Debbie Williams, a 1st grade teacher at Martin Luther King Jr. Elementary School in Yakima, Wash., scrolls through a math book as she plans lessons for her students while school buildings are closed due to the coronavirus. Districts across the country are trying to provide professional development on the fly to help teachers better prepare remote learning lessons.
How Districts Are Helping Teachers Get Better at Tech Under Coronavirus

By David Saleh Rauf

When the School District of Philadelphia, where the vast majority of educators have never used Google Classroom, went live with remote learning this week, teachers were instructed to take it slow: “review and enrichment” only for now—no new material will be taught until early May.

In preparation for the debut of its distance learning program, the Metropolitan School District of Pike Township, a small district outside of Indianapolis, relied on more than tech coaches to help teachers with digital training: Librarians got in the mix, too.

And when Miami-Dade Public Schools joined the wave of coronavirus school closures sweeping the country coast to coast in mid-March, the nation’s fourth-largest school district rolled out a smorgasbord of online instructional offerings, including dozens of webinars and third-party ed-tech resources.

The three approaches highlight how professional development for educators is adjusting to meet the new reality of digital teaching during a pandemic, and how there’s no one-size-fits-all approach for districts facing the challenge of delivering remote learning on the fly.

Across the country, educators are being equipped with new tech tools—devices, apps, software, and online textbooks—in greater volume than ever before. So now the push to train teachers on how to effectively use that technology is in full swing.

The approaches are almost as varied as the districts themselves. Some have seemingly made training available to teachers for just about every video, podcasting or live streaming app available under the sun, letting educators pick from a wide menu of options based on their individual tech know-how. Other districts are minimizing their offerings for now to avoid tech overload.

PD ‘for the Forseeable Future’

At a time filled with uncertainty, and no shortage of individual district game...
How do we support educators to ensure emergent bilinguals’ success?

In the US, by 2025, emergent bilinguals, also known as English language learners (ELLs) or English learners (ELs), will represent 25% of the student population in K–12 public schools.¹²

These numbers tell a story: Emergent bilinguals are our future. But how prepared are our schools and educators for this future? And how can we better set them up for success? Find out in the Rosetta Stone white paper Emergent Bilinguals Are the Future: How Do We Support Educators to Ensure Their Success?

Learn how to close emergent bilingual achievement gaps.

Download the white paper

plans for how to survive or even thrive in a total remote learning landscape, district academic officers and ed-tech leaders agree on this much: digital professional development has a long way to go.

“The need for this type of training is going to be ongoing for the foreseeable future,” said Jennifer Hall, an education tech specialist for the Atlanta Public Schools, a district of about 55,000 students.

Nestled in her home office, behind a crowded workspace equipped with a PC and two full-sized computer monitors, an iPad, a Macbook, and a podcast mic, Hall is one of about 15 education technology specialists with the Atlanta school district helping train teachers remotely to use different tech tools.

A typical day for Hall might involve one-on-one virtual help sessions with teachers, recording tutorials, writing tip sheets, or holding court about a new tech tool via a webinar broadcasting on public television.

Prior to the pandemic, all teachers in the district were already trained on Google Classroom in case of inclement weather closures. Since teachers and students were familiar with how to log on and navigate a basic online platform, the district was “ahead of the game,” Hall said.

And that’s opened the door for much more creative uses of technology, even during the early stages of remote learning this spring.

Teachers are holding live classes with Nearpod, an online engagement tool, in conjunction with Google Meet. Math and foreign language teachers are using Flipgrid to let students record short video responses during online classes. Jamboard is another common collaboration tool helping substitute for a lack of face-to-face interaction. Meanwhile, art and theater teachers are asking Hall how to use image and design tools such as Adobe Spark and Google Drawings to facilitate class projects remotely.

Hall said teachers who have never used technology before are now seeing its benefits.

“It can be overwhelming. There’s not an expectation that teachers use all the tools,” she said. “The goal has been to provide as many resources as possible for our teachers.”

‘Deal With This New Normal’

Long before the coronavirus forced schools into throwing together remote learning strategies, Miami-Dade district officials were steadily ramping up the use of technology over the past six years as part of a “Digital Convergence” initiative. It has included the acquisition of more than 200,000 new devices and continual professional development focused on e-learning. District officials say it allowed them to hit the ground running during the current crisis.

On the morning of March 16, when Miami launched its online curriculum following the sudden announcement three days earlier of district-wide school closures, teachers were able to access a fresh webinar guiding them through the newly-hatched distance learning curriculum. Staff spent a portion of that weekend at a district-owned television studio recording voice-overs so that new online instructional videos would be ready on day one.

“We were up with our phones in bed until 2 in the morning the night before because we were waiting for sound engineers to finish renderings, and for IT to upload the content to our YouTube channel, so we could hit send on an email to our teachers to let them know the webinars were ready to go,” said Marie Izquierdo, the district’s chief academic officer. “By 8 in the morning on Monday, we had 900 teachers that had watched the webinar. Overall, we had 18,000 views the first day of the webinars.”

The 355,000-student district has held dedicated PD days after negotiating with its teacher union, and offers webinars on how to use tech resources such as Microsoft Teams and Flipgrid, along with presentations from ed tech vendors ranging from Discovery Education to Khan Academy. Teachers can also access a variety of distance learning training sessions produced by the district, such as one showing them how to “navigate your remote classroom by exploring best practices for distance learning,” and a session providing an “explicit approach to plan for distance learning.”

“The commitment was there before we had an emergency we had to deal with,” said Izquierdo. “This is a very big aircraft carrier, and you can’t turn it on a dime. It’s because of that foundation that we’ve been able to turn and steer it so we can deal with this new normal.”

‘Not Comfortable With Remote Learning’

In Philadelphia, the school district is taking a slower approach to offering full-blown online instruction. Though remote learning began this week, teachers won’t start introducing new material and issuing grades until May 4.

Google Classroom will power the district’s digital curriculum in large part, but only 15 percent of its teachers were using the platform before coronavirus school closures. Professional development sessions started during the final week of March, said Fran Newberg, deputy chief of the district’s office of educational technology.

About 6,500 teachers trained that week on the basics of Google Classroom, she said, and additional training was focused on using other Google tools such as Docs, Drive, and Meet.

Instructional coaches will work with Philly schools to build activities for teachers based on grade and content areas, all accessible through a Google site.

“We know many of our teachers are not comfortable with remote learning,” said Newberg. “At this point, we’re teaching them how to utilize a very simplistic platform, but if they are already comfortable with a technology or a platform, they can do their own thing.”

AMY HUNTER, the K-12 Mathematics Coordinator for the Fairfax County Public Schools in Virginia, a district of roughly
188,000 students, said after “running the gamut” of virtual professional development sessions with teachers, her division opted for platforms already in use.

That includes Google Classroom, along with several digital textbooks and Blackboard, the district’s learning management system, as the go-to platforms for math teachers. Since starting distance learning in mid-April, however, major Blackboard technical glitches have disrupted lessons for teachers across the district—and on Thursday the fallout over the botched remote learning program resulted in MariBeth Luftglass, the district’s longtime information technology chief, stepping down.

Earlier this week, the district temporarily canceled face-to-face online instruction, and announced it was moving away from Blackboard, retaining a law firm in the process to review what went wrong, according to the Washington Post. Superintendent Scott Brabrand apologized to families in a message, saying the mistakes have been “frustrating and disappointing for everyone,” the Post reported.

But to a large extent, Hunter said that decision to use tools like Blackboard came down to equity: district officials wanted to use tools that all teachers, students, and even parents, could access. But Hunter said there was also a conscious decision to avoid putting too much on a teachers’ plates, given the current circumstances.

“We didn’t want one classroom having options that another didn’t. But to me it just seemed unfair to start introducing new resources that could overwhelm teachers,” she said. “We wanted to keep it as simple as possible for folks and make sure everybody has simple plug and play tools. Now, if you feel comfortable with that we can show you how to go deeper and do some fancy things.”

“We didn’t want one classroom having options that another didn’t. But to me it just seemed unfair to start introducing new resources that could overwhelm teachers.”

Amy Hunter
K-12 mathematics coordinator
Fairfax County Public Schools, Virginia

“...We had one teacher videotape herself with the periodic table of elements and explain all the elements,” she said. “There are different levels. The high-level learners have been going really gung ho with this.”

Inevitably, teacher progression with new tech tools is going to vary.

About 25 miles northwest of Cincinnati, Rebecca Dwenger spends most of her days coaching teachers “with whatever they need.” Dwenger, an instructional technology consultant for schools in Hamilton County, said those personalized virtual training sessions are tailored to the subject area and a teacher’s familiarity with technology.

PD sessions were made available for teachers within days of school closures in the district that Dwenger spends most of her time helping, but even with continual sessions “you don’t just teach them something one time and say ‘you’re good.’”

“The teachers are my students. You can’t do a one-time training and tap out,” she said. “I have teachers I have to show the tool to 12 times before they become comfortable using the instruction. I might have some teachers I can show a tool to once, and then they can become teachers of that technology.”

‘Jumping on the Bandwagon’

Jennifer Tatum, a 6th grade teacher at Cane Creek Middle School in North Carolina, is one of the more digitally advanced educators in the Buncombe County Public Schools, a district of about 24,000 students. As a result, she helps out as a liaison of sorts between the district’s technology coaches and its teachers, vetting new tech tools for educators and providing guidance on how to use them from an in-the-trenches perspective.

She has noticed reluctance by some to fully embrace tech tools, but “those teachers are surviving right now because they’re asking questions.”

“They want to know because they have to know,” she said. “Are they moving as fast as the teacher that feels comfortable? No. Do they have an LMS and a way to help kids? Yes. In a week or two will they be ready for something new? Yes.”

Jennifer Hall, the education tech specialist for the Atlanta Public Schools, said she’s encountered similar scenarios. Some teachers don’t pay attention during digital PD because “they say I’m old school paper and pencil.”

“But a lot more teachers are jumping on the bandwagon,” she said. “More than one
teacher has told me that they’re excited about how they’ve leveraged something new and how they want to implement it in a regular school setting next year.

Despite a lot of fear and trepidation, teachers seem to be jumping into the technology and are having some seemingly amazing experiences, said Lynette Guastaferro, CEO of Teaching Matters, a nonprofit that supports teachers.

In response to the pandemic, Guastaferro’s organization provided free online lesson plans that it estimates have been used by about 58,000 educators around the country to help with mass distance learning. She said every teacher is going to bring some element of their new digital learning back to the classroom when brick-and-mortar teaching resumes.

“This has been learn by fire. Every teacher right now is a first-year teacher,” she said. “When we come out of this the adoption curve on technology will be through the roof.”

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The Success of Social-Emotional Learning Hinges on Teachers

Too often, teachers don’t get the right training and support

By Madeline Will

Schools are closed in much of the United States, leaving students to hunker down at home for months without their usual outlets for learning and socializing. Educators say trying to meet their social-emotional needs will be more important than ever. Even when schools reopen, students might still be grappling with fears, anxieties, or lingering trauma.

But too often, experts say, teachers are tasked with implementing new social-emotional learning practices in their classrooms without adequate, ongoing support, which can tank the effectiveness of the initiative.

“Everybody wants to do things quickly and efficiently, so there’s been a move toward online training as a way for teachers to do this,” said Mark Greenberg, a professor of human development and psychology at Pennsylvania State University and a founder of the Collaborative for Academic, Social, and Emotional Learning, known as CASEL. “There’s little or no evidence that online training is sufficient to have teachers implement these programs with quality.”

He continued: “I think there are districts that feel they have to check SEL off as one thing they’ve done. They purchase curricula and they buy online training, and in most cases, if you go back two years later, you won’t find anything [different in schools].”

Sustained implementation and change in classrooms, Greenberg said, “really requires leadership and ongoing support.”

After all, actively supporting the social and emotional development of students is not an innate skill. Veteran teachers are not used to some of these practices, and many new teachers didn’t learn these skills in their teacher-preparation programs.

But only 29 percent of teachers said they have received ongoing training in social-emotional learning that has continued throughout the school year, a new EdWeek Research Center survey found. A fifth of teachers say they never receive opportunities in their job to reflect upon and improve their own social-emotional skills.

To help, a growing number of districts have begun to hire SEL coaches to work with teachers. Others are training their principals alongside their teachers in order to boost the entire school’s commitment to that work.

At first, many teachers “think of SEL as just gushy, feeling stuff, and it’s not just that—we’re really looking at embedding it into our practices and our academic content areas as well,” said Julie Carter, a SEL behavior coach in the North East Independent school district in San Antonio.

The Texas district has eight SEL coaches who lead professional-development sessions and work directly with teachers who need support. The coaches conduct obser-
vations, model instructional strategies, and help the teachers collect and analyze student data.

Carter said the coaching model has made teachers more comfortable with implementing new practices than a one-off training would.

“When you do it just that one time, it’s hard to get it to stick,” she said. “This is the way we’re getting it from the bottom up—it’s going to take more time for it to get to everyone, but it’s going to be so deeply embedded. It’s going to stay around longer because it will be part of the process, it’s not just one more [initiative].”

Districtwide Changes

In the Andover public schools, a nearly 6,000-student district a half hour outside Boston, Superintendent Shelley Berman has made fostering “safe, caring, and culturally responsive” classrooms a priority.

Four years ago, the district created a sprint team—a group tasked with making significant changes quickly, freed from bureaucratic red tape—to incorporate social-emotional learning and culturally proficient practices into the district’s 10 schools. The focus has been on: direct instruction in social skills; community service and service learning; creating a classroom climate that gives students a sense of community and mutual responsibility; and making sure all students feel welcome in school through culturally responsive curriculum and practices.

That starts with professional development, Berman said. Many teachers have gone through 10 days of training with Responsive Classroom, a SEL program that centers on generating a safe and engaging climate, in addition to in-house training. The district is now in the process of certifying some of its teachers to become Responsive Classroom trainers, too.

Also, Andover has sent teams of educators and administrators from four schools to participate in a yearlong certification program in social-emotional learning at William James College in Newton, Mass.

“We’ve tried to go very deep in this work with training leaders and providing teachers with leadership opportunity as well,” Berman said.

The district doesn’t have SEL coaches yet, he said, but that’s something it’s working toward.

So far, the efforts seem to be working: The district has administered a student-climate survey for the past three years, and Berman said there’s been “real growth” in students’ sense of connection to their school community. (There hasn’t been improvement in every area, however: Berman said that students’ sense of safety has decreased since the district started doing active-shooter drills.)

At High Plain Elementary, the first year’s survey results revealed that not all students felt welcome. The school has a diverse population—the first language of about 30 percent of students is not English, with the most common languages being Chinese, Hindi, and Spanish—and the results showed that educators were “maybe not putting the time into saying children’s names correctly,” said Principal Pamela Lathrop.

“What we found was that sometimes kids didn’t think it was OK to correct a grown-up,” said Lathrop, who is also the co-chair of the Andover district’s SEL sprint team. “We have made an effort to spend time in letting children help us learn how to say their name correctly [and discussing] the importance of names.”

To get to that point, she said, school leaders had to “guide the teachers through the work first.” The school hosted a professional learning book club for which teachers read Being the Change: Lessons and Strategies to Teach Social Comprehension, which examines identity.

Then, teachers shared the stories of how they got their own names and, in a group discussion, made the connection to their students.

School Leaders’ Role

After all, Lathrop said, “anytime you want teachers to have a change or have an effect on kids, you have to also recognize teachers need to have that experience within themselves.”

That means if school leaders want teachers to greet students in the morning and make personal connections to them outside of academics, administrators have to walk the walk with their staff, she said.

“You have to recognize that a teacher’s day is a long day, and you have to recognize that the demands on the teacher are high, and that sometimes you have to take a break and take care of a teacher’s social-emotional growth,” she said.

For example, she has offered mindfulness activities for teachers and found nontraditional ways to celebrate teachers’ work. This year, the school’s faculty went together to see the movie “A Beautiful Day in the Neighborhood,” which tells the story of Fred Rogers of TV’s “Mister Rogers’” fame.

For Jill McCarthy, a 2nd grade teacher at High Plain, the movie outing was a “breath of fresh air.”

Activities like that, she said, show that school leaders “have faith in us ... [and] offer up so many opportunities to come together and celebrate our work.” That positive environment is reflected in “our results and
even the kids, the demeanor amongst each other, and the adults with the respect we carry within the building.”

That’s why it’s important for principals to be considered social-emotional leaders, as well as instructional ones, Penn State’s Greenberg said. Too often, he said, “principals get almost no training in SEL or in how to lead a school in a way that is caring, healthy, and respectful.”

“When principals are involved in a sustained way in the intervention, the teachers teach more effectively,” Greenberg said.

In Education Week’s survey, 87 percent of respondents said administrators had gotten training in SEL. But when school leaders were asked about the type of professional development they received, just 42 percent said they received ongoing training throughout the year.

It Takes Time

Even with a supportive school culture, it takes time for teachers to learn how to implement social-emotional learning in their classrooms, educators say.

Berman, the superintendent in Andover, said that’s especially true for high school teachers, who already have a lot of standards and content to cover.

And older students tend to have more significant issues and conflicts than their younger classmates, Berman said, leaving some high school teachers to feel like they’re “not trained as a guidance counselor.”

The district is planning to do more professional development around classroom culture at the high school level, he said.

Teachers don’t know what they don’t know, which makes ongoing support so important, said Lindsey Frank, a climate and social-emotional learning coach for Community Consolidated School District 59 in Elk Grove Village, Ill. The coaching is optional, but Frank, who is the sole SEL coach in the district, said more and more teachers have begun reaching out for support.

“No that it’s a part of our culture as a district, we’ve seen that shift where a lot of people do find a lot more confidence in being able to support students,” she said.
black and Hispanic children.

“Are we going to write off another generation of kids while we wait for the other 40 to 50 percent of teacher-preparation programs to get on board?” Walsh said.

NCTQ has structured its review around the research from the 2000 National Reading Panel, a congressionally mandated review board that named the five essential components of reading and found evidence that explicit, systematic phonics lessons help kids become better readers. Despite these findings, which have been confirmed by further research reviews, many teacher-preparation programs have been slow to embrace what’s become known as the science of reading.

For this review, a team of reading experts evaluated the syllabi for required reading courses to see if the textbooks, planned lecture topics, and assigned readings support the five components of reading. Passing mentions of the components were not enough—NCTQ says its experts looked for “clear evidence of dedicated course time as well as measures to hold teacher candidates accountable for learning each component.” (The methodology of reviewing syllabi has been criticized in the past. Each program is now shown its rating before publication and given a chance to provide input and additional evidence; 15 percent of programs took NCTQ up on that offer for this review.)

In a statement, U.S. Secretary of Education Betsy DeVos slammed colleges whose curriculum did not adequately support the five components of reading.

“When nearly half of our nation’s teaching colleges are teaching future teachers what amounts to junk science, it’s no wonder nearly half of our nation’s low-income 8th graders are functionally illiterate,” she said. “How can anyone sit by and let this continue? How can even one college continue with a discredited curriculum? We know how to teach kids how to read. We just need to equip teachers with the fact-based, proven science to do it.”

Gaps in Coverage

The NCTQ experts found that comprehension was the component found most covered by traditional teacher-preparation programs, and phonemic awareness was the least—just over half of traditional programs cover this skill, which is the ability to identify individual sounds in spoken words. And only 53 percent of those programs spend enough time preparing prospective teachers to teach fluency, or the ability to read accurately and smoothly.

Even so, phonemic awareness was the area in which traditional programs saw the most growth—in 2013, only 35 percent of programs covered that particular component.

Walsh noted that research about phonemic awareness and fluency is newer than research about the other three components, which might explain their significant improvement over time as professors become more familiar with the body of reading research.

“If you were trained even in the ‘90s, you may not have learned anything about phonemic awareness,” she said. “The fundamental reason why teacher education has not been teaching the science of reading is that the teacher-educators are not themselves trained in it.”

For instance, an Education Week survey asked professors who teach early literacy how many phonemes are in the word “shape.” (There are three: “sh,” “ay,” and “p.”) While nearly all professors answered correctly, there was variation based on experience: 95 percent of those with less than five years in the field responded correctly as compared to 79 percent with more than 20 years of experience.

In the NCTQ review, preparation programs received an F if they adequately covered all five components—26 percent met this benchmark. A quarter received a B, meaning they covered four elements of reading. Eighteen percent of programs received a F, meaning they covered one or zero of the components with enough dedicated course time.

NCTQ also reviewed every required textbook—725 in all, which is seven times higher than the number of textbooks used in elementary mathematics programs—and found that 40 percent are “inadequate” for teaching the science of reading. Many of the textbooks promote unproven strategies like cueing systems, which encourage students to use semantic, visual, and syntactic clues to read an unfamiliar word, and running records, which is a tool for teachers to track student reading errors based on cues.

An Education Week analysis found that professors who teach early-reading courses are introducing the work of researchers and authors whose findings and theories often conflict with one another, including some that may not be aligned with the greater body of scientific research.

The Type of Program Matters

Traditional undergraduate programs have improved the most, according to NCTQ’s analysis. Fifty-seven percent now earn an A or a B, which is a 10-point improvement from 2016 and an 18-point improvement from 2013.

Traditional graduate programs, however, have stagnated. Thirty-three percent earn an A or a B, which is a 9-point improvement from 2013, but is the same percentage as in 2016. That is partially due to the fact that more graduate programs are included in this year’s review than in years past, NCTQ notes.

Even so, coverage of the reading components varies significantly by program type—on average, there’s a 20-point difference for each component. For example, just 36 percent of graduate programs cover phonemic awareness, compared to 55 percent of undergraduate programs.

Graduate programs do only offer two courses on average in reading instruction, compared to three in undergraduate programs—but even when NCTQ compared two-course graduate programs to two-course undergraduate programs, there was still a meaningful difference in their scores.

Walsh said she’s not sure why this difference exists. One theory, she said,
is that the more senior faculty members are more likely to teach at the graduate level, and they might be the least likely to be trained in the cognitive science. That theory is unproven.

However, Education Week’s survey did find that less-experienced instructors were more likely to teach research-backed principles of reading than senior professors. For example, 69 percent of instructors with five years or less experience in higher ed said a student who comes across an unfamiliar word should first sound it out (as opposed to look at the pictures or use context clues to make a guess). Just 38 percent of professors with more than 20 years experience said the same. Senior professors were also much more likely to teach cueing systems.

Also, NCTQ’s review of the 58 alternate-preparation programs yielded poor results—all but 12 of the programs received an F or a D. Only one alternate program, the California Teacher Residency Program at the Alder Graduate School of Education, earned an A.

The NCTQ analysis only considered coursework that’s required before candidates step into the classroom as teachers of record, which is probably why so many programs failed. Many alternate-preparation programs allow candidates to take coursework while teaching.

“IT’s a fundamental flaw of their design,” Walsh said. “Most kids only get one chance at 1st and 2nd grade.”

**Mississippi a Bright Spot**

Just like in 2016, Mississippi teacher-preparation programs earned the highest aggregate grade of the nation, with eight of its 12 traditional programs earning an A and the other four getting a B.

There has been a renewed commitment to early reading in the Magnolia State in recent years. Every undergraduate elementary education program in Mississippi has to require that prospective teachers take two courses in early literacy that cover the five components of reading. And the nonprofit Barksdale Reading Institute has worked to deliver research-based training for professors of early literacy across the state.

Mississippi was also the only state in the nation to make improvements in 4th grade reading over the last two years on the National Assessment of Educational Progress, although those gains cannot be explicitly linked to these reforms.

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**Want to Improve Math Teaching? Try Coaching the Coaches**

By Madeline Will

To improve teachers’ mathematics instruction, enlist a team of coaches. But to find out what actually makes for effective coaching, ask researchers.

That’s the premise of an instructional coaching program in Tennessee. Over the last four years, select coaches have been working with math teachers in grades 3 through 8 to promote high-quality teaching that’s rooted in complex thinking and aligned with state standards. Researchers with the University of Pittsburgh have been evaluating the coaches to better understand how to help them do their jobs better.

“As our state was transitioning to more rigorous standards, we needed a way to support our teachers,” said Laura Booker, the executive director of research for the Tennessee education department. At the same time, “we realized there was a real lack of training on how to be an instructional coach and work with adult learners.”

The coaching program tackles both of those challenges. Funded by a federal Institute of Education Sciences grant, the program uses a continuous improvement process, in which researchers analyze the coaching data periodically and then refine the guidance they provide to coaches.

The ongoing feedback loop helps the researchers determine the best coaching practices and create a model for guiding math coaches, said Jennifer Lin Russell, an associate professor of learning sciences and policy at the University of Pittsburgh, and the lead researcher on the coaching program.

So far, more than 70 coaches across 31 districts in Tennessee have been trained in the model, which emphasizes higher-level thinking in mathematics. Researchers are still analyzing the data collected. Results on student achievement are expected later this summer.

But so far, researchers have found that when coaches and teachers had deep and specific conversations while planning lessons, the teachers were better able to orchestrate high-level and open-ended mathematics tasks in the classroom. They became more skilled at helping students better understand math concepts.

Teachers also became more comfortable allowing students to do most of the
thinking about math problems, rather than jumping in and providing assistance as soon as students started to struggle, Russell said.

Booker said she remembers getting “cold chills” when she realized the process was working. “[One teacher said], ‘I feel like my teaching has so dramatically improved,’” she said. “It was like, this is why we’re doing this.”

‘Grappling in the Learning’

The coaching model asks coaches to provide evidence-based feedback to teachers; establish mathematics and pedagogical goals before lessons; and engage teachers in deep and specific discussions of the “instructional triangle,” which is made up of content, pedagogy, and student thinking. Coaches work with their partner teachers before, during, and after a lesson a minimum of three times per school year.

This level of intensive coaching requires time and resources. Still, high-level coaching can transform the instruction of a teacher who, for example, is great at language arts but struggles with teaching math, said Jim Knight, a senior partner at the Instructional Coaching Group, a consulting firm that partners with states and districts to train coaches.

“If you keep that great teacher in the system, it’s worth that kind of support,” said Knight, who is not involved in Tennessee’s coaching work.

To evaluate the coaching, the Pittsburgh researchers looked at planning documents and transcripts of videos of the coaching cycle: the pre-lesson conference, the lesson observation, and the post-lesson reflection.

“We would go out into the field, work with the coaches, and then we’d listen to what the coaches are doing and study their videos. That would call into question things that needed to be modified in the coaching project,” said Victoria Bill, a senior fellow at the Institute for Learning at the University of Pittsburgh, which provides the professional development for the coaches.

For example, coaches were asked to set learning goals with the teachers before lessons. But when Bill’s team watched coaches’ videos, the researchers realized that the coaches had a different understanding of math learning goals than they’d intended.

“We showed them some examples, but it wasn’t enough for them to learn it,” Bill said. “They needed to grapple in the learning with us.”

Coaches were trained to push the teachers to think and reason deeply about the mathematical concepts, as well as consider how to make sure students understood the concepts.

“There was all this educating of pedagogy, student learning,” Bill said. “And these are the people who are ... already the expert teachers. But I think they learned what they didn’t know, and we learned about what they need to learn more deeply.”

Jamelie Johns was part of the first cohort of math coaches in the program. She said the researchers taught her how to have conversations with teachers that press for both depth and specificity.

“I was able to get feedback [that said], ‘When you did this, we saw the teacher change her practice in this way. That’s a move I want to continue to make,’” Johns said. “If we saw something that wasn’t as impactful, I would revise.”

The continuous improvement model was a “big departure” from previous research projects, said Pittsburgh’s Russell, who is also a research scientist in the Learning Research and Development Center at the university. Mainly, it was faster.

“We’re used to these long cycles of data collection and analysis, and here we were, ... engaged in much more rapid analysis,” she said. “The way we were engaging with [the coaches] in a very regular way helped us understand what was
How do we support educators to ensure emergent bilinguals’ success?

Over the past 15 years, the US population has changed dramatically. Emergent bilinguals, also known as English language learners (ELLs) or English learners (ELs), currently represent roughly 10% of all students in our K–12 public schools. By 2025, this number is projected to increase to 25%.1,2

These numbers tell a story: Emergent bilinguals are our future. But how prepared are our schools and educators for this future? Today’s teachers face numerous challenges, from lack of training and support to limited state and government policies.2 More must be done to set up these teachers—and their emergent bilingual students—for success.

GROWING NEED, EMERGING CHALLENGES

Emergent bilinguals are one of the fastest-growing segments among school-age children in the US1; yet as a group, they statistically underperform non-emergent bilinguals. During the 2015–16 academic year, only 67% of emergent bilinguals, versus 85% of non-emergent bilinguals, graduated from high school on time.3

This gap is concerning, with a number of individual, districtwide, and societywide consequences:4,5

- Schools with lower adjusted cohort graduation rates (ACGRs) could be labeled in need of improvement, negatively affecting their reputation, funding, and more.
- Individuals without a high school diploma have lower earnings and higher unemployment rates than those with a diploma.
- Lower graduation rates for emergent bilinguals represent a loss to society as a whole, because these students are unable to contribute “to the nation’s competitiveness in the global economy.”6
What contributes to the emergent bilingual achievement gap?

Below is a brief overview of some of the contributing factors exclusive to districts and schools.

**DIFFERENT PROFILES AREN’T ACCOUNTED FOR**
Emergent bilinguals have diverse academic and linguistic needs as well as different levels of proficiency that a one-size-fits-all pedagogic approach to English language learning might not effectively address.\(^4,6,7\)

**CLASSROOMS AREN’T CULTURALLY RESPONSIVE**
Cultural responsiveness, or the ability to learn from and relate respectfully to people of your own culture and others, is an essential component of today’s classroom. When a classroom isn’t culturally responsive, emergent bilinguals can feel marginalized, leading to disengagement and lack of motivation.\(^5,8,9\)

**ACADEMIC LANGUAGE ISN’T FOCUSED ON OR FULLY DEVELOPED**
While many emergent bilinguals will be able to speak social English, they could lack the academic language needed for school success.\(^10\)

**THERE AREN’T ENOUGH EMERGENT BILINGUAL EDUCATORS**
Most states struggle to recruit and retain bilingual educators. During the 2015–16 academic year, there were only 78,000 teachers dedicated to addressing the needs of 4.6 million emergent bilinguals.\(^11\)

**K–12 TEACHERS LACK ADEQUATE SUPPORT**
Teachers may lack the tools, funding, and/or support needed to most effectively address the needs of their emergent bilingual students.\(^5\) A 2012 survey revealed that 55% of teachers have at least one emergent bilingual student in their classrooms, but there is no evidence that teacher training is improving.\(^2\)
What do educators need to help close the gap?

Below is an overview of the types of support, systems, and tools that educators need to help them more effectively teach and engage emergent bilinguals.

RESOURCES FOR ADOPTING AN ASSET-MODEL APPROACH
An asset-based approach helps ensure students see themselves and their communities reflected and valued in the content they’re taught in school.12

TOOLS FOR CREATING A MORE CULTURALLY RESPONSIVE LEARNING ENVIRONMENT
Teachers must consider instructional techniques, materials, their relationships with students, the classroom climate, and their own self-awareness. Providing opportunities for students to think critically about inequities in their own or their classmates’ experience is also key.13

Get tips for teachers and find out how to better assess language learning programs in the Rosetta Stone white paper Emergent Bilinguals Are the Future: How Do We Support Educators to Ensure Their Success? Learn more about Rosetta Stone language solutions at rosettastone.com/k12.


ABOUT ROSETTA STONE EDUCATION

Rosetta Stone is a global leader in technology-driven language and learning solutions for individuals, classrooms, and entire organizations. Our scalable, interactive solutions have been used by over 12,000 businesses, 9,000 public-sector organizations, and 22,000 education institutions worldwide, and by millions of learners in over 150 countries.
happening in the data.”

Researchers could see what the challenges of the implementation were, in close to real time, she said.

For example, the researchers wanted coaches to be having deep and specific conversations with teachers about mathematics, pedagogy, and student thinking. As the school year went on, the researchers were able to better refine the training and guidance they gave to coaches.

By the end of the year, the researchers could see noticeable improvements in the quality of coaches’ discussions, Russell said.

Learning to Be a Coach

For Johns, who is now the director of elementary math and science for Hamilton County schools, the biggest challenge in becoming a coach was learning how to work with adult learners, rather than students.

“As adults, we’re more fixed in our ways,” she said. “I think the perception is that teachers are expected to know everything because we’re the ones teaching, but it’s not that at all: Teachers are learners.”

That learning curve is why coaches need coaching, too, said Knight, who is also a research associate at the University of Kansas Center for Teaching and Learning.

Coaches need professional development to learn how to set goals with teachers, gather data, and pass their knowledge on to other adults, he said, adding that it’s tough to create lasting change in teachers’ instruction.

“To dramatically change the way you do your work ... it’s like changing your personality,” Knight said. “It’s going to take some time, it’s going to take some support.”

Ultimately, the three teachers Johns coached through the model had gains in both student achievement and student growth.

Now, there are 12 elementary math coaches in the Hamilton County district, which includes Chattanooga. A few have been trained in the state model, and the rest have learned the process from their peers.

“The selling point we often make [to teachers] is even professional athletes have coaches,” Johns said. “Coaching isn’t for weak people. It’s for strong people who want to get better.”

The $2.5-million federal grant that has funded the research in Tennessee runs out at the end of December, and the state education department is strategizing on how to keep the program going past the life of the grant.

Booker, of the Tennessee education department, said the plan is to divide the work into three regions of the state, with math consultants from the education department convening networks of coaches in each region. This could eventually scale up the program, she said, as the consultants extend the training to new coaches.

I was able to get feedback [that said], ‘When you did this, we saw the teacher change her practice in this way.’ That’s a move I want to continue to make.”

JAMELIE JOHNS
FIRST COHORT OF MATH COACHES IN THE PROGRAM

COMMENTARY

Published on April 8, 2020, in Education Week

What Happens to Student-Teachers Now? A Guide for Teachers

7 steps for keeping prospective teachers in the fold, remotely

By John Pascarella

If you welcomed a student-teacher into your classroom in January, you might now be questioning how to include her as you work to meet the basic instructional needs of your students. You’re probably feeling overwhelmed by the rapidly changing school policies on distance learning while navigating mounting pressures to troubleshoot new technologies like videoconferencing software. If that wasn’t enough, those pressures may be compounded for you as a parent or caregiver who is also tending to the learning needs of your own children.

Many educators take on student-teachers because they intuitively understand the value of their unique role in preparing new talent for the field. Research shows that beginning teachers who complete student-teaching and receive high-quality mentoring are twice as likely to remain in the profession. Odds are you began your career as a student-teacher who was mentored through your first lessons and interactions with students. Given the chance to pay it forward, you became a mentor teacher to share your guidance, wisdom, and influence. In doing so, you opened your classroom at a time when fewer college graduates are choosing teaching careers than at any time in recent history.

As a consequence of social-isolation measures in response to COVID-19, decisions about school closures, distance learning, and student-teaching have been made by a patchwork of federal, state, regional, and district leaders. School closures have
sidelined many promising student-teachers, leaving mentor teachers to figure out distance learning on their own. Although these policy decisions might be causing you some ambivalence about how to proceed with your student-teacher, you might be his only lifeline as the details of social isolation get sorted out. Rather than putting them off, bring student-teachers back into the fold.

Here’s what you can do:

1. **Empathize with your student-teachers.** They also lost your classroom community and connections to your students. They also feel the pain, distance, and concerns about students and parents or caregivers who have been unreachable during this crisis. You are the conduit to your classroom through which they can reconnect with your students. Encourage them to partner with you to improve learning opportunities during this extraordinary situation.

2. **Recognize that your student-teacher may be better equipped to teach online than you.** Most student-teachers have engaged in a wide range of digital-learning tasks, facilitated collaborative teamwork online, and used videoconferencing software. Leverage that experience. Invite them to co-plan digital-learning tasks and online lessons. Make them a co-host of virtual meetings and give them opportunities to lead. If you cannot give them access to closed learning platforms, include them in planning learning tasks that you post and share student work to involve them in grading.

3. **Include your student-teacher in establishing new routines and norms for your students’ learning.** Brainstorm new ideas with your student-teacher and be open to unfamiliar approaches. Your lack of exposure with a learning application or new platform might be an opportunity to leverage your student-teacher’s experience. Before shutting down an idea, allow the prospective teacher time to work through it, develop it further based on constructive feedback, and—if that specific idea proves infeasible—offer new ones.

4. **Delegate responsibilities and partner with your student-teacher to keep in closer contact with your most vulnerable students.** Your students who already have a history of anxiety, depression, learning and attention disorders, food or housing insecurity, or other health-related conditions are at greater risk during this crisis. Partner with your student-teacher to stay in regular touch with these students.

5. **Work in tandem with your student-teacher to maintain online-engagement norms.** You, your student-teacher, and your students are now looking into each other’s homes, so it is imperative that all parties be respectful of everyone’s privacy beyond what current school policies or laws require. “Review this resource” from the Consortium for School Networking on Video Conferencing Privacy Considerations with your student-teacher. Anticipate the likelihood that racial, cultural, linguistic, gender, sexual orientation, and economic biases might be explicitly or implicitly communicated during a videoconference meeting with your students. Be prepared to involve your student-teacher in addressing those biases in an effort to build greater transparency, trust, and safety throughout your school community.

6. **Involve your student-teacher in addressing disruptive incidents and explicit acts of racism.** While it’s unlikely you’ll experience “Zoombombing,” you have probably read about it or your district has informed you on how to change your Zoom settings. If you want to learn more, read this article from the Anti-Defamation League on “How to Prevent Zoombombing” and report any such incident to the FBI Internet Crime Complaint Center. You can involve your student-teacher in addressing these disruptive incidents—most of which have been explicit acts of racism that are most traumatizing to marginalized students—should they occur. Racial issues don’t take a backseat to a global pandemic; they are only magnified by systemic inequities that this crisis is making worse and by racist incidents like Zoombombing.

7. **Practice self-kindness in order to take better care of yourself and to model those efforts for your student-teacher.** Reflect on the issues you can and cannot control. Share these reflections with your student-teacher. Take time with him or her to review social-emotional learning resources that have become available online in the wake of this crisis. “A Trauma-Informed Approach to Teaching Through Coronavirus” from Teaching Tolerance is a good place to start. This can unify your efforts with those of your student-teacher so that together you better respond to your students’ social-emotional-learning needs.

One month from now, you might find yourself looking back, either wondering how your student-teacher could have been more involved or realizing how valuable he or she has been in supporting your students’ learning through this crisis.

Now is the time. Reach out. Get your student-teacher on the phone. Make a plan to strengthen learning opportunities together for everyone’s sake.

John Pascarella is an associate professor of clinical education and a former chair of the master’s teaching program at the University of Southern California. He is also the chief academic officer of K-12 Equity Leadership Academies at the USC Race and Equity Center.
Teacher PD Gets a Bad Rap. But Two Approaches Do Work

Researchers highlight effective professional development practices

By Heather C. Hill

In our last “What Works” essay, we cast serious doubt on the value of teachers analyzing student test data. Studies find the practice on average doesn’t produce student learning gains. We also noted that the practice is widespread, often forming a cornerstone of teachers’ professional learning time.

This raises a question: If this study of student data doesn’t improve schools, what should teachers do with their professional learning time?

It’s fair to say that many researchers have come to believe that professional development programs of any type are largely ineffective for increasing teachers’ skills. Driving this view are a handful of large, high-profile studies funded by the federal government over the past decade, which have returned near-zero impacts of PD on student learning.

Fortunately, scholars have studied many other teacher professional learning in the past two decades, and recent evidence points to two forms as particularly promising.

Promising practice #1: Teachers study curriculum materials

The first practice helps teachers take a deep dive into new curriculum materials. In a recent review of 95 STEM instructional-improvement programs, several colleagues and I found that when teacher PD focused on the curriculum materials teachers would use in their classrooms, student performance rose about 10 percentile points. In comparison, programs featuring either a teaching focus alone or a new curriculum focus alone resulted in just a 6 percentile point gain.

In PD workshops with a curriculum focus, teachers often use the materials, with colleagues, as if they were students—meaning they solve problems, conduct investigations, and think about mistakes students typically make with the material. In that way, teachers learn exact content coupled with exact instructional methods. For instance, where content-focused professional development might teach several different ways to model the problem 32 minus 21, teachers in a curriculum-focused program learn the specific model used in their materials. Curriculum-focused PD also gives teachers something to “bring back” to the classroom rather than having to adapt materials later or scour the internet for suitable lessons. Some evidence shows that instructional quality is stronger when teachers use a standard curriculum of any type, rather than cobbling together materials from various sources.

Promising practice #2: Structured coaching

The majority of U.S. schools, federal statistics suggest, have access to an instructional coach, typically for English/language arts, math, or science. But do the coaches help improve student outcomes? A recent research review by Matthew A. Kraft of Brown University and David Blazar of the University of Maryland suggests that when coaches engage in individualized, intensive, and sustained work with teachers—basically one-
on-one coaching or something similar—the coaches can have strong effects on classroom practice and student outcomes. The intensive coaching programs boosted teachers’ classroom practice by 20 percentile points, as measured by classroom observation instruments, and increased participating students’ performance by about 6 or 7 percentile points as compared with students in classrooms where teachers were not coached. Subject-specific coaching programs were more likely to be effective than subject-general programs, and programs that paired coaching with new curriculum materials improved instruction above and beyond the average effect.

The kind of coaching these authors highlight—individualized, intensive, and sustained—may be atypical in U.S. classrooms. Anecdotally, district-employed coaches often serve many roles in schools: curriculum designers, assessment administrators, facilitators of the study of student data, and even short- and long-term substitutes. As a result, coaches may work one-on-one with only a small number of teachers over a limited number of observation and feedback cycles. Thus while the majority of schools appear to employ coaches, they may not be maximizing coaches’ potential.

Several larger lessons grow from looking across these two promising approaches.

First, focusing directly on instruction—through delving into curriculum materials or through coach feedback and teacher reflection—can be a powerful lever for changing that instruction. Second, many successful programs feature informal accountability for change. Coaches regularly appear in teachers’ classroom to check in, keeping instructional improvement on the front burner. Similarly, STEM programs posted stronger student learning gains when teachers convened after the start of implementation to discuss progress and troubleshoot problems. Scheduling that meeting likely helped teachers move forward with their implementation plans.

Third, coaching and curriculum-focused PD may help teachers focus on building their skill in one kind of instruction, rather than having their heads continually turned by different instructional approaches. Often, U.S. teachers must work with a curriculum that suggests one instructional method, a coach who suggests another, and professional development PD that suggests a third. By contrast, both one-on-one coaching and curriculum study help build teacher expertise in one approach.

Finally, even the best professional learning needs a strong school culture to take root. Teacher openness to feedback, a sense of collective responsibility, school leadership support for both instructional improvement and the chosen PD makes a big difference in bringing about student gains. A future essay will consider the role leaders play.

Heather C. Hill is a professor of education at the Harvard Graduate School of Education and studies teacher quality, teacher professional learning, and instructional improvement. Her broader interests include educational policy and social inequality.

**COMMENTARY**

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Teacher Education Needs to Acknowledge ‘Whiteness’

Whiteness is socially constructed. Teachers need to deconstruct it

By Hui-Ling Malone

When I was in 3rd grade, I begged my mother to help me choose an outfit for my school’s “Pioneer Day.” My mom looked at me, sighed in resignation, and said, “OK.” My eyes lit up in excitement but quickly dimmed, as she continued, “But you know you would not have been one of them.”

One of them.

Even at 9 years old, I knew she was right. I am biracial, a descendant of en-
slaved Africans and the daughter of an East Asian immigrant. Clearly, White colonialism was not my history. Yet, I hated that my parents always reminded me that I wasn’t White, or rather, I wasn’t normal.

I don’t know when I had come to understand that Whiteness equated normalcy. In my predominantly White schooling, my teachers, though some well-intentioned, erased me by centering a monolithic, Eurocentric perspective. How students spoke, how we behaved, and what we learned were all premised on a standard that upheld Whiteness. In 6th grade, my teacher pulled me aside and told me not to hang with my African-American friends because they were “bad,” and I was “better” than them.

Later, I learned to reposition how I understood “normal,” thanks to my parents, who supplemented my formal education with African-American history and sent me to Chinese school to learn about my two cultures. For me, this education was critical for building a sense of self.

Yet, two decades past my primary school experience, the majority of teachers are still far less racially and ethnically diverse than their students. Most curricula still do not extend beyond the dominant Western canon.

Most teacher trainings emphasize classroom management, how to write an objective, and how to check for understanding—which are important for any skilled educator. But before mastering these goals, teachers must reflect on their identities in relationship to power and privilege. This understanding might support teachers working against unjust structures, refusing to passively support systems that oppress vulnerable communities they might serve.

Some cities have tried to address this disconnect, but change hasn’t been easy. When New York City’s public schools chancellor Richard Carranza recently mandated an implicit bias training for teachers, the trainings received mixed reviews. One anonymous White teacher told the New York Post, “It feels like I’m in a dystopian novel where all of a sudden being White is bad. All of a sudden, I’m the enemy.”

What this response exposes is the lack of understanding of institutionalized racism in this country and the ways educators explicitly or implicitly uphold systematic oppression. Ongoing teacher education that addresses Whiteness rigorously and systematically could lessen this confusion.

Whiteness was constructed to establish a racial hierarchy that sustains the privilege and power of White individuals and rewards those who assimilate to Whiteness, shedding their own cultural pluralities. Though race is biologically false, it is socially real. As historian David Roediger put it in his 1994 *Towards the Abolition of Whiteness*, “Whiteness is not only false and oppressive, it is nothing but false and oppressive.”

People weren’t “White” or “Black” before they arrived on the indigenous land we now call the United States. As Africans were kidnapped and enslaved on western shores, colonists created a “White identity.” In *Stamped from the Beginning: The Definitive History of Racist Ideas in America*, Ibram X. Kendi traces how the term “race” was utilized to identify, differentiate, and animalize African people.

So how does this shape our current reality? The construction of Whiteness led to government authorized racially segregated neighborhoods. The construction of Whiteness led to racially segregated schools where resources and opportunities continue to be hoarded for already privileged children. The construction of Whiteness explains the impulses of White parents up in arms about the possibility of sending their children to school with “disadvantaged” (read: Black and Brown) children. The construction of Whiteness explains why Black children are over-disciplined and grow up to be five times more likely to be incarcerated than their White counterparts. The construction of Whiteness can explain why at the tender age of 3 or 4, Black preschoolers are watched more closely and more likely to be marked as behaviorally challenged.

Whiteness fuels environmental racism, maintaining safety for some and toxic environments for others. From South Los Angeles, to Flint, Mich., to the Bronx, N.Y., working class Black and Brown communities are disproportionately exposed to harmful pollutants and live in food deserts with restricted access to healthy food that place their children in precarious health conditions.

Teachers—and not just White teachers—not only need to learn how to be “culturally relevant,” but must gain a deeper understanding of the political histories and conditions that shape the lived experiences of themselves and their students. Teacher education must help everyone think critically of the world around them so that tomorrow’s teachers, policymakers, doctors, lawyers, and service workers don’t perpetuate and sustain inequity.

What does it mean to acknowledge Whiteness in teacher education? It means preventing Black children from being traumatized by teachers who think it’s OK to auction Black students during a lesson on slavery, as one 5th grade teacher recently did at a private school in Bronxville, N.Y. Acknowledging Whiteness in teacher education means reflecting children’s identities in their learning and authority figures. Acknowledging Whiteness means disrupting the notion that there is only one standard of success by instead honoring our country’s beautiful cultural pluralism.

Deconstructing Whiteness in schooling is an ongoing, uphill battle for many of us, but each step forward matters. We as educators should sit in our discomfort, interrogate sentiments of defense or anger that may bubble up when discussing race and power, and question how we might be complicit in producing biases that harm children.

By 3rd grade, I felt ashamed because my schooling rarely connected with my identity. What would it have been like to feel recognized and valued the moment I entered school? Is this not what all children deserve?

Hui-Ling Malone facilitates the Youth Technical Assistance Center on Addressing Disproportionality at New York University’s Metro Center. She is also an adjunct professor at Hunter College in New York City.
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