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*Portions of Grades 3–5 Vocabulary lessons will be available in HTML5 and on supported iPads by late 2018. iPad® is a trademark of Apple Inc., registered in the U.S. and other countries.*
How the job status of U.S. principals changed (or didn’t) from 2015-16 to 2016-17:

82%—remained at the same school
10%—left the principalship
6%—moved to a different school

Of principals who were thinking about transferring to another school in 2015-16 …

only 12% actually did the following year.

Source: U.S. Department of Education, DAmag.me/jobs

Recommended Reading

Everyone has an opinion about standardized tests in American education, but how does our approach compare to other countries? Our look at how high-stakes tests are used around the globe offers some insightful perspective about how they’re used here. See page 50.

Also, we report on ways school districts support some of their most vulnerable students: children in foster care. Challenges include enrolling and tracking students moving between foster homes and their biological parents, and addressing special social-emotional needs (page 57).

You’ll also find stories on master scheduling, cybersecurity planning and financial advising, as well as a guide to the upcoming FETC conference in January.

And elsewhere …

Increasingly, public education is being supported by sites such as DonorsChoose.org, where teachers raise money for everything from books to special projects to clothing for students. But what does the growing dependence on crowdfunding sites—coupled with the willingness of teachers to pay for classroom supplies themselves—say about America’s commitment to publicly funded education? From Vox, see “More Teachers Are Turning to Crowdfunding Sites.” DAmag.me/crowdfund

Until next time,

—Jennifer Bankston, a Los Angeles USD teacher and Airbnb host, in “A Startling Number of Teachers Are Renting Their Homes Out to Help Pay Bills.” Money, DAmag.me/airbnb

Milk shares
INDIA—Elementary school students in the western Indian state of Maharashtra will receive 600 grams (21 ounces) of powdered skim milk to help boost nutrition. Three, 200-gram powdered milk packets will be distributed monthly as part of a three-month pilot project. On each designated “skimmed milk powder distribution day,” parents will also be instructed on how to properly make milk so that children get the full health benefits. Maharashtra is home to nearly 12 million elementary school students.
More: DAmag.me/india

Living wage
NEW ZEALAND—Corinna School in Porirua has become the first in New Zealand to provide all its staff—including the caretaker, janitors and teacher aides—with a living wage of at least $20.55 per hour. School support personnel typically start at $16.50 per hour, which incrementally reaches about $17.25 after seven years. In order to provide the pay increase, the school had to end a contract with a labor service and directly hire staff members, many of whom come from the surrounding economically challenged neighborhood.
More: DAmag.me/nz

Eye Openers

“It’s like having another teacher’s income on a good month.”

—Jennifer Bankston, a Los Angeles USD teacher and Airbnb host, in “A Startling Number of Teachers Are Renting Their Homes Out to Help Pay Bills.” Money, DAmag.me/airbnb

Global Ed News
Math curriculum promotes fluency and mathematical discourse in Iowa district

*Everyday Mathematics 4* helps elementary students experience productive struggle on the way to mastery

As a longtime elementary school teacher, Jolene Rude has seen her share of students struggle with—and sometimes abandon—difficult math problems.

After using *Everyday Mathematics 4*, however, even struggling students are learning challenging math concepts, along with life skills, says Rude, an elementary CORE math teacher at Johnston Community School District, located in a northern suburb of Des Moines, Iowa.

“*Everyday Mathematics* provides students the opportunity to try different strategies—to work with a partner or group,” Rude says. “Students know if one strategy doesn’t work, they can try another or talk it out. That builds stamina and perseverance, which help students know, with confidence, ‘I accomplished that; I can accomplish this.’”

**Comprehensive program**

*Everyday Mathematics 4*, designed for grades K through 6, teaches various methods of problem-solving to accommodate different learning styles; repeats standards-aligned concepts over multiple lessons and units to improve mastery; and uses real-world problems to demonstrate practical applications of skills.

The product’s research-based approach to math instruction supports the Johnston district’s growth mindset, while promoting mathematical discourse, fluency and productive struggle, says Jyll Johnson Miner, math/science K12 coordinator for the district.

“We are trying to create opportunities for small-group learning and personalized instruction,” Miner says. “*Everyday Mathematics 4* lessons encourage small-group learning through games, technology and math boxes. And automaticity, fluency, is built into the core through different activities.”

**Proficiency above state average**

Since implementing an earlier version of *Everyday Mathematics* in 2012, the district has seen steady proficiency growth across all grades, Miner says. On the 2017-18 Iowa state assessment, 91 percent of the district’s third-graders were proficient in math, compared with the state average of 78 percent; 86 percent of the district’s fourth-graders and fifth-graders were proficient in math, compared with the state average of 78 percent for grade 4 and 75 percent for grade 5.

In addition, grade 3 students scored 16 points higher than the National Standard Score for math proficiency; grade 4 scored 13 points higher; and grade 5 scored 17 points higher.

The *Everyday Mathematics 4* program is known for its spiral instructional design, which helps students master a topic after seeing it multiple times in multiple contexts. But the open-response and challenge questions are also noteworthy, Rude and Miner say, because they encourage mathematical discourse while students experience productive struggle on the way to mastery.

“Students can explain or defend how they solve the math box,” Rude says. “They can compare strategies and talk about why theirs is better than someone else’s. Sometimes, they learn a better way to solve a problem.”

For more information, visit mheonline.com/everydaymath4
View, comment, share this story online at DAmag.me/johnston
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3 steps to increase the rigor of your assessments
Rigor is an increasing concern in our schools. We continue to see evidence that our students at all grade levels are not working at a level that is challenging enough to prepare students for college and careers. The level of challenge in our assessments, which allows students to demonstrate learning at high levels, is crucial. In order to provide rigorous assignments for our students, we need to assess the current level of rigor, revise tasks to raise the rigor, and implement and adjust.

By Barbara Blackburn
DAmag.me/1018-rigor

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Mike Gee, Principal
Tompkinsville, Kentucky
Calculating the true costs of choice

Report raises concerns over taxpayers funding charters, vouchers and private schools

When voucher programs were first raised in the ’90s, they were often voted down. Reading your report, I was struck by how many states still found a way to get what they wanted. It’s the way they are so clever with the names. If you think about it, an “education savings account” sounds as though you’re putting away money for your child to go to college. Who would be against that? They may have different names in different states, but it is a legislation model being pushed by the Koch brothers and ALEC and other conservative organizations, especially in red states, to get these programs going.

The public is not that aware because the names disguise what they really are. And they always fast-track things. But we do see a pretty substantial pushback right now. Charters are not as popular as they used to be, and the news media for the first time is starting to question them. So the tide is turning. There’s a lot of money behind privatizing education as a market-based commodity funded by taxpayers. We’ll be struggling with these issues for quite a while.

The report notes that many of the charter and private schools that receive public funds are discriminatory. What we found is nearly all of them are on some level. They may be discriminatory based on the grades that kids need to get into them, or based on disciplinary records. Some are outright discriminatory on the basis of religion or sexual orientation of students. There are schools that will exclude students who are gay, lesbian, bisexual or transgender—or even the child of a gay, lesbian or transgender couple.

Now, if this is a private religious school, I suppose one could argue that this is a religious issue, and they should be able to do what they want. But they’re getting public money, and that is the crux of the issue. The taxpayers are paying for this discrimination, and the public schools are suffering.

They claim public schools are failing, so they open a charter school and give it tax money. Now, even if it wasn’t failing before, the public school may fail without the resources. Exactly. It’s not only the resources, but also the drain of high-achieving students and motivated students—students who can put up with the very strict discipline at many of these no-excuse charter schools.

But even more important are “stranded costs,” which many people don’t understand. Imagine that you send your child off to a private college and you pay, say, $20,000 for room and board. You don’t save $20,000 because your child is out of your house for nearly nine months. You still have to pay the mortgage, you have to turn on the lights, you have to heat the house and somebody has to mow the lawn. And that is exactly...
what happens to public schools. You still have to pay. There are some studies done by In the Public Interest that show how many millions of dollars it costs schools in California every time a child leaves for a charter school.

So then what happens? You have to cut programs, you have to cut sports or you have to raise taxes.

I believe that we need to help our citizens understand that this is affecting how much money they are paying. Voucher programs were intended for kids who tried the public school and it didn’t work out. Now, vouchers are going to any child who enrolls in a private school. The public has never had to pay for this before, and it is raising everyone’s taxes to run three parallel school systems—the public schools, the charter schools and now the voucher schools.

Although your report is not about the quality of the education, many of these voucher schools don’t require teacher certifications or participation in state testing. So what kind of education are these kids getting?

The truth is that national studies consistently show that kids who leave public schools for voucher schools do worse. There are some states that require state tests. And when they actually measure—as they do in Louisiana, Washington, D.C., and Indianapolis—the kids do not do better.

That’s fascinating because those who believe in this will say it doesn’t matter. All that matters is choice. Yet five minutes later, they complain about test scores in public schools. So they want to have it both ways. They want to use the test to hammer public education, but give the private schools a pass.

Were you surprised by anything when you were compiling this report?

There were huge surprises. It was much worse than I thought. I was surprised by the number of states that don’t expect charter school teachers to be certified. I was surprised by the fact that 33 states allow for-profit management companies to manage their charter schools. They always say charters are nonprofit. Well, the school itself may be a nonprofit, but it’s being managed by a for-profit company, which is where most of the money goes. They manage the teachers, the resources and the real estate.

A good example is the Basis Charter Schools, mostly in Arizona. They always make the top of the lists of excellent schools. But they don’t keep students. Their attrition rates are horrendous. They’re managed by a for-profit company. When that happens, you can’t even see how the money is spent.

Many of these states allow conflicts of interest between the for-profit management company, vendors and the charter school boards.

So you have states where it’s perfectly legal for a charter school board member to have their own company supplying the school, and in some states, they don’t even need to report it.

Another thing that surprised me from the research is that there are 15 states with voucher and neo-voucher programs that don’t require background checks for their employees. To me, it’s unbelievable that you would hand over all this money and not know who is working for you.

If that happened in a public school, heads would roll.

Absolutely. And 29 states plus Washington, D.C., fail to require the same teacher certification requirements as public schools in their charter schools.

Another one that really blew me away was that we found that there were 22 states that do not require that the charter school return to taxpayers assets and property if the charter school shuts down or fails. One-third of all charter schools shut down within 10 years, and by year 13, it’s 40 percent.

What can our readers do to draw attention to this?

I would encourage superintendents and principals to start talking to their communities about costs. There is a superintendent in Pennsylvania who figures out the stranded costs that I explained earlier. He knows how much money goes out of his district for charter schools. Sometimes it’s millions of dollars.

That is the argument you have to make to the taxpayer. When you do your budget brochure, explain how much charter schools cost us. When you have a public forum, let the public know that if those kids came back, there would be more services for children in the public schools, and it’s very likely taxes could go down.

Tim Goral is senior editor.
STEM Activities for Kids Plants
Career Seeds for Georgia Students

Schneider Electric enabled Quitman County to provide a fun and engaging STEM-inspired program for high school students.

At first, the class was like any other at Georgia’s Quitman County School District. Kids sat at desks while an adult lectured. Despite appearances, this was no ordinary lecture. Schneider Electric organized STEM activities for the kids in this Quitman County high school class. These activities are part of Quitman County’s energy performance contract with Schneider Electric and are designed to engage students in a STEM-inspired engineering shadowing program focused on energy conservation.

“I am always amazed at the level of engagement we get from students when we get out of the classroom,” says Quent Mather, Schneider Electric project development manager. “That’s why I think it’s very important to host these hands-on and real-life learning experiences.”

Quitman Superintendent Victoria L. Harris, Ed.S., couldn’t agree more. “We’re always looking for ways to expand our STEM curriculum, so when we found out Schneider Electric offered this opportunity, we couldn’t have been happier,” she says. “The fact that it was part of our energy-efficiency savings program was just icing on the cake.”

The need for STEM
Quitman County School District is just one example of how Schneider Electric is using its programs to not only help K12 schools to tackle maintenance backlogs and to bring them into the 21st century, but also to fund expanded STEM education and curriculum opportunities.

Educators like Harris know that the need for better STEM education is more crucial than ever. In fact, more than 8 million STEM-related jobs will be available in 2018, according to STEMconnector.org. But as many as 600,000 of those jobs will remain unfilled due to a huge shortage of skilled candidates, according to the U.S. Bureau of Labor Statistics.

At the same time, student interest in STEM education is waning. In fact, only 16 percent of high school students are interested in a STEM career and are skilled in mathematics. Just 28 percent of high school freshmen state interest in a STEM subject to pursue in higher education. And 57 percent of these students are predicted to lose interest by the time they graduate from high school, according to the U.S. Department of Education.

Schneider Electric’s STEM support
After listening to educators at hundreds of partner schools nationwide, Schneider Electric recognized an opportunity to offer new STEM education experiences. Schneider Electric started with a number of STEM-related activities to complement its energy-savings and facility revitalization projects. Here are three examples:

- **Conserve My Planet.** This activity is an educational energy-savings program for K12 schools. It’s a fun behavior modification program that motivates students, teachers and staff to take an active role in smart, efficient energy use in school and at home.

- **Green Teams.** Schneider Electric will meet with teachers and staff to present ideas for student engagement, including energy policy development, STEM programs and scholarships. Many times, Green Teams are a natural extension of existing science clubs.

- **Energy University.** Energy University is a free, online education resource offered by Schneider Electric to the public at large. More than 200 vendor-neutral courses are available on energy-efficiency topics to help individuals identify, implement and monitor efficiency improvements within their organizations.

Schneider Electric also works with clients to host STEM-related special events—Earth Day celebrations, tree plantings, energy usage monitoring, solar battery demonstrations, career fairs and job shadowing—to teach kids about the sustainability work going on at their schools and to plant the seeds for a future in science and math.
Additionally, Schneider Electric is partnered with Accelerate Learning to provide STEMscopes, the leading provider of STEM digital curriculum. STEMscopes gives teachers and students digital resources, supplemental print materials and interactive exploration kits that build student engagement and excitement for learning science. The hands-on STEM curriculum creates engaging learning experiences that encourage exploration and inspire ingenuity. It is used by 200,000 teachers and serves more than 4 million students in all 50 states. And best of all, it can be incorporated into an energy-efficiency and facility improvement project with Schneider Electric.

Engaging students with hands-on experiences
The student engineering shadowing program at Quitman County School District illustrates how pairing energy conservation programs with STEM-related events and activities is a great way to engage students in a real-world fashion, which may lead to untapped science and math interests—and future careers.

“The STEM field is incredibly broad and can offer many unique and fulfilling career paths for interested students,” Harris says. “These kinds of hands-on programs give our students here at Quitman County a glimpse of what that might look like. That’s invaluable.”

As someone who went into a STEM-related field, Schneider Electric’s Mather is just the person to help give them that viewpoint. He was particularly impressed that even Quitman students who weren’t currently interested in a STEM career could see how energy conservation measures applied to their lives.

“At one point, I could see the light bulb going on for them, and they were tying it back to their studies,” Mather says. “To show them a field I’m excited about is a really unique experience as an engineer. I just hope one of them gets excited and ultimately ends up pursuing a STEM career. That would be extremely fulfilling.”

To learn more about how Schneider Electric can help your school save energy and build new STEM curriculum, go to schneider-electric.us/enable

View, comment, share this story online at DAmag.me/schneider
Educators seek louder voices as candidates

Fed up with funding cuts and policies passed without educator input, some 170 current and former teachers, principals, and other educators are running for seats in state legislatures this year, a *Washington Post* analysis found. These candidates face the challenge of balancing a demanding career with a political campaign.

Educator involvement in politics has increased dramatically in recent years, says David Griffith, senior director of advocacy and government at ASCD. This past year, teachers and administrators swarmed state capitals to protest salaries, working conditions, school funding and other issues. The failure to return education budgets to pre-recession levels has also inspired educators to take political action, Griffith says.

"For years, educators have lamented that policymakers don’t have firsthand experience in the modern classroom," Griffith says. "Now, we’re seeing them not only reaching out to decision-makers, but actually wanting to become those decision-makers."

**Funding cuts spur political action**

Drastic funding cuts in Oklahoma pushed Ronny Johns, the principal of Ada Junior High School (part of Ada Public Schools), to run for office. He won the June Republican primary in Oklahoma’s House District 25.

“Our district had to pass a bond issue this past year just to order new school buses and textbooks,” Johns says. “We’ve got textbooks in our building older than the kids.”

For Aimy Steele, former principal of Beverly Hills STEM Elementary School in North Carolina’s Cabarrus County Schools, the final straw impacting her decision to run as a Democrat in the state’s House District 82 was a call from the district office, asking her to make room for five more classrooms in her already overcrowded school. No extra funding for teachers or construction was provided, she says.

Finding time to work and campaign is the top challenge for educators running for office, Johns and Steele agree. Steele entered the race in December 2017 and resigned as principal in June to campaign full time. If Johns wins in November, he plans to retire from the district, he says.

**Campaigning challenges**

Educators trying to juggle their day jobs also struggle with self-promotion and fundraising, Johns and Steele say.

The busiest time of the school year and of a general election campaign is the fall, says Griffith of ASCD. Educators don’t have the flexibility to adjust their schedules for campaign activities, and are not typically trained to raise funds on their own.

Those who seek elected office and do not win can still bring back lessons learned, Griffith says. "If people are running for office, they aren’t going to stop being active and engaged," he adds.

Educator political action can bring many ancillary benefits to a school, Griffith says, including getting colleagues and students interested in the political process.

Neither Steele nor Johns received criticism from parents about their campaigns. However, it’s important to ensure that no lines are crossed when it comes to politics and professionalism at school, Griffith says. For example, they cannot do campaign work while on the job, use school resources for political purposes or solicit donations from parents of students. Otherwise, they are typically allowed to participate in campaigns.

“You have to follow the appropriate laws and regulations, but those are in no way an impediment to being an active participant in our electoral and democratic process,” Griffiths says.

—Alison DeNisco
Co-principals Shy-Quon Ely II and Brooke Beavers recently took over Elder W. Diggs School 42, a struggling campus that Indianapolis Public Schools restarted as an innovation school. Beavers and Ely, who previously co-led a local charter school, will focus on improving test scores and preventing state intervention. The duo has hired nearly all new teachers and staff, extended the school day, and introduced new disciplinary procedures. They have also worked to establish closer ties with families and community members.

Source: The Birmingham News
At the start of the 2018-19 school year, Polk County Public Schools in Florida had 120 unfilled teaching positions. The district of more than 100,000 students grows each year, yet fewer teachers are entering the field now than in the past, and competition to hire newly minted educators is stiff, says Superintendent Jacqueline Byrd.

To attract more young people to the profession, Byrd recently launched Establishing Leaders in Teacher Education (ELITE). Through the program, high school sophomores take teacher education classes and earn an associate degree along with a high school diploma. Graduates can then attend nearby Polk State College to earn their bachelor’s degree in just two years, and return to the district as teachers.

“We can’t continue to sit by,” Byrd says. “If we all begin actively trying to combat the teacher shortage, maybe at some point, we can close the gap and help local colleges produce the teachers we need in our classrooms.”

A national crisis

Many other districts struggle with massive teacher shortages. Teacher education enrollment dropped 35 percent between 2009 and 2014, according to the latest available data from the nonprofit Learning Policy Institute. Nearly 8 percent of teachers leave the workforce every year—the majority before retirement age.

Low salaries, dismal job satisfaction rates, decreased education funding and a general devaluing of the profession detract future teachers and impede retention, says Erin McHenry-Sorber, an assistant professor at West Virginia University’s College of Education and Human Services.

State policymakers often try to fix teacher shortages with blanket policies, but administrators report that one-size-fits-all solutions often do not work, McHenry-Sorber says. For example, some areas see educator deficits due to drops in town industries and populations, while other areas experience increases in student populations that current teaching staffs can’t manage, she adds.

Administrators can partner with local universities, nonprofits and state associations to address local hiring issues. “Once we begin to really pay attention to the needs and experiences at the district level, we’ll have a much more nuanced and accurate portrait of the teacher shortage—and what responses or policy solutions will have the greatest promise,” McHenry-Sorber says.

Solutions in Mississippi

Mississippi faces a stark teacher shortage, with starting salaries of $35,000 at the lower end of the scale. In 2017, just 603 people applied for a teaching license in the state—down from 7,620 in 2007, according to the Mississippi Department of Education.

William Carey University, a private college in Hattiesburg, aims to fill gaps by working with more than a dozen districts statewide. It offers free or low-cost paths for students and teaching assistants to enter the teaching profession. In one program starting this fall, teaching assistants can finish their education degree at a 50 percent tuition discount. In another, the college will help Pearl River Community College students finish their third and fourth years of
Teaching education on the community college campus in Poplarville, Mississippi, with reduced tuition if they teach in one of three county schools upon graduation.

An alternative certification partnership with Meridian Public School District in the eastern part of the state allows teacher candidates to take two prep courses at William Carey University for free, and then get hired in the district. Twenty-five people participated last year, and as of August, more than half had been hired, says Ben Burnett, dean of the university’s school of education.

“We do have a large number of people in the workforce who would be interested in becoming teachers,” Burnett says. “We have to work with local districts to identify them and to find creative ways to make it happen.”

—Alison DeNisco

**Teacher out-of-pocket spending**

On average, teachers spent $652 of their own money on classroom supplies, instructional materials and PD in 2018, according to the fifth annual survey of K12 teachers by SheerID and Agile Education Marketing. That marks a 39 percent increase from last year.

As an administrator, you’re faced with big tasks, and budgets that might never seem big enough—especially when it comes to staff development.

Whether you’re trying to put professional development (PD) books in every teacher’s hand or planning for PD days, there’s a way to meet every need—easily and effectively.

Discover how Deer Valley Unified School District is rethinking PD by offering sustainable, equitable, digital resources to thousands of educators in their district. These collections feature titles from publishers like *ASCD*, *ISTE*, and *Solution Tree*, and are integrated with Google to create a hub for continuous learning.

Read about Deer Valley’s success at [gale.com/pdsuccess](http://gale.com/pdsuccess).

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Embedding language instruction into CTE programs can help close what some educators see as an “opportunity gap” faced by students learning English. And participating in the hands-on projects of CTE can be an effective way of accelerating language acquisition.

In October 2017, 30 percent of the students in Boston Public Schools’ CTE programs qualified as English language learners. At Madison Park Technical Vocational High School, ESL teachers now co-plan and co-teach with CTE instructors in courses ranging from traditional trades such as plumbing and carpentry, to high-tech pathways in computer science and design.

Madison Park also works with a local nonprofit called Write Boston, which sends specialists to coach teachers on additional literacy strategies.

“The equity component is at the forefront of our work, and we keep that in mind when building CTE pathways,” says Michelle Sylvaria, the district’s executive director of career and technical education.

At Boston International High School’s Newcomers Academy, all the students in the two-year medical assisting CTE program are current or former English language learners. And many students in the school’s Class of 2018 graduated with certifications in CPR, first aid and workplace safety.

Both Madison Park and Newcomers Academy have been proactive in providing classroom and vocational teachers with PD in state-required “sheltered English immersion strategies” that blend language lessons into general academic instruction, Sylvaria says.

For the Class of 2016, Boston’s graduation rate for ELLs in CTE programs was 82 percent. It dropped to 74 percent in 2017 as more students entered the program, but that rate still compares favorably to the general population of students, Sylvaria says.

Nontraditional CTE students

CTE and ELL leaders at Nashua School District’s two high schools in New Hampshire teamed with the broadcasting department to produce safety videos in English and Spanish. Some CTE teachers had been concerned about adequately communicating safety procedures to students still learning English, says Amanda Bastoni, the CTE director at Nashua North High School.

“Across the nation, CTE has not done an outstanding job of outreach to ELL students,” Bastoni says. “But CTE centers are now addressing this, and I think Nashua is on the cutting edge.”

Many CTE programs receive funding from federal Perkins grants. Nashua educators sought an additional grant to fund summer PD sessions, during which an ELL educator familiarized CTE instructors with all the academic supports available to ELL students.

The grant will also fund increased support for seven ELLs categorized as “nontraditional” CTE students. These are students who are underrepresented in their programs, such as males in cosmetology and education, and females in engineering and computer science. Textbooks and

Access problems?

A report by the nonprofit Advocates for Children of New York found that English language learners were underrepresented in New York City CTE programs. At-risk students who complete these programs have a higher chance of graduating. For the 2016-17 school year, the report found:

- **ELLs made up about 9 percent** of the students at the 117 high schools that offered CTE. They accounted for 12 percent of students at other high schools.
- **About 5 percent** of all CTE students were ELLs. ELLs make up about 10 percent of all New York City students.
- **Just 2 percent** of students who completed most of all CTE programs were ELLs.

Source: DAmag.me/advocates
other learning materials will be translated. The district, which employs a full-time ELL outreach worker, holds workshops at school and in the community to make sure ELL families are aware of the district’s CTE programs.

Parents have learned about college opportunities and have been made aware that employers will often pay for continuing education when they hire high school graduates, Bastoni says.

**Reading a manual**

Outside Boston, Montachusett Regional Vocational Technical School covers 16 districts near the New Hampshire border. Twenty-four of its students qualify as various levels of ELL. Before entering the program, the students take placement tests that measure their reading, writing and math skills. Some students new to the U.S. have even taken the tests in Spanish, Principal Tom Browne says.

Teachers at the school have earned dual certifications in their core subjects, such as English, and in ESL instruction. Other floating ESL teachers can co-teach in classrooms and vocational courses when instructors request assistance. Finally, ESL teachers have time to collaborate to make instructional plans for individual students.

A key focus is helping students with the technical language in automotive, culinary arts and other CTE programs. “That’s where we would really target the ESL instructors getting in and working with those particular students,” Browne says. “Reading a manual is one of the biggest challenges.”

—Matt Zalaznick

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**CAREER INCLUSION**—English language learners account for about 10 percent of the students in the CTE programs at Nashua’s two high schools.
Social-Emotional Learning

The recent success of *Won’t You Be My Neighbor?*, the documentary about Fred Rogers and his groundbreaking children’s television program, *Mister Rogers’ Neighborhood*, has educators returning to the social-emotional lessons taught in the Neighborhood of Make-Believe.

Talking to—and with—young children about their emotions, and about how to manage feelings and behaviors, was a primary focus of the show. Decades later, developing those skills in young children remains critical to future success, says Peter DeWitt, an education consultant, author and former elementary school principal.

If students don’t have an emotional connection to their school, it can be challenging for them to become academically engaged. A large number of students who have experienced trauma need to be made comfortable in the classroom.

“*Mister Rogers’ Neighborhood* also highlighted the whole idea of student voice—helping kids understand that they have a voice in their own learning, but also in their own life,” says DeWitt.

Inclusivity, equity and the understanding that friends come from different backgrounds were also tenets of *Mister Rogers’ Neighborhood*, says DeWitt.

To foster social-emotional learning, schools can start by assigning books and developing curriculum that feature diversity so students can see themselves reflected in learning materials, DeWitt says. Emphasizing social-emotional vocabulary—with terms such as self-responsibility and self-awareness—is also key.

Making eye contact

One thing that stands out from *Mister Rogers’ Neighborhood* was Fred Rogers’ determination to validate children’s feelings as meaningful and important, and his willingness to talk about difficult emotions, says Melissa Schlinger, vice president of practice and programs for the Collaborative for Academic, Social, and Emotional Learning (CASEL).

“Whether it was talking about death or feeling excluded or inadequate, Mister Rogers would confront those things in ways that were uncomfortable for a lot of people,” says Schlinger. “Having that self-awareness and understanding is a key aspect of social-emotional learning.”

Districts should implement social-emotional learning systematically, starting with a vision of what schools will be like and then work with staff to create that vision, Schlinger says. This requires buy-in and commitment from administrative and teaching staff, which means developing communication and PD strategies to create an environment that nurtures social-emotional learning. For example, staff can be more intentional in modeling social-emotional competence by making eye contact with one another and students in the hall and greeting students by name.

“The Mister Rogers documentary did a great job in showing how he was modeling the behaviors, relationship-building and inclusion that’s required to achieve better outcomes for all,” says Schlinger.

Time and money?

For many districts, time is one of the biggest challenges in implementing social-emotional learning—both making time during the school day to teach it and taking time outside of it for PD. Budget is another factor because of the cost associated with implementing social-emotional curriculum and PD.

Districts may also receive pushback from parents who don’t believe that schools should be involved with social-emotional learning, but educators need to continue focusing on it, says DeWitt.

“The reality is that kids come in lacking these skills,” says DeWitt. “And they need to be taught it from somewhere, and schools seem to be a good place for that to be happening.”

—Ray Bendici
Students recover credits during vacations

More school districts now operate winter- and spring-break academies as a way for students to recover missing credits and to increase their chances of on-time graduation.

Minneapolis Public Schools offers classes during vacations at about 20 high schools. Students can complete courses, retake classes they’ve failed or even get a jump-start on other work.

The district also created a position for a counselor who focuses specifically on getting ninth-graders to participate in the academies, says Daren Johnson, the district’s director of extended learning.

“The majority of kids, as many as 90 percent, wait until their senior year to complete courses they failed in ninth grade,” Johnson says.

During vacations, students can spend up to two hours a day, five days a week in face-to-face and online courses. The smaller class sizes strengthen relationships between students and teachers.

“This gives students a little more reason to complete,” Johnson says.

Academy students can also choose experiential learning opportunities. For instance, the district partners with a nonprofit called Wilderness Inquiry to send students on overnight camping trips. Campers can earn credits in courses designed by the district’s ELA educators.

Minneapolis Public Schools is now developing a similar program with the city’s Walker Arts Center for students who need an arts credit to graduate.

Administrators hope to have 500 students enroll in the academies this winter and 750 in the spring, Johnson says. The academies are paid for with the district’s credit-recovery funding and the money that the district receives to spend on partnerships with community organizations.

Acceleration academies
A study (http://DAmag.me/recover) done by a group of Harvard University researchers found substantial academic gains by students in vacation “acceleration academies” operated by the Lawrence Public Schools, which had been taken over by the state of Massachusetts in 2011. These students flourished, in part, due to small-group instruction, the study found.

—Matt Zalaznick

INDUSTRY NEWS

Maywood-Melrose Park-Broadview School District 89 became the first Chicago-area district to launch Woz U Education and the Steven Hunter Youth Foundation’s technology initiative specifically designed for K12 schools. District 89 also received STEAM kits for its K8 after-school program as part of the initiative.

New Hampshire school districts now have access to Sparked’s Govern Suite for board management, thanks to a deal made through the New Hampshire School Boards Association. Sparked’s software stores content in a secure cloud environment, which features a centralized calendar.

All schools at Lovejoy ISD (Texas) had Enseo’s MadeSafe emergency alert system installed for this school year. Using pre-existing coax wiring infrastructure made the installation quick and inexpensive, and didn’t burden existing systems.

High school students at St. Tammany Parish Public Schools began taking Proximity Learning’s virtual computer science and French classes after the Louisiana Department of Education approved the live course program. Students who completed a full year of computer science through live instruction have earned full credit.

Carlsbad Municipal Schools (New Mexico) will extend its partnership with Discovery Education for three more years to support a K12 STEM strategy in 10 schools. These schools will begin using the STEM Connect K8 web-based resource.

Loudoun County Public Schools (Virginia) has implemented Copley Consulting Group’s Qlik Sense platform to standardize how data is presented, and to analyze data from multiple systems in academic and administrative departments. District officials will use data to identify at-risk students and to determine the right interventions.

The Mississippi Department of Education has approved Curriculum Associates’ i-Ready as a universal reading screener for K3. Schools will administer assessments to all students at least three times annually. Mississippi districts, including Simpson County and the Pascagoula-Gautier School District, use the i-Ready online diagnostic and instruction program.
Students at Sunnyside High in Fresno, California, can now enroll in a multimedia and marketing course, thanks to a recently remodeled CTE classroom that promotes hands-on learning.

**CHALLENGE:** Educator Tamela Ryatt had taught traditional black-and-white photography for 16 years before Fresno USD shifted the course’s focus. The original photography classroom—which housed a large processing sink and darkroom—required remodeling to support the new multimedia curriculum. The school also needed to replace the room’s bulky table and chairs. “When some of my taller students sat down, their knees wouldn’t fit under the table,” says Ryatt. Ryatt also wanted to have the ability to change the room’s layout at a moment’s notice. “Half of my students had their backs to my projection screen, and movement was nearly impossible,” she says. “We could not have a productive group discussion.”

**SOLUTION:** Ryatt replaced the clunky furniture with Node workstations that have buckets underneath for storage. “Students can also roll around unencumbered on the Nodes and collaborate with one another in a matter of seconds,” Ryatt says.

The remodeled room also features a team table with bar stools that can be tucked away if students want to stand. In addition, a counter-height bank of eight workstations and adjustable-height drafting chairs are available for students. “The classroom sets the mood for creativity and fun, while we get our work done. I couldn’t be happier,” says Ryatt.

**COMPLETION:** August 2017

**COST:** $37,000

**PROJECT TEAM:** Project manager: Tangram Interiors (California) —Steven Blackburn
Let data drive your brand
How two schools developed more effective ways to tell their stories

By Trish Rubin

When looking for data, school leaders must ask how they can create content that engages and resonates with stakeholders.

Roland Hayes I.S. 291, didn’t know what to expect when she signed up for the boot camp. “I had no clue that all my current and past education and career experiences would coincide to create a vision,” she says.

A list of attributes identified in a staff and student survey became the school’s brand: “Challenge. Support. Accelerate.” This means that students are challenged to rigorous high school level curriculum with the appropriate support.

Bruce was surprised at how parents in her sixth-grade orientation meeting paid rapt attention as she shared brand theory. The parents now know that the school, part of the city’s Renewal improvement program, is on the rise, and Regents scores will be the “Result” that makes this promise of renewal real for families.

Bruce says she now feels empowered as the brand storyteller-in-chief and has worked to communicate the effort, which has also convinced teachers to buy in to the school’s core values.

School leaders are learning that “what is inspected gets respected” as a brand is developed. Measurement and data play an integral role—without it, storytellers-in-chief are vulnerable to perceptual illusions.

In bringing a brand to your school, use natural observations and tracking to identify friction that may cause a bump in the road when telling your story.

Trish Rubin is a marketing instructor at Baruch College in New York and is the author of BrandED: Tell Your Story, Build Relationships and Empower Learning.

Today’s schools often have no lead indicators other than state tests to answer, “How are we doing?” There’s another way.

“School brand defines each school’s values, culture and personality,” says Enrique Parada, cofounder of Project 77, a teacher sharing and engagement platform. “Data informs school staff about how a school can powerfully brand itself.”

In addition to data gathered by the central office, schools can build on information gleaned from stakeholders.

A school can create data collection instruments that measure brand efforts based on relationships as the following examples from a recent branding boot camp show. These leaders now understand branding and why it matters to school leadership and culture.

The Promise Project
During their boot camp experience, Principal Alice Hom and Assistant Principal Yi Law Chan chose a brand action-research project that visibly changed the image of New York’s P.S. 124. They researched school and non-school websites for inspiration and were attracted to homepages that had large slideshows, featuring the “main product”—their brand promise. The website would be unlike most in their district. The crown jewel was their students.

“If anyone wants to know what we do best, they only need to see what our students are doing,” says Hom. “We are an inclusive community that strives to foster curious, compassionate and critical thinkers.”

To build the website, they needed content. They set out to draw the community’s attention to the curiosity, compassion and critical thinking that was occurring throughout the school.

P.S. 124’s relaunched website (ps124m.org) represents a critical step in defining brand identity. This “human-centered design” principle continues the momentum of brand by ensuring that the school’s stakeholders are at the heart of all branding efforts. When looking for data, school leaders must ask how they can create content that engages and resonates with stakeholders.

A simple way to gather data in this case is to observe your constituents. See what excites or confuses them. During parent-teacher conferences, for example, teachers can ask parents to explore the school website on a laptop. Ask parents to provide their thoughts while navigating the site. These insights can inform design and determine whether the new brand is captivating its audience.

The Result Project
Janice E. Bruce, principal of New York’s Roland Hayes I.S. 291, didn’t know what to expect when she signed up for the boot camp. “I had no clue that all my current and past education and career experiences would coincide to create a vision,” she says.

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In bringing a brand to your school, use natural observations and tracking to identify friction that may cause a bump in the road when telling your story.
Master the schedule

Software allows administrators to maximize students’ and teachers’ learning time
As a math teacher at Harry S. Truman High School in the Bronx, Sheldon Vleck didn’t give much thought to the master schedule.

“I never saw it. The only thing I’d see were kids sitting in front of me,” he says. “You’d take a look at a kid and say, ‘Well, this kid is really good. How come he isn’t in the honors class?’”

It was only when Vleck became the school’s master scheduler that he first appreciated the intricacies involved. With 2,100 students, Truman is one of the larger public schools in New York City, and Vleck now had to put students into the courses they needed to graduate.

The master schedule represents an important but underappreciated system that determines what students learn, who they learn from and who they learn with. It even determines if they make it to graduation. Typically, the process goes something like this: Students request courses, but they may not know which courses they need. Counselors also pick courses, but they may have hundreds of students to support. Requests get loaded into scheduling software, along with teacher availability and other constraints. You press a button and, voilà, the computer generates a schedule that tries to give students what they asked for—or at least a seat in a classroom for every period.

By Abby Spegman
But believers in the power of the master schedule say it’s not just a logistical puzzle. As a means of improving outcomes for students and of promoting equity, it rivals instruction or school culture in importance.

Commitment to convenience?
“The master schedule is not just a time management system, it’s a belief system,” says Karin Chenoweth, writer-in-residence at The Education Trust, an advocacy organization for underserved students. Chenoweth, who also wrote *Schools That Succeed: How Educators Marshal the Power of Systems for Improvement*, says schedules should be based on what’s best for students, not what’s most convenient. (When her own child’s school switched to a block schedule, the principal told her it was meant to cut down on the number of times students were in the hallways. “That’s not a commitment to student success; that’s a commitment to adult convenience,” she says.)

In *Schools That Succeed*, Chenoweth writes about a low-performing high school in Los Angeles County with so many low-level math courses that some students waited four years to take algebra. A new principal took one look at the master schedule and eliminated those low-level courses, sending everyone straight to algebra and offering plenty of support classes and after-school tutoring. Today, Chenoweth says, more of the school’s students pass algebra, graduate high school and attend college.

“It’s not just the master schedule, but that system underlying the instruction has to be in place in order for instruction to come through,” Chenoweth says.

In the Bronx, Vleck quickly found that one of his biggest problems was that his software created the teachers’ schedule first. Then it tried to fit in student requests, leaving hundreds of students with incomplete schedules.

About four years ago, he switched to a program developed by USA Scheduler that builds teacher and student schedules simultaneously, with a much higher success rate. According to data from the New York State Education Department, Truman’s graduation rate rose 10 percentage points from 2014 to 2017—an improvement that Vleck attributes partly to better scheduling.

Life-altering decisions
In the summer of 2017, Cheryl Hibbeln was hard at work on the master schedule for a 2,200-student high school in San Diego. Hibbeln, executive director of secondary schools at San Diego USD, had seen things in the schedule that gave her pause.

For example, English learners were assigned to French classes instead of English classes. There were many PE classes with only 10 students. Ninth-graders were assigned to a less rigorous earth sciences course based on their performance in middle school math, instead of being assigned to a more rigorous physics course and given extra help in math.

To Hibbeln, these weren’t minor oddities but decisions that could do lasting harm to students. The last example—

**Student-centered scheduling**

San Diego USD sets guidelines for master scheduling, including:

- Prioritizing English learners and students with IEPs to ensure on-time graduation
- Assigning teacher prep time to enable collaboration within departments or grade-level teams
- Ensuring the neediest students are taught by the most effective teachers
- Expanding access to AP and IB courses
- Considering alternative bell schedules that let students complete more courses over the year, including credit recovery and intervention opportunities
GPS brings game-changing results to school bus routing

Technology and personal expertise mean tighter and more accurate trips to school

Q&A with Scott Parker, Senior Director, First Planning Solutions, First Student

What does the routing process look like at First Student?
We provide transportation services to more than 1,000 school districts in the U.S. and Canada. We pride ourselves on having a customized approach to a district’s unique transportation needs. At its core, successful routing is still the process of getting all students to school and back home safely and on time, using the optimal number of buses. Routers must consider travel and bell times, ride eligibility, transportation rules, hazard zones, and surface-level factors such as walk-to-stop distances. The data must be accurate to achieve the best outcome. We provide our routers with what they need to accomplish this.

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As GPS becomes more sophisticated, how will bus routing change?
GPS is becoming essential for building and maintaining accurate routes, stop sequences, etc. GPS also helps track and manage driver route compliance. Improved route compliance can produce operating cost savings through better time and fuel management. Accurate routes are essential for scenario modeling, in which the potential impact on transportation requirements of changes such as school openings or closings is studied for districts.

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As tech advances, so will our ability to assist districts with optimizing their transportation needs. These applications rely on accurate routes and bus location data to deliver their functionality—again, byproducts of GPS tech. Finally, a Google Maps-type of navigation is being ported to school bus navigation via onboard computers, and it is facilitated using GPS. We consistently participate in training so we can serve our communities.

“Hiring, training, managing and retaining well-qualified routing talent is difficult for a district. With our new First Transportation Solutions offering, districts can contract this entire process to us.”

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putting students into classes based on what they can’t do, instead of what they could do—might determine their acceptance into a four-year college.

“So the moment in ninth grade that that decision was made about them, it changed their whole life,” Hibbeln says.

In her master schedule, students who weren’t reading at grade level were placed in small classes at the beginning of the day with the most effective teachers. She put students who were in one advanced course into two or three more; created a math class taught in Spanish for native Spanish speakers; and found time for teacher collaboration.

But it wasn’t easy. Hibbeln poured over data, moving in and out of various computer programs. “I was questioning whether I wanted to stay in my job any longer—hand scheduling this school,” she jokes.

It was around that time that the district started working with the software company Abl, which creates master schedules based on school goals, such as maximizing co-teaching or creating small learning communities. The software also allows users to zoom in to see the placement of certain courses within the school day.

San Diego piloted Abl’s software in two schools during the 2017-18 school year. At Roosevelt International Middle School, Principal Christina Casillas set out to create more diverse class rosters and to reverse the unintended tracking of English learners and students with IEPs. She also wanted to add more opportunities for intervention, to build in more time for teacher collaboration and to coordinate classroom instruction to make better use of resources.

In her first year, she moved teacher collaboration time—when teachers can get together to plan lessons, to analyze student data and to receive professional development—from after school to during the school day. To make time for it, students get an extra specials block. For the 2018-19 school year, she staggered reading time in classrooms so that reading specialists don’t have to be in two places at once. And to address behavioral problems, she added conflict management classes to the school’s specials rotation, in addition to art, music and PE. This led to a significant decrease in suspensions, she says.

Foster also weighs in on class rosters, considering which students can learn together without distractions, and which teacher teams would be most effective. In second through fifth grade, Thomas Stone Elementary School’s teachers work in pairs, with one teaching reading and social studies, and the other teaching math and science.

“The pairings are crucial, and the whole grade-level mix is crucial because if two teachers are oil and water, there’s no need to give them that hour of collaborative planning because they’re going to sit there and not get along,” Foster says. “I only have a 180 days to get it right, and so I can’t waste one moment.”

Abby Spegman is a freelance writer based in Washington.

**GOOD TIMING** — Teachers plan together at Roosevelt International Middle School in San Diego USD. The district’s master scheduling guidelines expand access to advanced courses, prioritize English language learners and students on IEPs, and pair more effective teachers with struggling students.

**MORE ONLINE:** List of master scheduling software providers, DAMag.me/scheduling
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Astronaut, engineer, entrepreneur, physician and educator

Pursuing the Extraordinary
Audacious and pioneering, polymath Dr. Mae Jemison is at the forefront of integrating the physical and social sciences with art and culture to solve problems and foster innovation. She leads 100 Year Starship®, an independent, non-profit global initiative to ensure the capabilities for human travel to another star within the next 100 years. Jemison served six years as a NASA astronaut and was the first woman of color in the world to go into space. She founded two technology companies and the non-profit Dorothy Jemison Foundation for Excellence, which designs and implements STEM education experiences impacting thousands of students and teachers worldwide.

Keynote
Tech Share Live

Adam Bellow
Hall Davidson
Leslie Fisher
Kathy Schrock

A fun, fast-paced look at the latest, most exciting ed tech gadgets, apps, hardware, and software through the eyes of leading experts.
FETC is the only ed tech event with sessions and workshops designed specifically for CAOs, Superintendents, CTOs, CIOs and IT Directors!

### Future of Ed Tech Administrator
For superintendents, assistant superintendents, district administrators, state education leaders, chief academic officers, principals, media specialists, curriculum directors, facilities management directors, finance directors, instructional leaders, and virtual school leadership

- Gain technology-based best practices to lead school-wide initiatives that embrace technology, engage successful learners, and build capacity among teacher leaders
- Explore emerging technologies like augmented and virtual reality, AI, and digital content and productivity tools, that can assist in remediation and acceleration of student achievement
- Discover current trends and effective implementation strategies on the design of learning environments, data security and student privacy, technology evaluation and decision-making, designing makerspaces, and more
- Learn how to maximize technology to communicate, evaluate, build innovative school culture, coach staff, and boost district success using learner analytics

### Future of Ed Tech Information Technology
For state and district chief technology and information officers, information technology directors and their teams of technologists, technology integration specialists, web designers, network administrators, and IT support staff

3 new themes!

- **Boxes & Wires**
  Explore the “how-to” of technology infrastructure, networks, data administration, network security, student data privacy, and internet and wireless access that shapes how good work gets done.

- **IT Leadership**
  Examine the value of strong IT leadership and learn how to develop personal leadership, communication and storytelling skills; team-building techniques; and ability to deliver on the important things in the middle of the IT whirlwind.

- **Future of School IT**
  Prepare for what’s next in building effective digital ecosystems for personalized learning, network imperatives for achieving equity, and how big data analytics, artificial intelligence, and cloud computing is changing the entire game in school IT.

### Future of Ed Tech Educator
Gain best practices for effective technology integration and solutions that provide digital content, as well as instructional technologies and customizable learning materials that engage all learners by using technology to expand the learning environment beyond the classroom.

### Future of Ed Tech Inclusion & Special Education
Explore the latest applications of assistive and instructional technologies to meet the needs of K-12 students with disabilities in all settings, including Universal Design for Learning tools that can help differentiate instruction and increase academic achievement.

### Future of Ed Tech Early Learning
Learn how and when to incorporate technology into programs for children aged 3-6 years, and get product information for emerging technology tools.

For complete details on all 5 program tracks, visit www.FETC.org.
For 40 years, LRP’s resources have provided real-world implementation ideas and expert advice in education administration, law, and technology. With the help of FETC’s Program Review Committee, the FETC Program Chairs hand-select each speaker and presentation to ensure the content is timely and addresses the real challenges educators face.

To meet the evolving needs of the ed tech community, we’ve partnered with District Administration to enhance FETC’s high-quality content for K-12 leaders, increase FETC’s targeted leadership sessions and workshops, and provide a rich assortment of compelling, accessible, and personalized premier events and resources.

Whether you use Microsoft, Google, Apple, or a combination of the three, there’s something to fit your needs with more than 400 targeted sessions and 150 intensive workshops covering the hottest topics in ed tech including cybersecurity; student data privacy issues; ed policy and accountability; equity issues; funding technology; mobility, 1:1 and BYOD rollout and management; data integration and interoperability; learning space design; big data analytics; and more.

Featured Education Analyst Sessions allow you to engage with top analysts in interactive sessions delivering actionable advice for overcoming your technology challenges. Prepare for what’s next, sharpen your skills, and validate your strategies and decisions with insight straight from the experts.

Computer Science Firehose

Attend these 50-minute pre-conference sessions to discuss new trends in computer science education and gain guidance on developing and maintaining successful computer science programs. You’ll leave with ideas to inspire preK-12 students to take an interest in computer science while providing them with fundamental skills needed to thrive in a digital economy.

Mobile MegaShare

Join your colleagues, ed tech solution providers and mobile learning experts in four 45-minute collaborative, hands-on sessions to discuss current research and best practices to make effective use of existing and emerging digital tools and resources in support of student learning.
VerAttend, FETC’s program attendance certification system, provides official verification of participation in this valuable professional development activity. As an FETC 2019 attendee, you are eligible to earn up to 33 hours of continuing education units (CEUs) depending on the number and length of workshops and sessions you attend.

Further your professional development simply by attending FETC!

Information Technology Track
- Deepak Agarwal, Chief Information Officer, Palm Beach County School District
- Gary Brantley, Chief Information Officer, Dekalb County School District
- Diane Doersch, Chief Technology and Information Officer, Green Bay Area Public Schools
- Serena E. Sacks, Chief Information Officer, Fulton County School District
- Linnette Attai, Founder and President, PlayWell, LLC
- Derrick Brown, Chief Innovation Officer, Evergreen Public Schools
- Dr. Matthew X. Joseph, Director of Digital Learning and Innovation, Milford Public Schools
- Michelle Zimmerman, Ph.D., Director of Innovative Teaching and Learning Sciences, Renton Preparatory School

Administrator Track
- Rafranz Davis, Executive Director of Professional and Digital Learning, Lufkin ISD
- Derek McCoy, Principal, West Rowan Middle School
- Shannon Miller, Teacher Librarian, International Future Ready Librarians; Project Connect Spokesperson, The Library Voice
- Dr. Joe Sanfelippo, Superintendent, Fall Creek School District
- Dr. Randy Ziegenfuss, Superintendent, Salisbury Township School District; Professor, Moravian College
- Candice Dodson, Director of eLearning, Indiana Department of Education
- Ann McMullan, Founder and Lead Consultant, McMullan Education Consulting
- Dr. Scott Muri, Superintendent, Spring Branch ISD
- Eric Sheninger, Senior Fellow and Thought Leader on Digital Leadership, International Center for Leadership in Education (ICLE)

Visit www.FETC.org for a complete list of FETC 2019 Presenters

Get fresh ideas and real-world solutions from ed tech experts, innovators, and analysts including:
Here are just a few of FETC’s sessions and workshops for academic and technology leaders like you:

Concurrent Sessions

Current and emerging technologies for Microsoft, Google, and Apple users, as well as best practices developed through research and actual classroom experience, will be explored and demonstrated in 40-minute and one-hour sessions.

What Superintendents Need From Their Technology Leaders

Peter Aiken, Superintendent, Manheim Central School District
Donna Wright, Director, Wilson County Schools
Dr. Randy Ziegentass, Superintendent, Salisbury Township School District; Professor, Moravian College
Moderator: Ann McMullan, Founder and Lead Consultant, McMullan Education Consulting

For both superintendents and CTOs, ed tech initiatives can inspire a lot of excitement but also bring a lot of trepidation. Three superintendents who serve on CoSN’s Empowered Superintendents Advisory Panel share their perspectives with CoSN’s Empowered Superintendents Program Project Director — via a lively panel discussion — on how and why they collaborate, support, and leverage the expertise of their CTOs and other district technology leaders to achieve and sustain effective transformative learning environments. Time for questions from the audience is included.

Building the Sustainability of G Suite Within Your District

Debra Atchison, Director, Deb Atchison Consulting, LLC

How can I possibly train everybody on G Suite? I’m a oneperson show or have a very small team of trainers and I live can’t be everywhere all the time? Are you or your PD department/Instructional technology specialists spread too thin to get everybody trained and up to speed on G Suite? This session has the solution for you! Come learn how one district with more than 48,000 accounts developed a camp that prepared classroom teachers to help support and deliver Google Apps training. By participating in or offering Google Guide/Guru Camp, you are building sustainability within your district and ensuring that your technology goals are being trained on and implemented.

Hacking Leadership

Dr. Joe Sanfelippo, Superintendent, Fall Creek School District

Water is amazing and always finds a way. It has the ability to form, replenish our system, and power equipment. Leaders have the same properties. The best leaders take little openings and create space for those they lead. They find the smallest cracks of opportunity and create a path that was not there before. They shape the land. They find a way. Hacking leadership is about finding innovative solutions to issues that have plagued the system for years and implementing them tomorrow. Utilizing the tools in this session will enable you and your team to find the openings and create space for those you lead — space to learn, space to teach, space to thrive.

Artificial Intelligence in Your Classrooms

Julie Davis, Director of Instructional Technology and Innovation, Chattanooga Christian School

Voice User Interface (VUI) is a quickly growing market at a reasonable price point including products such as Alexa and Google Assistant. How are we looking to use these tools in the classroom? What would streamline education? What do we fear? As administrators, what legal issues are concerns for classroom use? How can we harness the next big technology explosion for educational good? Julie Davis recently spoke at the Alexa Conference, and she’ll share what she gleaned from a day with VUI programmers. Come listen to her ideas for the successful integration of these devices.

Creating Future Ready Schools and Classrooms

Tom Murray, Director of Innovation, Future Ready Schools

When we analyze the U.S. education system and classrooms across our nation, we see dramatic differences and gaps in innovation. How can schools and classrooms transform from those from the industrial era where desks are in rows, students are facing forward, and teachers are always front and center to ones that are learner-centered, are personalized, and leverage the power of technology? What areas need to shift? Districts and schools across the nation are transforming into ones that are future-ready, transforming teaching and learning throughout their district. This session will inspire school leaders and provide free tools that empower you to better prepare students for the world they face tomorrow.

Bridging the Digital Divide: Poverty and Technology

Jerri Lynn Williams-Harper, Head Master/Superintendent, Kalamazoo Covenant Academy
Dr. Beverly Knox-Pipes, Adjunct Professor, Nova Southeastern University

Even as technology becomes more affordable and internet access seems increasingly ubiquitous, a “digital divide” between rich and poor remains. Inadequate access to technology can hinder students’ ability to learn the tech skills that are crucial to success in today’s economy. The digital divide is an enormous and complicated issue — heavily interwoven with the issues of race, education, and poverty. The obstacle can be overcome if broken down into specific tasks that must be accomplished. Learn how we can end the digital divide and narrow the equity gap by providing access, training and establishing new initiatives. Hear how the digital divide can be resolved in the 21st century to transform modern teaching and learning.

Making Your School Something Special

Rushton Hurley, Executive Director, NextVista.org

Technology allows us to reimagine how we take our schools from good to great, enhancing learning activities, building staff morale and confidence, and communicating effectively with the larger community. Rushton Hurley will look at how we can move our teaching toward the powerfully memorable, build an exploratory culture, foster and share successes, and strengthen individual confidence in our students and our colleagues.
Outcomes.

Technology is used in a purposeful fashion while improving learning culture grounded in rigor and relevance to ensure that across the curriculum. You'll learn how to create a teaching and mobile devices, and personalization to integrate digital learning connectivity, an evolving real-time web, open-source technology, prepare them with the competencies for success in a digital world.

International Center for Leadership in Education (ICLE)
Eric Sheninger, Senior Fellow and Thought Leader on Digital Leadership, Digital Pedagogy for Deeper Learning

What are the leadership challenges utilizing a variety of communication approaches. You will complete an individual communications style assessment, and take part in role-play discussions involving common school current roles, will be reviewed and analyzed. During the workshop, essential skills required for all school leaders, regardless of their superintendents, principals, and teachers. In this highly interactive workshop, you'll discover what it means to be learner-centered and how it can reframe the use of education technology in your school or district. Learner-centered leadership will also be explored.

Innovation, Leadership, Communication: Keys to Success in Transforming School Culture
Julie Evans, CEO, Project Tomorrow
Ann McMullan, Founder and Lead Consultant, McMullan Education Consulting

Visionary leadership rooted in innovative thinking is the essence of what it means to lead learning in today's school systems. The ability to create and lead a culture of innovation to meet the needs of all learners requires skill sets that transcend the traditional roles of superintendents, principals, and teachers. In this highly interactive and collaborative workshop, you will examine the meanings of culture and innovation and share your own unique perspective. Five essential skills required for all school leaders, regardless of their current roles, will be reviewed and analyzed. During the workshop, you will complete an individual communications style assessment, and take part in role-play discussions involving common school challenges utilizing a variety of communication approaches.

Digital Pedagogy for Deeper Learning
Eric Sheninger, Senior Fellow and Thought Leader on Digital Leadership, International Center for Leadership in Education (ICLE)

Learning today should unleash the creativity of our students and prepare them with the competencies for success in a digital world. Come discover how to seize the opportunity inherent in ubiquitous connectivity, an evolving real-time web, open-source technology, mobile devices, and personalization to integrate digital learning across the curriculum. You'll learn how to create a teaching and learning culture grounded in rigor and relevance to ensure that technology is used in a purposeful fashion while improving learning outcomes.

Preparing a Staff for Major Change
Rushton Hurley, Executive Director, NextVista.org

The shift toward one-to-one environments gets a lot of attention with regard to which device to use and why, but often there isn't nearly enough discussion of how to get the team ready and even jazzed for the change. More than just helping teachers feel comfortable with devices, this is an opportunity to build staff morale ahead of a major change and use the momentum for meaningful school improvement. Rushton Hurley will walk you through the tips and techniques that proved highly successful in his work with a San Francisco Bay Area high school.

What Are You Doing With What You’ve Got?
Susan Brooks-Young, Author/Consultant, SJ Brooks-Young Consulting
Ryan Imbriale, Executive Director of Digital Learning, Baltimore County Public Schools
Dan Morris, Coordinator, Colorado Digital Learning Systems

Students bring and use their own devices on school campuses every day regardless of what technologies are available to them at school, yet there are solid reasons why schools continue to provide hardware to students. As a result, it’s increasingly important to accurately identify technology currently available on your site and plan how you will make the best use of what’s available while still planning for the future. Attend this workshop to review strategies, discuss return on investment and staff training, and identify steps to use the technology available to you well while planning for future needs.

Creating a Culture of Yes
Dr. Joe Sanfelippo, Superintendent, Fall Creek School District

Employ a mindset that enables opportunity for growth! YES invites opportunity; NO closes the door on it. YES creates value; NO destroys it. The leader who wants to transform schools looks for ways to exchange mutual value with others, find opportunities to respond to what others desire and serve others in a way that will create long term relationships that prosper both the organization and the individual. Creating a culture of “yes” helps leaders see the opportunities for those they lead as opposed to the reasons why ideas won’t work. Learn how to develop an environment where trust and “yes” are the default to transform the learning for students and staff. Hear how to model a spirit of “yes” and reinforce a spirit of “yes.” Finally, create ideas about how to reward a spirit of “yes” and make your staff heroes. The choice is yours to create a culture of “yes” — and it makes all the difference!

Building Digital Learning Environments: Tools for Implementation and Communication
Christine Fox, Deputy Executive Director, SETDA
Eric Hileman, Executive Director of IT Services, Oklahoma City Public Schools
Julia Fallon, Title II, Part A (Teacher and Principal Quality) Program Supervisor, Office of Superintendent of Public Instruction, Washington State

Dig into a set of professional learning resources developed to provide customized support re-garding digital learning implementation for schools and districts. SETDA’s openly licensed online tool, Transformative Digital Learning: A Guide to Implementation (http://digitallearning.setda.org), includes 10 facilitator guides that provide customized support and training for specific areas (planning, interoperability access, citizenship, and more) regarding digital learning implementation and a set of 10 stakeholder communication toolkits to help disseminate information about learning in the digital age to various groups, including school boards, adminis-trators, teachers, CIOs, and others. Hear from district and state leaders about the value of these resources and develop a plan to implement and customize these tools for your local needs.

For details on everything offered over 4 days, visit www.FETC.org

New Schedule! FETC 2019 will start on Sunday, Jan. 27, giving you the opportunity to participate in Workshops without time away from your students or staff. And, without incurring the cost of a substitute!
Resistance Is Futile: How to Bend G Suite to Your Will
Wanda Terral, District Technology Coordinator, Lakeland School System

Explore how to magnify the power of G Suite tools by creating your own custom Google Apps Script. Apps Script gives you the ability to connect various Google applications, automate those connections, and even create your own add-ons. In this hands-on session, you’ll learn to leverage Apps Script to attack inefficiency and frustration faced by the users you serve. You will need the Chrome web browser, a Google account, and the ability to access Google Apps Script. To participate in the hands-on aspect of the session, you will need a computer (a tablet/phone will not do).

Oh, How I Hate Thee, IT: End the Battle
Rae Hughart, Teacher & Professional Development Expert, Evans Junior High School

This fun-yet-serious, quick-hitting session focuses on how school IT professionals can develop better rapport and relationships that lead to ed tech implementation success. Expert teacher and professional development maven Rae Hughart will share an “inside baseball” view of technology implementations gone wild and how to successfully avoid the common traps that make teachers mutter under their breath. Boost your A-game with powerful techniques and facilitations, such as “Focusing on the Implementation Game,” “The Manageable Mayhem,” and “The Elephant Named Safety!” Don’t miss this session, because it’s time to end the battle and build collaboration with your busy classroom teachers! (Rae is also leading a deeper dive workshop on Tuesday afternoon.)

Immediate Response: Homeland Security Is Here to Help
Christine Sahlin, Incident Response Analyst, Department of Homeland Security

After an incident occurs on your school network, how do you respond? Do you have the technical support to determine what happened and how to mitigate it? Not everyone does. In this session, you will learn about the Department of Homeland Security’s NCCIC Hunt and Incident Response Team that is available to assist in incident response as well as proactive hunts. They bring in the technical expertise to get your network back on track with services available to school districts on request at no cost to the district.

“FETC is a one-stop shop for educators who are looking to innovate and support teachers in teaching and students in learning!”
Marcia Inacio
Technology Specialist, Palau Ministry of Education
Workshops

Led by ed tech experts and thought leaders, these 2-hour hands-on training workshops give you the unique opportunity to delve deeply into topics, learn new skills and strategies, and create new materials, without the time constraints of concurrent sessions. **Workshops may require an additional registration fee.**

**New Schedule!** FETC 2019 will start on Sunday, Jan. 27, giving you the opportunity to participate in Workshops without time away from your students or staff. And, without incurring the cost of a substitute!

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**The Plumbing: What It Takes to Make IT Flow**
*Henry Burroughs, President, Technology WIN!*

Whether a small or big school, sound instructional practice increasingly requires solid IT infrastructure, which exists mostly out of plain sight. Like plumbing, people most often worry about IT only when it breaks. In this workshop, IT professionals will discover how the proper installation and maintenance of “the plumbing” will keep them out of hot water and focused on delivering results. You will learn guidelines for planning, purchasing, and installing the routers, hubs, and switches that make ed tech flow, and gain a wealth of tips and tricks for finding and fixing leaks. Plus, you’ll develop ways of examining your entire system critically so you walk away with a solid plan for a drip-free IT infrastructure.

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**Alert! Seven Steps to Take Before a Successful Tech Audit**
*Susan M. Bearden, Senior Consultant, Bearden Education Technology Consulting  
Alex Inman, President, Educational Collaborators*

As budgets get tighter and expectations for quality technology integration get higher, an external technology audit can be a valuable tool to ensure the highest return on investment. Preemptive audit planning will ensure you are better prepared to receive external recommendations and quickly convert recommendations into meaningful changes ... and will help you look like a hero! In this workshop, you will learn about several free tools to help prepare for a technology audit. In addition, experts Susan Bearden and Alex Inman will bring specific experience from multiple technology audits across many different schools and districts. You’ll leave with specific tools and strategies to prepare your school or district for an external technology audit.

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**IoT: How Amazon Dash Orders Up School IT**
*Andrew Wallace, Director of Technology, South Portland Maine Schools*

The Internet of Things is a rapidly emerging technology that promises to have a profound effect on work, life, play, and, now, school! In this hands-on workshop, you’ll explore one such IoT tool — the AWS “Dash” Button — and how it can be used in the classroom and for facilities, transportation, and the back office. You will roll up your sleeves and work on your own AWS IoT Button and “imagineer” how AWS services and offerings can help you bring IoT to life in your school. You’ll leave with practical examples, schematics, code samples, and an AWS IoT Button to build, test, and deploy on your own.

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**Bigger Data: Understanding the Growing Importance of Analytics in Education**
*Cathy Cavanaugh, Principal Program Manager for Learning Research and Analytics, Microsoft  
Rita Oates, President, Oates Associates*

“Big Data” in K-12 is fast evolving with the potential to impact every school, district, student, and educator. Schools collect vast amounts of data on everything from student attendance and grades to learning styles and career preferences. The number of sophisticated platforms that “crunch” data increases proportionally. With such potential for in-depth analysis, where do busy IT leaders start? In this workshop, you’ll explore a vast array of tools for aggregating, analyzing, and visualizing data. You will learn important considerations when implementing your own analytics solutions. This workshop covers the big picture of analytics; pair it with “mashup” workshops for a deeper dive into BrightBytes, CatchOn, Power BI, Tableau, and other applications.

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**Legalize Cloud: How Cloud Computing Is Changing Everything**
*Michael Coats, Infrastructure Manager & Cloud Solutions Architect,  
Southwest MiTech / Kalamazoo RESA  
CIO presenters to be announced  
Moderator: Bruce Umpstead, Program Chair, Future of Ed Tech Information Technology Track, Director of State Programs, IMS Global Learning Consortium*

IaaS, PaaS, or SaaS — what does it all mean? Come gain valuable insight on how Cloud changes everything from operationalizing services, hosting applications, architecting solutions, and coding software to financing expenditures. Innovation expert Bruce Umpstead will walk up the “stack” and explain how shifting to “as-a-service” models can revolutionize school IT. Cloud architect Michael Coats will share his hard-won experience and technical considerations garnered from building the Midwest’s largest K-12 Cloud footprint. Gain understanding and start building the business case for Cloud adoption so you, too, can capitalize on the Cloud.
Discover exciting new tools you can use to engage students, enhance learning, and spur student achievement

There’s simply no better place than the Future of Education Technology Expo to get up-close and hands-on with today’s most innovative technologies and applications. It’s your chance to view live demonstrations, meet face-to-face with suppliers, ask questions, and see the latest products and services from more than 400 leading solution providers. For a current list of exhibitors, visit www.FETC.org/expo.html.

EXPO HOURS

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<td>TUESDAY, JAN. 29</td>
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Startup Pavilion
Discover emerging companies, demo original products and meet the entrepreneurs who are revolutionizing the ed tech market.

Pitchfest
Hear the next generation of innovators share their cutting-edge products and services that may be the perfect solution for your district, school, or classroom needs.

Hands-On Technology Lab
See, touch, and familiarize yourself with the latest software, gadgets, and hand-held technologies for preK-12 settings.

Skill Builders
These 20-minute, hands-on demonstrations will teach you a specific new tech skill you can use in your school or classroom right away.

STEM Theater Presentations
STEM experts and 2019 FETC STEM Excellence Award finalists share 30-minute presentations on the best tools and techniques to inspire students.

Game-Based Learning Pavilion & Talks
Engage with the latest game-based learning opportunities, tools, and digital applications, plus hear 40-minute talks on how to leverage them in your classroom.

Early Learning Pavilion & Talks
Get hands-on with early learning technology and tools, plus hear 40-minute talks on how to make the best use of these products with young learners.

Meet the Authors
We are pleased to have many talented authors speak at FETC! Meet your ed tech idols and education heroes while they answer questions, sign books, and take selfies.

Learning Labs
Leading experts present 40-minute sessions showcasing innovative products and technology for advancing student achievement and improving process management.

Poster Presentations
One-to-one conversations with education and technology innovators who have implemented exemplary technology integration projects.
An outstanding value ... no matter the budget

FETC provides a variety of options to meet differing needs and budgets:

Best Value!

- **Premium Pass**
  - Offered at a new lower rate for 2019 — includes unlimited access to Workshops, plus all the benefits of a Basic Pass.

- **Basic Plus Pass**
  - Includes 2 Workshops of your choice, plus all the benefits of a Basic Pass. More Workshops may be added for an additional fee.

- **Basic Pass**
  - Includes all keynotes; concurrent, skill builders and poster sessions; coffee and networking breaks; receptions and special events; plus unlimited entry to the FETC 2019 Expo Hall. Workshops require an additional fee.

- **Workshops**
  - To maximize your training, add workshops — or simply upgrade your registration — for the opportunity to train in an immersive, intimate environment. Led by recognized industry experts, FETC workshops offer best-practices training and invaluable networking opportunities.

**Amazing Team-Building Experience**

Attending together will unite your team with a common experience and build a solid foundation of skills and knowledge that will spur rapid progress within your school.

**Bring Your Team and Save!**

**We even offer special rates for teams!**

Register a group of 3 or more from the same organization and get big discounts.

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No refunds will be given for discounts not taken at time of registration. Discounted team rates are only available for Premium, Basic Plus, Basic or Daily Passes and cannot be combined with any other discount offer.

**REGISTER NOW** and lock in the **lowest rate**

Rates increase as we get closer to the event, so book early to secure the best rate!

Visit [www.FETC.org](http://www.FETC.org) to see today’s rates.

**www.FETC.org**

**1-800-727-1227**

with your credit card information

(9 a.m. - 5 p.m. ET M-F)

Visit [www.FETC.org/register.html](http://www.FETC.org/register.html) for terms and conditions, payment details, the cancellation policy and more. If you have any questions about registering, please call toll-free 1-800-727-1227.
Dear District Administrator,

As a longtime teacher, principal and, most recently superintendent, I know firsthand the complexity of personalizing an educational program for an increasingly diverse student population.

Luckily, rapidly changing technologies are transforming teaching and learning! Today, it’s essential that you and your staff know how to effectively implement digital practices to enhance student success.

I’d like to tell you about the Future of Education Technology Conference, the annual training event that explores how technology can transform the learning experience for students and educators. If you’re responsible for leading district-wide initiatives that embrace technology, engage all learners, accelerate student achievement, and maximize the capacity of faculty and resources — this event was made for you.

And, with unique learning opportunities tailored to each role in the ed tech revolution, it’s also the ideal experience for your staff! Take a minute to look through this brochure for a glimpse into what FETC offers everyone on your team.

I look forward to seeing you in Orlando!

Best,

Robert M. Avossa, Ed.D.
Senior Vice President & Publisher
LRP Publications
Most public school teachers still have access to a state-funded pension plan. But for the majority, their retirement benefits will be worth less than what they contributed during their years in the classroom, according to an analysis by the Fordham Institute.

The study, which examined the largest school districts in each state and in Washington, D.C., looked at how long it would take teachers to reach the “crossover point,” when the value of their retirement benefits would equal or exceed their contributions. The median crossover point for the 51 districts is 25 years, which means teachers must work for a particular district for a quarter century before their retirement payout will be worth more than what they personally contributed. Because few teachers stay in their jobs for that long, their retirement savings are ultimately lost.

Teachers face more hurdles than just the problems with state-run pensions. Educators who don’t rely on state pensions often have access to 403(b) retirement savings plans, which are similar to the 401(k)s used by private employers—but are often more lightly regulated. A recent analysis showed that millions of people who save in 403(b)s may be losing almost $10 billion per year in excessive investment fees. In addition, nearly one-half of public school teachers do not participate in Social Security, says Keith Brainard, research director at the National Association of State Retirement Administrators. That means for many teachers, the state pension system and 403(b)s are their only options for retirement planning.

As school districts clamor to recruit and retain high-quality teachers, a generous, dependable retirement savings plan can be an important draw. To offer that, district leaders must understand the challenges posed by current offerings and identify alternatives.

Who’s subsidizing whom?
It takes decades for many teachers on state pensions to cross over into earning on their retirement savings. And plans

By Nancy Mann Jackson
that are not portable from one district to another “disadvantage young and mobile teachers relative to teachers who stay in the plan for their full careers,” says Martin Lueken, author of the Fordham study.

For instance, teachers who split a career working in two systems will accrue only about half of the pension wealth that they would have received by working the same number of years under one system, Lueken says. And research shows that younger teachers’ retirement contributions are subsidizing the benefits of older teachers, and mobile teachers are subsidizing the benefits of full-career teachers.

In addition to the lack of portability, pension plans require teachers to make contributions that are not directly linked to their benefits.

Instead, “benefits are based on a formula that’s independent of contributions made,” says Lueken, who also is director of fiscal policy and analysis at EdChoice, an organization that specializes in school choice research.

“Required contributions are estimated using a discount rate that made sense in the 1980s, but doesn’t make sense today,” Lueken says.

Thirty years ago, for instance, it was common for a low-risk, 30-year bond to yield an 8 percent return; but today, the same bond would yield a return of about 3 percent. While most pensions anticipate 1980s-level returns, financial markets have changed considerably, Lueken says.

Many states also have pension debt on their books, showing that the plans are not fully funded. This means current teachers’ contributions are necessary to keep paying current retirees.

Making more informed decisions
While true changes to state-run retirement plans will have to come from lawmakers, district administrators can take several steps to improve their teachers’ retirement outlook.

One of the most important tools district leaders have is education, says Chad Aldeman, editor of TeacherPensions.org and principal of Bellwether Education Partners, an organization focused on closing achievement gaps.

Many teachers need more information about how their retirement plans work and how to make the right decisions about their options.

“Ninety percent of teachers are enrolled in defined benefit pension plans, and those plans can be quite complicated,” Aldeman says. “Teachers may not fully appreciate how the plans work or how much the district is spending on those benefits.”

Earlier-career teachers are often unaware of key milestones, such as when they “vest” in the plan and qualify for a pension.

Similarly, vested teachers who take a break from the classroom or leave the profession altogether face a difficult decision about whether to withdraw their money or wait for a pension upon retirement. “The math behind that decision is not intuitive, and districts could help teachers make the right decision for their unique circumstances,” Aldeman says.

A few states allow educators to choose between a traditional pension plan and a more portable, defined contribution plan, such as a 403(b), or a “hybrid” plan that combines a smaller pension with a defined contribution component. For most teachers who aren’t sure that they will remain in teaching, the portable option is typically the better choice. But “most of these states automatically default teachers into the pension plan,” Aldeman says.

As a general rule, teachers who want to supplement their pension plans should look for “simple products like index funds with low fees of no more than 1 percent,” Aldeman says.

“There are horror stories about teachers being targeted by predatory invest-

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**Retirement language**

Want to improve your district’s retirement offerings for teachers? Start by ensuring that you understand these terms.

- **DEFINED BENEFIT (DB) PLAN.** A retirement plan in which an employer promises a specified pension payment or lump sum (or combination) on retirement that is predetermined by a formula based on the employee’s earnings history, length of service and age, rather than depending directly on individual investment returns.

- **DEFINED CONTRIBUTION (DC) PLAN.** A retirement plan in which the employer, employee or both make set contributions on a regular basis. Benefits paid in retirement fluctuate, as they are based on the contributions made plus any investment earnings on the money in the account.

- **HYBRID PLAN.** A retirement plan that combines a DB and a DC, and is usually in the form of a smaller pension with a defined contribution component.

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“If our veteran teachers stay, we will share with them some of the savings we get by not having to recruit, hire and train their replacements.”

—Rob Smith, Alpine School District (Utah)
ment companies selling products with lots of hidden fees and opaque rules,” Aldeman says. “District leaders could take a more active role in screening those financial vendors.”

Advocating for improvements

Even if decisions aren’t made locally, local actions can affect retirement plan legislation in the statehouse.

“Districts should stay in touch with policymakers to communicate the important role that retirement benefits play in enabling districts to attract and retain qualified teachers,” says Brainard of the retirement administrators association. “Public employers often are among the largest employers in legislative districts, and legislators should be familiar with the public employees, including teachers, in their respective districts.”

In their interactions with legislators and elected officials, district administrators can advocate for changes that will make teacher retirement plans “more flexible and portable, more transparent, and more equitable, and that offer more choices for teachers with different preferences and life circumstances,” says Lueken, the Fordham study author.

For instance, he recommends eliminating vesting requirements or shortening them to one or two years. Rather than encouraging retention, these requirements are too rigid for most modern teachers and are “not good for having a dynamic workforce,” Lueken says.

In addition, administrators should push lawmakers to offer more plan choices, Lueken says.

A teacher with a defined contribution plan like a 401(k), who must leave the state midcareer—perhaps to care for an ill parent—can take the retirement plan with them, but in most cases, they would have to leave a defined benefit pension plan behind.

If state legislators aren’t interested in adding another type of plan, administrators should advocate for greater portability. For instance, in South Dakota, teachers who leave before reaching retirement eligibility can claim a refund benefit that includes both their own contributions and most of the employer contributions.

Managing plans creatively

Some districts manage certain parts of their teacher retirement packages, such as a voluntary supplemental 403(b).

If your district sponsors such a plan, take responsibility for managing it effectively, Brainard says. This includes making sure that:

• participants are paying fees that are reasonable
• investment options are appropriate
• the plan administrator is adequately communicating with plan participants
• employees are given sound advice regarding asset allocation and adequate contributions

Districts that want to provide valuable retirement benefits to their teachers can get creative and offer new or expanded benefits of their own. For example, Alpine School District, located in a suburb of Provo, Utah, pays 10 percent of each teacher’s salary into the state retirement system’s defined contribution plan. Teachers can contribute additional funds to the retirement plan, but they are not required to do so. In addition to contributing to the state program, Alpine contributes 1.5 percent of each employee’s salary into a 401(k).

For teachers who have at least 15 years of consecutive service, Alpine also provides another retirement incentive: The district pays those teachers a stipend for four years that is 54 percent of the difference between their base salary and the base salary of a beginning teacher.

“Most districts do not offer retirement benefits like this, but we want to encourage the retention of our great educators,” says Rob Smith, assistant superintendent at Alpine School District. “This stipend is separate from the teacher’s salary. If our veteran teachers stay, we will share with them some of the savings we get by not having to recruit, hire and train their replacements.”

Nancy Mann Jackson is an Alabama-based writer.
SPONSORED WEB SEMINAR DIGEST

Personalizing Learning through Digital Reading Platforms

Strategies for promoting engagement through technology

A District Administration Web Seminar Digest
Originally presented on August 2, 2018

Digital reading platforms can enable more personalized learning by providing engaging, interactive and customizable digital content to both students and educators in all subject areas, as well as supplemental curriculum materials, professional development resources, ELL and special education titles, and more.

In this web seminar, presenters discussed ways to use digital reading platforms effectively. Highlights included how to select and implement a platform, how to create a comprehensive digital content strategy, how to promote reading engagement using data on e-book and audiobook use, and how to build your collection based on what your students need and want.

Kay Benning: Newbery-winning children’s author Kate DiCamillo points out how reading builds capacious hearts, or hearts that are large, and it is the way we build a more empathetic and knowledgeable citizenry and change the world. This is why we work hard to uncover effective strategies to better meet the learning needs of our students.

We took a close look at our learners five years back and saw that we had very compliant students, but it was clear there were opportunities for improvement in the area of engagement. So in 2013 we implemented the Readers and Writers Workshop developed by Columbia Teachers College. Twenty trailblazing educators ranging from second grade to AP English took on a challenge of rethinking their instructional delivery models.

Then we continued to scale up personalized learning, and we put in an all-call for personalized learning action plans. We selected about 35 additional teachers who represented 80 different classroom sections. These teachers were interested in transforming instructional practices, and they were supported by Canvas learning management systems and Chromebooks for students in their classes. As we scaled out to all 400 classrooms, we implemented OverDrive districtwide in 2015-16. We continue to build, and we are now 1-to-1 in grades 2 through 12. Our OverDrive resources are now a part of both our reading and social studies curricula in grades K through 8.

Two keys to our successful integration of OverDrive were the scaling strategy and implementing the service because it supported our goal to personalize our learning and increase student engagement.

An inventory consultant shared with us that inventory is most effectively and efficiently deployed centrally, and having OverDrive allows us to service the same number of patrons with a significantly smaller inventory investment. Along with our other personalized learning strategies, our OverDrive collection continues to grow as we work to meet the needs of our learners in a timely and cost-effective manner.
Kay Benning
Director of Library Services
Elmbrook Schools (Wis.)

Edwin Tucker
Account Manager
OverDrive Education

“Let’s say I came across the word ‘distraught’ and wasn’t clear on the meaning. I select the word, and I can get it defined immediately, plus get some synonyms and then some links for exploring further. By the same token, I can take notes and highlight the text. And it’s all very intuitive.”

Reading spurs reading. Our print circulation saw a year-over-year increase of 24 percent districtwide, while our OverDrive increased 48 percent.

Edwin Tucker: Students overwhelmingly agree on the vitally important role technology plays in their education, and a recent PBS teacher survey clearly demonstrates the consensus among educators that the use of tablets in the classroom both facilitates and enhances learning.

So it’s somewhat startling to learn that only 25 percent of school districts have fully implemented a digital strategy, especially when it’s so easy to introduce students to technology through digital reading. With e-books, students begin a lifelong relationship with technology and digital learning using devices they are already familiar with, all while developing a necessary skill.

Our new app for education, Sora, provides an excellent and easy gateway to digital content. The curriculum aspect is what’s front and center. Students get assignments, and then it’s easy to access an e-title or audiobook.

The Explore tab shows everything in the collection. The titles would be curated by the school to appeal to different student groups. Let’s say I’m an eighth-grade student looking for some popular pleasure reading, and I’ve located my title, The Book Thief. With one tap, I can borrow this title, and then immediately I am ready to read.

Let’s say I came across the word “distraught” and wasn’t clear on the meaning. I select the word, and I can get it defined immediately, plus get some synonyms and then some links for exploring further. By the same token, I can take notes and highlight the text. And it’s all very intuitive.

From the Home tab, you’ll find some reading data. We thought data points would be fun for students to track their progress, but inevitably this data is important for the district when it comes to tracking its individual schools and, of course, for teachers tracking individual student progress. This data-driven approach underlies everything we do at OverDrive Education, and the benefit to schools is less time spent observing and gathering data, and more time spent instructing.

To watch this web seminar in its entirety, please visit districtadministration.com/ws080218
n most of the developed world, high-stakes tests make or break a student’s future, sometimes before the age of 12.

Many countries use national benchmarks to assess students, and construct tests to gauge understanding of the core curriculum.

This was an original goal of the Common Core, but in the U.S., standardized tests have become more about ranking schools and even teachers.

“In most other countries, everything the kids do leads up to testing at the end of the year in June,” says Dylan Wiliam, emeritus professor of educational assessment at University College London. “In many cases, those tests are used to determine a student’s future.” U.S. students, of course, also take summative tests in the classroom that affect grade-point averages and, in turn, college eligibility. High-stakes SATs and ACTs also figure into the equation. But American standardized tests rarely determine which public school a child can attend. “In the U.S., it is high stakes for the teachers, not the students,” Wiliam says.

From middle school to college, most students elsewhere in the world face a do-or-die climate that offers one shot at getting into the academic programs and schools that lead to better, more fulfilling jobs, Wiliam says.
Testing impacts learners and schools differently than it does in many other nations

**Deeper testing?**

In the U.K., students take the National Curriculum assessment before entering grammar school (which serves students ages 11 to 16). The results—a combination of testing and subjective teacher judgments—place students into “selective” or “super-selective” grammar schools.

The testing system in the Netherlands begins separating students at about age 12 with a test called the Cito Eindtoets Basisonderwijs. The scores steer students toward secondary schools that are either prevocational or that include both prevocational and secondary education. But the test is not the only factor. Teacher and parent recommendations are also considered. Occasionally, an IQ test can accompany this assess-

**MAKE OR BREAK**—A Chinese high school student studies for the 2018 national college entrance examination, also known as the Gaokao, in the city of Handan. The results determine what universities students can attend.
ment to identify children who do not test well or excel in school.

At the end of secondary school, Finnish students take a test that serves as both a high school graduation requirement and as a college entrance exam. Because school ends in mid-February and The Matriculation Examination takes place in late March, students have six weeks to prepare.

William says European testing tends to dig deeper into a student’s overall knowledge than does the U.S. approach. Students must analyze, write and explain their opinions—all important job skills.

“In England, students are asked to do a literary essay on a poem,” he says.

**Getting into the best schools**

Stress may be even higher in Asian countries. Students spend hours cramming for big placement tests and often pay handsomely for tutors.

Students who can’t afford extra classes or tutoring can be left behind—a criticism often leveled against SAT and ACT prep in the U.S.

In Singapore, young students take two- to three-hour after-school classes to prepare for the Primary School Leaving Examination. The test assigns rankings—such as “average” and “highly capable”—to funnel students into secondary schools.

Japan’s high-stakes high school entrance exam places students into secondary schools that are ranked as vocational, educational or new comprehensive (which combines both). This assignment often determines what type of college students will attend, as well as what type of job they will eventually hold, says Akihiko Takahashi, an associate professor of mathematics education at the College of Education at DePaul University in Chicago.

While high stakes, everyone has a chance to succeed regardless of their financial background because all students are taught the same information throughout the school year, Takahashi says. The test aligns closely to school curriculum and is designed to discourage cheating.

The Chinese system is similar, says **United Kingdom:** The National Curriculum assessment, which is also known as SATs or 11-plus, places students into middle schools that can determine their future education.

**Netherlands:** The Cito Eindtoets Basisonderwijs test helps place students into secondary schools.

**Finland:** The Finnish Matriculation Examination serves as a high school graduation requirement and as a college entrance exam.

**China:** The Gaokao, which is given at the end of 12th grade, ranks each student. Colleges use rank to accept students; no other criteria is considered.

**Japan:** A mandatory high school entrance exam places students into secondary schools; the results funnel students into colleges.

**Singapore:** Young students take two- to three-hour after-school classes to prepare for the Primary School Leaving Examination.

**Australia:** The Australian National Assessment Program identifies areas of weakness in students and schools.
Andrew H. Chen, chief learning officer at WholeRen Education, a multinational education company that assists Chinese students who want to attend American schools.

In China, students sit for a nine-hour test called the Gaokao at the end of 12th grade. This national exam covers six subjects. All students are tested on Chinese, mathematics and a foreign language. Students also select from a variety of additional subjects such as science, politics or history. It is required for entrance into almost all higher education programs.

The test results rank students, who then request admittance to the schools of their choice. This streamlines the placement of a high number of graduating seniors. In 2018, 12 million students took the test.

Colleges and universities admit top-ranking students first. High school grades, extracurricular activities and teacher recommendations hold little weight.

The Gaokao also determines what major a student can pursue. “If you go to the best school, you get a different life,” Chen says.

“There is no other way to get into a good school without scores. There is no transfer of schools, and it’s even difficult to change a major.”

Grasping the standards
Many in the Chinese education system believe the testing is fair because all the schools cost the same—a good college or university doesn’t cost more than a bad one, Chen says.

“If you are the child of migrant workers, you still have an opportunity to get into the best school,” Chen says.

Chen also points out that student outcomes prove the system’s viability. “If you look at the product that these countries turn out, those that do well on the test continue to perform well and go further,” he says.

On the other hand, the Chinese system is criticized for not being holistic and for implying that all questions have a standard answer. “People ask, ‘Where’s the creativity?’” Chen says. “If a student studies for a test for an entire year, it doesn’t encourage creative thought, problem-solving or individualism.” Chinese families who oppose the high-stakes environment sometimes pull their students out of the education system. Those students attend an international school that prepares them for universities abroad, often in the U.S., Australia or the U.K.

Other countries have reached standardization that is difficult to achieve in the U.S. because states issue their own tests. This de-emphasizes alignment with the Common Core, says Depaul’s Takahashi.

“In Asian countries, the tests are very aligned to the standards,” Takahashi says. “In the U.S., it is not very well aligned. The curriculum should be aligned to the test. It should be coherent.”

Shawna De La Rosa is a freelance writer based in California.
Minnesota district receives more food supplies for significantly less effort

Sourcewell’s co-op purchasing contract connects Wadena-Deer Creek Public Schools with the right dining vendors and products

A 1,100-student school district in Minnesota had been purchasing food supplies through a buying group of five other school systems—but it wasn’t efficient. “We would have to meet quite often,” says Director of Food Service Sandie Rentz of Wadena-Deer Creek Public Schools. “We wrote our own bids and market basket. Then we would go out for bidding and tabulate the results ourselves.”

Sourcewell, a government agency that provides cooperative-contract purchasing solutions nationally, now supplies all the district’s food needs through a cooperative purchasing agreement, which Rentz renews every two years. The partnership, now in its fourth year, puts Sourcewell, formerly NJPA, in charge of the procurement process, from ensuring bidding documentation quality to the bidding itself.

“It’s a big deal for us to have a good bid out there,” says Rentz. “This kind of contract is a no-brainer for any small district.”

Choosing the most cost-effective options

When the district first started out with Sourcewell, Rentz had a choice between two vendors and selected Upper Lakes Foods. “Their market-basket bid was much lower, and they impressed us with their commitment to schools,” Rentz says. Sourcewell also gives Rentz the chance to meet periodically with Upper Lakes Foods to see all the vendor’s new products.

For purchasing smallwares and other equipment, Rentz puts in a request for Sourcewell’s bid price along with ones from three other companies. “Sourcewell’s bid is always the cheapest,” Rentz says.

Under this contract, the district has purchased pans, scales, thermometers, serving items and can openers. “We are a very

Top 10 vendors

1. CDW—Multibrand technology provider
2. Staples—Office supply retailer
3. Yancey Bus—Blue Bird Bus sales, parts and service provider
4. US Foods—Food service distributor
5. Peach State—Consulting, engineering and material-handling integration firm
6. Grainger—Industrial-grade supplies and safety products source*
7. Multi-Unit Group—Food service distribution network*
8. Blue Bird Bus—Type A, C and D school bus manufacturer
9. Sharp—Electronics designer and manufacturer
10. Hoglund Bus and Truck—Full-service school bus and medium-duty truck dealer*

*used by Wadena-Deer Creek Public Schools

For more information, visit sourcewell-mn.gov
specialized market,” says Rentz. “All our wares have to be NSF-approved.” And with Sourcewell, they are, she says.

Sourcewell also included services from NutriStudents in the contract (see sidebar below, left). NutriStudents makes sure that the district’s nutritionals are compliant with USDA regulations.

More time, more funds
Since implementing the co-op purchasing plan with Sourcewell, the district’s available funds have increased by 7 percent. This has allowed Rentz to redirect these savings toward updating the dining services at an elementary school that the district is remodeling.

“Since we now have enough money in our food service balance, our payments no longer have to come from the district’s general fund,” says Rentz.

Another benefit: Rentz has extra time to spend on other job responsibilities, such as interacting with staff and researching different menu ideas. “Besides treats, there are different chicken products that are a little more expensive because they’re low-fat and made from whole grains, but now we can afford to give those a try,” she says.

**Specialized services**
Another contract benefit, Rentz says, is that Sourcewell takes the time to ensure that students at Wadena-Deer Creek Public Schools receive the food they need.

“I like the fact that Sourcewell does their research on companies that know school food because we are a very specialized customer,” says Rentz. “We’re just fortunate that Sourcewell understands this and has found the companies that we need.”

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**Multi-Unit Group offers NutriStudents K-12**

Sourcewell’s Multi-Unit Group contract features an exclusive partnership with NutriStudents. The NutriStudents K-12 platform helps schools efficiently manage USDA-compliant programs. Through Sourcewell, schools can license this system and contract with a local food distribution company without going out to bid.

The NutriStudents value-added service includes:

- Over 100 weeks of menus
- Food production reports
- Product order guides
- Training resources

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**Sourcewell, AASA join forces**

In 2012, Sourcewell partnered with the School Superintendents Association (AASA) to provide their members with Helping Kids, a mini-grant program to meet the immediate needs of students.

Every year, Sourcewell and ASSA present four $2,000 awards to public school districts.

In 2018, grants were given to 28 hurricane-affected school districts in Texas and Florida.

For more information, visit aasa.org/minigrant
Working with very young children means connecting with them on their level. There’s a piece of myself in every game, picture, word and gesture I use to help them communicate.

Jaclyn Woodyatt, M.A., CCC-SLP
Speech-Language Pathologist,
Charlottesville City Schools

American Speech-Language-Hearing Association-certified audiologists and speech-language pathologists use their education, experience and requisite skills to help improve students’ communication.

Find your altruist at ASHACertified.org/schools
When Tiffany Anderson took over as superintendent of Jennings School District near St. Louis in 2012, she faced high poverty and low academic achievement. As part of the turnaround effort, she focused on building supports for students from low socioeconomic backgrounds, particularly those in foster care who struggle with social-emotional trauma and frequent changes in residence.

With assistance from community partners, Anderson renovated a dilapidated, district-owned house and turned it into a permanent group home for students in foster care.

Christened Hope House, the 3,000-square-foot home is managed by a full-time, licensed foster counselor. Up to seven students of both genders, who range in age from 5 to 17, are selected by the superintendent and house parent to live in private rooms there, receiving regular meals and experiencing a greater sense of stability. Students stay for one to two school years, on average.

The renovation required an initial $50,000 investment from the district. The program’s success has since inspired more than $80,000 in sustaining donations from the community. Thanks to this and similar efforts targeting at-risk students, the district moved from a Missouri school assessment score of 57 percent in 2012 to 81 percent four years later.

“We have the opportunity to remove barriers in amaz-
WHAT TO KNOW ABOUT STUDENTS IN FOSTER CARE

The Texas Education Agency’s Foster Care and Student Success guide (download at DAmag .me/fcss) offers strategies for supporting students in foster care. Increasing awareness for educators is critical. Here are a few things to know:

- Students come into foster care through no fault of their own and have often experienced abusive, neglectful environments.
- Students in foster care want to be treated like everyone else. School often provides normalcy and can be a refuge from a chaotic home life.
- Maintaining confidentiality and sensitivity is key as students do not want to be stigmatized as “foster children.”
- Students often enter foster care with gaps in their education.
- Trauma and adversity may impact students’ learning and behavior.
- Most students have experienced tremendous loss, often having been separated from siblings, family members and personal belongings.
- Students want to be empowered with decision-making and engage in goal setting.

Fostering Success

Students want to succeed, but what if we change our mindset?” says Anderson, who is now superintendent of Topeka Public Schools in Kansas.

Most school districts have not marshaled the resources to build and operate such a facility. Instead, other approaches have been implemented to support students in foster care, ranging from raising awareness and providing PD, to creating special programs and adding specialized staff.

Kansas ‘can-do’

Students in foster care face huge challenges. According to the National Working Group on Foster Care and Education, only about 60 percent graduate high school by age 19; they miss an average of five weeks of school annually; and most have faced trauma. Many also require special education services.

Anderson found many of the same foster care challenges two years ago when she took over in Topeka, a 32-school district with approximately 300 students in foster care.

She first organized three-person mental health intervention teams that are deployed across the district. Each team consists of a school liaison (a district employee who is a licensed clinical social worker), a mental health agency clinician, and a care coordinator who assists with family outreach. The liaison—the bridge between the district and social services—reviews student intervention plans, tracks grades and coordinates mental health care.

A representative from every school also begins visiting foster homes during the first week of school, and new teachers tour the community to become familiar with areas that have a high concentration of students in foster care.

“There’s no substitute for developing personal relationships,” says Anderson. “We really focus on creating a sense of belonging in the classroom and in the school community.”

The district also provides PD that covers topics such as how to become a licensed foster parent because there is a shortage of foster homes in the district.

“Schools have staff development programs for curriculum materials, CPR and everything else, so why not this?” says Anderson.

In the past two years, Topeka’s students in foster care have shown improvements in attendance, in standardized assessments, and in math and English grades at the elementary, middle and high school levels.

Tutoring and college tours

With between 7,000 and 12,000 students in foster care at any point during a school year, Los Angeles USD launched the Foster Youth Achievement Program in 2013. The district spends $11 million annually to support the initiative.

The achievement program employs 82 counselors who conduct comprehensive academic assessments on individual students to track attendance, educational progress and social-emotional wellness, says La Shona Jenkins, the program’s coordinator. Counselors also develop individual education plans and communicate progress with guardians, teachers, school psychologists, county social workers and, if applicable, probation officers.

The program also has 10 lead counselors—one each at LAUSD’s six sub-districts and also at the district’s youth resource centers. These counselors handle compliance with state and federal policies, among other issues. They also provide PD for administrators on subjects such as the commercial exploitation of children.

Through the district’s academic support and achievement program, students receive tutoring—at school or at home—from LAUSD teachers. And the program organizes college tours and Foster Youth Shadow Day, in which students are paired with carpenters, doctors or other local professionals.

The district also supports foster youth leadership councils, which are active at 26 high schools and at one middle school. More than 200 students meet monthly to learn about advocating for themselves, attending college, developing public speaking skills and other subjects.
In 2016, the Every Student Succeeds Act clarified McKinney-Vento Act requirements that students in foster care remain in their school of origin. If they move, the district must provide transportation and immediate enrollment in the new system, and transfer all records.

To enhance stability and meet transportation requirements, LAUSD’s buses transport students when necessary. If a student moves to a neighboring district, they may be transported by a private company at the district’s expense.

Welcome teams
In Texas, nearly 16,000 school-age students are in foster care at any given time, according to the Texas Education Agency.

To improve support, the agency was recently reorganized to focus on highly mobile and at-risk students. It also published Foster Care and Student Success, a 135-page guide with more than 100 initiatives and strategies for improving conditions from early childhood through college (see sidebar, opposite page).

The guide was “a labor of love,” says Kelly Kravitz, the Texas agency’s director of highly mobile and at-risk student programs. Advice on subjects such as how to facilitate successful enrollment—from setting time frames to attaining necessary records—is provided.

Connecting students to extracurricular activities and to academic supports is also covered, including best practices for sharing academic performance data with child welfare stakeholders.

The agency also focuses on PD for principals, registrars and other frontline school personnel so they understand privacy and confidentiality issues. They also learn the proper care-related and documentation questions to ask new students when they arrive at a school.

The Department of Children and Families and local foster care agencies can send experienced personnel to schools to teach “basic foster care 101,” says Kravitz.

Educators can learn the hurdles that foster students must overcome, such as living in toxic environments or not having basic school supplies, and who’s involved in a particular student’s life. In turn, schools share what services they have in place for at-risk students.

The agency also holds regular statewide foster care summits featuring representatives from the court system, the child welfare system and the education system. Topics covered include data sharing, special education needs, mobility issues and legal updates.

Tackling trauma
Colorado Springs School District 11 is a 28,000-student suburban district with a low foster care population. No specific district entity is solely tasked with support. Individual schools manage day-to-day student needs, says Cory Notestine, counseling services facilitator and crisis response team coordinator.

The district has forged partnerships with multiple community groups, including Fostering Hope, a local foster care agency that provides guidance in navigating the foster care system.

In addition, the district provides PD for teachers to support students who have suffered trauma. PD covers how to help students develop social-emotional competencies, such as perseverance, self-efficacy and grit.

“You can have two students who experience similar trauma, yet they perform dramatically different in the classroom,” says Notestine. Ultimately, increasing awareness and stability is the key for students in foster care.

“It’s very important that educators don’t think of it as ‘one more thing,’” says Texas Education Agency’s Kravitz. “The approach should be ‘What are we doing that we can build upon, and how can we better integrate this student group into those efforts?’”

Ray Bendici is deputy editor.
The next generation of IT infrastructure, hyperconvergence combines computing, storage and networking into a single, simplified and automated system that is far easier and less costly to use and maintain, making it a perfect fit for school districts, which often have limited IT resources.

This webinar discussed hyperconverged IT infrastructures, how these systems work in K12 environments, and the keys to successful implementation and deployment—which can take just a few minutes, but can benefit teachers, students, parents and administrators far into the future.

Frank Seal: A little-known fact is that we’re the folks who actually coined the term “hyperconvergence.” We wanted to take those core essential elements for a virtual infrastructure—the servers, the storage and the hypervisor—and bring them all together into one simple piece to manage infrastructure.

In just a few short years, hyperconvergence—or “HCI” as they call it sometimes—has emerged as a critical enabling technology for K12 so that districts can modernize their data centers while keeping costs under control. Hyperconvergence is the fastest-growing segment when it comes to integrated systems.

Typically, what districts do in server rooms or data centers is what we call the 3-2-1: three host servers, two switches and one fan. It could be less or more, but fundamentally, it’s all the same thing. You have a storage piece and a networking layer with licensing on top of this, and then you have to manage all these moving parts.

Each of those products was not designed with the other pieces in mind, and there are a lot of decisions that need to be made when you’re doing design and implementation, all of which could lead to potential pitfalls in the future or a lack of flexibility. You’re just using oddball spare pieces from different vendors and taping them together with VMware or Hyper-V or something like that. That is not the most optimized way to do work.

Those are a lot of the struggles we constantly hear, and those are the items we wanted to tackle with our product. With hyperconvergence, you get four main pillars:

1. Simplicity. This leads to a lot of the cost savings within the infrastructure. We’re reducing that administrative cost.

2. Availability. You want to keep things up and operational. You want to be able to survive multiple hardware failures within the environment and have your workload continue to operate. You want to reduce the overall footprint in your server room and data
“Typically, what districts do in server rooms or data centers is what we call the 3-2-1: three host servers, two switches and one fan. ... Each of those products was not designed with the other pieces in mind, and there are a lot of decisions that need to be made when you’re doing design and implementation.”

center. So that’s less power that you’re consuming and that’s less cooling that you need. That simplicity also leads to less overall administration and upkeep. The overhead for a typical hyperconverged infrastructure is typically less than 20 percent of the equivalent for a traditional infrastructure.

3. **Scalability.** You want to be able to grow this when you need to. You don’t want to buy five or seven years of storage up front and then just sit on it, and it gets old and ages out before you ever get a chance to consume it. Instead, you want to be able to dynamically grow this and take advantage of technology as it gets denser and cheaper year after year. That’s what you get with hyperconvergence.

4. **Affordability.** You’re reducing overall capital expenditures and operational expenditures—again, because you’re getting that five-times reduction in the labor that’s needed to manage this technology. You can actually use IT generalists to run this versus having a five-certificate-holding specialist to just change some settings.

We want to leverage the automation and orchestration to reduce the risk within the product and to dramatically simplify the operations—the initial deployment, ongoing maintenance, growth and even onboarding of new staff. That unified management is in one website-driven console; you don’t have a separate tool for storage, a separate tool for virtualization and a separate tool for automation.

We want to let you and your team move away from focusing on the infrastructure and move toward being able to drive innovation and insight within the organization, to make this disappear and focus on what’s propelling the school forward.

Another piece we have as an add-on within the product line is integration with Google’s Cloud platform. Now you can seamlessly replicate or back up data to Google’s Cloud. The interface looks exactly the same, and you have regional protection in case, for example, you have a local power outage.
The privacy risks of AI

When voice-activated tools are used in the classroom, school leaders need to safeguard student data

What are the primary privacy concerns in using AI devices, particularly voice-activated tools?
As a technology director, my first concern is student safety. How are we protecting the privacy of our students? I’m finding that teachers using these devices are not. When I talk to my teachers about the Family Educational Rights and Privacy Act, the Children’s Online Privacy Protection Act and the Children’s Internet Protection Act, they don’t really understand what those laws are and how noncompliance can impact their students, themselves and the district.

On the district end, we need to start developing policy around having these devices in the classroom; otherwise it’s wide open for student voices to be recorded and used to develop algorithms. These devices also circumvent any school filtering and firewall. I had one teacher say to me that she turns it off, but Alexa is always on. As soon as you say one keyword, it activates.

Which aspects of student privacy laws must educators consider before using these devices?
They should consider what constitutes personally identifiable information under FERPA. The Department of Education is very clear that student names or any kind of identifying information, cannot be divulged. The [app providers] are not asking for parents’ permission to disclose personally identifiable information. With CIPA, schools must ensure internet safety policies include monitoring that blocks harmful content. With COPPA, when it comes to the collection of personal information of children under 13, we need to get parental consent.

How can administrators build awareness and help teachers avoid pitfalls?
At the beginning of the school year, it should be addressed. Also, more teachers should have a voice on technology committees, which is where district regulations and policies should begin.

District leaders need to go into classrooms and hear what’s going on and see why these teachers want to use it. We need to create an approved list of apps that are vetted to make sure that they’re compliant.

So you don’t think an outright ban on these devices is necessary?
I don’t think we should say “No,” but we need to work together. The teacher’s voice is as important as the district leader’s in policy decisions. If a teacher in my district were to bring one in, I’d probably have them take it home until we figured it out. I don’t believe these virtual personal assistants should be in the classroom—there are other AI tools available—but they’re coming.

Emily Ann Brown is an associate editor at DA.
Google Expeditions allows teachers and students to explore the world through virtual-reality (VR) and augmented-reality (AR) tours. It enables students of all ages to go on a thousand-plus virtual field trips to places like museums, underwater and even outer space, or interact with 3D objects in the classroom. We’ve created kits that are preconfigured and tested before they’re sent to you, so you and your students can start exploring right out of the box.

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Teachers teaching teachers

With $20 million in voter-approved “innovation” funds as part of a $576.5 million bond issue, the Boulder Valley School District’s schools were tasked with integrating technology in curricula and rethinking innovative spaces. Examples include a makerspace, digital music studio and even mobile technology stations.

Each school in the Colorado district received a stipend—from $200,000 for elementary schools to up to $800,000 for high schools. One school built a distance-learning lab and turned a computer lab into a makerspace, while another school chose mobile furniture to make learning spaces more flexible.

With the influx of funding came a need for educators and administrators to share ideas to best integrate technology into instruction. With up to 150 educators already involved in PD cohorts each year, the district was able to utilize that professional learning structure and support for the innovation projects, says Kelly Sain, director of educational technology.

Over two days this past summer, the Innovate@BVSD conference enabled nearly 160 teachers to learn more about new educational tools, share best practices, network for future collaborations and showcase student projects. One teacher presented on how technology helped her to increase accessibility of second language curriculum for her students. Teachers also worked in teams to program robots to move and speak, simultaneously sharing ideas about using them in classrooms.

Rethinking use of space has also led to some name changes. The library became the “curiosity center” and classrooms are now called “learning communities,” says Kiffany Lychock, director of educational innovation.

A MAP FOR SUCCESS—Teachers at the Innovate@BVSD conference in the Boulder Valley School District share new and innovative ways to bring technology into instruction.

Al analysis

A group of researchers and computer scientists is building an artificial intelligence system that can analyze instruction via speech recognition and natural language processing, says Sean Kelly, a sociologist at the University of Pittsburgh School of Education. Developers want to replicate, as closely as possible, the feedback that a content expert might give to a teacher.

Recently published research focused on “authentic” questions that middle school teachers asked to spark discussion and for which there was no preset answer. Human observers reviewed hundreds of recordings of four classroom sessions and classified how the teachers presented lessons. An adaptive algorithm was then created to identify speech patterns associated with authentic questions, Kelly says. For this experiment, the difference in questions deemed authentic by humans and the computer was not statistically significant, at 3.9 percent versus 3.6 percent, respectively.

However, it took programmers a long time to teach the robot the algorithms for a single experiment.

The feedback system shows promise, but Kelly emphasizes that the AI needs more accurate algorithms, along with the ability to discern components of other classroom discussions, before it can adequately analyze instruction.

### How school districts use data dashboards

- **Student performance** 78%
- **IT systems and services** 62%
- **Mid-course assessments** 53%
- **Financials/budgeting** 52%
- **Student information system admin view** 75%

**Source:** 2016-17 Digital School District Survey
When securing edtech infrastructure, district leaders must concentrate on six “layers”: physical, network, applications, content, endpoint and cloud/data centers, according to a 2017 report by the Council of the Great City Schools.

“More than ever, schools are a ‘wink-wink’ among the industry when it comes to cybersecurity vulnerability,” says Robert Dillon, director of innovative learning for the School District of University City in Missouri.

Today’s educators must balance student data privacy while building a culture of “education next,” adds Dillon, who presented on the need to “secure innovation” at the Future of Education Technology Conference in January 2018. “More and more attacks are coming at K12, but that fear can drive us to make decisions that aren’t good for learning,” he says. “If we added up all the unfunded mandates around cybersecurity, it would put schools out of business.” As old threats evolve and new ones emerge, district leaders must try to plug all cybersecurity vulnerabilities. Below are several strategies CIOs and their teams can deploy to build a 360-degree defense.

Can I use this app?
Union County Public Schools’ vendor-provided edtech management system contains a search tool that lets teachers determine if they can use a digital
resource with students. The display, which decodes hard-to-decipher terms of service agreements, includes a box that says whether the resource is approved, requires parental permission or doesn’t meet security requirements. “Most teachers can’t spend the time digging through service agreements to figure that out, and this allows us to do it in a quick, simple way,” says Casey Rimmer, the North Carolina district’s innovation and edtech coordinator.

Union County’s determinations are based on the Children’s Online Privacy Protection Act and Family Educational Rights and Privacy Act.

District leaders should expect vendors to be more open about this information, she adds. Union County Public Schools, like a growing number of districts, now requires providers to sign user data agreements, which are uploaded to the management platform so contracts are always available and visible. “The landscape of education and digital teaching and learning is vastly different than in the past,” she says. “We need to make sure our policies and practices are evolving just as rapidly.”

Did you click on the link?

For a comprehensive security plan to take hold effectively, districts must ensure that all staff, teachers and students are on board. When a teacher in the Metropolitan School District of Wayne Township in Indianapolis clicked on an email link from a dubious sender 18 months ago, ransomware locked down a server that’s connected to a district database that teachers use to create test bank questions.

Luckily, the district had a backup copy and wiped the infected database. After the breach, the district jumped into action with an anti-phishing campaign. A 2018-19 security awareness initiative will train teachers, students and staff on how to spot and avoid security vulnerabilities. “Just like teaching students in a classroom, you need a multi-disciplinary approach to teach the same material in multiple ways to everyone,” says Pete Just, the district’s chief operations and technology officer.

A few teachers at each school act as peer coaches who can answer questions and offer cybersecurity guidance to their colleagues. The district also runs a phishing simulation that sends suspicious-looking emails to teachers and staff. Those who click the link receive a three-minute online training that shows the red flags of a scam. Later in the school year, the district runs the simulation again. At-risk employees who click receive a longer video and sometimes face-to-face training. To promote October as National Cyber Security Awareness Month, the district also engages students and staff with fun reminders.

Covering all cyberbases

The “Cyber-Security in Today’s K-12 Environment” report from the Council of the Great City Schools outlines six areas of security. Districts should develop a strategy for each one.

1. **Network security:** Prevent unauthorized traffic across a school’s network. Distributed denial-of-service attacks have disrupted online testing.

2. **Application security:** Eliminate software vulnerabilities that lead to breaches by taking a “life cycle approach” to applications. This should begin during purchasing and testing, rather than after implementation.

3. **Content security:** Protect databases. Districts typically must meet local, state and federal requirements. Single sign-ons for devices may help here.

4. **Endpoint security:** Prevent malicious software and unauthorized users from accessing endpoint devices, especially in 1-to-1 environments. This includes tracking assets and deleting sensitive data when items are lost or stolen.

5. **Cloud/data center security:** Ensure that core computing resources are patched and segmented to prevent unauthorized access. Cloud services can streamline operations for schools, but can be a security concern when outdated programs are used.

6. **Physical security:** Protect district brick-and-mortar buildings, as well as students, teachers and staff.

Read the report at DAmag.me/holistic

MORE ONLINE: Additional cybersecurity tips from the labs at the National Institute of Standards and Technology, DAmag.me/nist
This year, staff will put out air dancers—those wavy inflatable tubes—that say, “Have you changed your password during the last six months?” In upcoming months, the district will also force mandatory password changes.

“The key is to create awareness in highly visible ways that can be microlearning experiences,” Just says.

How old are your devices?
As part of a physical security plan, administrators should track their devices, making note of which servers, hardware and networks are outdated and could provide a weak point for hackers. Staff should determine who owns the devices (such as the technology department or campus law enforcement), contact manufacturers for their security practices, and ensure that authentication and encryption protocols are in place.

“School districts often have old devices and servers, and it’s important to understand the vulnerability that creates and how to move away from those devices or to isolate them,” says Just.

Do you know where the holes are?
The Council of the Great City Schools report outlines several examples of how districts have linked physical security with end-user and cloud security. Broward County Public Schools in Florida requires single sign-on for many applications. Because passwords are a major vulnerability, the district tries to reduce the human factor in errors.

Similarly, to reduce cloud-based security issues, Fresno USD in California employs Active Directory Federation Services, which allows secure online transactions among partner organizations. With this approach, authentication uses login information at the district level and eliminates the need to create new credentials for users or share passwords with a third party.

Districts can also conduct penetration testing with a trusted outside vendor to find new software and hardware vulnerabilities that can’t be detected by internal scans. Wayne Township ran a penetration test at the beginning of August to find any gaps before students and teachers returned for the school year. “Most of our staff in K12 didn’t grow up with cybersecurity awareness, and penetration testing helps us to plug the holes,” Just says. “It’s great to have the resources to depend on others who do this well and can help us stay secure.”

Carolyn Crist is a writer based in Athens, Georgia.
Emergency notification systems

The alarming rate of school shootings in recent years has led to the creation of emergency notification systems that can send various types of messages to multiple devices, including live videos to law enforcement. Administrators have more control of their messages, including the ability to determine who has received and read them. One system even expedites the process of family reunification through technology that identifies and accepts guardian signatures.

**BLACKBOARD MASS NOTIFICATIONS**
Blackboard
This system provides one interface for sending notifications to phones, emails, RSS feeds, social media and websites. School officials can customize messages and preset urgent announcements. They can also see who has read messages and when they were read.

DAmag.me/blackboard

**INFORMACAST FUSION**
Singlewire Software
This emergency notification system sends emails, SMS texts, push notifications and phone calls to on-premises devices and smartphones through the InformaCast Mobile app. Administrators can also display messages on digital signage, the internet of things and networked equipment, such as IP clocks.

DAmag.me/fusion

**CAHOOTS APP**
Cahoots
Using this app, district administrators can send a mass text message by tapping the emergency toggle at the top of the screen before holding down the app’s big red button. Doing this also creates a live, secure voice channel to chat in real time with select school faculty.

DAmag.me/cahoots

**RAPTOR EMERGENCY MANAGEMENT**
Raptor Technologies
District officials can hasten family reunifications with this app’s real-time updates of student status and location. The app also verifies and records guardian signatures using time-stamped data. Additionally, district officials can distribute drill schedules, monitor compliance and send emergency alerts.

DAmag.me/raptor

**ONE CALL NOW APP**
One Call Now, an OnSolve company
This app sends automated texts, emails, and text-to-speech and voice messages to various devices. Senders can find out who listened to or read their messages with real-time reports and can forward messages to e-calendars and other individuals. Additionally, the app stores sent messages for future reference.

DAmag.me/onecallnow

**NETSUPPORT NOTIFY**
NetSupport
This one-way mass notification tool enables administrators to deliver desktop alerts that cannot be skipped, ignored or saved for later. Alerts carry varying priority and audibility options. This tool also creates real-time records of who has received and read the message.

Netsupportnotify.com

MORE ONLINE: Additional emergency notification systems, DAmag.me/emergency
The amazing thing about the Acellus Program is that through the Placement Exam, our students were placed into 13 different classes appropriate for their individual levels. This differentiation allows them to work at their own pace in completing the course work appropriate for their level. Consequently, our students have been able to make gains of 2 to 3 years in a single semester. The amount of curriculum covered thus far is astonishing. The "on task" and "task completion" behaviors have increased tremendously.

All of this would not have been possible without the Acellus Learning System.

Recently, we have added the Acellus STEM-10 Labs to our Special Education classrooms. The students are enjoying learning about coding and are anxious to begin coding their individual Robots. This dimension has added excitement towards exploring and learning something new.

Not only are the robots a wonderful teaching mechanism, but they also allow us to use them as positive reinforcement. The students are so excited to work with the robots!

—Troy Mircovich
Superintendent, Ingleside ISD
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School investigations—whether at a private or public high school, or other institution—pose special problems for school administrators and counsel. The risks are often high, and school leaders, even those well-versed in the typical legal issues affecting their institutions, may be inexperienced in conducting investigations.

While there is no one-size-fits-all approach, here are six best practices for any school or university faced with a situation requiring an investigation.

1. Continually assess risk
Risk assessment is simple in theory, but more challenging in practice. Why? Because when a problem arises, decision-makers often have only partial, imperfect information and limited time to act. Plus, previously unknown risks can emerge as new facts become known.

Risk is key because it drives nearly every later decision:
- Who will lead an investigation?
- How extensive will it be?
- What steps are required?
- What public relations or crisis management actions are needed?

So it’s not enough to make a quick judgment about the risk and move on. Rather, there must be an initial assessment on which immediate decisions are made, followed by a regular recalibration of approach as new information develops and circumstances change.

2. Define the purpose and scope of the investigation
Purpose and scope are related but distinct concepts. The purpose is simply the goal of the investigation. For schools and universities, the purpose often will be to respond to a complaint, determine whether misconduct occurred, and ultimately decide what action needs to be taken. Having a clear purpose ensures that the investigation is focused and efficient.

By contrast, scope is the overall body of information that will be considered and the steps used to gather it. Establishing the appropriate scope is critical. If the scope is defined too narrowly, an investigation can fail to obtain important information or undermine its own credibility. If the scope is too broad, however, it can bog down the investigation, inflate costs and distract from the actual purpose.

3. Consider the school culture and stakeholders
For an investigation to be effective, it must recognize and account for the culture of the institution. This is true in the corporate world and in educational institutions. A sexual misconduct investigation with Title IX implications will have different challenges if it occurs at a small Christian-based high school than if it occurs at a large state university. Likewise, investigators must understand school power structure, formal and informal, and other dynamics of the institutions and people within the scope of the investigation. That type of knowledge will be critical in getting access to information, detecting and counteracting any inherent biases, and ultimately reaching a sound conclusion.

4. Be wary of required disclosures
The event that triggered the investigation may also trigger certain disclosures or other legally required actions. For example, both Title IX and the Clery Act have disclosure requirements—by certain classes of employees and, in some cases, the institution—if they are implicated by the conduct at issue. More generally, schools can be subject to contractually mandated disclosures or routine legal requirements, such as document preservation, when on notice of potential

Using internal lawyers and personnel is usually more cost effective and less disruptive, but outside counsel who specialize in investigations can bring greater credibility.
litigation. Schools, particularly universities that employ various types of professionals, should also be mindful of the potential disclosure obligations of licensed professionals who may be accused of or found liable for some types of misconduct.

Finally, many educational institutions contract with federal and state governments to provide goods and services, which can also carry disclosure requirements depending on the type of contracting and industry.

5. Carefully consider involving other experts
Depending on the nature of the investigation, outside experts may be needed. Indeed, one of the first questions administrators should ask is whether the investigation itself should be conducted internally or by outside counsel. There are advantages to each.

Using internal lawyers and personnel is usually more cost effective and less disruptive, and it can often capitalize on the institutional knowledge of in-house staff. But outside counsel who specialize in investigations can bring greater credibility and independence, and a broader, more objective perspective to an investigation.

As a general rule, the greater the risk—particularly the greater the risk to the institution itself—the more seriously outside counsel should be considered.

Regardless of who conducts the investigation, schools also may need to involve additional experts for more narrow investigative needs. For example, an interviewer specifically trained to work with trauma victims may be appropriate.

More broadly, if the investigation involves data or document requests, as in most litigation or government enforcement matters, a third-party vendor to manage digital evidence and e-discovery may be needed.

In each case, involving an additional expert or vendor should be done with care. Their roles should be carefully defined, and ideally, they should be retained by the school’s legal department or outside counsel to further ensure that their work is protected by the attorney-client privilege and work-product doctrines.

While beyond the scope of this article, there are situations in which many of the usual considerations must be put aside, and law enforcement agencies should be contacted to handle an investigation.

6. Know who the client is, and protect the privilege
It is imperative to identify the client and understand the implications—legal and otherwise—of that. Often, a board, specially formed committee or other governing body is the entity that retains counsel.

The engagement letter with counsel must unambiguously define the client and, in the case of an entity, identify who is authorized to communicate for the client. The engagement should also specify the scope and nature of the services, particularly the legal purpose of the services.

While certain buzzwords are not strictly required by courts when evaluating later privilege claims, both schools and their counsel are well-served by making it clear that the attorneys are retained to render legal advice in some fashion.

Missteps with privilege abound in investigations. As privilege-related disputes in high-profile cases such as those involving Baylor and Penn State demonstrate, schools and universities are no exception. In some cases, those risks are heightened by typical privilege land mines such as failing to maintain confidentiality. But for schools, often there is a tension between preserving the privilege and wanting to release information in an effort to manage public relations. Such decisions should be made only after careful consideration with counsel. In most cases, the waiver effect of intentional release of information cannot be undone or, due to the principles of a subject-matter privilege waiver, even limited.

Finally, for counsel and their school clients, special care should be given to the form of any investigative report or summary. While written reports lend greater formality and arguably greater credibility to an investigation’s findings, they also pose far greater risks to privilege waiver.

High-profile investigations, by their nature, are fraught with peril. Schools and universities, along with their attorneys, should follow the sound principles that guide any effective internal investigation, but also account for the special challenges educational institutions face. Only by doing both can they be sure that the investigation will be successful and the school will be protected. DA

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In 2014, Chagrin Falls Schools in Ohio rolled out a 1-to-1 Chromebook initiative with the goal of transforming learning in the district. The initiative was highly successful. Students, teachers and administrators embraced the devices and the G Suite for Education. Chagrin Falls Schools had become the first district in the nation in which every teacher obtained the Google Educator Level 1 certification by the end of 2016. Not long after, the district was selected as one of the original 12 Google Reference districts around the globe.

Students were creating and teachers were collaborating, and innovation was spreading. But behind the scenes, there was a growing issue that needed to be addressed.

Although a majority of parents approved of the move to an online model, a subset of parents said they felt more disconnected since the initiative began. They felt out of the loop without papers and folders spilling out of their children’s backpacks.

Our LMS, Google Classroom, was not as open to parents as we needed it to be. We were succeeding in changing the culture at school, but we were not doing as well at home.

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Our LMS, Google Classroom, was not as open to parents as we needed it to be. We were succeeding in changing the culture at school, but we were not doing as well at home.

This was particularly apparent with students in grades 3 through 8. A team of teachers and technology professionals met to find a way to help those parents who were struggling. Communication was key.

Parents needed to understand that technology and access to information online is a vital part of modern education.

**Newsletter**

We decided to approach the problem from several angles. The broad approach began with sending an email newsletter to parents. The semi-monthly publication covered relevant information on modern-day parenting as it relates to technology, education and Generation Z. Some sample topics included cyberbullying, social media and digital citizenship. The newsletter was our attempt to educate parents on how their children view the world. Additionally, the emails informed parents on how edtech companies were leveraging technology as a way to engage students in the classroom.

Parents needed to understand that technology and access to information online is a vital part of modern education to begin to close the connection gap. The district offered the newsletter to all parents, not just those who have children in the school system.

**Email**

The newsletter worked well, but it lacked a personal connection. General information, not specific to any one child, can easily get lost in an inbox. The solution? In spring 2018, several sixth-grade teachers had their students craft an email to their parents every few weeks. Students were provided a template as a starting point. They were instructed to write about what they were doing in various content areas. Students were encouraged to share artifacts of their work, such as a document, presentation or photo. Even though these were simple emails, our parents enjoyed receiving personal communications from their children. These messages, which encouraged writing and critical thinking skills, helped to bridge the connection gap. This fall, we’ll scale the program to grades 5 through 8.

**Parent event**

Bringing parents together to see the technology in action was the last piece of the puzzle. Chagrin Falls Schools is planning an edtech conference for parents this fall. The event will include several 20-minute sessions covering tools such as Quizlet, Kahoot, Breakout Edu and Google Classroom. The goal of the event is to bridge the connection gap by giving parents the opportunity to experience education technology at the point of instruction.

Parents, especially those who are not tech savvy, can be overlooked. District leaders need to be cognizant of this when implementing large technology initiatives. They can avoid trouble by educating parents about Generation Z and using a variety of methods to help them stay connected. DA
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About 64 percent of youth with major depression do not receive any mental health treatment. That means that people under 18 who are most at risk of suicidal thoughts or of difficulty in school and in relationships don’t receive the treatment they need.

There were 13 suicides in the Indianapolis suburb of Fishers in 2016. Fishers’ Hamilton Southeastern Schools is a district of 21 schools and more than 21,000 students. With students outnumbering traditional guidance counselors by 700 to 1, the schools couldn’t meet the needs of struggling students.

In 2016, the district passed a referendum to provide mental health services to its 21 schools. For the 2017-18 school year, 12 licensed therapists spent at least 2 1/2 days per week at each school to provide mental health counseling to students and families. As a result, in one school year, the number of students who received mental health services increased by more than 1,000 percent. Our data showed that nearly 50 percent of diagnoses treated were anxiety/stress-related disorders.

The outcomes speak for themselves: 55 percent of students who received services showed an improvement in GPA as well as in math and reading scores.

The stigmas surrounding mental health issues often make students reluctant to seek help. Following are five ways that school districts, regardless of size, can reduce those stigmas.

1. **Encourage thoughtful conversations about mental health**
   In recent years, we’ve seen more students talking about hurting themselves. The issue isn’t new, but our accommodating atmosphere is. We strive to make mental health a more common discussion so students feel comfortable sharing this information. We see this as a positive outcome of our goal to reduce the stigma of mental distress in school, as fewer students are suffering in silence.

2. **Introduce mindfulness**
   Integrating mindfulness in the classroom is a preventative measure for mental health issues. More than 30 of our teachers are now trained to teach mindfulness in the classroom. Though research on the effects of mindfulness on children is just beginning, we see how regular mindfulness practice helps our students understand that they have a choice in how they respond to stimuli.

3. **Involve community experts**
   Mental health issues are like any other health problem. They require trained professionals for diagnosis and treatment. We’ve been intentional about involving local professionals in our efforts, and many providers are eager to help.

4. **Involve parents**
   Many students say that the adults in their lives don’t understand the reality of depression and other mental health problems. We recognize the need to educate the entire family. Each year, Fishers High School hosts A Night of Hope for families. In separate sessions, parents and teens discuss current trends in youth mental health. More than 400 families attend the event to talk candidly about mental health.

5. **Clarify every step of the way**
   What is obvious to some may not be so clear to others. Our Stigma Free HSE student club has a licensed therapist available at every meeting, but we make it clear that these are not support group meetings and aren’t intended to be. No school event or club can replace traditional counseling or therapy with a licensed mental health professional. We know that early intervention is key to helping those struggling with mental illness and that, oftentimes, the stigma and misunderstandings about treatment keep people from reaching out for help. Real students struggle with real problems, and reducing the stigma is possible with the right approach.

Brooke Lawson is the mental health coordinator at Hamilton Southeastern Schools in Indiana.
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