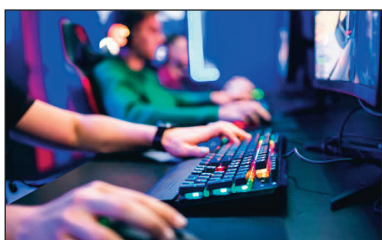




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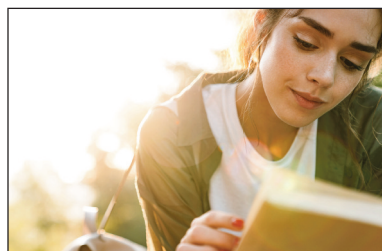
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# eSCHOOL NEWS

*Technology News & Innovation in K-12 Education*

Vol. 23, No. 1

[eSchoolNews.com](http://eSchoolNews.com)

January–March 2020

## Working against teacher burnout

**BY MICHELE ISRAEL**

Sometimes, teaching is more like bombardment: Grading hundreds of essays, placating disgruntled parents, accommodating learning needs, sweating out the principals' nerve-wracking classroom observation. And then there are the stressors of life beyond the classroom.

Being a teacher can be tough. It is rewarding but also overwhelming and, at times, can take a personal and professional toll.

But that doesn't have to be, explained educator Justin Ashley in the edWebinar "Catching Happiness: How to Work Through Burnout and Be a Joy-Filled Teacher." Ashley shared ways



to counteract teacher burnout to build socio-emotional health and increase happiness.

Ashley was a teacher burnout victim. His fallout was severe: He became addicted to prescription drugs, wasn't spending time with his family, didn't sleep enough, and finally landed in rehab, his life having come undone. His is a

**Burnout, page 2**

## 5 ways to integrate STEAM into instruction—right now

**BY MICHAEL C. KNOWLTON, M.ED**

Picture your last trip to the grocery store. The aisles are filled with options—too many really. For example, selecting a carton of eggs might take a little more time than it used to. You have cage-free, vegetarian, organic, pasture-raised, and even eggs enhanced with Omega-3 fatty acids. Scientists call this phenomenon "choice-overload," and it can lead to us swearing off eggs forever. In my experience visiting hundreds of classrooms and thousands of students, many teachers are faced with a similar

**STEAM, page 4**

## 10 priorities for K-12 IT leaders

**BY LAURA ASCIONE**  
Managing Editor, Content Services

School districts are moving to highly digital ecosystems, and K-12 IT leaders have more and more to manage to ensure that teaching and learning can go on uninterrupted by failing or clunky technology.

CoSN's annual IT Leadership Survey offers critical insight into what's expected of today's K-12 IT leaders. The survey's findings help to identify areas where IT leaders might need more support and assistance as they work tirelessly to meet the IT needs of administrators, teachers, and students.

"From managing infrastructure and cloud-based services to rostering and passwords, the sphere of IT leader responsibilities continues to expand. Ultimately, IT leaders are connect-

**Priorities, page 3**

## Burnout

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cautionary tale for teachers. How do they walk the fine line between professional and personal well-being?

They start, explained Ashley, by understanding that happiness is made up of relationships, financial stability, professional satisfaction, and physical and mental health.

### Making learning exciting

Nurturing excitement in the classroom builds professional satisfaction, said Ashley. Switching up teaching styles to find more creative and interactive ways to engage students encourages them to become part of the learning process.

Students, emphasized Ashley, fall in love with the “remarkable, exceptional, new, and interesting content” so much they enjoy coming to school. Turns out, it has the same effect on teachers.

### Behavior management

Rules provide the consistency that children need. But if they aren’t based in mutually respectful relationships, they lose their value.

Ashley relies on Gary Chapman and Ross Campbell’s book, *The 5 Love Languages of Children*, which highlights what young people need to form respectful connections, to drive the way he shapes his relationships with students around these languages:

**Affirmation:** Pointing out positives so students know that they’re doing the right things.

**Quality time:** Encouraging student participation in group activities and providing opportunities for interaction with others during recess or in the cafeteria, for example, to give children time and space in which to form bonds.

**Physical touch:** Giving children fist bumps and high fives, for example.

**Personalized gifts:** Rewarding prizes, such as colored pencils, playing cards, and even a lollipop can help to create connections.

Acts of service: Doing good for stu-

dents to demonstrate care and concern.

### Stating your personal creed

Figuring out personal and professional priorities helps teachers to remain balanced. This requires finding answers to questions-to-self in four key areas:

**Style:** What lifestyle do I want to have? What style do I have when it comes to teaching and living?

**Values:** What are really the most important aspects of my life? What’s at the top of the priority, and what’s not at the top?

**Joy:** What do I enjoy doing the most? Where do I find myself laughing and smiling and losing a sense of time and place?

**Legacy:** What do I want to leave in this world?

### Family and friendship

Quality time with family, especially children, is crucial to personal well-being. Ashley follows the advice of parent expert Amy McCreedy who recommends parents blocking out at least 15 minutes a day to spend with their kids without cell phones, computers, or video games in the mix.

It’s equally as important to not be isolated from friends who substantially contribute to a person’s well-being.

### Financial happiness

Teachers’ salaries can be limiting. Ashley recommended budgeting, wise spending, saving, and investing, and establishing an emergency fund to greatly reduce financial anxiety that can erode emotional health.

### Physical and mental health

Ashley urged teachers to monitor and address the following issues in order to be the best they can be in mind, body, and spirit:

**Sleep:** Teachers don’t get enough sleep, affecting how they function in the classroom. Avoiding caffeinated and sugary drinks after 12 PM; eliminating schoolwork and technology in the bedroom at night; wearing blue-light block-

ing glasses when watching TV; and lowering room temperature by two or three degrees before jumping into bed are among research-based actions that improve sleep habits.

**Anxiety:** Fear, worry, and rumination eat away at teachers’ emotional stability. Often, they fret about issues that can be positively addressed. Flipping to the benefits of a potentially negative situation reduces anxiety. Stressing over a principal’s review of your teaching? Value any feedback in order to improve.

**Depression:** This is common among teachers and becoming more prevalent. A bonafide chemical imbalance triggers depression, which is exacerbated by poor eating habits, social isolation, and failure to compartmentalize. Teachers can consider working with a mental health provider to deal with depression.

**Exercise:** Working out at least 30 minutes three times a week uplifts your mood and puts you in a better mental state. Going to a gym is one option but riding a bike, playing a sport, hiking... all are good for the body and mind.

Ashley assured that rebuilding, renewal, and reinventing are possible. The Japanese, he explained, call this process “kintsugi,” the act of gluing back together broken pieces of pottery with a golden lacquer that makes the piece even more beautiful than when first created. Educators, he said, should ask themselves how to beat teacher burnout and rebuild their lives with gold.

### About the presenter

Justin Ashley is an award-winning teacher, motivational speaker, author, and public education advocate from Charlotte, North Carolina, where he began teaching in 2007. He is also a highly sought-after speaker for professional development. He has been an inspirational keynote presenter for thousands of current and future teachers, creating an atmosphere that bounces back and forth between rapt silence and raucous laughter. In 2013, he became the only teacher ever to win both North Carolina History Teacher of the Year



## Priorities

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ing administrators to operational efficiency, teachers to actionable insights, and students to opportunity. As districts focus on closing the homework gap, IT leaders have another dot to connect—home access,” according to the survey.

IT hardware and management companies such as LaptopsAnytime—which offers kiosks that give students and educators access to the right laptop, tablet, or combo device at the right time—along with others such as Impero, Classlink, and Skyward, are just a few of the partners aiming to help school and district IT leaders with this balancing act.

The survey breaks down the top 10 findings to help IT leaders manage their responsibilities and outline their priorities.

### 10 things impacting K-12 IT leaders this year

1. Cybersecurity is the top priority for IT leaders today. It comes as no surprise, according to the survey, because school districts collect more data and threats to that data are increasing.

2. The top 3 challenges faced by IT leaders for the past 3 years remain the same: budget, professional development, and breaking down department silos.

3. Bring Your Own Device (BYOD) strategies declining in popularity. They are used by only 16 percent of school



districts, probably as a result lower cost devices being introduced to the market.

4. Virtually all IT leaders (95 percent) agree that addressing the homework gap is a concern for their district. This is a significant change. Last year 30 percent of leaders indicated digital equity was not important issue for their district vs. only 5 percent one year later.

5. Print is not dead. Past predictions have been overly optimistic. For 67 percent of districts, print still comprises at least half of their instructional materials.

6. There is some progress on all areas of interoperability, but only Single Sign-On (SSO) has been fully implemented in more than a quarter of school systems.

7. This survey identifies a number of ways in which IT leaders are looking to be more relevant to teachers and learning, with 75 percent of IT Leaders saying it is important to be more responsive

to educator IT needs in the classroom.

8. The largest percentage of IT leaders continue to have education backgrounds (40 percent), followed by those with technical backgrounds (35 percent), a growing number from business/management backgrounds (20 percent) and other (3 percent).

9. Lack of ethnic and racial diversity in school district IT leadership remains a serious problem in most school systems, with no progress since last year. “The ethnic and racial diversity of IT leaders continues to look very different from the population they serve,” according to the report.

10. The percentage of women in school district IT leadership roles has declined in recent years. In 2016, women made up 36 percent and men 64 percent of IT leadership positions, and in this year’s survey, the breakdown is 28 percent female and 77 percent male. **eSN**

## Burnout

continued from page 2

and North Carolina Social Studies Teacher of the Year in the same year.

### Join the community

Social-Emotional Learning, Positive Behavior, and Student Achievement is a free professional learning community on edWeb.net that offers a place for educators to explore practical, effective ways to integrate social-emotional learning, inclusive teaching practice,

and higher-level instruction.

This edWeb broadcast was sponsored by Free Spirit Publishing. The recording of the edWebinar can be viewed by anyone at <https://home.edweb.net/webinar/studentachievement20200211/>. **eSN**

*Michele Israel writes about the ideas and best practices that are shared in edWeb’s edWebinars so they can spread innovative and best practices to the education community. Michele owns Michele Israel Consulting, LLC, which serves large and small educational, nonprofit,*

*media, corporate, eLearning, and blended-learning organizations to bolster products and programs. Her rich career spans over 25 years of successfully developing educational materials and resources, designing and facilitating training, generating communication materials and grant proposals, and assisting in organizational and program development. In addition to lesson plans and other teacher resources, Michele’s portfolio includes published articles covering a range of educational and business topics.*

## STEAM

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feeling when starting their instructional transformation with STEM or STEAM.

As a teacher-leader and STEAM Innovator in Santa Rosa County, FL for the good part of the last decade, I have made some incredible observations that can undoubtedly help every teacher transform their instructional practice and better prepare their students from kindergarten to career.

Here are five ways to immediately integrate STEAM into classroom instruction:

### 1. Connect with an industry expert or professional.

Here's some precious wisdom for students: "You can't be what you can't

Trips are my "go- to" when I want to immerse my students in an unforgettable learning experience that will take them far- beyond the walls of their classroom.

### 2. Know WHY your standards are meaningful.

Imagine having an answer for that age-old question: "Why do I need to know this %\$#?" Okay, so maybe the conversation is not actually that harsh, but students' tone can pretty well communicate the sentiment. Nevertheless, the best reply to this terrific- kid is an authentic response articulating the job-skills and career opportunities related to that standard.

Roll the tape! "Students, after today's lesson, our goal is to be able to explain how an author develops the point of view of the narrator or speaker in a text."



see." One of the best ways to awaken a child's future is to show them the possibilities. Don't just say, "You can be anything." Students need examples, interactions, and experiences that will provide context for future opportunities.

You can ignite passion and drive enthusiasm by connecting your classroom with experts in-person or virtually. To this point, I rely on two resources in particular: Skype in the Classroom and Discovery Education's Virtual Field Trips, which can be found in Discovery Education Experience. Both fantastic resources allow you to search for connections and virtual experiences by topic, grade-level, and even by various careers and industries. All in all, Virtual Field

Terrific Kid: "Mrs- I mean Mr. K... When will I ever have to do this in real-life?

Mr. K (STEAM teacher): "Perhaps, you could use these skills to trace someone else's personal experiences to determine why they may have certain opinions or beliefs..." Almost like a judge-placing themselves in the shoes of the accused in order to determine an appropriate sentence.

As a teacher who has answered this question many times, I will say that one of my favorite resources is STEM Connect by Discovery Education. This resource provides challenges, model-lessons, and more to make your teaching purposeful. The best part is that it

eliminates the need for teachers to create lessons on their own. The heavy lifting has been done for us, so we can get some precious time back to teach.

### 3. Let students struggle.

Not for punishment, but, because you care. Be a learning facilitator and force students to take individual responsibility. At the same time, support student collaboration. Allow them to utilize technology as a resource and encourage students to ask their peers before their teacher. Also, require your students to teach each other. This model is a much more accurate representation of their future workplace.

### 4. Imagine your classroom as a professional workplace.

Organize your students into purposeful groups that model a professional hierarchy. Compartmentalize classroom responsibilities by creating student-groups that are responsible for unique tasks that require real-world skills.

For example, I may organize my classroom of 20 high school students into 4 collaborative groups of 5 individuals in each group. Moreover, Group 1 (Intelligence) may be responsible for researching and communicating intel to Group 2 (Design Team), which is responsible for designing a plan to execute a task guided by group 1's research/expertise. From there, Group 2 collaborates with Group 3 (Consultation services), which provides feedback to Groups 1 and 2 on the progress so far. In the meantime, Group 4 (Management) may be responsible for administrative tasks such as recording ideas, securing supplies, monitoring behavior, and providing support as needed.

The beauty about this Henry Ford-inspired student-centered learning is that you can change your group members by the day or week. It is as easy as: "Next Monday, Group 2 will be the new design team."

As an added level of engagement, I use Canva.com to create free professional-looking company badges that students can proudly don. Not only are kids excited to feel official, the badges also serve to

**STEAM page 15**

# Using robots to bring science to life

Two STEAM educators share how their hands-on earth and life science lessons engage and enlighten young learners

**BY KATIE BLAGDEN  
AND BARB TENNYSON**

As elementary STEAM educators, we have both learned that the best way to teach science is through hands-on exploration where lessons are both rigorous and relative to all of the students in the classroom. Incorporating robotics, coding, and engineering into these lessons is a great way to engage students and inspire them to apply their learning.

It can be something of a challenge to incorporate this hands-on learning into some science units, such as earth and life science. For example, many life science units focus on looking at plants and animals and reading about their environments—leaving out the integral hands-on engineering and robotics. Here are two tech-infused lessons that have increased student engagement and brought elementary earth and life sciences to life.

## Teaching earth science and collaboration in the ‘Windy Day’ project

In Barb’s 1st-grade classes, STEAM lessons revolve around wind and weather. One example is the “Windy Day” project. We start by talking about the science vocabulary. It’s first grade, so we focus on questions like what’s hot, what’s cold, what does wind feel like, and what does it look like outside?

To simulate a windy day, students use art materials like streamers and feathers and attach them to a KIBO robot. They code the robot by creating sequences of programmable wooden building blocks that have commands printed on them, and then use the robot itself to scan the blocks and start their program. They also sometimes use the robot’s sound module to record their own windy day sounds. They make silly sounds of wind rushing or sometimes record their voice telling the story of the robot. These recordings become part of their program.

The first time the robots come out, we set a timer, and they have two minutes to put it together with no directions. It’s amazing what 1st-graders can figure out in two minutes! We intentionally don’t give every student their own robot. It’s usually three in a group, and everybody has a job.

A lot of our work is about getting kids to know what it sounds like and looks like to work as part of a group.

Before the lesson, we go through strategies for how to make decisions as part of a group, and at the end, we ask them to reflect on why they built their KIBO the way they did, and why the program they coded made their construction look and act like a windy day.

## Helping robot animals survive the winter

One of Katie’s favorite and most engaging 1st-grade life science lessons combines animal survival and coding the KIBO robot. The unit starts with a compelling, standards-based question: “How do animals survive in the winter?” Students brainstorm and construct explanations by sharing ideas and drawing models. It’s also helpful to contrast their animal survival techniques and adaptations with humans’ solutions to surviving in the winter.

Next, students get to the best part: applying their knowledge by coding a robot. First, they decorate their robots as winter animals, such as arctic foxes or polar bears, which they have previously researched. They get together with partners and choose an animal to draw. They then draw it using white crayons on blue paper and attach it to their robot. The class discusses what food and shelter their particular animal needs to survive a



cold winter, then students create a model shelter using paper to make a dome where their “animal” can sleep.

The class then talks about how animals use body parts like arms and beaks to collect food. Students add arms and claws or beaks to their robot using paper, tape, and binder clips. Then they create a sequence and program their robots to scoop up the model food they created out of paper and bring it to their shelter.

They set a timer, and the animals need to bring food inside their domes within a certain amount of time before they “freeze.” It challenges students to work out an algorithm with their KIBO blocks and to scan the blocks to get their robot animals to move a certain way in a short amount of time. As a bonus, there can be predator animals added to the game as well.

For assessment and to communicate their learning, students use an interactive media app called Seesaw. They record themselves discussing what they learned in the lesson, and they share a picture or video of their project. This is an effective way to check for student understanding, especially in large classes of active students.

## Inspiring collaboration and engagement

Using open-ended tech tools allows students to understand life and earth science topics through true representation. As elementary teachers, we both love

**Robots, page 15**



# 3 steps to rethink failure

BY LEANN SIMMERMAN

Failure can be a painful experience for anyone, but it is especially tough for teens who are still forming a sense of self. When people experience failure, they often report feelings of embarrassment, shame and depression. Teens can perceive it as a judgment – final, condemning and irreversible.

But, as many educators know, failure is an essential part of the learning process. A 2016 study from Columbia University found that high-school students' science grades improved after they learned about the personal and intellectual struggles of scientists, while students who only learned about the scientists' achievements saw their grades decline. The study also indicates a positive link between learning about the struggles of others and student motivation.

So, yes, failure is important, but how do we teach it? Here's a three-step plan from Rethinking Failure, a no-cost lesson from TGR EDU: Explore. Use these strategies to help students reconsider failing, and turn it into a catalyst for future success.

## 1. Define failure.

After introducing the topic of failure, I ask students to consider what it means to them personally. What does it look like? What does it feel like? What are its social implications? Afterwards, students share their perspectives with each other, engaging in a Socratic Seminar style conversation.

At first, students often gravitate towards the “ugly” side of failure. At this point, I intervene to propose another view: there are two sides to failure, and if we learn to use it as a mechanism for growth rather than self-punishment, it becomes a catalyst for future success.

In an article about failure's role in long-term success, educator Monica Fuglei shares her reasoning behind hosting an ‘I hope you fail’ lecture each semester.

“After years of teachers asking for the right answers [my students] aren't accus-

tomed to someone highlighting or requesting the wrong ones. Students' failures tend to linger, creating mental baggage that interferes with learning. Lifting the burden requires us to address failure head-on and encourage students to accept it as a natural part of getting educated.”

To help students overcome the ‘failure’ barrier, we must introduce them to the benefits that failing can offer.

## 2. Analyze the role of failure.

It's important for students to understand how struggle can ultimately lead to success. I like to walk through a few profiles of individuals who are famous for their successes, but have also experienced notable failures.

For example...

Sonia Sotomayor experienced chronic disease, troubled family relationships and a failed marriage during her journey from a housing project in the Bronx to a seat on the Supreme Court.

Professional athlete Michael Jordan was cut from the varsity basketball team during his sophomore year in high school.

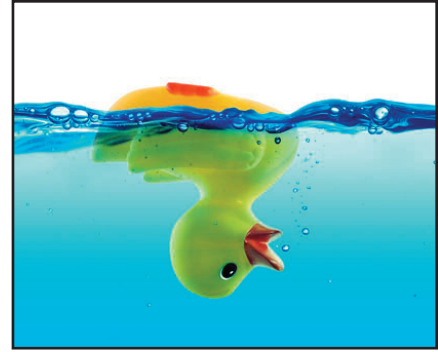
Oscar-winning director Ang Lee failed Taiwan's college entrance exams (twice), and had his application to acting school denied because his English wasn't considered to be good enough.

Activist Mahatma Gandhi was sentenced to six years in jail for conspiracy after his civil disobedience campaign, which promoted non-violence, justice, and harmony.

I have students collaborate to discuss the role failure played in each person's success. It's important to communicate that failure is inevitable, but doesn't need to have a negative result.

## 3. Apply a growth mindset approach to reframe failure.

Author, blogger, and entrepreneur Jia Jiang once gave a TED Talk on rejection. Jiang embarked on a personal quest to desensitize himself from the pain of rejection, and ultimately overcome his fear. His journey revealed a



world where people are much kinder than he'd imagined, and rejection was less painful than he once believed.

To overcome his fear, Jiang changed his mindset. To help my students overcome fear of failing, I encourage them to embrace a growth mindset. Coined by researcher Carol Dweck, individuals with a growth mindset believe their talents can be developed through hard work, good strategies and input from others.

When it comes to rethinking failure, a growth mindset can change the way we overcome challenges. We can grow our brain's capacity to learn and solve problems, and use our newfound power to rethink how we overcome challenges.

For example, a thought such as “our school's STEM club sounds like fun, but it's too difficult for me, I don't think I could ever join it” can be transformed to “our school's STEM club is fun, but it's also challenging – it would be a great way to feel the satisfaction of finishing a difficult project.”

In the end, it's important for students to know that failing is a part of improvement, and if you aren't making mistakes, you aren't learning. We have an opportunity to make the most out of our lives when we risk failure.

When students feel comfortable making mistakes, the nervous feeling of being ‘wrong’ goes away, and is replaced by an opportunity to learn and grow. I urge every teacher and parent to help their students become comfortable with failure, and to make the invaluable connection between failure and future success.

ESN

*LeAnn Simmerman is a teacher of the gifted at Maury County Public Schools.*

# 8 tips to launch an esports program in your district

Esports emerges as a learning and social catalyst in schools—and its benefits are growing

**BY MICHELE ISRAEL**

It may lack sweat equity, but it's up there with even the most physically demanding of sports. Esports, the competitive side of video gaming, is exploding. And K-12 schools are buying in, because esports is not only fun, but also a viable educational tool!

A recent edWebinar, "Ready Player One: Esports in K-12," highlights why esports has taken hold in schools. Research-based evidence affirms its highly positive impact on students' academic achievement, soft skills, and social-emotional well-being.

Dr. Dennis Large, the director of educational technology for the Riverside County Office of Education, among the first county offices in California to facilitate an esports league, knows first-hand the power of gaming in schools.

The county jumped on the esports train to heighten student engagement. Schools with gaming clubs boast substantial benefits, chief among them bringing disenfranchised students—often not participating in school athletics—into the community to be accepted and celebrated.

"Those esports members and players," said Large, "carry just as much swagger, just as much social credibility as do any track stars or football or water polo stars," he emphasized.

County esports clubs keep growing. Those that started with six or seven players are now at 150 members. Recently, the county sponsored its first league tournament, where 50 school teams competed. Students who once couldn't wait for the school day to end now rush to after-school esports clubs, where they have friends, socialize, and build community while strengthening gaming skills. Truancy and tardiness have declined.

Kevin Brown, esports program specialist of the Orange County Department of Education and the North American Scholastic Esports Federation (NASEF), described how esports affects students' overall well-being.

He cited NASEF research illustrating gaming's impact on student achievement. Not unlike traditional sports teams, esports programs set scholastic output requirements, and students must maintain specific grade averages to participate. As a result, players tend to excel academically.

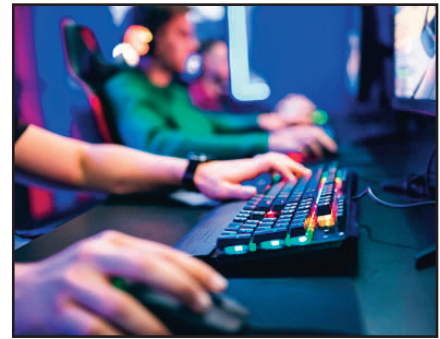
Esports bolsters Next Generation Science Standards-aligned competencies. Students improve math skills (applying mathematical theories and formulas to calculate gaming strategy), become more tech-literate, and strengthen their scientific reasoning and problem-solving capabilities.

Brown described how students from other countries grow their English language skills as they communicate with peers in clubs and use games in coursework.

Students gain leadership, communication, and problem-solving skills that help them become college and job ready. In clubs, they are peer coaches, graphic designers, fundraisers, and game strategists—roles that build career competencies.

Players assume responsibility, win humbly and lose gracefully, form supportive and collaborative relationships, and self-moderate—all critical social-emotional skills. They establish harmonious partnerships and have meaningful conversations with peers and adults. They can sit with people who are equal to or maybe a bit better at gaming to learn from them, putting ego aside.

This may be hard to believe, but esports also builds students physically.



They may not be running laps, but gamers do fortify hand-eye coordination, brain function, and rapid calculation skills. They also have a robust physical orientation in 3D worlds.

Does all of this esports-generated benefit have any value beyond school? Absolutely. Colleges actively recruit gamers for their esports teams (more than 170 colleges and universities participate in competitive gaming), courting them with substantial scholarships, which could total \$100 million in 2020.

Esports is also a professional industry that in 2018 generated \$906 million in revenue, and has the potential of reaching \$3 billion by 2022. Millions of people worldwide follow esports. Some casual gamers are celebrities earning big bucks and garnering major brand endorsements.

If your school is ready for esports, follow the tips Brown and Large offer to jump-start a quality program. Be sure to use NASEF's helpful resources to guide you.

**1. Discovery** – Reflect on the purpose and construct of an esports program. What goals and outcomes do you want it to address? What do you want the club to look like? What values should be promoted? (Take a look at NASEF's.)

**2. Stakeholders** – All school community members (administrators, parents, teachers, students, counselors, and board members) should be involved in the design of an esports program, with the understanding of its benefits and

**Esports, page 8**

## Esports

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awareness that not all video games are toxic. Stakeholders create community standards dictating, for example, the types of games that can be played, what tournaments clubs can join, etc.

**3. Technology** – Ask yourself: Does the school have the technology to support games? If not, are there funds to buy what is needed? Is there Wi-Fi? Is the school hardwired? What gaming platform should we use? Is there a campus IT coordinator?

**4. Leadership** – All clubs/teams require a general manager who is an adviser and keeps the group operational. Consider virtual college-level coaches that NASEF provides through Connected Camps. Decide how to recruit student leaders or support students who want to start an esports team.

**5. Criteria and Code of Conduct** – Clubs should establish charters that ensure members properly compose and comport themselves during club time, at tournaments, etc.

**6. Safety and Security** – Ensure compliance with the Children's Internet Protection Act. To avoid privacy and protection issues, consider using a console-based game room that is internet-free.

**7. Inclusion and Diversity** – Create opportunities for all students, especially those who are underrepresented: girls, students of color, and the differently-abled. Think about recruitment: Will there be an audition and roles for students who are not the best players?

**8. Game Selection** – Brown's response to students who want to play Grand Theft Auto? Never going to happen! Standard first-shooter games are typically violent and not good options for school esports. There are gentler choices like Overwatch, Fortnite, and Splatoon. To select the most age-appropriate games, follow the ESRB ratings, search for reviews that organizations like Common Sense Media provide, and peruse NASEF's recommendations. Find out what students want and help

them select games within guidelines.

Esports' growing popularity, particularly in schools, validates what students have known for a long time: That gaming is awesome—on so many levels.

### About the presenters

Dr. Dennis Large is currently the director of educational technology for the Riverside County Office of Education. In this position, he works with the school districts in Riverside County as they implement programs such as online and blended learning, personalized learning, and California State Standards and assessments. He is proud to have played an integral role in the development of the Leading Edge Certification program, the Technology Leadership Network, the Riverside County Google Camp, and the Riverside County Esports League. Previously, Dennis was an administrator for the Los Angeles County Office of Education for 13 years, where he did similar work around educational technology. Dennis also was a classroom teacher for 13 years, with experience in elementary, alternative education, and special education. Dennis recently completed his Ed.D. in educational technology leadership through an online program at Boise State University.

Kevin Brown thought he would be a lifelong hotelier, working with five-star properties like Four Seasons Hotels. He found his way into education after the massive shift in the hospitality market post-9/11. Kevin taught career technical education classes (primarily hotel hospitality and management) for the Orange Unified School District in California before being recruited to open a massive hotel project in Newport Coast, California. Kevin returned to career technical education just in time to catch the rising tide of educational restructuring through esports, where he puts his years of experience as a gamer, classroom skills, and a passion to meet kids where they are to the test every day. Kevin holds a business management degree from Argosy University and a teaching credential from California


State, Long Beach, and he speaks more languages than most people have toes.

### About the host

Jennifer Eehalt is the Pittsburgh regional manager at Common Sense Education. She is responsible for helping school districts build a culture of digital citizenship among educators, students, and their families. She designs and delivers professional development for preK–12 educators that focuses on the implementation of Common Sense's K–12 digital citizenship resources, along with how to integrate technology into the classroom. Through her work, she has had the opportunity to share best practices by presenting at ISTE, ASCD, PETE & C, IDEACON, and GAETC.

### Join the community

Digital Learning & Leadership is a free professional learning community on edWeb.net where you can share, learn, and discuss ideas and best practices to enhance teaching with technology.

This edWeb broadcast was sponsored by Common Sense Education. The recording of the edWebinar can be viewed by anyone at <https://home.edweb.net/webinar/commonsense20200115/> 

*Michele Israel writes about the ideas and best practices that are shared in edWeb's edWebinars so they can spread innovative and best practices to the education community. Michele owns Michele Israel Consulting, LLC, which serves large and small educational, nonprofit, media, corporate, eLearning, and blended-learning organizations to bolster products and programs. Her rich career spans over 25 years of successfully developing educational materials and resources, designing and facilitating training, generating communication materials and grant proposals, and assisting in organizational and program development. In addition to lesson plans and other teacher resources, Michele's portfolio includes published articles covering a range of educational and business topics.*



# 7 things that keep young women in engineering

**BY LAURA ASCIONE**  
Managing Editor, Content Services

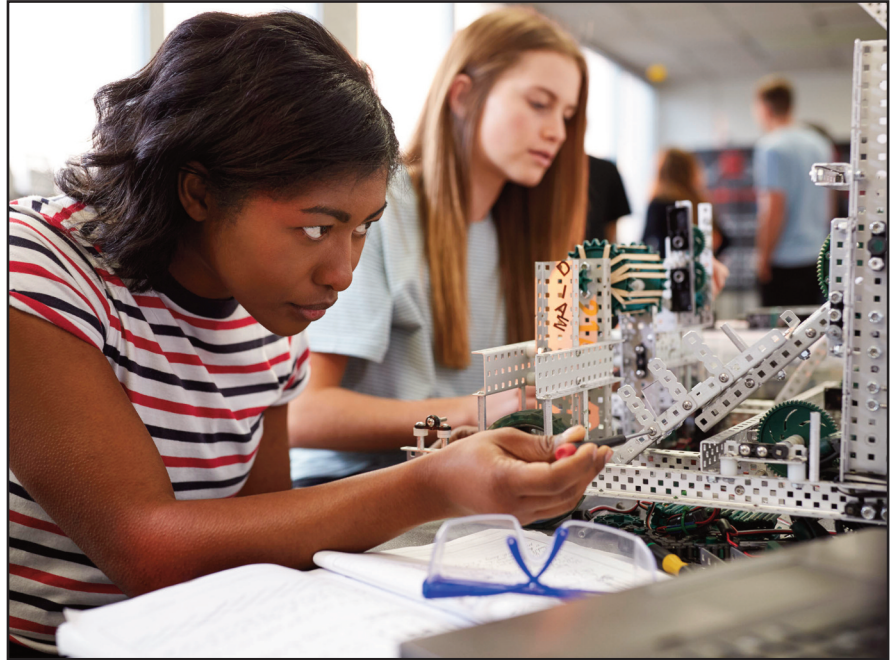
As the nation faces a STEM worker crisis, renewed focus is paid to the shortage of young women who pursue engineering career paths in higher ed and who go on to remain in the engineering field. But rather than focusing on the factors that push young women out of engineering, researchers are instead looking at factors contributing to women's success in engineering education and careers.

DiscoverE, which works to involve more girls and women in engineering, partnered with Concord Evaluation Group to publish *Despite the Odds: Young Women who Persist in Engineering*, a comprehensive literature review that pinpoints commonalities contributing to girls pursuing, and then remaining in, engineering education paths and careers.

While there is much attention paid to the factors and events that push women off STEM education paths and out of engineering careers, there is less of a focus on the factors that help these disciplines retain women.

This review found a handful of high-quality studies exploring STEM education and career success. Some of those studies focused generally on men and women, but a few focus specifically on women in engineering, the authors note.

They key factors are organized according to which ones contribute to women choosing engineering and persisting in the field. The report also indicates the type of support for each factor: strong empirical evidence from reviewed literature; emerging evidence for the factor with some gaps in literature, which suggests a need for further research; and an implied relationship, meaning that, while there isn't empirical evidence, there is an implied connection between the factor and choice or persistence.



Those factors are:

**1. Demonstrate an interest in and positive attitudes about engineering:**

Girls who choose engineering hold favorable views of engineers and see the field in a positive light.

**2. See value in the field of engineering:**

Young women who choose or persist in engineering believe that engineers work to solve important problems and that becoming an engineer can enable them to contribute to society and help people.

**3. Demonstrate engineering-related self-efficacy:**

Young women who choose or persist in engineering believe, with confidence, that they have the skills and knowledge to do the work of engineers.

**4. Embrace a STEM identity:**

Young women who choose or persist in engineering embrace the idea that they are or will someday be engineers or other STEM professionals.

**5. Have a strong support network:**

Girls who choose or persist in engineering tend to have strong support networks of friends, family, peers, and/or role models.

**6. Draw upon social and cultural capital:**

Young women who persist in

engineering are often able to draw strength from personal or cultural experiences of struggle to overcome obstacles.

**7. Feel a sense of belonging:**

Young women who persist in engineering report feeling as if they have found a place where they belong in the community of engineers or engineering students.

One underlying theme is evident, according to the authors: factors including girls' interest in engineering, how they perceive its value, and their self-confidence to take ownership of engineering learning or careers are likely impacted and supported by their participation in informal engineering learning experiences such as clubs and enrichment activities, along with having the opportunity to tackle engineering-related topics in school.

Additional research is essential, according to the authors, especially to see if success factors vary depending on women's race, ethnicity, socio-economic status, gender identity, and more. More efforts and interventions should be conducted in a scientific manner so various factors can be evaluated for their success and distributed in a more widespread manner.

eSN

# Here's why this principal started a school turnaround with SEL

The academic needs were clear, but they all connected back to the need to build relationships among students, teachers, and family members

**BY BELINDA VASQUEZ**

I worked in juvenile probation for eight years before becoming a teacher, so I've seen the potentially devastating effect of the emotional issues that kids deal with. Before I took over as principal at Bluebonnet Elementary, I was an assistant principal at the middle school, where many of our discipline issues stemmed from students not being able to problem-solve or maintain healthy relationships.

When I became principal, talking to my staff, my teachers, the families, and

needed to understand why teachers were trying to build relationships with them.

On the other hand, my teachers told me that, as a result of high principal turnover, there had been a lack of consistency, leading to distrust of the administration. My immediate promise to them was: "I'm in this with you. Trust me."

Clearly, our teachers needed SEL themselves. Whether they're in the classroom teaching or in the hallway talking to another team member, students hear the language they use and see the way they

lum as our foundation.

We wanted students to be using the same language at home as they were at school, so we also engaged our "parent partners." We call them parent partners because we see them as an indispensable part of our community. We got them involved by hosting a family event in the fall where we taught everyone what the 7 Mindsets are, why applying them in their homes would help their kids, and how we're helping their kids learn them at school.



the community was an eye-opener for me. They pointed out areas of dire academic need, but underlying all of them was a lack of community.

So rather than focus on, for example, increasing test scores in math, my leadership team and I decided to start by integrating social-emotional learning (SEL) into not just our curriculum but our entire community.

## SEL for students, teachers, and 'parent partners'

In those early conversations, I found that many of our students didn't feel a part of something big. They needed a foundation of confidence in themselves and in their school as a community, and they

behave. I needed my teachers to build relationships among themselves so that, even if they had disagreements, they could do it in a healthy way.

To establish a common set of goals for the whole school, we put together a team of teachers. I helped them develop a vision, but they were the ones who presented it to the staff. Our performance objectives were attendance, discipline, and building relationships. Our thought was once we were on a better trajectory with those three things, we would start seeing improvement in academics. My own children had learned the 7 Mindsets, such as "everything is possible" and "100 percent accountable," at the school they were attending, so we used that curricu-

## Student-led assemblies

Our assemblies are pretty much 100 percent student-led and mindset-focused. We identify grade levels, then give them a mindset and tell them when they're going to present and the highlights they need to hit. We have meetings far in advance so they know we're supporting them in the planning process, but what the assembly looks like is totally up to the students.

It has been amazing. Some kids are very willing to go on stage and take over, but we've also seen kids who usually wouldn't be so vocal come out of their shells and present in whatever way they feel comfortable. They might recite a beautiful poem, but they'll do it behind a curtain, in a disguise, or in a video. They make those choices, but we always make sure that the end result is students recognizing students.

## Developing student leaders

Like many schools, we develop leaders through our student council and National Elementary Honor Society. We also have passion projects that tie into our 7 Mindsets. Every student has to participate, but how they participate can be different. For example, some stu-

**Turnaround, page 16**

# This district uses micro-credentials to boost PL

Teachers in remote rural schools are developing micro-credentials to overcome geography and connect to personalized professional learning

**BY JENNIFER CARROLL  
AND ROBERT BROWN**

Nationally, distance is a barrier to traditional in-person training opportunities for teachers and administrators in many rural areas. Four years ago, the Kentucky Valley Educational Cooperative (KVEC) decided to “flip the script” on professional learning and use micro-credentials to benefit its educators in small remote rural schools scattered throughout the mountains of southeastern Kentucky.

Rather than asking educators to spend their limited time and money traveling great distances for professional learning, we chose to use technology as a tool for overcoming distance. We began developing our own personalized, competency-based micro-credentials to connect our educators with new opportunities to improve their teaching and advance in their careers.

They’re also addressing unique challenges faced by students living in our region – a high-poverty, isolated area larger than the state of Connecticut.

KVEC is an education service agency serving 23 school districts in the mountains, hills, and hollers of Appalachia. KVEC provides professional learning for more than 3,000 teachers and its staff members are very familiar with the challenges facing rural districts, schools, and teachers seeking high-quality professional learning.

Some of those challenges include:

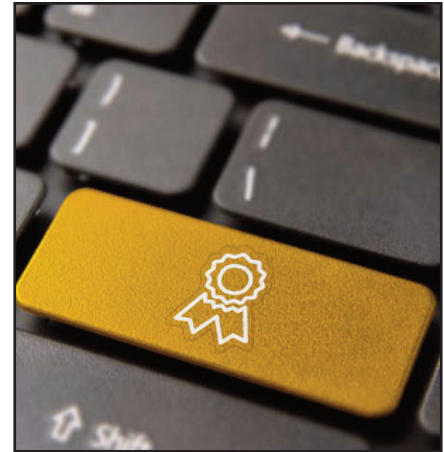
- **Distance:** Conferences and other professional learning opportunities can be four to six hours away from some of our schools and districts, requiring overnight lodging and other travel issues.

- **Logistics:** Teacher and substitute shortages make it impossible for individual or groups of teachers to attend a training or be out for multiple days.
- **Personalization:** Professional learning needs to meet the needs of the individual teacher or administrator and with professional learning not being funded in state budgets, there is little opportunity to provide for individualized learning for educators.
- **Quality:** Rural districts, due to funding and other constraints, tend to resort to sit-and-get PD that often doesn’t prove effective or provide time for implementation and reflection.

KVEC works with teacher practitioners and other experts to develop micro-credentials relevant to their classrooms and communities. Micro-credentials are digital representations of educational achievements. Just like medals earned for skills training, micro-credentials represent the completion of requirements set by the organization issuing the credentials.

Credentials earned by teachers at the beginning of their careers are often referred to as certifications, awarded in a particular area of instruction. Micro-credentials represent smaller, bite-size learning, mastery of skills, and are awarded for the demonstration of very specific competencies. A micro-credential is not represented by a certificate or a diploma—instead, badges are awarded for demonstrating mastery. Badges can be displayed on social media accounts, in a digital portfolio or “backpack,” or even in an email signature.

Micro-credentials are clinical. Educators engage in learning “on demand.” They can access the learning



at school during their planning times, at home, waiting in a doctor’s office or anywhere they would like to spend time learning. Micro-credentials are housed on an online platform.

Educators apply the learning in the context of their work — in their classroom, school, and district — to gather evidence and artifacts of the learning within their practice. Artifacts might include video, student work, lesson plans, written reflection, pictures, or any other evidence of professional practice and/or student outcomes.

KVEC’s micro-credentials are available to anyone, anywhere, anytime with an internet connection to the Digital Promise platform (<https://microcredentials.digitalpromise.org/>). KVEC works extensively with its partner school districts in Kentucky and throughout the nation to help create systems of personalized, competency-based professional learning, which include micro-credentials.

The next exciting phase of work around digital professional learning engages special education teachers, practitioners, and experts as micro-credential developers. There is a shortage of special education teachers in our region, state, and nationally, particularly in rural areas. Many special education teachers in our region are working with alternative certifications, which means they have little or no pre-service education.

KVEC is building the capacity of special education teachers to curate

**Micro-credentials, page 15**



# Bridging the gap between science and coding

It's possible to incorporate coding and programming into core subject areas—here's how to get started

**BY EILEEN BELASTOCK**

Students exposed to coding and programming at an early age are well equipped to take on higher-level computer science courses in high school—and they also build essential skills for future opportunities in the technology world.

When Rob van Nood was hired as the educational technology specialist for Catlin Gabel School in Oregon, coding and computer science courses were only offered in grades 9-12, and not to students in the younger grades.

This lack of coding education in earlier grades left a significant teaching gap in 21st century skills such as problem solving, designing, and computational thinking.

In a recent edWebinar, van Nood explained that it is his mission to mentor and facilitate computer science learning in a manner that integrates coding in every aspect of his students' education.

Engaging students with coding and computer science must extend past the walls of the computer science lab. Hence, while it is great to see students on the ground, learning from coding tutorials and programming robots, students must be able to make a connection between coding and the physical world.

"I didn't feel great that I spent all this time building these relationships with kids and getting them to understand a little bit about coding. Then, after those days, they didn't have any other use for the technology or use for coding outside of robotics that they might do at a camp," said van Nood.

Integrating coding and programming into K-8 core curricula takes a special relationship and commitment between classroom teachers and instructional technology specialists.

When applied properly, coding and

programming can have a positive impact on core curricula. van Nood sees not only more engagement of students but examples of problem-solving skills like conditional thinking and trial and error that are enriching classroom instructions.

Middle school science projects such as the environmental aspects of sustainability and the Copernican Revolution are great opportunities for students to use products such as mBots and SAM Lab tools to apply to their learning. The familiar Goldilocks story becomes a project when students are the designers and prototype builders of the perfect "tea" temperature using tools such as SAM Labs, Microbits, Vernier probes, and LEGOs.

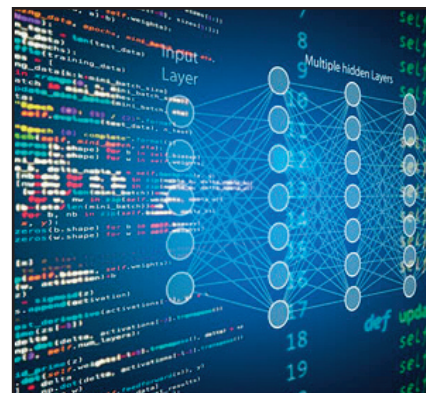
Science courses are not the only way to connect students to coding. Middle school social studies curricula on Feudal Asia/Medieval Europe and the Hillary Steps are perfect avenues for incorporating STEM tools. When students develop, analyze, and interpret data and artifacts, they are challenged to explain their thoughts in writing as well as show their ideas in strong metaphorically visual models.

van Nood emphasizes that students need to be creators of their learning. It is critical to establish best practices for engaging students with data collection technology.

Recognizing that girls are excellent coders, both curriculum leaders and classroom teachers must develop inclusion strategies to overcome the prevalent gender stereotypes of coding and robotics.

## About the presenter


For the past 22 years, Rob van Nood has been passionate about creating spaces and experiences where kids can



explore and pursue their passions. Rob has taught in public, charter, and independent schools and has worked with students from PreK to 12th grade. Currently, as Catlin Gabel School's Educational Technology Specialist, he supports teachers, administrators, and students to integrate technology, making, and tinkering into their learning experiences. Part of Rob's responsibilities is to also find creative ways to bring the world of coding into the lives of students through integrated projects. As the co-founder and lead educational designer at Tinker Camp, he runs tinkering and maker workshops for educators across the Portland, OR, and Vancouver, WA, metro areas.

## Join the community

STEM Learning: Full STEAM Ahead is a free professional learning community on edWeb.net that provides educators, curriculum leaders, and industry members with a place to collaborate on bringing more science, technology, engineering, and mathematics into the classroom.

This edWeb broadcast was sponsored by Vernier Software & Technology. The recording of the edWebinar can be viewed by anyone at <https://home.edweb.net/webinar/stem20191205/>. 

*Eileen Belastock, CETL is the Director of Academic Technology for Mount Greylock RSD in Williamstown, MA, and also works with edWeb.net to write articles on their professional learning edWebinars. You can follow Eileen on Twitter @EileenBelastock.*

# A strategy to help struggling adolescent readers

Learn how to maximize learning and help elevate students to reading proficiency

**BY SUZANNE CARREKER,  
PH.D., CALT-QI**

According to the Nation's Report Card, about two-thirds of eighth-graders are not proficient readers. What's even more alarming is the fact that the size of that cohort has remained steady for the last 25 years! This means, unless they have had intervening remedial instruction, the majority of ninth-to-12th-grade students are also non-proficient readers. And, as can be seen by the Report Card, those inadequate reading comprehension skills are producing below-grade-level performance across academic subjects.

Fortunately, research shows that adolescence is not too late to learn to read well. The challenge for teachers is that one class of students will contain a wide range of reading abilities and needs, from those who are virtual non-readers to ones who are at grade level or above grade level.

So, how do we teach all those students to read well? How do we maximize student learning? And how do we minimize the time it will take to get them to reading proficiency?

## Understand students' strengths and weaknesses

Even when they display similar reading proficiencies, students' overall strengths and weaknesses are going to be very different. Therefore, it is essential to pinpoint the specific reason for a student's lack of proficiency.

You can find information on students' strengths and weaknesses through the following resources:

- Individualized Education Programs
- Formal educational evaluations
- Universal screeners
- Progress monitoring tools
- Summative assessments
- Teacher observations—yours and other teachers', including those who have worked with the students in the past



## Determine the cause

Once you have that information, you can use the Simple View of Reading formula to determine the cause of particular patterns of strengths and instructional needs. The formula proposes that reading comprehension is the product of two interdependent components: word recognition (also called decoding—the accurate and automatic translation of printed words into their spoken equivalents) and language comprehension (the ability to derive meaning from sentences and text through listening):

**Word Recognition x  
Language Comprehension  
= Reading Comprehension**

Students can struggle with either or both components, giving rise to three learner profiles. Below is a brief overview of how to identify these different learner profiles and address their learning needs, but you can find more details in a white paper, “Supporting Non-Proficient Adolescent Readers: Identifying and Addressing Why They Struggle.”

*Adequate language comprehension, inadequate word recognition*

Students with this profile focus so much of their cognitive resources on sounding out the words in a text that they can't pay attention to the text's actual meaning. But they have very good listening comprehension; if they listen to the text, they can focus on meaning. Some may have dyslexia. These students need word recognition instruction in order to be able to instantly and accurately recognize words so that their cognitive resources are ready for meaning.

*Inadequate language comprehension, adequate word recognition*

These students can read accurately and fluently, but they will struggle to tell you what the text is about. They have limited vocabulary and are confused by non-literal language, e. g. idioms, metaphors, and multiple meanings. These students benefit from learning morphology (the meaningful parts of words), and the syntax of complex

**Strategy, page 15**

## Strategy

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text. They should be reading grade-level classical and contemporary informational and narrative text, but you'll need to provide scaffolding to help their comprehension.

*Inadequate language comprehension, inadequate word recognition*

These students' reading inadequacies may be due to high mobility; every time they move to another school, they're dealing with a different curriculum, resulting in disjointed learning and (very likely) low motivation. Finding books with subject matter that matches their interests could ignite their enthusiasm for reading. They will need the instruction prescribed for the previous two profiles.

This profile may also describe English learners who have strengths in decoding and language comprehension in their native language but may still be learning to read and write in English. If the students are Spanish speakers, you can take advantage of the fact that 30-40% of English words have cognates (words descended from the same language) in Spanish since both English and Spanish contain Latin and Greek parts.

## Apply the Structured Literacy™ approach to each student's needs

The instructional approach best suited for students with these profiles is Structured Literacy™. Informed by reading science, it emphasizes the structures of language:

- Phonology (the language's sound system)
- Orthography (the language's written system)
- Morphology (meaningful parts of words)
- Semantics (meanings of words/relationships among words)
- Syntax (sentence structure)
- Pragmatics (the use of language)
- Discourse (the organization of spoken and written language)

Students receive explicit, systematic, and cumulative instruction that contains a logical order of skills and concepts (moving from simple to more complex). New learning builds on prior knowledge, and instruction is multisensory or multimodal so as to engage students and increase memory retention.

## Explicitly teach academic language and personalize learning

Additionally, all the student profiles discussed need instruction in academic language to help their comprehension. Also called "the language of the classroom," academic language consists of domain-specific words, literary words not often used in everyday conversation, and synonymy (thinking about words that have the same meaning).

The most important thing we educators can do is meet each student where they are. When students enhance their areas of strength and remediate areas of instructional need, they have energy and ideas for the future—hope. According to the Gallup organization, when students have hope, they can set attainable goals and can see multiple pathways to achieving those goals. This increases their agency, their engagement, and their wellbeing. All of that is necessary for them to achieve college, career, and life success.

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*Dr. Suzanne Carreker, CALT-QI, serves as Principal Educational Content Lead at Lexia Learning.*

*The most important thing we educators can do is meet each student where they are. When students enhance their areas of strength and remediate areas of instructional need, they have energy and ideas for the future—hope. According to the Gallup organization, when students have hope, they can set attainable goals and can see multiple pathways to achieving those goals. This increases their agency, their engagement, and their wellbeing. All of that is necessary for them to achieve college, career, and life success.*



## STEAM

continued from page 4

identify which group or team they are in for the time being. On the back of the badge, I may list soft-skills required for this group to have success or provide real-world examples of where this type of team may fit into corporations like Boeing, Microsoft, or IBM.

### 5. Be creative and flexible with assessments.

Dare to be different. Make the leap and you and your students will feel inspired by all the ways kids can show you that they really know what you're teaching them. For example, replace a traditional 'matching' vocabulary test in a fourth- grade classroom. Instead of students drawing a line on a worksheet from a keyword to its rigid definition, allow students to describe the vocabulary term in their own unique way. One phenome-

nal way to incorporate this strategy is to simply ask open-ended questions such as, "What does the word mean?" Some creative responses may include metaphors, pictures, synonyms, correct sentence usage, memes (yes, memes), artwork, short stories, photographs, claymation, or faux social media posts. As a superstar-STEAM- teacher, rely on clearly -defined rubrics (I use this tool to create my own) to accurately measure student- proficiency while providing flexibility and creativity for the performance task. In this example, the student could score up to 25 points in four categories: 1. Clear communication 2. Accuracy 3. Support & Development and 4. Creativity. As a bonus, I find that I can commonly recycle these custom rubrics across many topics and assessments or performance tasks.

In the end, we've all walked away from the egg aisle a little unsure if we made the right purchase, wondering,

"Should I have gone for the free-range brown organic?" The truth is, you have to know which type of egg is best for you. Ultimately, the best egg is the one that satisfies your hunger.

So, whether you call it STEM (Science, Technology, Engineering, & Math), STEAM (Science, Technology, Engineering, Arts, and Math), or even STEM (Students and Teachers Energizing Minds), use these 5 methods to satisfy your students' curiosity by serving up real world practice, right now in the classroom. **eSN**

*Michael C. Knowlton M.Ed. is the Professional Learning Specialist at Florida's Santa Rosa County Schools and is passionate about helping educators build a culture of STEAM instruction in their classrooms. Want to learn more? Contact Michael at knowltonm@santarosa.k12.fl.us.*

## Micro-credentials

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their knowledge and expertise by engaging experienced faculty in identifying the skills and competencies needed by all special educators, and teaming them with KVEC staff experienced in developing micro-credentials.

Through this collaborative project, KVEC is strengthening the skills of experienced teachers while providing personalized professional learning for new and inexperienced teachers who otherwise may not have access to additional training specific to special education.

Other micro-credentials are being developed to include: Teaching Rural Students From Poverty, Progress Monitoring, Curriculum-Based Measurement, Eliciting Student Responses, Adapting Math Lessons for Students with Disabilities, and Co-Teaching Between Special Education and Regular Education Teachers.

KVEC expects to release a stack of 12 co-developed micro-credentials by early spring 2020 and continue this

model of empowering and building the capacity of educators and administrators to develop micro-credentials as a high-quality, clinical, personalized form of competency-based professional learning.

Professional development is often lacking in rural schools and education funding isn't always equitably distributed to support teacher training in our state and nationally. For these reasons, rural school leaders and educators are innovative out of necessity.

We are using technology to create new tools for overcoming persistent challenges, creating new opportunities for learning, and ensuring geography doesn't determine destiny for our students and communities. **eSN**

*Jennifer Carroll and Robert Brown lead the micro-credentialing work for the Kentucky Valley Educational Cooperative (KVEC). For more information about KVEC and the work with micro-credentials, contact Jennifer Carroll at jennifer.carroll@wolfe.kyschools.us or robert.brown@hazard.kyschools.us.*

## Robots

continued from page 5

blending coding with valuable science concepts. Every project students create ends up looking different because they don't have step-by-step instructions. Instead, they have the creative freedom to show what they understand.

At the end of every class, students share what worked and what didn't work. It helps them find alternative solutions to common problems by collaborating with their peers. It also allows both teachers and students to see patterns in successes and challenges. It's a great way for students to learn coding, life science, and life skills from each other. **eSN**

*Katie Blagden is a K-4 STEAM educator and science curriculum coach at Ayers Ryal Side Elementary School in Beverly, Massachusetts.*

*Barb Tennyson is the instructional technology specialist and STEAM educator at the John Eliot Elementary School in Needham, Massachusetts.*

## Turnaround

continued from page 10

dents develop “passion posters” that we place around the school to display what they’re passionate about.

We foster connections among different grades by having our 4th- and 5th-graders serve as reading mentors to our kindergarten and 1st-grade students. Once a week, the older students go read to the younger ones and help them develop their literacy skills.

To further build a sense of community, we have student ambassadors who help with morning drop-offs. They open every door, they say “good morning” to kids and families, and tell them to have a nice day. At our bus drop-off, they high-five or fist-bump every kid, then wave goodbye to our bus drivers and tell them to have a great day, too.

### Improving attendance to build community

Making school a place that students want to be has greatly impacted our attendance. When I started, we were at just over 95 percent for the year. Our goal has been 97 percent for the past two years. Last year we were at 96.76 percent, so we didn’t quite get there, but we’re improving.

We’re also using attendance to rein-

force our sense of community. Every week we communicate attendance to family members, and we celebrate the highest attendance for grade levels by awarding “Attendance Champion” banners that they display in their classrooms. We celebrate individual attendance for kids who have been at school every day for a week or a month. So we’re offering a number of incentives to get that data where we want it.

### Using discipline data to strengthen relationships


Discipline referrals at Bluebonnet were high for an elementary school when I got here. We wanted to use a better metric, so our referral data for this year has been based on the number of admin-assisted calls.

We’re logging the frequency of our admin calls and the frequency of what each call is for. This year, we’ve been responding to these calls by going to classrooms and not just finding out what’s going on, but taking that teacher’s class so they can walk out and have a conversation with that student. We believe that the best way to improve discipline is to build relationships between teachers and students. From the start of the school year to November 1, 2018, we had 33 referrals. This year, as of November 1, we’d had just eight.

## Connecting SEL and academics

Our academic performance has significantly increased, especially when it comes to reading. Our district’s goal is for each student to show 1.5 years’ growth in reading and math per academic year. At this time last year, 49 percent of our students were reaching 1.5 years; this year it’s 67 percent.

We use student/teacher conferences to reinforce SEL concepts. When a teacher shares positive academic data, she’ll say, “You see, everything is possible.” Our students are hearing the social-emotional component in every meeting, across all subjects, and they’re achieving at higher levels because they feel confident.

We talk the talk, and we walk the walk—literally. Our administrators do at least 10 walkthroughs a day. During our daily announcements, we let kids know, “We’re going to come see all the wonderful things you’re doing in class. We know that you’re 100 percent accountable. We know that you’re going to do great things.” 

*Belinda Vasquez is the principal of Bluebonnet Elementary in Lockhart, Texas. She can be reached at [belinda.vasquez@lockhart.txed.net](mailto:belinda.vasquez@lockhart.txed.net).*

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eSchool News covers the intersection of technology and innovation in education. We focus on how technology can help educators improve learning and deliver instruction more effectively, enhance the student experience, and transform their schools.

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eSchool News ISSN: 1098-0814 is produced 4 times a year.

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