill of $1,000 prevented her from qualifying for a place to live. “Our faith-based community was able to patch together that thousand dollars along with some donations from people on the Rapid Response Team,” Colarusso-Martin says. The mother paid her bill, the team found her stable housing, and the district’s Supplemental Nutrition Assistance Program coordinator connected the family with benefits. The team also made sure her children had school supplies.

In previous years, Colarusso-Martin has organized a back-to-school event at the high school in which families are invited to pick up free backpacks and school supplies, learn about resources from 50 community partners, meet some of the district’s teachers, and get a free haircut from 10 hairdressers. About 2,500 people attend each year. Massena was the first district in the county to coordinate such an event in 2018, and 10 additional school districts held their own back-to-school events in 2019.

Because of the pandemic, no such event was held at the start of the 2020–21 school year. But Massena was able to continue its family home visit program this past summer. As part of the program, which began in 2019 with a $7,000 grant from NYSUT, 18 educators visited families of students entering kindergarten and junior high, two key transition points in schooling. To practice social distancing, educators met families in driveways and backyards and on porches to discuss the upcoming school year, answer questions about online learning, and listen to their hopes for their children. Colarusso-Martin says educators were trained and paid for their time, and district officials are now preparing for a third summer of family home visits.

Making Mental Health a Priority
Even before the pandemic, Massena prioritized meeting students’ mental health needs. The district employs 10 school counselors: one for each of the three elementary schools, two at the junior high school, and five at the high school. Each school also has its own school psychologist.

Wendy Serguson has worked as a counselor at Jefferson Elementary for 31 years. The move to a community school model is “the best thing that ever happened in our district,” she says. Communication between schools and outside agencies has improved, and it’s now easier for counselors to connect families with resources. Serguson says making those connections has been especially important this year, since there are more instances of depression among students who feel isolated at home.

Because the district issued Chromebooks to all students last spring when schools were fully remote, those who needed mental health supports were able to attend telehealth visits with therapists from two primary mental health organizations: the Massena Wellness Clinic and Citizen Advocates. Fortunately, Colarusso-Martin had already embedded these supports in the district’s five schools before the pandemic.

After learning moved to a hybrid model, students could resume attending appointments either in school or at the clinics’ offices. Currently, the district is in talks with two local hospitals to pilot a virtual school-based health center.

Every month, Colarusso-Martin checks in with all of the counselors to see what supports students need to stay on track and to address attendance issues. In addition, a social worker is available to meet with students in the high school and junior high on in-person learning days.

One program, aptly named Handle with Care, shows just how attuned the district is to students’ mental health needs. The program, which Colarusso-Martin developed with law enforcement, outlines a specific protocol for sharing information when students are exposed to violence or trauma at home. In such cases, a law enforcement official will contact school officials, who share information with appropriate counselors and teachers so they are able to be extra sensitive to students’ needs. If a student needs counseling or other supports, Colarusso-Martin works with school staff to find the right resources.

In October 2020, the district received further support for students’ social and emotional development when the MFT won a $25,000 grant from the AFT Innovation Fund. The grant has enabled the district to join in and expand a partnership with the Holistic Life Foundation, a nonprofit organization that fosters the well-being of children and adults in systemically underserved communities, that had been established by the nearby St. Regis Mohawk Tribe (whose children make up 10 percent of the district’s students). Together, these groups are incorporating mindfulness training and yoga in Massena schools and helping teachers and students heal from trauma, manage stress, build resilience, and develop coping skills.

Cathy Donahue, a French teacher at the junior high school, says the mindfulness initiative makes teachers feel cared for and supported—just as they care for and support their students. And working directly with a community school coordinator makes it far easier to translate their compassion into action. “If I have a student who I’m worried about, I don’t call the principal,” Donahue says. “I call Kristin, and I know that she is going to probably know the family and have some sort of contact or support in place so we can help those kids, 100 percent. And if she doesn’t, she’ll find them.”

—J. D.

Endnotes
2. Coalition for Community Schools, “Community Schools Right at Home in Rural Areas,” December 2012, communityschools.org/community_schools_right_at_home_in_rural_areas; and D. Williams, The Rural Solution: How Community Schools Can
(Continued on page 39)

‡For more on the AFT Innovation Fund, see aft.org/about/innovation-fund.
Teaching Reading to African American Children
WHEN HOME AND SCHOOL LANGUAGE DIFFER

BY JULIE A. WASHINGTON AND MARK S. SEIDENBERG

Reading depends on spoken language.* This is a simple statement with profound consequences for children whose spoken language differs from the language they are expected to read. For most children, the language skills they bring to school will support learning to read, which is mainly learning to understand their spoken language in a new form: print. However, some children’s language skills differ in important ways from the classroom language variety, and teachers rarely receive sound guidance on how to enhance their literacy instruction to meet these children’s needs.

Teaching reading to children whose language differs from the oral language of the classroom and from the linguistic structure of academic text adds an additional layer of complexity to reading instruction. There is a large and growing body of evidence indicating that language variation impacts reading,¹ spelling,² and writing³ in predictable ways. In particular, it has been demonstrated that mismatches between the language variety spoken by many African American children in their homes and communities and the written language variety encountered in books and other text can slow the development of reading and writing.⁴

The focus of this article is the impact of one language variety, African American English (AAE), on literacy development and on teaching, assessing, and learning. Our goal is to describe aspects of instruction, curricula, and assessment that may create obstacles to literacy for African American children (compounding the effects of other factors, such as growing up in systemically under-resourced neighborhoods) and to share ways to modify instructional practices to benefit AAE speakers in significant ways.

AFRICAN AMERICAN ENGLISH

Many African American children are bidialectal speakers of English. That is, they speak two varieties of English: African American English and General American English (GAE). Whereas AAE is frequently spoken in the child’s home and community, GAE is used in reading, writing, educational contexts, commerce, and the media. One of the major educational linguistic tasks for school-aged African American children who speak AAE is to bridge the two varieties in order to develop strong literacy skills. Importantly, for many African American children, particularly those growing up in communities enduring chronic poverty, though GAE may

*The exception is the case of deaf children who use a visual-gestural, rather than spoken, language.
be encountered through media, such as television, it becomes prominent upon entry into school. GAE is the medium of instruction, and in school it is learned through exposure and modeling in the classroom. Also important, not every African American child speaks AAE, although most do.5

The history of AAE has been fraught with social, educational, and political judgments about AAE’s legitimacy and value.6 AAE is a systematic, rule-governed variety of American English spoken by a community of speakers connected by race, culture, identity, and language. That fits the linguistic definition of a “dialect,” but the term is problematic for other reasons. (See “Changing Language About Language Variation” on page 28; although we support a transition from dialect to language variety in colloquial usage because of misconceptions about dialects, we also use dialect occasionally in keeping with how it is defined in linguistics.) AAE has been referred to as “bad English,” “poor grammar,” and “ghetto” by people outside of its community of speakers. As a result, attempts to introduce AAE into classrooms or to leverage it to teach children who speak it how to read have been met with great resistance.7 Unfortunately, these negative views of AAE sometimes become conflated with the children who speak it, and expectations for them are lowered. It is important that teachers understand that language varieties are linguistically equal, even when they are not socially equal. The social stigma surrounding varieties spoken by linguistic minorities can be compounded by race and class, but they are as linguistically valid as other dialects and highly valued by the people who speak them.

When a child who is learning English as their second (or third) language lags behind in reading English, we recognize that the learning curve is steeper because the child is learning to both speak and read a second language. We have not given this same consideration to children who use two dialects. Although AAE and GAE overlap more than two distinct languages, research has demonstrated that using two varieties can complicate learning new, language-influenced skills (i.e., reading and writing) as much as using two languages. In fact, the subtle transformations between the cultural and the general varieties of a single language may be even more difficult for young children to detect and resolve than the more obvious differences between two languages.8 By design, curricula and instructional activities for children who are learning English take their dual language status into account. Extending these same benefits and considerations to dual variety speakers could have comparable, positive consequences for African American children.

By far the most studied variety of American English, AAE’s characteristics in the five primary domains of language (morphology, phonology, syntax, semantics, and pragmatics) have been well-documented in adults and are becoming better documented in children.9 These investigations have demonstrated that as used by young children, AAE primarily involves variation in verb morphology, syntax, and phonology (see “Key Features of African American English” on the right). Because reading depends on spoken language, AAE is significantly implicated in learning to read.

**IMPACT ON READING**

The influence of AAE on reading has been a particular emphasis for research focused on school-aged African American children. Because reading depends on spoken language, AAE is an obvious candidate for understanding disparities in reading achievement

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**Key Features of African American English**

<table>
<thead>
<tr>
<th><strong>VERB MORPHOLOGY</strong></th>
<th><strong>DESCRIPTION</strong></th>
<th><strong>EXAMPLES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable past tense</td>
<td>The -ed marker is variably attached to verb forms in past tense contexts.</td>
<td>The cow jump_ over the moon. He fix_ the broken car.</td>
</tr>
<tr>
<td>Variable plural</td>
<td>The -s marker is variably attached to nouns.</td>
<td>She saw three cat_ in the window. A girl puttin’ some glass_ on the table to drink.</td>
</tr>
<tr>
<td>Variable third person -s</td>
<td>The -s marker is variably included on the verb in third-person singular contexts.</td>
<td>My friend want_ to buy some candy when we get to the store.</td>
</tr>
<tr>
<td>Variable possessive</td>
<td>The -s marker is variably included to mark possession, and possessive pronouns are variably marked.</td>
<td>I rode in my uncle_ car. They waitin’ for they car.</td>
</tr>
</tbody>
</table>

**SYNTAX**

<table>
<thead>
<tr>
<th><strong>DESCRIPTION</strong></th>
<th><strong>EXAMPLES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject and verb do not agree in tense and number.</td>
<td>My friends was runnin’ fast to catch the bus.</td>
</tr>
<tr>
<td>Main and auxiliary forms of the verb to be are variably included.</td>
<td>This _ my red car. They _ watchin’ the girls jump rope.*</td>
</tr>
</tbody>
</table>

**PHONOLOGY**

<table>
<thead>
<tr>
<th><strong>DESCRIPTION</strong></th>
<th><strong>EXAMPLES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consonant clusters in the final position of words are reduced to one final consonant.</td>
<td>col_/cold fief_/field cas_/cast</td>
</tr>
<tr>
<td>Variable inclusion of g in the final position of a word ending in -ing.</td>
<td>jumpin’/jumping waitin’/waiting goin’/going</td>
</tr>
<tr>
<td>Following a vowel, voiceless (ð) and voiced (ð) th sounds in medial and final positions of words are replaced by /fi/, /tu/, or /ni/.</td>
<td>wif/with wit/with bave/bathe</td>
</tr>
<tr>
<td>Preceding a vowel, the voiced (ð) th sound in initial position of words is replaced with /d/.</td>
<td>dis/this dem/them dat/that</td>
</tr>
<tr>
<td>The /ks/ consonant cluster is transposed, becoming /ks/.</td>
<td>aks/ask ekscape/escape</td>
</tr>
</tbody>
</table>

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*These examples were taken from the transcripts of child speakers of African American English. Some examples include another AAE feature in addition to the feature being highlighted. In this sentence, for example, the child deletes the auxiliary form are and also drops the final g. Production of multiple AAE features in a single sentence is common.*
between African American children and their white and Asian peers. Having documented these disparities for more than 50 years, perhaps it is time to examine potential solutions—such as materials and practices that are sufficiently sensitive to the needs of AAE speakers.

One key issue is the amount of dialect present in a child’s language, which is referred to as dialect density. Dialect occurs on a continuum from low to high use. For example, children for whom dialect influences less than 10 percent of their oral language are said to have low dialect density; those for whom dialect influences 50 percent or more of their oral language have high dialect density.* Differences in density impact reading and writing in important ways.11 The higher the dialect density, the further the child’s speech is from the language used in reading and writing. Simply put, linguistic distance influences how much instruction and practice a child is likely to need to bridge the differences between oral language at home, oral language spoken by the teacher, and the written language of books and other texts.12 The more AAE that a child uses, the more likely that reading, writing, and spelling growth may be slowed,13 contributing to the reading struggles of African American children in later elementary school and adolescence.14 Challenges in learning to read are not inevitable for children who speak AAE, but greater attention to the impact of their language on reading and writing development is critical.

The culture of education demands that AAE speakers engage in additional language learning compared with GAE speakers.

*The percentages of use constituting high and low dialect are not absolute and can vary by region.
Requiring AAE-speaking children to switch to GAE without using their linguistic strengths in AAE to bridge the two varieties represents a significant encumbrance. Children are required to demonstrate linguistic flexibility at the same time that their cognitive resources are being allocated to learning the language of the classroom along with a wide array of new academic and social skills.

Some children manage these additional linguistic and social demands, but many do not. For example, AAE speakers already know how to conjugate verbs but must also learn a second set of rules for conjugation in GAE. Learning the second dialect involves discovering what is different in GAE, compared with what the child already knows in AAE. Although progress in reading is related to facility with GAE, providing the additional time and relevant opportunities to acquire knowledge of AAE and GAE differences tends not to be a priority in most schools or curricula. At school entry, AAE speakers’ exposure to GAE varies and typically lags behind monodialectal GAE speakers simply because their language experiences prior to school entry do not always include GAE. Analogous effects are seen in bilingual children, who need extra time and support to become fully proficient in both their home language and English. Importantly, given that both bilingual and bidialectal speakers are typically stronger in one language or variety than the other, achieving parity between the two can take considerable time.

**NONLANGUAGE FACTORS**

In addition to the differences between AAE and GAE, other factors contribute to the difficulty many African American children experience with academic achievement in general and reading in particular. Some factors are related to the child’s immediate environment, such as socioeconomic status and family factors; other factors are related to the broader social, economic, and political context, especially educational opportunity and quality, housing security, and access to adequate nutrition and healthcare. Of these, socioeconomic status (SES) has received the most attention. The impact of reading difficulties on many aspects of emotional health and well-being have also been examined, albeit to a lesser extent.

**Socioeconomic Status**

Income inequality and educational inequality have been linked historically. Recent analyses suggest that disparities in students’ academic achievement by race and socioeconomic status have remained virtually unchanged for the past half century. In the United States, income, wealth, and access to higher education are unequally distributed. Although policymakers, researchers, and others have long talked about “achievement gaps,” differences in academic performance between high- and low-SES students are more accurately referred to as opportunity gaps. For students from lower-SES backgrounds, their achievement often does not represent their potential to learn, but it does reflect the inequality in opportunity to learn resulting from lower-quality and less-abundant educational, social, and material resources that often plague children in both urban and rural environments.

1 Although this assertion is anecdotal, it is based on our combined 70 years of experience.
to linguistic expectations rather than speaking freely. Anecdotally, African American college students for whom switching from AAE to GAE does not occur automatically report great concern about participating in discussions in the college classroom for fear of “saying it wrong.” When AAE is the speaker’s culturally and personally authentic code, using GAE is an adaptation to external constraints, including pressure to assimilate. Corrections of AAE as “bad English” convey to the speaker that their cultural language (and therefore their culture) is inadequate or defective. As a result, the use of GAE may be performative rather than authentic.

Assuming different personas in differing contexts, in this case school and home, creates the “double consciousness” described by sociologist W. E. B. Du Bois. Monitoring the presentation of self, which includes language, carries cognitive and emotional costs. Cognitively, it is an additional task to be performed while engaged in other activities (such as reading). Emotionally, it involves continuous self-evaluation, criticism, and correction. Research on this topic is almost nonexistent, but it is a part of the bidialectal experience that needs close attention.

**RECOMMENDATIONS FOR TEACHING**

Speaking AAE is not inherently an obstacle to becoming a reader, but it becomes one when children’s specific needs are not recognized or addressed. The issues we have reviewed suggest many supportive steps school systems and educators could take. We offer six recommendations below to help school systems and educators begin reconsidering how they engage African American children who are becoming bidialectal and learning to read. Collectively, the essential supports mainly involve (a) providing sufficient opportunities to learn; (b) using materials and practices that are effective given the students’ backgrounds; and (c) eliminating the unwar-

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**Impact on Assessment**

Language variation complicates assessment among children who speak African American English (AAE) or any language variety that differs from General American English. This is a long-standing issue in both psychometric and clinical research. Psychometrically, many standardized instruments have been found to lack sensitivity when used with children from low-income families and with speakers of language varieties, making it more likely that their strengths will be overlooked. Clinically, studies focused on *language differences versus language disorders* have highlighted significant overlap between the linguistic features of AAE and features of language impairment, making it more likely that AAE speakers will be misdiagnosed and identified as language impaired when no impairment exists.* In both cases, psychometrically and clinically, it is important to acknowledge the shortcomings of standardized assessment instruments, which typically do not include these children in their normative samples, and thus tend to score language variants as errors.

For teachers, attention to assessment outcomes that do not capture students’ strengths or weaknesses is warranted. Working with children day after day, teachers know about characteristics of their students that may not be captured by standardized assessments. Accordingly, teachers are in a good position to speak up and advocate for their students whose assessment outcomes do not appear to be representative of the students’ demonstrated abilities (or needs) in the classroom.

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1. **Expand teachers’ knowledge of language variation.**

As part of their professional training, prospective teachers usually are made aware of a number of cultural differences that may affect education. However, language variation and its impact on reading and instruction are rarely emphasized. Teachers who gain this background will know that language variation is a universal linguistic phenomenon and that AAE, like other dialects, differs from the codified, more general version of American English used in education but is otherwise linguistically unremarkable—it is a “standard” example of dialectal variation, so to speak. They could also gain greater understanding of how such variation affects educational goals and practices, as discussed below.

2. **Expand children’s knowledge of language and the world prior to school entry.**

Many AAE-speaking children are less ready than their peers to benefit from reading instruction on the first day of kindergarten because they are not familiar with the school dialect. But young children are exceptionally good language learners; AAE speakers could gain greater facility with GAE in a language-intensive pre-K environment that provided rich and abundant access to both oral and written language. In 2018, only 38 percent of Black 3- to 5-year-olds were enrolled in preschool, compared with 43 percent of their white peers. This disparity in early childhood education should not only be eliminated—we should invest in greatly expanding access to high-quality, language-focused preschools throughout our most under-resourced neighborhoods.
Children learn language via exposure and use, not explicit instruction. In the course of a school year, teachers whose own language backgrounds vary would provide thousands of examples of utterances in each variety and would model the ways that people who speak somewhat differently successfully communicate. Children can learn pronunciations of words and ways to conjugate verbs that differ from their own language use if given sufficient opportunities to learn them. Children can also gain greater awareness of conditions that govern movement between codes (e.g., their use in different settings or with different individuals), a critical skill for any child who speaks two languages or two varieties. Learning more about GAE does not require extinguishing knowledge of AAE, any more than learning a second language requires unlearning the first. Rather, it places AAE speakers on a more equal footing with children who have learned GAE in the home, while still honoring the need, and desire, to communicate with their families, communities, and friends who also use AAE.

Parents and other caregivers can also be encouraged to create additional language-learning opportunities for children outside of school. Efforts to gain families’ participation will be more successful if their role in helping their children thrive is emphasized; parents and caregivers are committed to the success of their children but often do not know how to help. Reading books to children may provide a vehicle for introducing linguistic expressions and aspects of the world beyond their immediate experiences. The language in books for children includes vocabulary and grammatical constructions that differ from those in everyday speech, and thus are not available anywhere else except books. In the light of the moon a little egg lay on a leaf” is the first line of an enormously popular book for very young children, but few people talk that way. Shared reading can provide a context for expanding children’s world knowledge and giving them additional practice in using language. For parents who do not read well themselves or are uncomfortable with reading, educators (as well as librarians and others who engage with families) can help caregivers find books paired with audiobooks that parents and children can listen to together. The audiobooks do not take the place of books but allow parents and children to interact around the book, listening to the story together, and prompt parents when to turn the page.

Parents can also provide language-learning opportunities simply by having conversations with their children. Parents are often encouraged to talk to their children, but it is important to stress having conversations that are, by definition, interactive. This kind of talk encourages turn-taking, requiring input from both the caregiver and child. If teachers are concerned about how much conversation is happening outside of school, it might be helpful to send children home with conversation starters, encouraging them to be the catalysts for sparking family conversations. For example, educators could: teach or make a game at school, then send it home with children and encourage them to teach it to their families; encourage the class to ask a parent or caregiver to teach them how to make their favorite food and write down the recipe to share at school; or read a book to the class several times and then send it home with students to share. In each case, children rehearse the skill or activity at school first, making them eager to show what they have learned when they get home. Both parents and children get very excited about this kind of sharing; it removes the burden from both to figure out how to do or initiate what the teacher has instructed and makes children proud to share what they have learned.

### 3. Use classroom materials and practices that are effective with AAE speakers.

The curricula and support materials produced by major educational publishers assume that GAE is the language of the child and the classroom. With rare exceptions, these materials do not accommodate differences in language background or provide clear guidance about appropriate practices for children who need support to become bidialectal. Unfortunately, this means that it is left to classroom teachers to develop materials and practices on their own. The table on page 27 provides a list of the major features of AAE likely to be present in young children’s language use. It is not an exhaustive list but provides some guidance regarding the language structures that children use and what they will need to learn to speak, read, and write in GAE. Especially in the case of phonology, the table highlights places where children may need extra time to learn a new phonological form because it differs significantly from their own sound system. Here, we note several key implications for instruction.

#### Learning more about General American English does not require extinguishing knowledge of African American English.

- **Phonological awareness:** It is commonly assumed that spoken word play, such as rhyming, develops phonological awareness (knowledge of the structure of spoken words), which facilitates later reading acquisition. The activity emphasizes perfect rhymes such as bear-care, which share the same rime (pronounced air). Perfect rhymes are less prominent in AAE word play than other types of phonological overlap, however. Indeed, for any child whose language variety impacts the vowel system, the words that rhyme will differ. For example, for an African American child in the southern United States, the word thing may rhyme with either king or rang, depending upon how it is pronounced. Moreover, even perfect rhymes work differently because AAE phonology allows optional deletion of final consonants in some cases. For example, cold and hole can rhyme in AAE because of deletion of the final /d/. The net effect is that these activities do not always function in the same way as for GAE speakers.

- **Phonemic awareness:** Tasks such as deciding if two words begin or end with the same sounds bring attention to phonemic structure, which is a key to learning spelling-sound correspondences. The validity of the exercise can again be vitiated by differences in pronunciation. When the task involves comparisons of initial phonemes (e.g., ball, book), AAE and GAE speakers perform comparably. In contrast, some AAE speakers may perform poorly on comparisons involving final consonants, because they are variably included in AAE. It may take AAE-speaking children as much as a year longer to master phonemic awareness in the final position of words.

Deciding
that cold and hole do not end in the same sound may be difficult if cold is usually pronounced cole. When children take longer to acquire such knowledge, we should not assume that they are less capable learners. We should realize that AAE speakers are learning both a new oral language variety and to identify final consonants (whereas GAE speakers only have to learn the latter).

**Phonics:** Learning the correspondences between the spellings of words and their pronunciations is an important step in learning to read. Instruction typically assumes that words are pronounced as in GAE. What happens if the child’s pronunciations are different, as occurs for many words in AAE? For example, a teacher might write the word gold on the board, pronounce each of the component sounds, and model how they are blended to form gold. For a GAE speaker, the lesson is about the correspondences between four letters and four sounds. The lesson is different for an AAE speaker who pronounces it gole. AAE speakers may be able to figure out the correspondence between the teacher’s pronunciation and their own, but translating between the two involves extra effort and a single spelling now corresponds to two pronunciations. Then, in a future phonics lesson, AAE-speaking children may be confused as they learn to spell the homophonic word goal.

We have investigated these conditions using computational models that learn phonics (i.e., spelling-sound correspondences). The models first learned the GAE pronunciations of a large set of monosyllabic words. In the AAE condition, half the words had different pronunciations than in the GAE condition because of final consonant deletions. The models were then taught the correspondences between the spellings of the words and their GAE pronunciations. Although both models could learn the correspondences with sufficient experience, the AAE model took much longer because it was learning the alternative pronunciations of half the words at the same time. This model provided an explicit, mechanistic account of the impact of mismatches between the oral and written language system that children who are becoming bidialectal invariably encounter.

**Reading aloud:** Reading aloud is an important, widely used learning activity. Children’s accuracy and fluency as they read aloud is an indicator of their progress and provides opportunities for feedback—but learning two varieties can make the task more difficult. A child who knows the AAE and GAE pronunciations of cold needs to produce one and suppress the other. The child may be able to generate the “correct” (for the school setting) pronunciation, but may do so more slowly, giving the appearance of lack of fluency. Researchers have found a tradeoff between rate and accuracy when African American children read aloud, such that they achieved a lower score on fluency because they slowed down their reading in order to improve the grammatical accuracy of their oral reading. In this same study, as the complexity of reading passages increased, students appeared to sacrifice reading accuracy in an effort to manage the lexical and syntactic complexity of passages. These outcomes provide evidence of the active decision making that can constrain the cognitive resources that bidialectal readers are able to apply to oral reading. In addition to reducing fluency while reading aloud, this may impact reading comprehension. (Similar results are found among children who are becoming bilingual, but their challenges with reading aloud in English tend to be better understood.) When reading aloud occurs in front of other students, the appearance of lower proficiency can be deeply embarrassing and can create aversion to reading.

**Attention and effort:** Children who are still learning the school dialect have to focus greater attention and effort on understanding the teacher’s speech, which can detract from being able to focus on the content. In a busy classroom setting where the teacher is harder to hear or see, the impact will be greater. These difficulties can be lessened for children by providing in writing any important information that has been presented orally, as well as providing visual supports whenever possible. In addition, we encourage teachers to become more familiar with AAE in order to better comprehend and communicate with children and families who are high-density AAE speakers.

4. **Provide enough time on task.**
Sensitivity to the time a child who is becoming bidialectal may need to master a new language skill is critically important. A child who has more to learn to reach a goal needs more time to get there. It takes ample learning opportunities, sufficient practice, and, for many children, additional instruction. This requires rethinking our views about what constitutes “typical” developmental trajectories. Instead, teachers should offer as much learning time in early childhood and throughout the elementary grades as needed for African American children to enter the middle grades as confident readers and writers.

Bidialectal children may take more time to gain the knowledge that supports skilled reading, but that is a byproduct of acquiring more knowledge to connect with the knowledge that they already have. Educational outcomes for these children are modulated by numerous factors, including educational quality, amount of experience using each language variety, and availability of educational resources in the home and community. Successfully addressing these initial challenges—and doing so in a way that values the home language variety—can eventually yield the many personal, social, and economic benefits of being bidialectal.

5. **Respond constructively to AAE use in the classroom.**
Teachers face difficult choices when students use AAE in the classroom. If AAE is viewed as “bad English,” the response may be to provide a GAE correction, which conveys to children that their home language is bad. It should be possible to help children learn the classroom language variety without negative messages about AAE. With very young children, in preschool through first grade, simply providing full-form models of classroom language is helpful. For example, if a child is deleting the copula, a teacher can cheerfully produce the same utterance, making the copula salient and lengthening the child’s production slightly.
Child: “This my backpack.”
Teacher: “Yes, this IS your backpack. Let’s put it away.”

After several such opportunities to learn, children who were once deleting the structure will begin to include it. This is a common, effective technique used in interactions designed to enhance language development that can be easily applied in a classroom.

Based on a classroom observation, a researcher34 provided an example of a teacher who corrects Joey, a third-grade boy, who pronounces the word street as skreet (which is a common cultural and regional variant). When Joey says Orange Skreet rather than Orange Street, his teacher replies by saying, “Not skreet. Say street.” Joey responds, “Skreet.” His teacher makes him read the sentence again, but Joey continues to say skreet. The classroom teacher corrects him again in front of the class. When the teacher finally leaves him alone, he continues to read aloud, but this time haltingly, mumbling and fearful of saying the wrong thing and being further embarrassed by the teacher. This is a great example of what not to do. By treating the phonological variation in the child’s reading as an error, the teacher eroded Joey’s self-confidence, making him likely to be more resistant to reading aloud in the future. It is an experience he will likely never forget! A more helpful approach would be for Joey’s teacher to make a note of the skr/str pronunciation and include it in a whole-class language lesson without singling out Joey or any other child. This is typically a regional variant. Since Joey is doing it, there are likely others who are as well, and everyone would benefit from spending time learning the sound-phoneme mapping for this consonant cluster.

At the other extreme, many teachers are averse to commenting on children’s use of their home language variety, concerned that it is not their role to encourage becoming bidialectal. The philosopher Jennifer M. Morton discusses issues of justice and ethics associated with dialect differences.35 She acknowledges the perceived need to accommodate GAE given its importance for health, education, and employment under existing circumstances but also the threats to personal and cultural integrity that adopting GAE entails. The need for one group to adapt to the language and culture of another in order to thrive is an intrinsic form of inequality. She concludes that gaining knowledge of both GAE and AAE is nonetheless the most favorable accommodation to non-ideal circumstances.

Teachers need additional guidance and opportunities to engage in professional dialogue on this issue. Not responding to use of the home variety is an instructional choice that conveys information about linguistic expectations. The challenge is to balance the need to respect children’s language and culture, while helping them gain additional facility with the classroom language variety because it serves other functions (as in learning to read).

6. Recognize the impact of bidialectal experience on comprehending and producing language.

Becoming fluent in using two languages or dialects is a positive achievement, but there are bumps along the way, such as the interference between codes that often occurs in comprehension and speaking or reading aloud. Slower responses, dysfluencies, and other “errors” occur because the child’s knowledge of the two codes and how to use them is still developing, not because the child lacks the ability to learn. Many studies have demonstrated that children who speak AAE also understand GAE. They may be slowed down in some areas where the two dialects contrast, as we noted above. With few exceptions, AAE and GAE are mutually intelligible. Given sufficient time and relevant experience, bidialectal speakers, like bilinguals, will learn to navigate the two codes in both oral language and print.

FINAL TAKEAWAYS

Most languages have several within-language varieties. An inclusive way to think about language varieties is that they occur along a continuum from those that differ little from the general variety to those that are more distant. This framing includes all communication practices across all speakers36 and does not consider one variety to be superior. It allows us to put languages and speakers in their proper perspective as equally valued, especially as we support children learning to read and write. All children need to have the skills to make linguistic choices across contexts: formal, informal, home, school, speaking, reading, or writing. Even within these contexts, there are choices that require varied skills, such as writing a report for school, writing a thank-you card for a birthday gift, or writing a text to meet up with friends.

Above all, our shared goal should be for all children to become good readers; this requires practice with reading. For children who speak more than one language variety, learning to read requires learning the differences between their oral language and print, in addition to the inconsistencies of English orthography, making supportive instruction and abundant practice even more critical for mastering reading. The burden placed on the child can be tremendous, but it can be mitigated by effective, culturally responsive instruction and through being given the time needed to master new skills.

Finally, teaching children who are becoming bidialectal to read does not require an entirely new, separate theory of reading instruction. The same elements that have been identified for all developing (Continued on page 40)
ASK THE COGNITIVE SCIENTIST

Why Do Students Remember Everything That’s on Television and Forget Everything I Say?

By Daniel T. Willingham

Question: Memory is mysterious. You may lose a memory created 15 seconds earlier, such as when you find yourself standing in your kitchen trying to remember what you came there to fetch. Other seemingly trivial memories (for example, advertisements) may last a lifetime. What makes something stick in memory, and what is likely to slip away?

Answer: We can’t store everything we experience in memory. Too much happens. So what should the memory system tuck away? How can the memory system know what you’ll need to remember later? Your memory system lays its bets this way: if you think about something carefully, you’ll probably have to think about it again, so it should be stored. Thus your memory is not a product of what you want to remember or what you try to remember; it’s a product of what you think about.

A teacher once told me that for a fourth-grade unit on the Underground Railroad he had his students bake biscuits, because this was a staple food for enslaved people seeking escape. He asked what I thought about the assignment. I pointed out that his students probably thought for 40 seconds about the relationship of biscuits to the Underground Railroad, and for 40 minutes about measuring flour, mixing shortening, and so on. Whatever students think about is what they will remember.

The cognitive principle that guides this article is memory is the residue of thought. To teach well, consider what an assignment will actually make students think about (not what you hope they will think about), because that is what they will remember.

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

Cognitive science is an interdisciplinary field of researchers from psychology, neuroscience, linguistics, philosophy, computer science, and anthropology who seek to understand the mind. In this regular American Educator column, we consider findings from this field that are strong and clear enough to merit classroom application.
We all know that students won’t learn if they aren’t paying attention. What’s more mysterious is why, when they are paying attention, they sometimes learn and sometimes don’t. What else is needed besides attention?

A reasonable guess is that we remember things that bring about some emotional reaction. Aren’t you likely to remember really happy moments, such as a wedding, or really sad ones, such as hearing that a beloved relative has passed away? You are, and in fact if you ask people to name their most vivid memories, they often relate events that probably had some emotional content, such as a first date or a birthday celebration.

If memory depended on emotion, we would remember little of what we encounter in school. So the answer Things go into long-term memory if they create an emotional reaction is not quite right. It’s more accurate to say, Things that create an emotional reaction will be better remembered, but emotion is not necessary for learning.

Repetition is another obvious candidate for what makes learning work. Repetition is very important, but not just any repetition will do. Material may be repeated almost indefinitely and still not stick in your memory. For example, if you’re like most people, you don’t know much about what a penny looks like. When shown a real penny among 14 counterfeit pennies, people are terrible at picking out the real one even though they have seen a penny thousands of times.

So repetition alone won’t do it. It’s equally clear that wanting to remember something is not the magic ingredient. How marvelous it would be if memory did work that way. Students would sit down with a book, say to themselves, “I want to remember this,” and they would! You’d remember the names of people you’ve met, and you’d always know where your car keys are. Sadly, memory doesn’t work that way.

**How Does Memory Work?**

Here’s another way to think about it. Suppose you are walking the halls of your school and you see a student muttering to himself in front of his open locker. You can’t hear what he’s saying, but you can tell from his tone that he’s angry. There are several things you could focus on. You could think about the sound of the student’s voice, you could focus on how he looks, or you could think about the meaning of the incident (why the student might be angry, whether you should speak to him, and so on). These thoughts will lead to different memories of the event the next day. If you thought only about the sound of the student’s voice, the next day you’d probably remember that sound quite well but not his appearance. If you focused on visual details, then that’s what you’d remember the next day, not what the student’s voice sounded like. In the same way, if you think about the meaning of a penny but never about the visual details, you won’t remember the visual details, even if they have been in front of your eyes 10,000 times.

Whatever you think about, that’s what you remember. Memory is the residue of thought. Once stated, this conclusion seems impossibly obvious. Indeed, it’s a very sensible way to set up a memory system. Given that you can’t store everything away, how should you pick what to store and what to drop? Your brain lays its bets this way: If you don’t think about something very much, then you probably won’t want to think about it again, so it need not be stored. If you do think about something, then it’s likely that you’ll want to think about it in the same way in the future. If I think about what the student looks like when I see him, then his appearance is probably what I’ll want to know about when I think about that student later.

There are a couple of subtleties to this obvious conclusion that we need to draw out. First, when we’re talking about school, we usually want students to remember what things mean. Sometimes what things look like is important—for example, the beautiful facade of the Parthenon, or the shape of Benin—but much more often we want students to think about meaning.

The second subtlety (again, obvious once it’s made explicit) is that there can be different aspects of meaning for the same material. For example, the word piano has lots of meaning-based characteristics. You could think about the fact that it makes music, or about the fact that it’s expensive, or that it’s really heavy, or that it’s made from fine-quality wood, and so on. In one of my all-time favorite experiments, the researchers led subjects to think of one or another characteristic of words by placing them in sentences—for example, “The moving men lugged the PIANO up the flight of stairs” or “The professional played the PIANO with a lush, rich sound.” The subjects knew that they needed to remember only the word in capitals. Later, experimenters administered a memory test for the words, with some hints. For piano, the hint was either “something heavy” or “something that makes music.” The results showed that the subjects’ memories were really good if the hint matched the way they had thought about piano, but poor if it didn’t. That is, if the subjects read the moving men version of the sentence, hearing the cue “something that makes music” didn’t help them remember piano. So it’s not even enough to say, “You should think about meaning.” You have to think about the right aspect of meaning.

The obvious implication for teachers is that they must design lessons that will ensure that students are thinking about the meaning of the material. A striking example of an assignment that didn’t work for this reason came from my nephew’s sixth-grade teacher. He was to draw a plot diagram of a book he had recently finished. The point of the plot diagram was to get him to think about the story elements and how they related to one another. The teacher’s goal, I believe, was to encourage her students to think of novels as having structure, but the teacher thought that it would be useful to integrate art into this project, so she asked her students to draw pictures to represent the plot elements. That meant that my nephew thought very little about the relation between different plot elements and a great deal about how to draw a good castle. My daughter had completed a similar assignment some years earlier, but her teacher had asked students to use words or phrases rather than pictures. I think that assignment more effectively fulfilled the intended goal because my daughter thought more about how ideas in the book were related.

Now you may be thinking, “OK, so cognitive psychologists can explain why students have to think about what material means—but I really already knew they should think about that. Can you
tell me how to make sure that students think about meaning?" Glad you asked.

When we think of good teachers, we tend to focus on personality and on the way the teachers present themselves. But that’s only half of good teaching. The jokes, the stories, and the warm manner all generate goodwill and get students to pay attention. But then how do we make sure they think about meaning? That is where the second property of being a good teacher comes in—organizing the ideas in a lesson plan in a coherent way so that students will understand and remember. Cognitive psychology cannot tell us how to be personable and likable to our students, but I can tell you about one set of principles that cognitive psychologists know about to help students think about the meaning of a lesson.

The Power of Stories

The human mind seems exquisitely tuned to understand and remember stories—so much so that psychologists sometimes refer to stories as "psychologically privileged," meaning that they are treated differently in memory than other types of material. I’m going to suggest that organizing a lesson plan like a story is an effective way to help students comprehend and remember.

Before we can talk about how a story structure could apply to a classroom, we must go over what a story structure is. There is not universal agreement over what makes a story, but most sources point to the following four principles, often summarized as the four Cs. The first C is causality, which means that events are causally related to one another. For example, “I saw Jane; I left the house” is just a chronological telling of events. But if you read, “I saw Jane, my hopeless old love; I left the house,” you would understand that the two events are linked causally. The second C is conflict. A story has a main character who is pursuing a goal but is unable to reach that goal. In Star Wars, the main character is Luke Skywalker, and his goal is to deliver the stolen plans and help destroy the Death Star. Conflict occurs because there is an obstacle to the goal. If Luke didn’t have a worthy adversary—Darth Vader—it would make for a rather short movie. The third C is complications. If Luke simply hurried away for 90 minutes at his goal of delivering the plans, that would be rather dull. Complications are subproblems that arise from the main goal. Thus, if Luke wants to deliver the plans, he must first get off his home planet, Tatooine—but he has no transportation. That’s a complication that leads to his meeting another major character, Han Solo, and leaving the planet amid a hail of gunfire—always a movie bonus. The final C is character. A good story is built around strong, interesting characters, and the key to those qualities is action. A skillful storyteller shows rather than tells the audience what a character is like. For example, the first time the Star Wars audience sees Princess Leia, she is shooting at stormtroopers. Hence, we don’t need to be told that she is brave and ready to take action.

If we’re trying to communicate with others, using a story structure brings three important advantages. First, stories are easy to comprehend, because the audience knows the structure, which helps to interpret the action. For example, the audience knows that events don’t happen randomly in stories. There must be a causal connection, so if the cause is not immediately apparent, the audience will think carefully about the previous action to try to connect it to present events.

Second, stories are interesting. Reading researchers have conducted experiments in which people read lots of different types of material and rate each for how interesting it is. Stories are consistently rated as more interesting than other formats (for example, expository prose), even if the same information is presented.

Third, stories are easy to remember. There are at least two contributing factors here. Because comprehending stories requires lots of medium-difficulty inferences, you must think about the story’s meaning throughout. Your memory for stories is also aided by their causal structure. If you remember one part of the plot, it’s a good guess that the next thing that happened was caused by what you remember.

My intention here is not to suggest that you simply tell stories, although there’s nothing wrong with doing so. Rather, I’m suggesting something one step removed from that. Structure your lessons the way stories are structured, using the four Cs: causality, conflict, complications, and character. This doesn’t mean you must do most of the talking. Small-group work or projects or any other method may be used. The story structure applies to the way you organize the material that you encourage your students to think about, not to the methods you use to teach the material.

For my teaching, I think of it this way: the material I want students to learn is actually the answer to a question. On its own, the answer is almost never interesting. But if you know the question, the answer may be quite interesting. That’s why making the question clear is so important. I sometimes feel that we, as teachers, are so focused on getting to the answer, we spend insufficient time making sure that students understand the question and appreciate its significance. To us, the question and its importance are obvious. To them, they aren’t.

Implications for the Classroom

Thinking about meaning helps memory. How can teachers ensure that students think about meaning in the classroom? Here are some practical suggestions.

Review Each Lesson Plan in Terms of What the Student Is Likely to Think About

This may represent the most general and useful idea that cognitive psychology can offer teachers. The most important thing about schooling is what students will remember after the school day is over, and there is a direct relationship between what they think about during the day and their later memory. So it’s a useful double-check for every lesson plan to try to anticipate what the lesson will actually make students think about (rather than what you hope it will make them think about). Doing so may make it clear that students are unlikely to get what the teacher intended out of the lesson.

For example, I once observed a high school social studies class work in groups of three on projects about the Spanish Civil War. Each group was to examine a different aspect of the conflict (for example, compare it to the US Civil War, or consider its impact on today’s Spain) and then teach the remainder of the class what they had learned, using the method of their choice. Students in one group
noticed that PowerPoint was loaded on the computers, and they were very enthusiastic about using it to teach their bit to the other groups. (This was a while ago, when PowerPoint was not in common use in high schools.) The teacher was impressed by their initiative and gave his permission. Soon all of the groups were using PowerPoint. Many students had some familiarity with the basics of the program, so it could have been used effectively. The problem was that the students changed the assignment from “learn about the Spanish Civil War” to “learn esoteric features of PowerPoint.” There was still a lot of enthusiasm in the room, but it was directed toward using animations, integrating videos, finding unusual fonts, and so on. At that point, the teacher felt it was far too late to ask all of the groups to switch, so he spent much of the rest of the week badgering students to be sure their presentations had content, not just flash.

This story illustrates one of the reasons that experienced teachers are so good. This teacher clearly didn’t let students use PowerPoint the next year, or he thought of a way to keep them on task. Before you have accumulated these experiences, the next best thing is to think carefully about how your students will react to an assignment, and what it will make them think about.

Think Carefully About Attention Grabbers

Almost every teacher I have met likes, at least on occasion, to start class with an attention grabber. If you hook students early in the lesson, they should be curious to know what is behind whatever surprised or awed them. But attention grabbers may not always work. Here’s a conversation I had with my oldest daughter when she was in sixth grade.

Dad: What did you do in school today?
Rebecca: We had a guest in science. He taught us about chemicals.

Dad: Oh yeah? What did you learn about chemicals?
Rebecca: He had this glass? That looked like water? But when he put this little metal thingy in it, it boiled. It was so cool. We all screamed.

Dad: Uh-huh. Why did he show you that?
Rebecca: I don’t know.

The guest surely planned this demonstration to pique the class’s interest, and that goal was met. I’m willing to bet that the guest followed the demonstration with an age-appropriate explanation of the phenomenon, but that information was not retained. Rebecca didn’t remember it because she was still thinking about how cool the demonstration was. You remember what you think about.

Here’s one more example. A guest in a biology class asked the students to think of the very first thing they had ever seen. The students mulled that question over and generated such guesses as “the doctor who pulled me out,” “Mom,” and so forth. The guest then said, “Actually, the first thing each of you saw was the same. It was pinkish, diffuse light coming through your mother’s belly. Today we’re going to talk about how that first experience affected how your visual system developed, and how it continues to influence the way you see today.” I love that example because it grabbed the students’ attention and left them eager to hear more about the subject of the lesson.

As I alluded to earlier, I think it is very helpful to use the beginning of class to build student interest in the material by understanding the question that underlies the lesson for the day—or as the story framing puts it, to develop the conflict. You might consider, however, whether the beginning of the class is really when they need an attention grabber. In my experience, the transition from one subject to another (or for older students, from one classroom and teacher to another) is enough to buy at least a few minutes of attention from students. It’s usually the middle of the lesson that needs a little drama to draw students back from whatever reverie they might be in. But regardless of when it’s used, think hard about how you will draw a connection between the attention grabber and the point it’s designed to make. Will students understand the connection, and will they be able to set aside the excitement of the attention grabber and move on?

Try to anticipate what the lesson will actually make students think about.

We have learned more about how the mind works in the last 25 years than we did in the previous 2,500. Yet the teachers I know don’t believe they’ve seen much benefit from what psychologists call “the cognitive revolution.”

The gap between research and practice is understandable. Cognitive scientists intentionally isolate mental processes (for example, learning or attention) in the laboratory in order to make them easier to study. But mental processes are not isolated in the classroom. They all operate simultaneously, and they often interact in difficult-to-predict ways. To provide an obvious example, laboratory studies show that repetition helps learning, but any teacher knows that with too much repetition, motivation plummets, students stop paying attention, and no learning takes place. The classroom application would not duplicate the laboratory result.

The second edition of Why Don’t Students Like School?, from which this article is drawn, explores 10 principles that are so fundamental to the mind’s operation that they are as true in the classroom as they are in the laboratory and therefore can reliably be applied to classroom situations. Many of these principles likely won’t surprise you: factual knowledge is important, practice is necessary, and so on.

What may surprise you are the implications for teaching that follow. You’ll learn why it’s more useful to view the human species as bad at thinking rather than as cognitively gifted. You’ll discover that authors routinely write only a fraction of what they mean, which I’ll argue implies very little for reading instruction but a great deal for the factual knowledge your students must gain. And much more. Why Don’t Students Like School? ranges over a variety of subjects in pursuit of two goals that are straightforward but far from simple: to tell you how your students’ minds work and to clarify how to use that knowledge to be a better teacher.

—D. T. W.
If not, is there a way to change the attention grabber to help students make that transition? Perhaps the “metal thingy” demonstration would have been better after the basic principle was explained and students were prompted to predict what might happen.

Use Discovery Learning with Care

Discovery learning refers to students learning by exploring objects, discussing problems with classmates, designing experiments, or any of a number of other techniques that use student inquiry rather than the teacher telling students things. Indeed, the teacher ideally serves more as a resource than as the director of the class. Discovery learning has much to recommend it, when it comes to memory. If students have a strong voice in deciding which problems they want to work on, they will likely be engaged in the problems they select, and will likely think deeply about the material, with attendant benefits. An important downside, however, is that what students will think about is less predictable. If students are left to explore ideas on their own, they may well explore mental paths that are not profitable. If memory is the residue of thought, then students will remember incorrect “discoveries” as much as they will remember the correct ones.

Now this doesn’t mean that discovery learning should never be used, but it does suggest a principle for when to use it. Discovery learning is probably most useful when the environment gives prompt feedback about whether the student is thinking about a problem in a useful way. One of the best examples of discovery learning is when kids learn to use a computer, whether they are learning an operating system, a complex game, or a web application. Students show wonderful ingenuity and daring under these circumstances. They are not afraid to try new things, and they shrug off failure. They learn by discovery! Note, however, that computer applications have an important property: when you make a mistake, it is immediately obvious. The computer does something other than what you intended. This immediate feedback makes for a great environment in which “messing around” can pay off. (Other environments aren’t like that. Imagine a student left to “mess around” with frog dissection in a biology class.)

Try Organizing a Lesson Plan Around the Conflict

There is a conflict in almost any lesson plan, if you look for it. This is another way of saying that the material we want students to know is the answer to a question—and the question is the conflict. The advantage of being very clear about the conflict is that it yields a natural progression for topics. In a movie, trying to resolve a conflict leads to new complications. That’s often true of school material too.

Start with the content you want your students to learn, and think backward to the intellectual question it poses. For example, the state may mandate that sixth-graders will learn the models of the atom that were competing at the turn of the 20th century. These are the answers. What is the question? In this story, the goal is to understand the nature of matter. The obstacle is that the results of different experiments appear to conflict with one another. Each new model that is proposed (Rutherford, cloud, Bohr) seems to resolve the conflict but then generates a new complication—that is, experiments to test the model seem to conflict with other experiments. If this organization seems useful to you, you might spend a good bit of time thinking about how to illustrate and explain to students the question, “What is the nature of matter?” How could that question intrigue sixth-graders?

As I’ve emphasized, structuring a lesson plan around conflict can be a real aid to student learning. Another feature I like is that, if you succeed, you are engaging students with the actual substance of the discipline. I’ve always been bothered by the advice “make it relevant to the students,” for two reasons. First, it often feels to me that it doesn’t apply. Is the “Epic of Gilgamesh” relevant to students in a way they can immediately understand? Is trigonometry? Making these topics relevant to students’ daily lives will be a strain, and students will probably think it’s phony. Second, if I can’t convince students that something is relevant to them, does that mean I shouldn’t teach it? If I’m continually trying to build bridges between students’ daily lives and their school subjects, the students may get the message that school is always about them, whereas I think there is value, interest, and beauty in learning about things that don’t have much to do with me. I’m not saying it never makes sense to talk about things students are interested in. What I’m suggesting is that student interests should not be the main driving force of lesson planning. Rather, they might be used as initial points of contact that help students understand the main ideas you want them to consider, rather than as the reason or motivation for them to consider these ideas.

If the goal of a lesson plan is to get students to think about the meaning of some material, then it’s pretty clear that the best approach is one in which thinking about meaning is unavoidable. One of the things that has always amazed me as a memory researcher is the degree to which people do not know how their own memory system works. It doesn’t do any good to tell people, “Hey, I’m going to test your memory for this list of words later,” because people don’t know what to do to make the words memorable. But if you give people a simple task in which they must think of the meaning—for example, rating how much they like each word—they will remember the words quite well.*

Learning is influenced by many factors, but one factor trumps the others: students remember what they think about.

Endnotes


*Sometimes memorizing less-meaningful information helps students move forward (e.g., foreign language vocabulary or the multiplication table). In those cases, don’t be afraid to use mnemonics, as explained in the online sidebar at aei.org/summer2021/willingham.
Liberal Education
(Continued from page 11)


Transformative Social and Emotional Learning
(Continued from page 17)

Endnotes

2. Collaborative for Academic, Social, and Emotional Learning, “SEL in…,” caselearn.org/what-is-SEL.


5. Nagaoka et al., Foundation for Young Adult Success.


Teaching Reading to African American Children
(Continued from page 33)

readers to break the code are necessary for children who speak AAE as well. What differs is the delivery of these elements. Reading is a language-based task; introducing language variation affects the efficacy of many standard instructional practices and reading-related activities. The impact of language variation on reading is not an intractable issue. Adapting instruction and materials to encompass and embrace such variation reduces the load for both teachers and students, allowing them to reach their respective goals.

Endnotes

18. Hanushe et al., The Unwavering SES Achievement Gap; and Hanushe et al., “The Achievement Gap.”
33. Thomas-Tate, Washington, and Edwards, “Standardized Assessment.”

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