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7 ways to drive district-wide innovation

BY CARLA GAY

Innovative learning experiences can, and should, be widely available, highly engaging, and designed to prepare all students for our rapidly evolving global economy

When the Gresham-Barlow (OR) School District (GBSD) hired Dr. A. Katrise Perera as the superintendent in July of 2017, she set out to listen and learn from students, parents, staff, and community members how to best serve our students. Her charge to me was to do the same when she brought me on last summer as executive director of innovation and partnerships. Well aware that initiative overload is common in education, I didn't rush to implement new programs. Rather, my focus has been to identify the innovative programs and initiatives already underway



that I could support, expand, and help replicate at other schools. Moreover, I have been mindful that innovation often takes root when there are considerable resources available.

However, innovative learning experiences ought not be exclusive; they should be widely available, highly engaging, and designed to prepare all students for our rapidly evolving global

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Help get more girls into STEM careers

BY LAURA ASCIONE
Managing Editor, Content Services

Representation matters everywhere, and nowhere is it more important than in the workforce. As the U.S. faces a shortage of STEM workers, female STEM workers are particularly underrepresented. But to get girls in STEM, they have to see themselves in the field.

Female students aren't motivated to study STEM in college or pursue STEM careers if their classes or career fields are made up of a sea of white men. No representation means fewer girls in STEM—women make up

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How to better support students with anxiety

BY CHRISTINE RAVESI-WEINSTEIN, M.ED.

As educators struggle to understand anxiety and its implications for student success in schools, so too do the parents of these students. Whether it's failing to complete work at home, not turning in assignments, or avoiding school altogether, students with anxiety display an affect often confused with disinterest and complacency. Anxiety, however, couldn't be more different than the conclusions we often make about those students diagnosed. Anxiety is an illness associated with general fear and worry; it is not nervousness and it most certainly is not complacency.

For students with anxiety, the fear of the

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Innovation

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economy. Under the leadership of Dr. Perera and the GBSD Board, and in collaboration with Career Technical Education Coordinator Sarah Dorn, here are seven ways we're working to drive district-wide innovation in Gresham-Barlow.

How to drive innovation

1. Engage multiple stakeholders

We make a concerted effort to listen to and engage multiple stakeholders including principals, teachers, parents, students, and school board members, as well as the local Chamber of Commerce, city and business leaders, and professional organizations on what types of educational experiences we should offer our students and which qualities employers are looking for in our future workforce.

Resoundingly, they've asked that students develop competencies such as problem solving, perseverance, strong communication skills, creativity, and ingenuity. These conversations also helped inform our bond-funded construction currently underway to ensure that the schools we're building and renovating will include physical spaces that allow for different types of learning and the development of future-ready skills.

2. Develop pathways

Our partnership with community stakeholders has also helped guide our effort to develop pathways in each of six career clusters that start in elementary and extend through middle and high school to ensure students graduate college- and career-ready. The first pathway to launch is Construction, and due to our partnership with local industry, students are already participating in projects with real-world relevance across grade levels. For instance, a fourth-grade project to design benches will culminate in a pitchfest this month at which Portland-based Fortis Construction will select four student's models to incorporate into the design of an outdoor space at one of our elementary schools. High school marketing students are collaborating with the Lease Crutcher

Lewis Construction team to learn more about the construction business from a marketing perspective, and we are seeking industry partners to support a recently proposed project to have Career Technical Education students build sheds for the benefit of the community.

3. Develop a common framework

To promote effective communications, our district leadership team has developed a common framework to help all stakeholders share an understanding of our goals as well as the language we're using to express them. This approach gives us the flexibility to iterate while we build innovative curriculum and experiences for all students. It has also helped facilitate widespread participation in the work underway to develop the district's Portrait of a Graduate.

4. Focus on data

As we review and strengthen current programs and develop new ones, we are looking closely at how students are performing while finding ways to collect data more frequently throughout the year via formal assessments, informal interviews, and other means. By breaking down the data in various ways and using multi-tiered systems of support, we can monitor which groups of students are accessing which programs, and we are using that information to remove barriers to entry, add additional supports for students who are struggling, and accelerate learning.

5. Support project-based learning (PBL)

Creating experiential and meaningful learning experiences for students starting at a young age is critical to sparking a love for learning that can span a student's entire educational career. One elementary school's project this spring is to clean an adjacent pond and test soil and water quality as part of an ecology unit. To support and expand initiatives like these, we are providing regular professional development on PBL methodology and opportunities for our PBL pioneers to share challenges and successes.

6. Fortify STEAM programming

We are adding a number of new STEAM spaces to our middle and high schools, as well as soliciting new project proposals. One middle school teacher has proposed that we convert an old bus into a mobile STEAM lab to expand STEAM educational opportunities beyond the classroom. Students are actively involved in developing designs and suggesting resources for the bus, which could make its debut as early as this spring.

7. Expand summer learning

We are collaborating with our district's CTE-focused charter school to add more high-quality offerings to our summer programming to engage students who might not otherwise have opportunities to extend their learning. Plans are underway to develop a two-week design camp for eighth graders transitioning to high school in which students will identify local or global challenges, propose solutions, develop prototypes, and solicit feedback from industry representatives.

Future outlook

By focusing on innovation, access, and opportunity, we expect to improve engagement, participation, and performance across all groups by 2025, including students of color, students with disabilities, emerging bilingual students, and students experiencing poverty. Moreover, I anticipate that our efforts to provide a continuum of innovative learning experiences will grow to encompass community preschools, higher education institutions, and additional industry groups as we continue to integrate our work directly into the fabric of the greater community.

Carla Gay is executive director of innovation and partnerships at Gresham-Barlow School District in Oregon. Previously, she was an administrator, teacher, and school social worker focused on student engagement, dropout reengagement, and college and career readiness. Connect with Gay on Twitter @carlagay12 or via email at gay@gresham.k12.or.us.

Anxiety

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unknown, of potential judgement, and/or of failure is so intense that the solution is often to pull the pendulum as far back in the opposite direction as possible. Because there is so much an anxiety sufferer cannot control, he/she tries to control anything possible: the neatness of his/her notes, the direction of a conversation, his/her score on an English test. If perfection is not a possibility, then a student with anxiety doesn't see the risk as worth taking. The anxiety that comes from messy notes, getting a wrong answer on a homework assignment, or not getting a 100 on a quiz is so debilitating that the next best option is to disengage.

The imprecision of labels

We have a tendency to identify ourselves with an "all or nothing" mentality. We are either smart or stupid, social or antisocial, funny or boring, athletic or uncoordinated. It's very rare for us to pare down our abilities or inabilities with specificity. I've never heard an educator or parent describe a student in the top 5 percent as anything other than smart, but the story of that student goes much deeper. Perhaps math and science came easy; the time spent on those subjects was significantly less than his or her peers in the top half of the class. However, for the ease with which math and science came to him/her, English and history did not. The student had a tutor and put in countless hours of studying. Do we label this student as "stupid" or smart? We use labels on individual outcomes, rather than journeys. A student in the top 5 percent is smart no matter how he/she got there. Therefore, a student who avoids school is disinterested and complacent.

Students with anxiety fall victim to the societal labels we place on each other more so than students who do not. No one wants to be considered stupid or antisocial, but if certain subjects or situations lead a student toward such a label, it is easier to avoid than to submit.



Avoidance is an effective strategy in some instances—a fear of heights is easy to manage by just keeping your feet on the ground. But avoidance exacerbates the mental illness we inevitably encounter on a daily basis. Similar to learning to deal with losing or disappointment, dealing with challenges and imperfections are lessons that come from experience and exposure.

How to help children with anxiety

For the parents of students with anxiety, the instinctual solution is to remove the triggers from their students' lives; no parent wants to see their student in anguish. Whether it is to request a schedule change or to advocate on behalf of their student, parents often make decisions they think will eliminate student anxiety. In reality, they exaggerate the problem.

If students are going to successfully overcome their anxiety and parents and educators are going to work in conjunction with each other to do so, schools must find practical ways to support not just students suffering, but parents struggling too.

Here are five ways educators can do just that.

1. Change approaches, not schedules.

A common request from the parents of students with anxiety is a schedule change. Rarely are the changes because of misleveling, such as when a student is in a college prep class but should be in an honors section. Changes in schedules are typically requested because of anxiety,

i.e., work avoidance and/or teacher conflict. Maybe the teacher questioned why the student failed to complete the last three homework assignments or explained that the test had to be made up after school the day of return. Either situation increases the student's anxiety and results in him/her being unable to work because of what is deemed judgement.

Changing a student's schedule is not the answer. Removing triggers is not going to teach the student coping skills. Educators should do everything possible to put off a schedule change. The student's anxiety is not going to be resolved; it will present itself in a new scenario.

Instead of changing schedules, change the approach. Ask the student questions about how he/she felt when asked about their homework and/or were told the test needed to be made up that day. Anxiety is an illness of identity and "all or none." Getting students to express their struggles will empower them to control their illness rather than avoid it.

2. Celebrate effort, not smarts.

From a very young age, we celebrate intelligence. When a toddler is told to throw out their trash and proceeds to walk to the barrel and throw out his/her wrapper, we gush at how smart he/she is. This is the case for so many new milestones.

But what happens the first time the child runs into adversity and doesn't understand the expectations? The student is apt to believe he or she is no longer smart. The "all or none" approach to intelligence leads many students to

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Using data to solve boundary challenges

Even the suggestion of closing a school can bring competing interests to the surface, roiling tensions. Muskogee Public Schools avoided the drama by leading with data

BY ERIC WELLS

Redrawing boundaries reallocates a district's resources at a fundamental level, and with that reallocation comes a great deal of concern, anxiety, and turmoil as members of the district's community worry whether their needs will be addressed properly. Compounding that tense situation, districts are often working with incomplete data and making what amounts to educated guesses about where resources will do the most good.

understand formats was key not just in informing our decisions but in making sure members of our community understood and supported those decisions.

Using data to understand needs

Leading the process was our long-range planning committee, a group of 35 community members selected by our school board, the superintendent, and prominent members of the community.

helped us look at things from several perspectives and understand students' demographic attributes. The data made it clear that this was not actually a neighborhood school—we realized this was a low-income school area with more diversity than some other areas. Our software helped us create different planning scenarios that reflected both that data and the community's input.

After studying the data, we changed our previous scenarios to be a better reflection of each area in town and provided instant feedback for our planning committee as it moved forward with the process.

Emotions do run high, especially when you're dealing with people's children, but once we were able to show them the facts—the actual lay of the land—it cooled things down. We had one school, for instance, on the west side of our district whose new boundaries will encompass about 45 percent of our whole district's area. People didn't understand why that school had such a large area, but when we showed them the GIS maps and where all the students actually live, folks suddenly grasped that it wasn't an issue.

Creative solutions inspired by changing demographics

Another issue we were able to address with GIS was the economic diversity of our schools. Muskogee is not a particularly dense town, so we don't have a typical inner city. But we do have an older part of town that is a little rundown and pockets around our district that include low-income housing.

We didn't want a situation where we had one low-income school and then all the other schools. As we looked at the data and tried to balance and diversify our schools, we hit on a solution we hope will work not just for our students

Challenges, page 5



Muskogee Public (OK) Schools serves about 5,600 students across 13 school sites. Between a declining birth rate in the area that we serve and more students and their families choosing non-traditional options such as online schools, our enrollment recently shrank to the point that we needed to close a building and reallocate some of our resources.

We settled on turning one elementary school into a 6th grade center and then closing a middle school and moving its students to a larger elementary school. We're closing only one building, but that still requires rezoning the remaining five elementary schools and the 2,700 elementary-aged students they serve.

Here's how the strategic use of a wealth of data presented in easy-to-

To begin, the committee was operating under the assumption that our schools were neighborhood schools.

But when we began to dig in with our data software, a geographic information system (GIS) tool called ONPASS® Pro from Educational Data Systems, we found that one of our sites didn't meet our assumption. This school is in a great neighborhood, and a lot of homes within its boundary feed into it. But the population in that part of town is aging. When we looked at the data, we found that the school had about a 65 percent intra-district transfer rate. It was hard to believe that only 80 kids attending this school lived within the actual school zone.

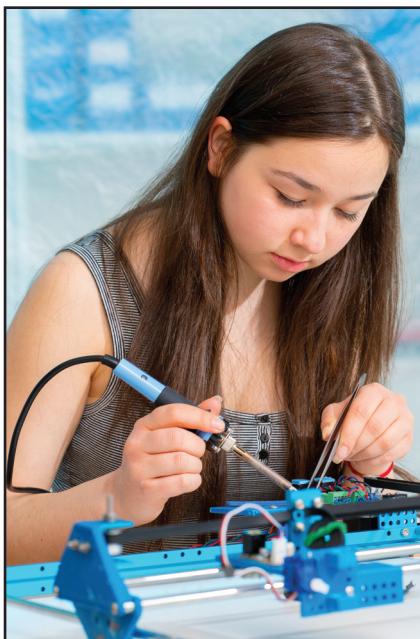
Seeing accurate and up-to-date data

STEM

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almost 50 percent of the workforce, but hold less than 25 percent of STEM jobs.

Women of color and different religions made up part of this year's newly-elected U.S. Congress. Movies like



Wonder Woman and Captain Marvel bring "main character" female representation to super hero films, while movies

like Black Panther feature strong women of color—one of whom happens to be both a princess and a brilliant scientific inventor.

It's time for us to help girls see themselves in STEM careers. And if we want to get more girls in STEM, we have to show them the women who are working in STEM now. These new initiatives give girls a chance to explore their own potential role in STEM as they illustrate past and present female role models and pioneers.

Career connections to encourage girls in STEM fields

1. IF/THEN is a new \$25 million philanthropic initiative driven by the fact that girls cite a lack of female role models in STEM as a key reason why they don't pursue a career in that sector. The idea focuses on this concept: If girls see women like them working in the STEM field, then girls can picture themselves in all kinds of STEM careers. The initiative aims to tackle the gender gap and increase funding for women working in STEM.

2. The Google-supported Girl Powered, launched by The Robotics Education & Competition Foundation and VEX Robotics, is committed to

showing how exciting it is to be involved with STEM, showcasing examples of how women are changing the world, providing tools for success, and enabling comfortable environments where all students confidence and abilities can flourish. These real-life examples and hands-on opportunities can help motivate more girls in STEM education.

3. Microsoft and Nobel Media partnered on Women Who Changed Science, a unique web experience that highlights the inspiring journeys and contributions of female Nobel Prize winners. The site notes that 64 percent of U.S. girls and women cannot name another woman in the sciences, and the women highlighted are intended to inspire girls in STEM pursuits and empower the next generation of scientists.

4. CompTIA's tech workforce charity, Creating IT Futures, acquired non-profit TechGirlz and will help the program forge a new path to get more girls interested in STEM by exposing them to engaging workshops and experiences. TechGirlz workshops have been successful because subjects are designed specifically for middle school girls, and as research shows, middle school is the age where girls either lose interest in STEM or decide to stick with it. **eSN**

Challenges

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but may help to revitalize a struggling part of town.

Based on the data, we chose to make one of the schools there a magnet school focused on project-based learning. It will change the dynamic of the school, and we're hoping that will extend to the community beyond.

Informing transportation decisions

ONPASS® Pro is not a transportation planning tool, but we were pleasantly surprised to find that it offered powerful insights for our transportation team.

We bus a lot of students at Muskogee, but it was eye-opening when the data revealed just how many students that actually was. With ONPASS Pro, we are able to look at more than simply where students live relative to schools. We can tie in metrics such as which students need before- or after-school care. Having data like that revealed that we needed to move one of the programs to a different site to serve more students and increase efficiency.

A community built on information

We work with the school board, of course, and they ultimately work for the public. But sometimes there's still a disconnect, especially when we're presenting scenarios that some members of the public do not view favorably.

Having a wealth of data at our finger-

tips, ready to be fired off in an email, detailed within a report, or displayed visually on a map, really helps to bridge that disconnect. Then everyone knows why things need to change and where the evidence says those changes need to happen.

When it comes to drawing new boundaries, the best way to begin is with a well-informed school board and a well-informed community. I'm proud to say—with the right tools—I was able to help that process go as well as it could in my district. **eSN**

Eric Wells is the chief information officer for Muskogee Public Schools in Oklahoma. He can be reached at eric.wells@roughers.net.

4 ways that better edtech management empowered our district

Billings Public Schools is the largest school district in Montana, supporting more than 16,800 students across 33 schools. With the support of technology levies, we have invested \$1 million into new technology for both the high school and elementary levels.

Over time, Billings Public Schools accumulated a complex assortment of devices, including 16,000 Chromebooks, 7,000 Apple iPads, 3,000 Macs, and 2,000 Windows devices. These devices are used to support a STEM program that is leveraged by every student at every school. However, as the number and complexity of devices increased, the number of IT personnel to support those devices remained the same, decreasing our ability to effectively leverage this new technology.

Improving our edtech management

As we began investing year-over-year in our technology, it became increasingly difficult to measure the effectiveness of technology on any level. Although we believed we had a comprehensive enterprise management platform for managing our Apple and Windows devices, we often were forced to use workarounds that required us to manually touch each device, resulting in unmanaged devices. Struggling with increasing costs and decreasing service levels, we decided to reassess our approach to technology integration.

We operate with a mission to “inspire, educate, and empower students to be responsible and innovative global citizens who achieve their full potential.” It is important to us that our technology integration reflects this mission, allowing us to assess return on education (RoE) for intangible outcomes such as digital equity, student engagement, and the privacy and security of our students.

Visibility is an important consideration when it comes to supporting return on education. At surface level, we turned

to FileWave for a more comprehensive visibility of the devices in use across our district. However, we’ve gained so much more from partnering with the multiplatform endpoint management provider.

Before we switched to FileWave, it was hard for us to assess the inequalities across our district. Students in one school would have more technology and access to it than students in others. We didn’t have the IT staff numbers in the building to know exactly what was in there, or if each device had all the software it needed to be effective.

During the migration to FileWave, we uncovered devices that should have been phased out years ago. Now that we have the support of our technology levies and the insight from FileWave, we’re working to standardize devices to make sure all students in the district have equal opportunity to devices and apps to support their learning.

Improved device flexibility

We have structured our devices by school and classroom with SmartGroups that help us provide a seamless experience for some of our specialized teachers who float from location to location. For example, with FileWave we can ensure that our band teacher will always have access to the internet or the printer without having to manually set up those services in each location. As we look to replace the teachers’ computers next year, we know it will take only a day or two to roll them out, which is very different from our pre-FileWave days.

Saving time with streamlined workflows

We’ve been able to streamline our device-management workflows—from deployment and patching to supplying a whole classroom of devices with the software they need for their next lesson. Without this level of multi-platform

endpoint management, we would easily need four to six more computer techs in our district. A 4,000-device high school should be unmanageable for a single tech, but that’s the kind of support we’re able to provide with FileWave.

Managing student devices

At the classroom level, we have made great strides in supporting student learning. Using profile-based permissions, we can now set up our iPads so that students can’t delete required apps from their devices. Our students can also be locked into the required apps for their classes to ensure they stay focused on their work.

As we all know, technology can have a positive, significant impact on student learning, but only if teachers can control the technology—not the other way around. With the support of our dedicated technology integration specialists for the district, we’ve been working with our educators to build the pedagogical basis for our tech. We now feel like we’re making strides on integrating technology in meaningful ways for our students and teachers.

eSN

Deana Elder supervises tech support and manages large projects as the technology support coordinator for Billings (MT) Public Schools. Elder’s years of experience in the classroom working with students and teachers gives insight to their technology needs. She leads a team of 20 computer techs and coordinates ordering and distribution of thousands of computers, iPads and other technology devices to teachers and students.

Christian Massie is a computer technician within Billings (MT) Public Schools. Massie’s 12 years in IT, with the past four years working within the district in both elementary and high school environments, help him understand the needs within the classroom environment. He manages the FileWave server and assists in troubleshooting and project management.

5 steps to ensure accessibility

If we want to help every child reach his or her potential, we need to take the appropriate steps

BY STACEY PUSEY

While the Individuals with Disabilities Education Act (IDEA) was last reauthorized in 2004, with amendments in 2015, and the Web Content Accessibility Guidelines (WCAG) updated back in 2008, the demand for accessibility and equality in education continues to grow. Administrators and teachers, who want to help every child reach their potential, can't afford to wait for new laws and policies. To ensure accessibility, educators need to constantly evaluate the effectiveness of accessibility initiatives, advocate for resources for their students, and anticipate where they need to go next. During the edWebinar "Accessibility: Effective, Equitable Learning Environments for All Students," which is part of a series hosted by CoSN and edWeb.net, the presenters discussed how they approach CoSN's five steps to ensure accessibility.

5 steps we need to take to ensure accessibility and equality in education

Step 1: Stay current with federal and state legislation.

First, every district needs an administrator who stays current on federal and state laws regarding compliance. That person then disseminates information as needed to principals, teachers, etc. The presenters also recommended reaching out to colleagues, staying in touch with state associations, and in general having an ear out for any changes.

Step 2: Develop and communicate a district-wide policy for accessibility including guidelines for accessible purchasing.

The onus is on the district leadership to create accessibility compliance policies for teachers as well as the materials they use. Previously, when talking with vendors about accessibility, the conversations didn't go very far, but now they are able to discuss it in depth. Both



Accessibility is the responsibility of all educators, staff, and administrators. All staff should receive regular professional development on the district's guidelines and topics related to accessibility.

sides need to do their due diligence to remove barriers to student learning. All policies should be regularly communicated to all constituents and readily available upon request.

Step 3: Build staff capacity.

Accessibility is the responsibility of all educators, staff, and administrators. All staff should receive regular professional development on the district's guidelines and topics related to accessibility.

Step 4: Conduct regular accessibility audits.

Like professional development, audits shouldn't be done once a year. Educators need to perform regular evaluations of how the policies, teaching strategies, technology, curriculum, etc., are being implemented and the impact on student achievement. Educators should also talk to the parents to find out their views on accessibility. The goal is to determine where there are gaps and inequities, and the school needs to understand what's happening

outside of the classroom.

Step 5: Set expectations. Model accountability.

Starting with the district office, all staff need to follow the accessibility policies. They need to be a part of the normal, everyday procedures.

Most important, we must ensure accessibility is not limited to any one group of kids or description. All of the presenters go beyond what's required by the law to make sure that every student who needs assistance receives it.

"If you as a superintendent or one of your staff members aren't willing to step up and take a stand for those kids, then I don't know who would do it," said Dr. Tom Muzzey, superintendent, Orchard Farm (MO) R-V School District. "I always think of that and make sure that I have people that are checking me and what I think and believe at all times to make sure what we're doing is best for our students."

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8 reasons why my students lead their own conferences

BY RAYNA FREEDMAN

I can clearly picture my eight-year-old self staring out the large window, waiting for my parents to come home from my parent-teacher conference. I wanted to know what my teacher said, how I was doing, and what was wrong with me. The stress as the minutes ticked by increased as I got older, and the stakes were higher. As my parents shared the details with me, I am not sure I paid attention.

When I became a teacher, that memory stuck with me, and in my first year as I sat discussing students with parents, I felt something was missing. I realized it was not something but someone. The student should be part of the conversation; after all, it is his or her learning we are discussing.

From that point on, I transitioned to student-led conferences with elementary students. That first year they took 45 minutes per child, and I was meeting with students and their parents during my lunch, after school, or at night at the public library. It took a month to get through all students, but the pride in both the student's and parent's faces made it all worth it.

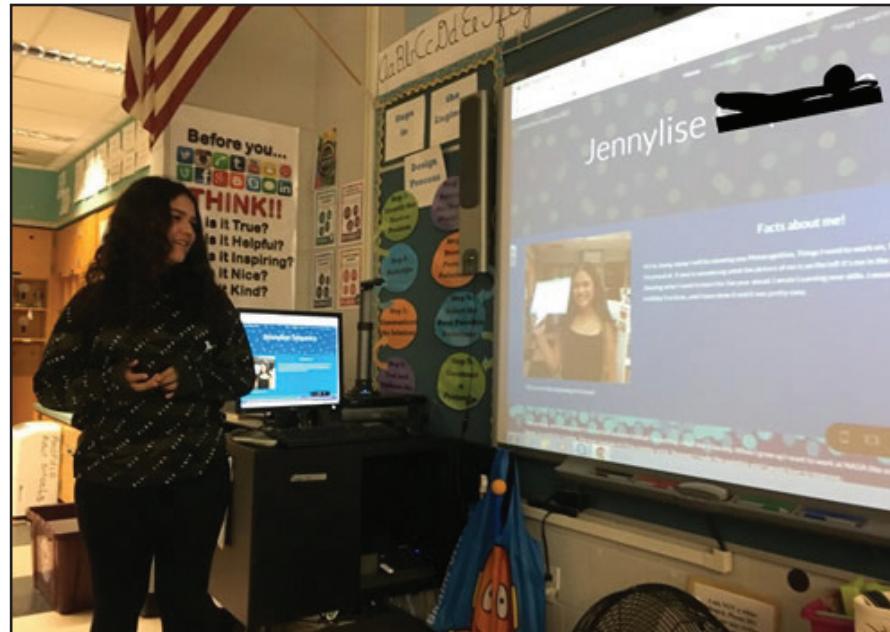
Eighteen years later I am able to do 20 minutes per child, having rich conversations as a team to support student learning. This past year we added digital portfolios that transformed the conference. Students presented their work in a small, theater-style setting, taking complete ownership of their learning process.

Educators often ask me why I have elementary students run their own conference. Below are a few of the reasons I share with them.

8 reasons why my students should lead their own conferences

1. Student-led conferences promote student agency.

Running their own conference provides students a meaningful experience



that is relevant and authentic. It allows students to voice their own strengths and weaknesses. They choose what to share to showcase things they learned, need to work on, and are proud of. By making decisions about their learning, students take a greater investment in the process.

2. Students are part of the conversation.

By giving a child the opportunity to express him or herself as part of the learning team, we are letting the child know you are important. You have value. You need to own your own learning and scaffold your own thinking to grow. These are invaluable life skills!

3. Students are accountable for their own success.

Student-led conferences send a message to individual learners that they are in charge of their own success. The adults surrounding them will support and guide them, but ultimately the child drives his or her own decision-making process. The responsibility falls on the shoulders of the student. When students share what they need to work on to their parents and teachers, they immediately take ownership of this and begin working on it the next day.

4. Students develop metacognitive skills.

The art of reflection helps propel us all forward. By giving students opportunities to practice this skill, we teach them how to dive deep into learning. Students begin to internalize what they have learned, how mistakes help us grow, and set goals for the future that they are accountable for. Using a digital portfolio to provide evidence with captions that supports their thinking helps students develop clear communication skills. Reflective practices are very powerful.

5. Students engage in a productive struggle.

It can be challenging to identify pieces of work that support what students want to discuss during a conference. Curating evidence is a struggle for students, as it brings to light what they need to work on. This struggle helps push students toward being self-directed learners.

6. Learning is personal.

Every individual learns best in different ways, and the sooner students can figure out how they learn best, the more successful they will be at choosing the

Conferences, page 10

12 activities & tools to build curiosity

BY DANNY WAGNER

Building social and emotional-learning (SEL) skills such as curiosity requires face-to-face interaction, meaningful discussion, and reflection. Edtech is no complete substitute for that, but there are tools that can supplement the development of character in the classroom and at home. According to Character Lab, curiosity is: a strong desire to learn or know something—a search for information for its own sake.

While some tools focus specifically on building curiosity, the websites and apps that you use daily (in all subjects) can be used to promote inquisitiveness, too. You don't have to stop using the tools you love or toss out your lesson or curricular plans to start developing SEL. Below we have included some tips, tools, and actionable ideas for seamlessly integrating curiosity and life skills-building into your content classroom.

Why build curiosity?

To some, curiosity suggests actively seeking out challenges and new experiences. While that's partly true, studies suggest that curiosity has a deeper impact on learning. Scientists at the University of California, Davis, found that brain activity increased when participants were more curious about certain questions, resulting in greater quick recall as well as long-term memory.

For teachers, this means students' curiosity might be harnessed to promote more meaningful learning—although what's most meaningful about curious exploration is the path, not the destination. It's up to teachers to help students realize that while technology can make the discovery process easy, finding an answer from an internet search tends to be much less satisfying than the struggle it took to get there. The good news is that student curiosity isn't in short supply, and while some students seek understanding more than others, all have the ability to push the limits of what is known. If educators successfully nurture curiosity in the classroom, students might begin to

challenge the status quo—like one 16-year-old who worked to develop a cheaper, faster cancer-detection system—and transform the world as we know it.

Take action

- Set aside time for students to play and tinker with ideas, tools, emotions, beliefs, and materials in the classroom.
- Challenge students to not accept everything at face value and to rethink historical or standard ways and methods.
- Have students practice asking good questions and incorporate them into a project-based learning experience.
- Make sure the technology you use doesn't take the place of, but instead supplements, face-to-face interaction.
- Using our Digital Citizenship Curriculum? Both our student interactives and lessons already foster key SEL skills.
- Visit some other excellent SEL resources, including CASEL, Character Lab, Edutopia, and Ashoka.
- Think about the digital tools you're already using in the classroom. Can you find a creative way to use them to model curiosity? Check out our suggestions below!

Directly target curiosity

See our Edtech That Fuels Interest-Driven Learning list for more curiosity-focused tools.

1. Ted-Ed

Short videos and animations from the brightest minds support a kid's sense of wonder about the world. Create a lesson right on the site or explore a collection of organized content, such as Math in Real Life, to get students energized.

2. Wizard School

Original, interactive challenges, such as designing a tree house, show kids the joy of learning. Set students free to explore and share; if working in groups, kids can compare how they were inspired to find different solutions to the same problem.

Build curiosity in all subjects

FOR ELA CLASSROOMS

3. Genius

Genius lets students work together to annotate text online, from literature to historical documents. Have students choose a song that interests them, annotate the lyrics, and then look at how others interpreted the same piece.

4. LeVar Burton Kids Skybrary

With a digital library of hundreds of books, this app focuses on learning about real life and nurturing imagination. Have students explore books by a theme of their choice, and then give kids informal time to share with peers what was most fascinating.

FOR MATH CLASSROOMS

5. Incredible Numbers

Make math shine with this app that hits on topics not often mentioned in class. When students finish a test or need a greater challenge, let them get immersed in fascinating facts and unique visualizations on topics such as cryptography.

6. PBS KIDS Measure Up!

This app uses videos and games to compare length and height, capacity, and weight. Supplement the on-screen games by playing some similar games off the screen: Give kids the freedom to explore the weight and length of items around the classroom.

FOR SCIENCE CLASSROOMS

7. Mystery Science

Remarkable video clips ask the big questions about scientific phenomena, lead students in a discussion, and then get them involved in an experiment. Pause videos often to allow students to predict, hypothesize, and share their thoughts.

8. The PocketLab

A small sensor pairs with your device to collect data such as motion, temperature, and more. Let kids come up with a question they want to answer, strap the sensor to a rocket or ceiling fan, and then watch the student-driven learning happen.

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Conferences

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right support tools. Teachers and parents should be part of the conversation, listening to what a student needs to grasp skills and concepts. It should not be the student listening to what the teacher and parents think.

7. Collaboration with peer feedback.

In preparing for student-led conferences, having the children share their thoughts and ideas with others and elicit feedback is instrumental. Students told me they wished we did more of that as their classmates gave valuable comments about how to enhance their digital portfolio. Tony Vincent's feedback chart is a useful tool to support students in understanding how to give and receive feedback.

8. They can share work with people who cannot attend.

The four walls of the classroom are removed with student-led conferences using digital portfolios. Not only can students confidently go home and discuss their conference with relatives who could not attend, but they can also share their portfolio. This provides further conversation where students can take ownership of their learning and continue their journey towards self-actualization. **eSN**

Rayna Freedman is a 5th-grade teacher at the Jordan/Jackson Elementary School in Mansfield, Mass. She has taught grades 3 to 5 and is an instructional technology specialist. She is working on her doctorate through Northeastern University as she hopes to change the field of education some day. Freedman is president of MassCUE and has been presenting at the annual conference since 2010. She is a Google Level 2 certified educator, a BrainPOP certified educator, a Flipgrid Ambassador, and Fablevision Ambassador. Freedman has presented for ISTE, Ed Tech Teacher, Tech and Learning, Medfield Digital Learning Day, FETC, BPLC, and BLC. Follow her on Twitter at @rlfreedm.

Accessibility

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About the Presenters

Matthew J. Miller is the superintendent of Lakota (OH) Local Schools. He has spent the last 24 years serving Ohio communities as a superintendent, director of student services and instruction, principal, and teacher. Miller is actively involved in the prestigious and national League of Innovative Schools through Digital Promise, also serving as an elected member of its advisory committee. He was selected as one of 100 superintendents to attend and present at the #FutureReady National ConnectED Superintendents Summit at the White House, was named to the National School Boards Association Top 20 to Watch, and conducted his first TEDx Talk in 2016: Don't Buy the Book: Cultivate, Curate and Go Open.

Dr. Thomas Muzzey is currently serving as superintendent of schools at Orchard Farm (MO) R-V School District. Prior to his service at Orchard Farm, he served as the superintendent for Warren County R-3 schools. Dr. Muzzey has 30 years of experience in public education as a teacher, assistant principal, assistant superintendent, and associate superintendent.

Dr. Donna Wright began serving as director of schools for Wilson County (TN) Schools in 2014. Under her guidance, district-wide academic performance has significantly improved; the district is undergoing the largest school building program in the history of the county; a concentrated emphasis on early literacy instruction is a focal point; and college and career readiness is a hallmark in middle and high schools. She has worked in public school education, K-12 and higher ed, for over 36 years.

About the Host

Ann McMullan is a 34-year veteran educator who served as the executive director for educational technology in the Klein (TX) Independent School District, until September 2013, when she and her family moved to Los Angeles. For 16

years Ann led the team in Klein ISD that provided professional development on technology and 21st-century instructional strategies to over 4,000 professional educators serving over 50,000 students. During that time McMullan also co-chaired the Texas Education Technology Advisory Committee which developed the Texas Education Agency's Long Range Plan for Technology, 2006-2020.

Today, she is based in Los Angeles, California working as a public speaker, writer, and independent education consultant focused on supporting leadership, visioning, and planning to meet the needs of today's students. She is a frequent presenter at state, national and international education conferences and serves as project director for CoSN's Empowered Superintendents Program. She serves on the board of PowerMyLearning Los Angeles and on the advisory board of Project Tomorrow. In the fall of 2016, McMullan co-authored and published *Life Lessons in Leadership: The Way of the Wallaby*.

Join the Community

Super-Connected is a free professional learning community on edWeb.net for school superintendents, district leadership, and aspiring district leaders.

This edWeb broadcast was co-hosted by CoSN and edWeb.net and sponsored by ClassLink. The recording of the edWebinar can be viewed by anyone at <https://home.edweb.net/webinar/supers20190311/>. **eSN**

[Editor's note: This piece is original content produced by edWeb.net.

Stacey Pusey is an education communications consultant and writer. She assists education organizations with content strategy and teaches writing at the college level. Pusey has worked in the preK-12 education world for 20 years, spending time on school management and working for education associations including the AAP PreK-12 Learning Group. She is working with edWeb.net as a marketing communications advisor and writer.

How we created a growth mindset in math

BY CATHERINE CASTILLO

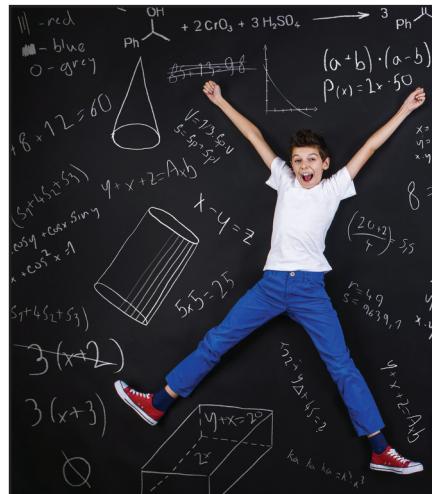
Historically, students have been led to believe that they are either destined to be good at math or that they just “aren’t a math person.” At Springfield (MO) Public Schools, we wanted all of our students to feel empowered as mathematicians. Through Jo Boaler’s research, we were able to identify key changes that needed to take place in order for that to happen in our district.

Our approach to teaching mathematics began as a journey toward equity in math class. We began focusing on conceptual understanding, strategy-based fluency through number talks and open tasks that support multiple entry points and solutions. In the past, much of our math instruction was focused on procedural rules that didn’t allow students to build flexibility with numbers. Despite the constant focus on fact retrieval, teachers continued to note that students didn’t have mastery of basic facts year after year, and it showed in our standardized test scores. We began offering professional development around strategy-based fact practice and eradicated time testing from our classrooms.

Last year we implemented a workshop model to support the need for differentiating instruction in K-5 classrooms. We modified that structure this year to include whole-group problem-solving days, in which educators facilitated productive struggle and the class worked heterogeneously and dived deeply into problems that were more inquiry- or visual-based.

Turning math class into a conversation

One of our district components for math workshops was a numerate environment. There was a misconception that a numerate environment was the visibility of math tools, literature, and anchor charts. Our vision for a numerate environment was one that fosters a classroom full of collaboration and discourse. We wanted to hear students



actively sharing ideas, thinking deeply about mistakes, and connecting their ideas and strategies to those of others.

We looked for structures that promoted these goals and math talks was a natural fit. In her book *Mathematical Mindsets: Unleashing Students' Potential through Creative Math, Inspiring Messages and Innovative Teaching*, Boaler writes that opening up the conversation around math is the single best way to increase number sense.

Last year, we offered professional development to teachers through after school workshops, in service days, and summer learning opportunities. We purchased *Number Talks* by Sherry Parrish for our teachers and facilitated learning about number strings by having teachers engage in math talks as students.

As teachers began to implement the structure in their classrooms, feedback indicated that they wanted a framework that clearly laid out which strategies they should be focused on at their grade level and how to facilitate them easily. That’s when we found and purchased *Daily Math Fluency* from hand2mind to help educators easily and effectively guide math talks with students. This allowed our teachers the framework they were looking for to be intentional about math talks in their classrooms.

We set aside time for students to share their strategies in the classroom.

We focused on providing adequate think time, using structures for equal participation like those from Kagan Cooperative Learning, and providing opportunities for students to revise their thinking.

Students were suddenly comfortable exploring the multiple ways a math problem can be solved with the entire class. When students made mistakes, they were able to recognize in real time how others got the right answer. They were comfortable voicing their disagreement with incorrect strategies in a sensitive way, while teaching each other how one problem can be solved in multiple ways. Students were seeing their misconceptions addressed immediately instead of having to wait for a teacher’s feedback.

Choosing visual tools to promote number sense

For us, math talks have been one of the vehicles that allow students to own their learning. We loved the visual nature of seeing relationships between dot patterns, ten frames, and open arrays. We felt that students were provided the support that was needed to have deep discussions about math concepts.

Now, when teachers say, “It’s time to do math talks,” students are excited to share their strategies and the classroom is abuzz with mental math strategies. Thanks to these new methods, our teachers have seen student engagement increase. We’ve seen a 2- to 3-percent increase in our standardized assessment in math from December of 2017 to December 2018 for every grade in K-5 and every subgroup. It’s been a joy getting such positive feedback from teachers. Students not only feel engaged, but also successful.

eSN

Catherine Castillo is the coordinator of 21st-century numeracy at Springfield (MO) Public Schools. Connect with her on Twitter @MsCastillosMath.

5 online discussion tools to fuel student engagement

Online discussion tools give students a chance to connect with each other and be heard

BY JEFF KNUTSON

Creating a classroom community where meaningful conversations can happen isn't easy—it's an ongoing process that takes time. But using online discussion tools can be one great way to help your students build these skills. Plus, the ability to engage in online discussions responsibly is a great 21st-century skill in and of itself.

Online discussions often lead to better in-class discussions afterward—you know, the kind where students raise their hands and speak out loud. With online discussions, students have a chance to engage with each other virtually, often having their thoughts and opinions validated. Afterward, they're typically much more willing to share out loud in class and often share in thoughtful ways.

Still not convinced? Here are a few more reasons to consider using online discussions:

- Because comments are more permanent, students tend to think a bit more critically about what they say.
- Especially for more introverted students, online discussions can be less intimidating than speaking in front of the class.
- It's easier for students to share dissenting opinions or "outside-the-box" ideas.
- As students type responses, they often recognize and share more nuanced and compelling points and arguments.
- Anonymous posting (though still teacher-moderated), a key feature with some discussion tools, can help erase the fear of public judgment or ridicule.
- Everyone has ample opportunities to be heard and connect with other classmates, ensuring equity among all voices in your classroom.

If you're looking for an online discussion tool, you've got a variety of options. Here are a few top picks and teacher favorites:

Backchannel Chat

Price: \$15/year/class;

\$299/year/school

Platforms: Android, iOS, and web

Grades: 7-12

Backchannel Chat's moderated online discussions are intended to engage students and encourage them to share. Think of it as a teacher-moderated, private version of Twitter, where students can discuss topics that might just transcend the virtual space. Setup is quick and easy: Teachers sign up, name their chat, and give students the URL. Students can join with only a name; no other personal information is required. Teachers can moderate discussions, remove messages, and "lock" the chat at any time.

Kialo

Price: Free

Platforms: Web

Grades: 7-12

Kialo is a free platform designed to foster thoughtful debate and discussion. Students can browse for and participate in existing discussions or create their own. Once they've chosen a discussion, students then choose their side—pro or con—and add their own opinions via "claims." Kialo is a good platform for teaching the importance of reasoned, respectful arguments when trying to persuade others. Most teachers likely will want to create private discussions limited to their students to focus on a curriculum- or class-related topic.

NowComment

Price: Free

Platforms: Web

Grades: K-12

NowComment is a document-anno-



tation and -discussion platform that allows students to mark up and discuss texts. Upload a document (in any number of formats) to create an online discussion area. Paragraphs for text are numbered, with the document shown on the left and the comment panel on the right. You can control when students can comment on a document and when they can see each others' comments. For group projects or peer-reviewed activities, you can have students upload their own documents.

Turnitin

Price: Starts at \$2.50/student for school-wide subscription

Platforms: iOS and web

Grades: 3-12

Known mostly as an online plagiarism detector, Turnitin has some lesser-known tools, too, including a built-in discussion platform. While the discussion tool may not be as robust as some other choices, Turnitin's tool does offer anonymous posting and teacher-moderation options. Plus, if your students are already signed up and have accounts, getting started will be a cinch.

YO Teach!

Price: Free

Platforms: Web

Grades: 6-12

YO Teach! is a backchannel web app teachers can use to create and moderate chat rooms for real-time student interaction. The admin features allow teachers to delete posts, mute students, control room access, and use the interactive features. Students can interact with teacher and peer posts by sharing text messages, replying to others' posts, voting,

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Here's why AI skills will make or break students' futures

BY LAURA ASCIONE
Managing Editor, Content Services

It's OK if you don't know exactly what artificial intelligence (AI) is—but you need to learn, and quickly, because it's already firmly ensconced in our lives, and AI skills are shaping the future lives and careers of today's students.

AI has already fundamentally changed the way we "do" many things. For instance, most people talk about how the internet destroyed the entire chain of brick-and-mortar Blockbuster stores with Netflix, but this assessment isn't exactly true—AI was behind that transformation.

"We talk about AI as if it's coming," but in fact, it's already here, and it's been here, said Joseph South, ISTE's chief learning officer, presenting with ISTE CEO Richard Culatta during a CoSN 2019 session. "It's not hype to say we're behind the curve—we are behind the curve on this, in terms of preparing students for AI."

When we talk about AI, we're talking about computer systems that demonstrate behaviors associated with human intelligence—the ability to plan, reasoning, learning, the ability to adapt, and social intelligence, to name a few. And because AI can demonstrate these behaviors and learn, it is poised to have a tremendous impact on the future of work.

"How does this impact jobs? Forty-seven percent of jobs are at threat of AI," South said. "This means that 47 percent of jobs as we define them today are going to change." Those jobs may not be eliminated, but they will definitely change.

This new AI-enabled world will require citizens and workers with advanced social and emotional skills such as empathy and leadership; advanced cognitive skills such as digital knowledge, computational thinking, and creativity; and advanced technology skills.

"When you put these together, you

find new models of learning," South said. "These competencies will help propel students into the future."

Students Need Help To Develop These AI Skills

"The key to making all of this happen is that we have to have teachers able to have intelligent conversations about what AI is, what it means, how we work side-by-side with a robot—these are all conversations teachers need to be having, but aren't," Culatta said.

Case in point: General Motors predicts a worker shortage in 10 years, because the workers needed to build cars, which are essentially drivable AI machines, are in school today, but they are already not learning the skills they'll need to fill those jobs.

"As we hear and talk more about AI, there's more about how AI will do great things in the classroom," Culatta said. "What keeps me awake at night is how we have careers to fill and problems that need to be solved, and we have a generation of people who will need to fill those careers and solve those problems—and we aren't doing anything to teach them. The language of future problem-solving will be the language of AI, and we are not creating a generation of students that can understand this language."

Teachers need more opportunities to explore how AI skills are relevant to education and in their own classrooms. ISTE and GM partnered to create a course in AI explorations and their practical use in school environments, and the course walks teachers through basic AI concepts and gives them ideas about project-based learning with AI.

"This is one of the ways we're stepping up to make sure teachers are prepared to have these conversations," Culatta said. "You don't have to be an engineer or a computer scientist to have conversations about how AI can transform the workplace."

It's also key to get school and district leadership involved to make sure leaders and teachers understand why they need AI skills, because teachers can't be empowered to harness AI if they don't understand how it works and why their students need it.

"We need to make sure we aren't being blinded by the flashiness of the AI tools themselves," Culatta said. "We need to make sure we're creating students who are able to thrive in the AI world."

Schools, then, have to be able to reframe learning and focus on the skills that will help students be successful. Skills that are uniquely human will be more important than ever, because AI skills can't replace the most human-centered skills.

"What's going to be important is learning how to relate to each other, to work side-by-side with machines, and to personalize learning," South said. "It's a good time to be human, as long as we change learning to be more humane."

eSN

Engagement

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responding to polls, sharing and annotating pictures, and submitting drawings. YO Teach! can be an engaging way to encourage collaboration and social interaction among students.

[Editor's note: This post originally appeared on Common Sense Education.]

As senior producer and content strategist for Common Sense Education, Jeff Knutson helps creates and publish content for teachers aimed at helping them learn new, innovative, and effective ways to use edtech in the classroom. Prior to his work at Common Sense, Knutson was an editor and classroom teacher. He's an advocate for the creative, thoughtful, and responsible use of technology, and he thrives on sharing his knowledge, experience, and perspectives with others.

Why we love our math software

Here are five great math programs that teachers and administrators recommend

BY ELLEN ULLMAN

Editorial Director, Content Services

Math gets a bad reputation for no good reason. After all, it's a universal language and it applies to so many areas of life. Learning math can be challenging, and teaching it can be equally challenging. But tools like math software can help educators make the topic more palatable and relatable for students.

We asked five educators to share their favorite math software with you. If you're looking for something to change up your math instruction, check out what these educators have to say.

Math software picks

"My students absolutely love working with DreamBox. There is complete silence when they are on the program! It is amazing how it adapts to the exact level each of my students need. Students can work on DreamBox individually at their own pace and level while I am working with small groups on our current content. It is truly filling in the missing gaps for some students and stretching others beyond what I can do in the classroom! It's almost as if there is another teacher providing individualized instruction! It's a fantastic program."

—**Dani Kremer**, 4th-grade teacher, Center Point Urbana Primary School (IA)

"One of the biggest benefits of Illustrative Mathematics 6–8 Math is that our students now see math differently. They see that it is problem-based, that mistakes can be valuable in their learning, and that it's about the process, not just the result. This is not only important for their success in math but in life. Our teachers are changing their mindsets, too. Before, when teachers were planning lessons, they didn't necessarily step back and look at the big picture of how the lessons they taught in September would connect to lessons



they taught in December or March. Thanks to the coherence of the 6–8 Math curriculum, they now have a better understanding of these connections and about how mathematics is about building mastery over time, rather than simply mastering one skill or concept and then moving to the next one."

—**Dennis A. Regus**, director of assessment and accountability, Menifee (CA) Union School District

"i-Ready provides a comprehensive profile of individualized data for each of our students, as well as personalized instructional pathways, matching instruction to skill level and addressing learning gaps caused by lagging skills, and extension opportunities for learners who are ready for more challenge. It also gives our teachers access to a depth of individualized student data that we have never before had in the area of mathematics. The easy-to-use reports offer quick, real-time data our teachers use to plan and fine-tune their instruction to meet the specific mathematics needs of our students in both whole-group and small-group learning. Teachers also use the reports to engage

students and parents as active partners in supporting strong math growth."

—**Linda Seberg**, executive director of academic programs, Redmond (OR) School District

"I like the fact that the Carnegie Learning products make my students think and process information rather than just spoon-feed them the information. As well, I absolutely love that MATHia does not allow my students to pass on to something else if they have not yet mastered a certain process in the operation. It is humanly impossible for me to do this with every assignment every day for 150+ students, but this program does."

—**Connie Cardona**, teacher, South Miami Middle School, Miami-Dade County (FL) Public Schools

"ST Math has given my students an active approach to become involved in discovery while using tools never before afforded them. It has helped them progress with a confidence we've never witnessed in the past."

—**Jackie Tetreault**, sixth-grade teacher, Union Hill School (MA) **eSN**

3 things I learned by accident at CoSN 2019

BY LAURA ASCIONE

Managing Editor, Content Services

A few themes stood out at CoSN 2019—artificial intelligence, coding, and preparing students for 2030 are three that immediately come to mind. But as I attended more sessions, smaller—yet equally cool—bits of information jumped out at me.

I love attending conference sessions because I get to listen to educators and edtech leaders talk about what's most important when it comes to helping students succeed and feel proud of their accomplishments.

Here are just a few of the new things I learned, or things that aren't often talked about, at CoSN 2019:

1. Equity doesn't only apply to disparities in income. Socioeconomic status and income levels seem to be the most references aspects of equity, but during the conference I realized equity is a much bigger umbrella, and its other aspects aren't always discussed as widely as income disparities. Special education students and English language learners are often left on the other side of equity gaps.

In Vancouver (WA) Public Schools (VPS), administrators and tech leaders are focusing on equity across the board. For instance, when students in special education classes are issued iPads, putting those iPads in different cases signi-

fies that those students are somehow “different,” so the district hands out iPads in the same cases whenever possible.

At VPS, equity begins with #ThatKid, explained Mark Ray, the district's director of innovation and library services. “We don't think of students as English language learners; we think of them as English language learners with specific needs. Students have very different experiences in their lives, and very specific needs, yet we group them all together.”

2. LTE and school bus networks offer unexpected benefits for administrators, students, and parents. Sure, homework and internet access are often the primary goals, especially for students who don't have internet or devices at home. But there are unintended perks and safety benefits to equipping buses with video-monitoring, GPS, and wi-fi, said Michael Flood, Kajeet CEO, and Tom Ryan, chief information and strategy officer at Santa Fe (NM) Public Schools.

If a school or district building experiences a power outage, a wi-fi bus can park out front and offer some help as connectivity is restored. What about students who forget to get off the bus? Video monitoring can help with logistics there, and just might help parents avoid panicking.

It happens more than you might think. My first-grade son fell asleep on

the very short ride home from school; had my daughter not woken him up, he would have stayed on the bus. In another, more serious instance, a bus driver had a medical emergency and the bus went off the road. GPS could have helped locate the bus had it gone seriously off-route.

3. While CTOs are technology leaders in districts, superintendents strive to recognize all levels of technology leadership, from teachers all the way down to students. “We're trying to empower people throughout our district to see themselves as technology leaders,” said Dr. Doug Brubaker, superintendent of Fort Smith (AR) School District.

Tech leadership isn't limited to those with big titles, either. “Your tech leaders should be everyone, depending on the issue or topic,” said Dr. David Schuler, Township (IL) High School District 214's superintendent and the 2018 Illinois Superintendent of the Year. “Given the situation, everybody has the opportunity to be a technology leader in our district.”

Some districts create programs that recognize tech leadership at all levels, and others have help desk programs that teach students to become tech leaders as they cultivate real-world problem solving skills.

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Curiosity

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FOR SOCIAL STUDIES CLASSROOMS

9. Minecraft: Education Edition

Make history come alive with Minecraft. Students can show their mastery of a place, structure, or time period by recreating it in the game. Have students add written signs that can guide other students on a tour of their learning.

10. Smithsonian Learning Lab

Discover, remix, and share over 1 million Smithsonian museum images, videos, texts, and more. Have students search artifacts by interest and then create their own

collection online that can be annotated with notes or quizzes for others to use.

FOR ALL CLASSROOMS

11. Dreamdo Schools

This project-based learning platform lets students browse projects or create their own. Kids can develop their ideas and document their accomplishments, all while building and sharing with a global community that promotes activism.

12. Instagram

Pique students' eagerness by meeting them where they are: social media. Have students submit photos they create or discover, centered on a theme. This can include memes for novels or historical events or pictures of their artwork.

[Editor's note: This post originally appeared on Common Sense Education.]

Danny Wagner is senior editor, education reviews at Common Sense Education. His focus is on guiding the editorial direction of the Ratings & Reviews platform to discover the best in education technology. In addition to reviewing digital media for learning potential, Wagner produces content and writes articles for a variety of topics, including STEM and social and emotional learning. Previously, he was curriculum technology integration specialist for San Francisco (CA) Unified School District and a science and robotics teacher for a decade in the midwest.

Anxiety

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believe they are not smart and instead are stupid. Rather than pump up our children with how smart we believe they are, celebrate how hard they work. When we ask our toddler to throw out a wrapper and they figure out the request, express excitement by saying, "You're working so hard"—not "You're so smart."

Celebrating the effort that leads to success will instill perseverance in our students rather than intelligence. Believing in hard work will indirectly impact the request for schedule changes; students who work hard once and succeed are more likely to work hard again through subsequent adversity.

3. Encourage self-advocacy.

Molding students into self-advocates does not mean parents cannot reach out to teachers on behalf of their student(s). Educators must encourage parents to facilitate student interaction with teachers. Educators should ask that as much communication as possible come directly from the student for the purposes of self-advocacy. When students contact teachers via email, educators should ask that they copy their parents on the correspondence. An approach like this supports parent communication without sacrificing student self-advocacy.

4. Encourage extracurriculars.

Parents want to experience the sense of pride associated with seeing their student(s) participate in extracurricular activities, and doing so provides students with a healthy outlet known to reduce anxiety. Support parents in encouraging student involvement outside of the classroom by getting involved yourself or by creating incentives for student participation. Design assignments that require students to engage in activities outside of academia but be sure to suggest alternative assignments for students unable to attend extracurricular activities due to employment, lack of transportation, or other issues.

5. Implement routine.

From a young age, students benefit from routine. Even a one-hour time change can send students into days or weeks of upset and adversity. Just as parents are trying to implement routine in the household, educators should be implementing routine in the classroom. Classrooms with no secrets feel safe for students. Safe learning environments will result in a reduction in student anxiety and an increase in student success. They will also support parents in their attempts to create expectations and routines at home. Make all homework checks predictable and makeup policies non-negotiable. Doing so eliminates the risk of upsetting students and increasing anxiety due to

judgement calls and last-minute decisions.

Perfection is an endless, uphill climb. Students with anxiety are unable to convince themselves that striving for perfection is as fruitless as attempting to walk up an escalator that's going down. Couple this with the "all or none" identities we assign to ourselves and students' sensitivity to adult tone and school can be a recipe for avoidance for a majority of anxiety sufferers.

Parents want to protect their children from stressors and societal expectations, but doing so is not teaching our students anything. Instead, supporting such a mind frame only serves to hurt students further. Help parents help their children by slowly exposing students to their own triggers, challenging their own labels, and celebrating their hard work. After years of consistent support and counseling, our students will not only be successful in school, they will be resilient members of our greater school communities.

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Christine Ravesi-Weinstein is a high school assistant principal. She previously served as a high school science department chair for four years and a classroom teacher for 15 years. She is an avid writer and educator and is passionate about bridging the two with her advocacy for emotional well-being. Read about her organization Running From Anxiety and follow her on social media at @ThinkRunFight.

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