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THE FUTURE IS EMERGING

- A Dream for the Future of Career Exploration

- Helping Young People Find Their Voice in Public Media

- A Mixed Reality Alternative to Performance Testing

- 2021 ACTE Board of Directors Election

- Embracing the V Word — at Virtual VISION!



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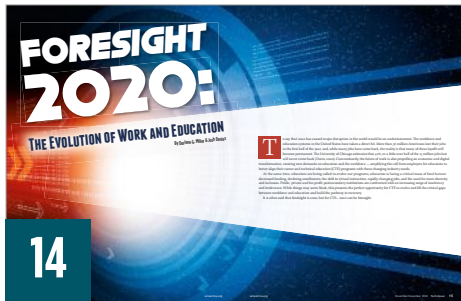
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THE FUTURE IS EMERGING!

THOSE WHO HAVE HEARD ME BRING GREETINGS AT A STATE CONFERENCE HAVE PROBABLY HEARD ME SAY, “THERE HAS NEVER BEEN A MORE EXCITING TIME TO BE part of career and technical education!” And that is something I truly believed... prior to March of 2020. The context of that comment

stemmed from the significant shift in attitude toward career and technical education (CTE) that I have witnessed over the last decade — an attitude that more favorably recognizes the critical role our profession plays in local, state and national economies and the positive difference we make in the lives of individuals.

Now, in the midst of the pandemic, do I still believe there has never been a more exciting time to be part of career and technical education? Yes. There has never been a more exciting — and challenging — time to be part of career and technical education. We have the opportunity to work together to reimagine CTE in a post-pandemic world.

Often it takes disruption for systems to make significant shifts in the way they do business. Disruptions challenge current organizational habits, uprooting and changing how we think, behave, do business and go about our day-to-day lives. This is certainly what I have experienced at ACTE as a result of COVID-19.

Much of the attitude change toward CTE can be attributed to ACTE's work in advocacy and professional development and its focus on program quality. As the unifying organization for CTE professionals, ACTE's program of work and strategic initiatives brought us together to enhance the credibility of our endeavors. It is the work of our talented ACTE staff, board and members, and the manner in which we have responded, in the midst of a pandemic that will ensure the future of CTE continues to be innovative and exciting.

Prior to COVID-19, none of us would have imagined virtual state conferences or a Virtual VISION. We wouldn't have embraced webinars, online professional development and telecommuting the way we do today. ACTE provides strong leadership as we navigate this new road.

I have heard it said that it is not the disruption that is positive or negative; it is how we respond to it that influences our outcome. I am extremely proud of how we, ACTE, have chosen to respond to this disruption.

Appropriately, this issue's theme is, “The Future is Emerging.” Read on, and learn from articles addressing topics that couldn't be more relevant. I invite you to allow them to inform your thinking as, together, we shape the future of a profession that we love.

Doug Major
ACTE President

Techniques

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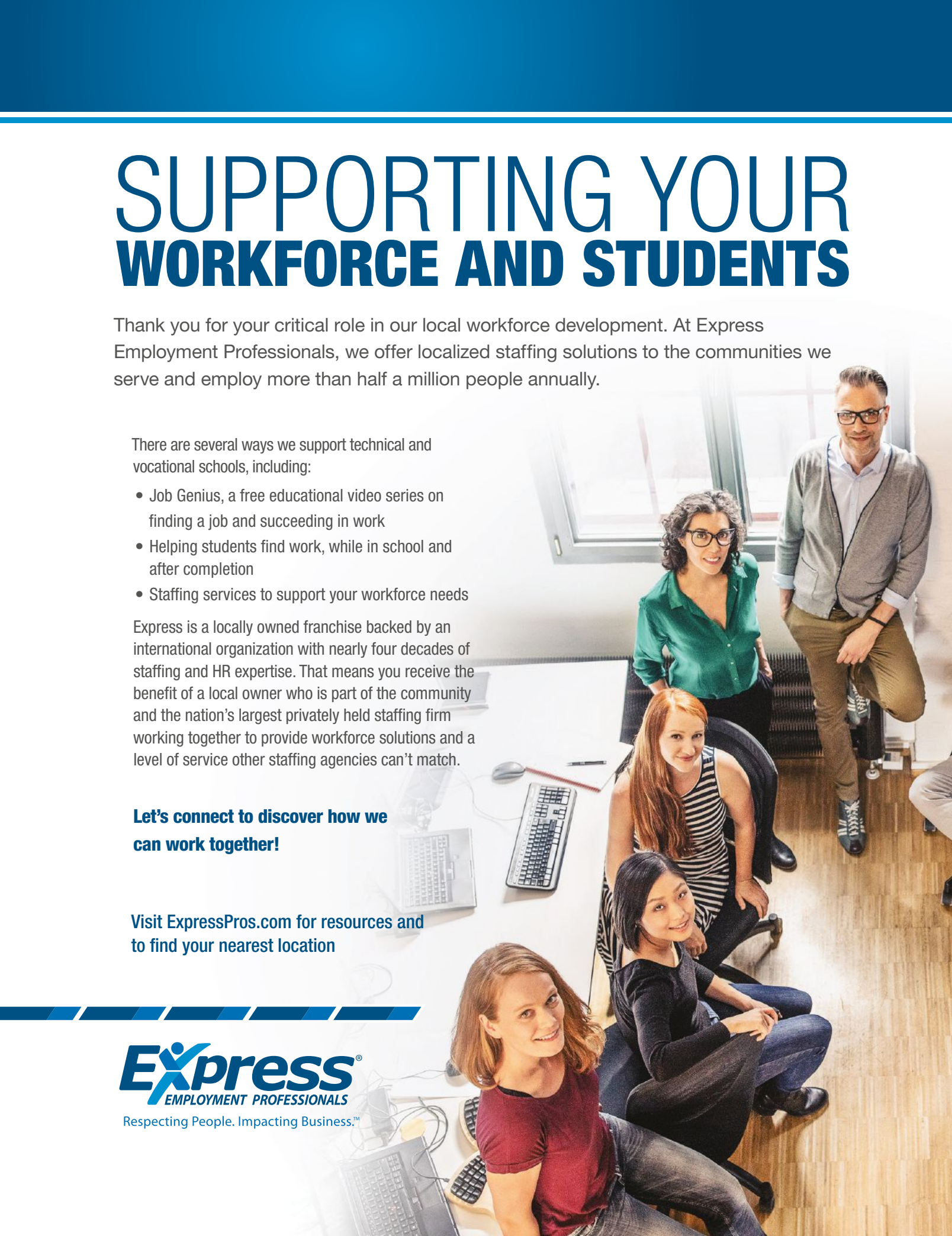
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CRAFTING A SOLID CTE SOCIAL MEDIA MESSAGE

By Jakki Wiseman

“Content is fire; social media is gasoline.”

– Jay Baer (2014)

LOVE IT OR HATE IT, SOCIAL MEDIA IS A HUGE PART OF OUR STUDENTS' LIVES. CAREER AND TECHNICAL

education (CTE) teachers, we need to meet our audience where they are. We must use these platforms as a way to inform and educate our students about the opportunities that are available for them in the world of CTE.

Why social media? We have a great website!

While websites are wonderful resources, full of great information, they are the end

result and not the starting place for students. The goal of a well-crafted social media message is to get students (and hopefully their parents, too) to look further into their options.

Our target audience is constantly looking at their phone; as many as “91% of all social media users access social channels via mobile devices. Likewise, almost 80% of total time spent on social media sites occurs on mobile platforms” (Standberry, 2019). If they are already on their phones and on these platforms, meet them there! Tell them about CTE!

What platform, and why?

While there are many different social media platforms to select from, Facebook, Twitter and Instagram are the three most popular in the education and business world. Each has its pros and cons:

- Facebook has the most users and the ability to share posts.
- Twitter is limited by the number of characters but also allows users to share tweets for a wider audience.
- Instagram is an amazing visual medium, but sharing is only enabled in stories.

All three platforms offer users the option to tag others (as well as locations and businesses) and categorize posts with hashtags. Facebook, Twitter and Instagram all provide space for students and parents to engage in dialog about CTE pathways and related course options.

Things to consider when setting up your social media accounts

1. Select the same username across all platforms; keep it simple and to the point. We chose CTEinSC — short and relevant. This will also make you easier to find.
2. Use a generic email address when setting up the accounts. When responsibility is passed on, login details won't be tied to one person's account. This also makes it possible for multiple people to share the responsibility of posting.
3. Review any relevant public release guidelines for understanding. School, district or agency public relations personnel are your go-to source for this information.

4. Select and use hashtags consistently. Make sure to check first that they are not being used by anyone else.
5. Establish clear messaging. What information do you want to convey in each post? And don't forget to include your hashtags! **#cteinsc #futurereadycte**

Planning is key.

Like any other long-term project, good planning is key to social media success. Consistency is also very important. Deliver posts to your audience on a regular basis. Determine and adhere to a reliable schedule; a shared calendar can facilitate this.

Sometimes, content development will be easy and you'll have an abundance of material. Other times, you'll need to get very creative. Planning a monthly focus, or seasonal themes, can help with your planning. We put together a calendar of suggestions for last year's CTE month celebrations.

Support and build connections.

Strong relationships with business and industry are a very important component of career and technical education. Social media is an excellent tool to encourage and support these connections. This is

where tagging, sharing and retweeting can play a powerful role in showing others how important these collaborations are to our students and their future career choices. Social posts also help showcase the companies working with our students. It's a win-win!

Involve the students.

Who knows more about this medium than our students? Developing relevant content for their peers would be a valid and powerful learning experience in many career clusters. This sort of involvement also presents an opportunity for project-based learning and/or a possible internship position. Social media platforms let students become teachers as we learn to capture our current, and future, CTE students.

Learn from examples.

Tap into the power of the internet. Visit a search engine of your choice, and discover what is already out there. Search CTE. Search career and technical education; nobody says you have to start from scratch! What kind of posts catch your eye? How are they structured?

A good example can be a great teaching tool.

A helpful hashtag tool:
hashatit.com/

Still not sure?

Start small. Try one social media platform until you feel comfortable expanding to others. It's better to do one outlet with 100% of your efforts, than several at 50%. ■

Jakki Wiseman is the professional development education associate in the career and technical education office at the South Carolina State Department of Education. Prior to this, she was a classroom teacher and technology coach in Alaska, North Carolina and South Carolina for 27 years. Email her at jwiseman@ed.sc.gov.

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Get creative! Create great content.

Here are some resources I have found to be very helpful:

- Foodimentary, because who doesn't love a good food holiday? There's one for every single day! **foodimentary.com**
- On the National Day Calendar, there are so many great wacky holidays out there that you can use to relate to your content. **nationaldaycalendar.com**
- This Day in History offers a great way to relate what students are learning about today to something that happened in history. **history.com/this-day-in-history**



THE UNTAPPED POTENTIAL OF CULTURALLY RESPONSIVE TEACHING IN CTE

By Daniel K. Bullock & Julie A. Pack

IN 2018, DURHAM PUBLIC SCHOOLS (DPS), A LARGE URBAN SCHOOL DISTRICT IN NORTH CAROLINA, adopted a new strategic plan aimed at closing educational gaps in students' learning experiences. One of the targeted disparities on which the district focused was the gap between the graduation rates of white students and students of color. DPS found that white students were graduating at a rate of 91% within four years, while Black and Latinx students were graduating at rates of 83.1% and 71.4%, respectively. One strategy named for decreasing the disparity in graduation rates:

Increase the number of career and technical education (CTE) completers as data showed that CTE completers had a 100% graduation rate.

Thus, it became imperative that the district devise ways to strengthen the cultural relevance of instruction and programming within CTE and beyond. How would we do this? What would it look like to infuse culturally responsive teaching (CRT) in CTE?

In this article, the authors will:

- Define culturally responsive teaching
- Describe how CRT might be utilized in a CTE classroom
- Provide tips, resources and recommendations to expand the use of CRT in CTE and, potentially, other subject areas

What is cultural responsiveness?

Zaretta Hammond (2015), author of *Culturally Responsive Teaching and the Brain*, defined culturally responsive teaching as:

an educator's ability to recognize students' cultural displays of learning and respond positively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content... All the while, the educator understands the importance of being in a relationship and having a social-emotional connection to the student in order to create a safe space for learning.

Additionally, Geneva Gay (2010) defined culturally responsive teaching as "using the cultural knowledge, prior experiences, frames of reference and performance styles of ethnically diverse students to make learning encounters more relevant to, and effective for, them."

Some educators may find it a challenge to apply these definitions of culturally responsive teaching in career and technical education. One initial barrier to utilizing CRT might be the distinctions between the racial/cultural identity of teachers and the racial/cultural identity of students.

In 2017, the National Center for Education Statistics reported that approximately 79% of teachers were white compared to only 48% of students. Conversely, only 21% of educators were educators of color, despite students of color being the majority of students served in public schools.

If culturally responsive teaching calls for educators to use the cultural knowledge of diverse students to make learning more relevant, then teachers in CTE classrooms must commit to professional learning that helps them develop knowledge of diverse cultures. Much of this professional learning should focus on helping educators build healthy relationships with students and establishing social-emotional connections.

What does cultural responsiveness look like in a CTE classroom?

Relationships with students are a key component of a culturally responsive classroom. As a CTE teacher, it is important to recognize and acknowledge your own cultural identity and privilege as well

as the cultural identities of your students. Ensuring that classroom interactions (teacher–students and students–students) show respect and appreciation for diverse backgrounds, opposing perspectives, varied life experiences and values help to establish classroom relationships where students feel valued.

A classroom inventory assignment will give teachers unique insights on each student. A CTE business teacher might assess students' ideas for starting a business or organization and discuss business types through the examples that students provide.

A culturally responsive CTE classroom will affirm and value the worldviews of the historically underrepresented. To ensure you are centering multiple perspectives, take a hard look at your educational resources, including the posters on the wall.

What messages do these materials send to your students?

Pay attention to the people and stories highlighted to ensure that the students in your classroom can see themselves reflected in affirming ways. Activities should reflect and honor the diverse backgrounds your students bring with them and those they will encounter in the workplace.

For example, in a culturally responsive culinary arts classroom, students will learn food preparation and baking skills while cooking a variety of dishes from around the world. In a CTE business class, the teacher might lead a discussion on institutional barriers, like redlining, that Black and Latinx entrepreneurs face while starting a business.

One of the most important components of CTE is the relevance of learning for use beyond the classroom.

The culturally responsive CTE classroom not only connects the classroom to the world of work, but it also relates to the students' real-life experiences, communities and cultures.

In addition, the CTE classroom should provide space for students to develop an understanding of established systems of oppression, especially as they relate to the

workplace, and how to take action against them. These critical conversations about racism and sexism in the workplace — in regard to hiring, promotions, compensation and discrimination — can help to build a social justice framework for students within the context of career and technical education.

Racism often manifests in hiring practices where applicants with similar or equal qualifications are less likely to get a callback if they have Black-sounding names, compared to applicants that have white-sounding names. It is important to have conversations with students about these practices, how we work within discriminatory systems, and how we can work to dismantle them.

Helping students to confront inequity in their school and local communities — such as increasing access to rigorous and high-level courses — will enable them to take action and contribute to change. It is also important for teachers and schools to expose underrepresented student groups to high-demand, high-wage CTE pathways such as computer science, engineering, biotechnology and finance.

Work-based learning and pre-apprenticeship programs increase opportunities for students of color to build relationships with employers that lead to future employment.

Where can you learn more about culturally responsive teaching?

The first step in creating a culturally responsive CTE classroom lies in making the decision to evaluate materials, relationships, content and pedagogy through a culturally responsive lens. ■

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To learn more about ways your classroom can become more culturally responsive, check out these resources:

- Teaching Tolerance provides free resources to educators who work with children in K-12 to inform their practices and create civil and inclusive school communities where children are respected, valued and welcome participants. **[tolerance.org](https://www.teachingtolerance.org/)**
- New America provides resources for change including a report on culturally responsive teaching. **[newamerica.org](https://www.newamerica.org/)**

To assist educators with evaluating classrooms and resources:

- Culturally Responsive Curriculum Scorecard from the Metropolitan Center for Research on Equity and the Transformation of Schools, New York University: **[bit.ly/32GgNyy](https://www.metcampus.org/bit.ly/32GgNyy)**
- Culturally responsive observation checklist from the Educational Service Center of Northeast Ohio: **[bit.ly/3jlpXl9](https://www.esco.net/bit.ly/3jlpXl9)**

TEACHING TOMORROW'S CTE LEADERS IN THE WAKE OF COVID-19

AS THE 2020–21 ACADEMIC YEAR BEGAN IN VIRGINIA, ALABAMA AND ACROSS THE

United States of America, career and technical education (CTE) teachers faced seemingly insurmountable challenges.



Kimberly Wilson



Beth Brumley

Techniques spoke with two such teachers: Kimberly Wilson is a family and consumer sciences teacher with Alexandria City Public Schools in Alexandria, Virginia. And Beth Brumley, a health science instructor and primary certified nursing assistant program coordinator in Tuscumbia, Alabama. Wilson was awarded ACTE's Teacher of the Year at its CareerTech VISION 2019, and Brumley was recognized as New Teacher of the Year.

They are leaders in CTE, giving of themselves to prepare today's students for the

careers of tomorrow — in ways we never imagined, in the wake of COVID-19.

Here, in their own words:

In what ways has COVID-19 affected your classroom and school community?

Kimberly Wilson (KW): In the beginning, I thought that we would only be out of school a couple of weeks and then routines would resume along with early mornings or late evenings at school events. It didn't seem daunting or overwhelming — only an experience and another way of delivering instruction. Quickly, news started to spread about the severity of this global pandemic, and now states and schools were literally shutting down. Breaking news! The announcement came that our school district was closing. We had a few hours to gather instructional materials for at home virtual teaching until further notice. I was shocked, unsure, and now truly overwhelmed!

How will my students respond to this sudden change?

How will it impact student engagement and participation?

The shift was challenging and difficult. Family dynamics, and students' responsibilities, changed. Shifting responsibilities often made it difficult for students to participate or engage in class instruction. For me, the heartbreaking and harsh reality is that I would not see my students face-to-face. What a sense of loss — not being able to say goodbye to students or celebrate their accomplishments! Opportunities for teacher collaboration and jovial camaraderie were all snatched away.

Here are three points to summarize how COVID-19 has affected classroom learning:

1. Some students feel less intimidated using virtual learning as opposed the traditional day-to-day classroom interactions. By utilizing the virtual style of instruction, some students are more motivated, inspired and engaged in the learning process. During COVID-19, students are also able to schedule one-on-one instructional time with the teacher.
2. Many students still do not have reliable technology to engage in daily virtual learning instruction and activities, which leaves them feeling disengaged and frustrated.
3. With the lack of engaging face-to-face interaction and work-based learning opportunities, students lack the desire to participate in the virtual classroom.

Beth Brumley (BB): The question could be asked, "How has it NOT affected our classroom and school community?" As a teacher I love building relationships with students and having engaging conversations with students in my classroom. Masks in the classroom make that challenging. My classroom is too quiet. I know many other teachers feel this way as well.

One positive thing is, teachers have been pushed to learn technology for

their classroom. Teachers who did not use technology in the past are now using it in more creative ways than they thought possible. Our teachers have drawn closer together in our school to share creative ideas. We have almost become a 1:1 school system because of remote learning due to COVID-19. Most of our high school students now have a Chromebook that they are able to take home with them.

How has COVID-19 driven you to innovate in the classroom?

BB: The flipped classroom is a useful tool; I record myself teaching, and the students watch my recording ahead of time, and then we discuss. This has been fun for my students because they come into the classroom feeling more prepared and may be more likely to open up.

Think, pair, share is one of my favorite classroom activities. Because of social distancing, our students cannot get into groups like they used to, but they can share ideas via digital collaboration tools like Google Docs.

My remote students record themselves doing assignments and submit videos for credit. Recently they were tested on how to properly wash their hands. I was impressed by the creativity my students had in a handwashing video.

KW: Whether teaching in hybrid, virtual or blended learning environments, teachers continue to think outside of the box by creating instructional learning opportunities that are engaging and meaningful. Interactive platforms, such as YouTube, Nearpod, Flipgrid and even Bitmoji, are leveraged to keep students focused on the task at hand, which is learning.

Canvas, the learning management system adopted by Alexandria City Public

Schools (ACPS), has allowed me to be more creative in delivering instruction from group/peer interactions to flipping the classroom. Breakout rooms are used for student collaboration. Group/individual presentations allow students to share their screen and work, and students conduct polls for formative assessment throughout the lesson.

I have evolved in my teaching approach with asynchronous and synchronous instruction. When utilizing synchronous learning, my students and I go through the learning process together, which enables me to provide support while students are completing tasks and activities.

Asynchronous learning is student-centered; my students work at their own pace — at different times and spaces particular to individual needs. As a teacher who is constantly changing mindsets and overall classroom vibes, I set the tone for learning. The delivery of instruction and being passionate about the subject I teach are critical to the learning process.

What did back to school look like in your district this year?

KW: We started the 2020–21 school year completely virtual and will continue through the end of the first semester.

BB: Our school began the school year with an A/B schedule. The A students came to class Mondays and Tuesdays, while the B students worked virtually. On Thursdays and Fridays, the groups switched. We also had some students who chose to work completely virtually.

As of Sept. 28, many students returned to the classroom for instruction on Monday, Tuesday, Thursday and Friday. Wednesday is a virtual day for our students, and a grading/cleaning day for our

teachers. After Thanksgiving, if cases are still declining, we may go back to five days a week in the classroom.

What are your thoughts and feelings about the upcoming school year?

BB: At first, I came into this school year with a little anxiety. I have an autoimmune disease, and I am unsure of how COVID-19 would affect me with myasthenia gravis. But the longing to be in the classroom with students I had not seen since March trumped the anxiety and the what ifs. As the year has progressed, we have had very few exposure issues, and very few positive cases in our school. Our students are very thoughtful of others. They have followed every guideline that has been placed.

We persist in our new normal, and we try to look at the positives. I tell my students, every day, that they are a part of history. They will be in history books — how we started school in a nontraditional way, with masks and social distancing.


We hope that long-term care facilities will reopen so that we are able to take care of our patients and that students gain that hands-on experience they need.

KW: When we are able to return to school, I anticipate that teachers and students alike will be technically savvy in navigating the use of technology. Additionally, we will have a greater appreciation for face-to-face learning and a deeper appreciation for the physical classroom environment. I anticipate that, after the first semester, ACPS will reevaluate the state of the pandemic to determine whether we transition to a hybrid model of instruction, traditional environment, or retain the current virtual model. ■

FORESIGHT 2020:

THE EVOLUTION OF WORK AND EDUCATION

By Darlene G. Miller & Josh Davies



To say that 2020 has caused major disruption in the world would be an understatement. The workforce and education systems in the United States have taken a direct hit. More than 36 million Americans lost their jobs in the first half of the year, and, while many jobs have come back, the reality is that many of these layoffs will become permanent. The University of Chicago estimates that 42%, or a little over half of the 15 million jobs lost will never come back (Davis, 2020). Concomitantly, the future of work is also propelling an economic and digital transformation, creating new demands on education and the workforce — amplifying the call from employers for educators to better align their career and technical education (CTE) programs with these changing industry needs.

At the same time, educators are being called to evolve our programs, education is facing a critical mass of fatal factors: decreased funding, declining enrollments, the shift to virtual instruction, rapidly changing jobs, and the need for more diversity and inclusion. Public, private and for-profit postsecondary institutions are confronted with an increasing surge of insolvency and irrelevance. While things may seem bleak, this presents the perfect opportunity for CTE to evolve and fill the critical gaps between workforce and education and build the pathway to recovery.

It is often said that hindsight is 2020, but for CTE... 2020 can be foresight.

The year 2020 didn't create the challenges we are now facing — it has only served as an accelerant for the changes and problems that were already coming. State funding for secondary education has declined over the past decade for nearly half of the states, with CTE programs hit especially hard. Perkins funding for both secondary and postsecondary programs has seen a significant drop since 2004 (Zekus, 2017). While the full extent of COVID-19 on state budgets is still being sorted out, there will be widespread, significant revenue shortfalls.

Missouri has already called for an 18% reduction, and some estimate that nationwide education budgets may be cut as much as 35%. Analysis of historical data suggests that community colleges may suffer “steeper and more rapid cuts in state funding” (Jenkins, Fink, & Brock, 2020). This is especially difficult for community college programs, who are simultaneously being hit by declining enrollments — a key source of revenue. An analysis by the Southern Regional Education Board (2019) found that community college enrollment declined 11% percent nationwide between 2012–17, with potential enrollment drops of an additional 20% for fall semester 2020.

The way we teach, and the jobs we train students for, have changed over the past decade. According to the U.S. Department of Education, while community colleges are leaders in offering online classes, only about half of all community college students take at least one online course (Gallagher & Maxwell, 2019).

To begin the 2020–21 academic year, at least 114,000 public and private schools went virtual over concerns around COVID-19; many more closed in-person instruction after they opened (Kennedy, 2020). This shift toward virtual learning poses a unique challenge for career and technical education programs that may not have the technology to deliver virtual instruction. It isn't just instructional methods that are changing, the very jobs and skills are changing too. An estimated 85% of the jobs of 2030 have not even been invented yet. Moreover, Gabe Dalporto, the CEO of Udacity, highlighted the impact that 2020 has had on the job market transformation. “A billion people will lose their jobs over the next 10 years due to artificial intelligence (AI), and, if anything, COVID has accelerated that by about nine years” (Semeuls, 2020).

While technology will drive the jobs of tomorrow, work of the future will be human work, involving those things that machines cannot do. Human work requires traits such as compassion, empathy, ethics, communication, critical analysis and judgment (Jezard, 2018).

According to a survey conducted by the Association of American Colleges and Universities (AACU, 2018), employers look for graduates who can bring innovation into the workplace, solve

complex problems, communicate clearly and use evidence-based analyses to make their decisions. These are the transferable skills that will be in demand, no matter which career pathway our students follow.

These societal changes have a massive impact on inclusion and diversity in career and technical education. Funding cuts have limited program choices at local schools and created barriers for students unable to switch schools. As state support for postsecondary education falls, those costs have been shifted to students. This one-two punch disproportionately impacts first-generation college students who are predominately Black and Latinx. The move to online classes has only exacerbated the racial disparity of in-person courses as these communities are underserved by broadband access (Chandra et al, 2020). As a result, the success rates of underrepresented minority students, to use the standard classification, are poor (Newfield & Sublett, 2018).

In the face of 2020, career and technical educators across the country are doing what we do best — adapting and changing. Our research found innovative solutions in general categories:

- Building sustainable skills
- Creating lifelong learners
- Developing micro-credentials

Building sustainable skills

The most valuable workers, now and in the future, will be those who combine technical knowledge with human skills. Evolutionary educators are taking this opportunity to create new partnerships both inside and outside their institutions to develop this combination of skills. Jo Alice Blondin, president of Clark State Community College, explained the unique opportunity we have,

“All of the workplace skills and competencies that we teach — critical thinking, teamwork, communication, ethical responsibility and quantitative reasoning — have become even more valuable to employers and the workplace in light of the ‘syndemic’ we are experiencing: COVID, racial injustice, unemployment and mental health. The ideal employee of the future must demonstrate strong competencies in both the traditional liberal arts, and in the occupational training required to do highly skilled technical work. Integrating and embedding these competencies into CTE training is the single most successful way to prepare students for the future of work. Community colleges stand at the ready to meet this need.”

One strategy: Partner with liberal arts faculty to incorporate these skills into CTE programs through integrated lesson plans or classes combined into learning communities. This is a great opportunity for the more than 71% of secondary school districts that have dual enrollment with their local community colleges (Community College Research Center, 2012).

Another strategy: Work with local employers to determine their skills of the future and build them into curricula. This also can be used to build work-based learning opportunities, providing students the opportunity to develop skills in real time and with the latest technology. There are several organizations applying these strategies:

- Questa High School, in collaboration with Los Alamos National Laboratory, University of New Mexico-Taos and local labor organizations, created a public-private partnership to build a one-year, dual-credit program in construction trades. The program allows high school seniors to earn college credits and then enter directly into a union apprenticeship upon graduation — working in the laboratory, receiving additional training, and earning \$18 an hour.
- Houston Community College, Spring Branch Integrated School District and TRIO Electric formed a three-way apprenticeship partnership to offer an industry-led, pre-apprenticeship, dual-credit electrician training program for high school students. Students earn valuable in-demand skills, receive dual credit toward an associate degree program at the college and can apply for acceptance into the TRIO Electric apprenticeship program.

Creating lifelong learners

As automation and AI continue to affect and change jobs, it is increasingly incumbent upon educators to emphasize lifelong learning in CTE. Technology changes will require workers to build new skills constantly throughout their working career. One approach further develops career pathways with multiple on-ramps along the way. Specifically highlighting stackable credentials, both inside and outside of higher education, promotes vertical movement within a career and reinforces the need for lifelong learning. For example:

- Through their *Pathways to Healthcare Program* grant, Arizona’s Pima Community College created five pathway programs (medical office, nursing, medical and physician support, emergency medicine, and other). The steps along each pathway are designed to stack to ensure that students acquire the necessary prerequisites and associated credentials to keep moving up the pathway (Gardiner, Rolston, Fein, & Cho, 2017).
- In February 2020, the American Council on Education (2020) launched the Education Blockchain Initiative. The goal is to identify and evaluate the ways blockchain technology can improve the flow of data among educational institutions and employers while also empowering individuals to translate those skill gains into economic opportunity. This emerging tool utilizes technology to

collect and showcase certifications and qualifications securely and accurately. As a result, it eliminates the barrier of institution and organizational databases that, due to privacy laws, are often difficult to access and share.

Developing micro-credentials

While degrees continue to be the gold standard to demonstrate knowledge and skills, more and more employers are looking beyond traditional two- and four-year degrees. The growth of professional certifications over the past decade has proven that employers are also looking for additional ways to determine skill proficiency. While job requirements commonly list traditional degrees and established certificates, this model no longer fits. The current marketplace demands that businesses operate with greater agility than is afforded by these legacy structures (Jesuthasan & Boudreau, 2018).

And it isn't just employers. Strada Education Network's (2020) public opinion polls have found that, as a result of COVID-19, more and more Americans prefer nondegree programs and skills training over degree programs. To fill this gap, career and technical education programs need to align with local employers to determine the skills needed for their jobs and then develop credentialing for those exact skills. Building these credentials into community college associate degree programs can lead to more effective, employer-recognized and industry-aligned degree programs (Weise, 2020). These credentials could be both an alternative to traditional degrees and also a supplement to ensure that learners have specific skills required by employers.

Private companies are already developing their own certificate programs as a result of the current void in quality offerings. The most dramatic example of this are the Google Career Certificates — a collection of courses taught by Google employees and hosted on Coursera. They take about six months to complete and will cost a fraction of a traditional education.

Kent Walker, the senior vice president of global affairs at Google, explained the value of the certificates to employers. "We will consider our new career certificates as the equivalent of a four-year degree for all related roles." The benefit will go across industry as well, since Google has established a consortium of over 50 employers, including Walmart, Bank of America and Intel, that recognize the certificates.

Leveraging the value of these certificates also creates capital with another key stakeholder group: parents. Employer-centered micro-credentials will encourage more family support of nondegree pathways. As the jobs and skills of the future evolve, so must the perception that a baccalaureate degree is the only pathway to success (Bariso, 2020).

Increasingly, the jobs of the future will focus on skills instead of degrees. This is the sweet spot where CTE programs, at both the

secondary and postsecondary levels, can not only provide an alternative to the inflated cost and time commitment of a baccalaureate degree but can also provide hyper-local focus on the specific job skills needed in our home communities. By building sustainable skills, creating lifelong learners and developing micro-credentials we will prepare our students to succeed now and in the future.

These strategies will also allow us to continue to present the most inclusive path to a living wage and sustainable employment. Now, more than ever, it is imperative that we ensure the future workforce is both skilled and diverse. The key is to take this opportunity to engage and promote our work with employers, students and, most importantly, parents. We need to take advantage of these times; use 2020 as your guide to become more effective, inclusive and relevant. Now is the time for foresight, not hindsight! ■

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A DREAM

for the Future of Career Exploration: Madera Technical Exploration Center

By Kristin McKenna & Alyson Rocco





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adera Unified School District is located in a rural part of California's Central Valley, an area with persistent labor needs in agriculture, health care and manufacturing. The need to align their students' skills with the needs of local industries led Madera Unified to innovate in ways that would benefit the entire community.

First steps

The district's college and career readiness department mapped out the steps required to prepare students for the 20 complete career and technical education (CTE) pathways already in place at their comprehensive high schools. At the time, students were asked to make elective educational choices upon entering high school with no background and no knowledge of the potential long-term impact. The need for career exploration early in a child's education became clear. Students needed to understand the options to make the strategic choices necessary to map out the appropriate pathways to college and/or career success.

In 2017, Madera Unified's college and career readiness department, along with Imago, created a curriculum that represented the industry sectors and pathways offered within the district. This customized curriculum not only gave students an overview of their options, but the pathway videos starred the district's very own high school teachers and facilities. The pilot launched in the fall of 2017 and now concludes each year with a Career Fair for sixth graders in the district.

This was a great first step; students started thinking, earlier, about what interests them and how that might apply to their futures. In 2019, the district added an opportunity for seventh grade students to take an Explorations of CTE Wheel elective. This yearlong course introduced students to six industry sectors offered as pathways in Madera Unified and helped them develop a better understanding of opportunities in eighth grade and high school.

Innovating a workforce of the future

The college and career readiness department, along with members of the superintendent's cabinet, started to brainstorm: How could we connect the work started in sixth grade to that in secondary CTE pathways? Todd Lile, Madera Unified

superintendent, had taught at the Center for Advanced Research and Technology (CART) in Clovis, California, and was impressed with how powerful learning was for students when they had an opportunity for application. It brought about an overwhelming question: Why don't we provide this model for students earlier in their education?

This initial brainstorm launched the idea of an eighth grade school that would be positioned at the forefront of a constantly changing educational system — a lab school ingrained in the idea that education must be engaging, interactive and, most importantly, relevant. The Madera Unified Board of Trustees immediately supported the idea; they recognized the unique opportunities it would bring the students of Madera, bridging the early exploration concept to high school pathways.

The district brought in Theron Cosgrave, a talented expert with Swanson and Cosgrave Consulting who had led similar projects. Cosgrave started with a feasibility study to explore how the idea for Madera Technical Exploration Center could become a reality. After exploring the concept with teachers, community partners, administrators and students, a task force was assembled to start thinking about logistics.

1. Which pathways should be represented?
2. How can core academic and CTE standards be embedded within each lab?
3. And what does a facility like this even entail?



In November 2018, with strong community support, Measure M was passed, due to which Madera Unified raised \$120 million to renovate parts of older schools and build two new elementary schools as well as a new concurrent enrollment middle school — later to be named Madera Technical Exploration Center or MadTEC.

The Madera Unified School District board of trustees again showed overwhelming support of the project at the completion of the 2018–19 school year by hiring Principal Alyson Rocco and a staff of 18 highly qualified teachers. The MadTEC team was given the gift of a year to complete foundational planning and integrated curriculum development. One of those 18 teachers, Linda Tolladay, describes that experience at the beginning of last year:

"I am 60 years old. I should be thinking about retirement. And yet, here I am, giddy as a 25-year-old with the possibility of doing education right, doing school the way that will matter to kids. I cannot believe how fortunate I am to work with such an amazing group of educators, visionaries all, who believe passionately in the lives of young people." She went on to say, "I cannot believe how fortunate I am to work with a principal who gets it, who inspires us with her own dedication and caring and belief in us. I can't believe how fortunate I am to be ending my career in Madera Unified. I cannot wait to see how our adventure progresses."

Tolladay and the other 17 teachers spent the 2019–2020 school year collaborating to build the foundations of this new career-themed lab school, prior to doors opening in August 2020.

Welcome to MadTEC

Madera Technical Exploration Center consists of six career-themed pathways:

- Agriculture
- Media and performing arts
- Entrepreneurship and marketing
- Health sciences
- Manufacturing and engineering
- Public safety

Students identify a pathway of choice and prepare for a rigorous CTE experience at one of three comprehensive high schools in Madera Unified: Madera High School, Madera South High School and the brand new Matilda Torres High School.

So, what makes this school unique not only to Madera Unified, but also the state of California? The fact that the lab school will not present as a traditional school with one teacher in a classroom of 38 students, focusing on one subject at a time. Instead, a lab team of three highly qualified teachers — working together within shared lab spaces — integrates academics through a career theme, with up to 90 students at a time for half a day. Each lab team consists of a CTE teacher, an English teacher, and either a history, science or math teacher. CTE standards are taught alongside content-specific standards for English, math, science or history. Although there are high school programs set up in a similar nature, few districts are doing it in the middle grades.

MadTEC emphasizes project-based learning through a career and technical education lens. The curriculum engages students' intellectual curiosity by personalizing learning through choice, and by giving them a hands-on environment where lessons become relevant to the real world. During the 2019–2020 school year, teaching staff had the opportunity to collaborate with high school CTE teachers about how to build foundational knowledge and employability skills to support the expectations of an exemplary Madera Unified graduate.

Staff visited high school classes, both within and outside the district, which helped guide curriculum development efforts. They witnessed project-based learning in action, observed high-leverage teaching strategies, and gathered information about how they might blend the various school cultures on their site. Since each lab has a CTE teacher and two core teachers, they recognized the need for all staff to go through teacher industry externships. All teachers spent time with local advisory partners to better understand the field and to gain insights about the applied knowledge in their pathway. Additionally, MadTEC staff continued working with Cosgrave on project-based learning, curriculum development and strategic planning.

During the planning year, the school created an identity for itself. Madera Technical Exploration Center staff designed a foundation for the school's beliefs, practices, and commitments to each other and the community. The staff developed a mission, "Madera Technical Exploration Center exists to build strong relationships with students and the community through

project-based, career-themed education rooted in real-world experiences. Madera Technical Exploration Center is where students are empowered to learn by doing." The vision has also been developed, with a commitment to "transform education by taking an integrated approach that keeps equity and the evidence of student learning at the heart of decision-making."

A vision of student engagement

Madera Technical Exploration Center seeks to accomplish this vision by engaging with the community, local business and industry in order to move beyond the traditional approach to education. MadTEC will inspire students through the use of the Graduate Profile to emerge as leaders ready to think, adapt, communicate, collaborate, produce, and contribute."

In order to transform education and bring life to the mission and vision, the team is committed to:

- Designing authentic, innovative and creative projects
- Fostering collaboration
- Modeling integrity, empathy and respect
- Establishing effective communication with all stakeholders
- Inspiring perseverance in the pursuit of excellence

In December 2019, the staff hosted recruitment events at each of three middle schools and four K–8 schools in Madera Unified. The MadTEC staff created six stations for students to get a glimpse of each career and engage in a related activity (e.g., basic CPR compressions, virtual welding, fingerprint lifting, navigating a robot based on computer programming). Students got to experience how computer graphics and audio are laid over each other to create animated movies, and they discussed what marketing tactics are used to promote successful businesses. Teachers and students also briefly explored how the career lens they choose can affect other subject areas.

From these student and parent interest nights, the school saw overwhelming interest in attending in August of 2020. MadTEC filled each of its six labs with 150 students enrolled — 75 students per lab in two sessions per day. The building is scheduled to be completed in November

Follow along with Madera Technical Education Center.
maderatec.com/en/.

2020. The floorplan offers ample space for collaboration, with doors that roll up — opening classrooms to outside spaces or into the shared corridors — and flexible student seating options.

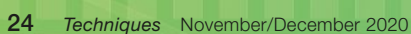
Madera Technical Exploration Center began the 2020–21 school year the week of Aug. 19 in a distance learning environment due to COVID-19 restrictions in California. Because the teachers spent a year engaged in extensive training and planning, they were able to modify many of their plans to work in a distance learning environment. But they are eager to start back with students where the curriculum can be best delivered — once it is safe to do so. Reflecting the last four years in this process, it is truly hard to believe that the opening of school is here. A dream set for the future is finally a reality. ■

Kristin McKenna is the director of college and career readiness for Madera Unified, where she oversees 24 high school CTE pathways and the feeder programs into them. She is a former high school agriculture teacher and California FFA Star Administrator in 2019. Email her at kristinmckenna@maderausd.org.

Alyson Rocco was hired as the principal for Madera Technical Exploration center in 2019. Prior to being with Madera Unified, she spent 15 years in Clovis Unified, 10 as a classroom teacher and five in administration at all levels: elementary, intermediate and high school. Email her at alysonrocco@maderausd.org.



By Dave Boardman & Elis Estrada





A month after the COVID-19 pandemic shut down American schools, the PBS NewsHour, a national nightly news program, aired a segment featuring teenagers from across the country on how they were dealing with social distancing.

"During this whole time, my teachers have been really flexible, especially with the amount of work they give," said Isabelle Mesropian from Canyon High School in Southern California. "Honestly, I miss the classroom atmosphere."

"I'm very upset," said Salma Valenzuela, a senior at Northside Charter High School in Brooklyn, New York. "The coronavirus really affected me because it took away my senior year, and I have just been trying to push through."

The voices came through a distance learning curriculum created by PBS NewsHour Student Reporting Labs (SRL), a national public media initiative that trains middle and high school students to produce video news stories about the biggest issues facing young people today.

SRL was founded in 2009 as an effort to reimagine and redefine young people's experiences with journalism.

"How can we get more teenagers to care about the news?" was the question founder Leah Clapman asked after talking to students who said they didn't see people who looked like them, or hear voices that sounded like them, in the news. The news was being produced by adults, for adults, and their experiences as young people were not being represented.

Over 11 years, nearly 100 student-produced or co-produced pieces have aired on the NewsHour to millions of viewers, and dozens more on local PBS stations, providing thousands of students with intentional pathways for reaching authentic audiences through public media.

With programs in more than 165 schools, SRL works with teachers, students and local PBS stations to experiment with innovative ways of teaching and producing video journalism. Throughout the school year, students pursue news projects tied to national issues, such as the coronavirus pandemic and the presidential election, and get support from journalism mentors and public media professionals. These project-based learning experiences help

students build critical thinking, problem-solving, teamwork and communication skills. They are the essential skills necessary to become informed media creators and consumers in today's world.

A powerful form of learning and civic engagement

SRL's ties to public media give young people the tools to create well-informed content, and provides access to unique publishing platforms. Student reporters in the program are engaged with the issues affecting their community; they are empowered to join important conversations.

It's not only valuable for students to frame their world through the stories that

surround them in times of uncertainty or crisis, but always. Once journalism students gain an awareness of the potential audience, perspectives change; they recognize that they're not just spectators, but journalists themselves. Media researcher Henry Jenkins (2006), a professor at the University of Southern California, terms the approach "participatory culture." School becomes meaningful, and students connect and learn when their work extends beyond the school walls and into greater societal conversations.

When Student Reporting Labs issued a call in 2018 for students to develop stories on "public art" and its role in today's world, Joe Damon, a student from Mid-Maine Technical Center in Waterville, Maine, was at a loss for a topic. But after a conversation with his instructor, he took a nontraditional approach, designing a story pitch about tattoos as the new form of public art.

The topic was an appealing one for Joe, and one that won quick approval from SRL.

While Joe shaped his story with input from his teacher, youth media producers at SRL and suggestions from his peers, it was his vision and sense of editorial style that guided the final story — from the animated title screen to decisions about what to include, and what to cut from the final piece.

The piece, "Public Art: Your Own Canvas," explores the view of tattoos as public art from young people and a professional tattooist.

vimeo.com/333156727



CC: CHRISTOPHER CARPENTER

The story not only earned its spot in an Emmy-nominated Maine Public program — Maine Spring Live: Science, Nature, and You — it was featured on a website promoted by the popular PBS series, Nature, and scored thousands of views on MMTC's social media platforms.

vimeo.com/334903645

Control over editorial style gives students like Joe a sense of ownership and agency that can influence engagement and the ultimate success of a piece of journalism. Shaping a story takes effort, starting with the inception of an idea, through the field work and interviewing, and on to the editing and endless revision.

In 2019, a team of students from Mid-Maine Technical Center (MMTC) produced a four-minute story for Maine Public Television on a student-led groundwater testing study that found high levels of arsenic in drinking water. Interviewing scientists, chemistry teachers and students might not have been a top pick for many young people, but the assignment had two draws: It would have a statewide television audience and presented a chance for direct mentoring from a local public television producer.

Now, individual style decisions had to be measured against Maine Public's broadcast standards, and the sense of quality viewers expect from a public television program.

Lucas Pelotte was a senior video journalism student working on the project.

"You still had to have your own personal style with it, but it was kind of challenging because it was going on TV," he said. "It kind of made you want to know it was going to be good."

Rebecca Conley is the Maine Public producer who worked with the students involved. It was her role was to help the young journalists strike a balance: keeping their own vision of the story and shaping it to meet the standards and time constraints of a professional broadcast outlet. "Journalism is that fine line. You're trying to tell a story, but are you trying to tell the story, or can you let the story tell itself? It just needed to be helped in telling. And that's all the magic of editing."

Connecting skills to career paths

Sometimes the value of public media for young people comes not in its creation, but in its consumption. When SRL debuted its "Making It Work" series, portraying how young people across the country were preparing for careers, students at MMTC were amazed. A young man in Pennsylvania showcases entrepreneurship running his own hog farm. A Detroit media producer sparks students' interests with a burgeoning YouTube career.

Not only did students contribute to the "participatory culture" of our media-rich society, but, as young consumers, they gained a sense of how to watch news with a critical eye. They learned to seek out connections where they exist and about what





good journalism looks like, as a producer and as a consumer.

There's a heightened sense of purpose when students are working on a Student Reporting Lab project. They are focused; whether they're interviewing about the youth vote, climate change, or adapting to life under stay-at-home orders, students know they are producing for an audience that will care about the message.

That doesn't mean the classes are free of fun and friendship — far from it. Collaboration becomes even more important, as does attention to detail, a sense of objectivity, and a need for student journalists to make their work stand out from the other Student Reporting Labs across the country. When reporting on the youth vote in the final days before the 2018 midterm elections, students at MMTC picked locations they thought highlighted their community. They dressed professionally for working on-camera, and they vetted their own work, making decisions on which interviews to send to PBS for consideration. And then they celebrated as two of their picks made it to national audiences watching PBS NewsHour.

Students could take on the same work without a program like PBS NewsHour Student Reporting Labs. There are always topics to explore, stories to develop. But what changes, when students are creating for public media — even for audiences online in local communities — is that awareness of audience and the expectation that the end product matters. That means following the basic tenets of journalistic fairness, objectivity and accuracy in telling a story; learning the technical details: sound, exposure, focus, composition; and so much more.

SRL's curriculum helps students follow a track from deciphering what makes a meaningful visual piece of journalism to finding those stories in local communities. Students start with short interview-based prompts featuring peers within their own classes, then move toward more complex, community-based, multi-interview stories that dive deeper into a topic. All through the process, students are coached toward gaining advanced skills in the field.

In Maine, CTE communications students work toward certification endorsed by the Maine Association of Broadcasters, aligned to the state's CTE standards for multimedia production. In some programs, students can also use their career and technical education experience to:

- Meet English language arts or other subject area standards through alignment with the Common Core.
- Earn college credit through a series of robust dual enrollment agreements with state community colleges.

At MMTC, students in the Mass Media Communications program are eligible for internships with local businesses and nonprofits, often arranged through personal networking by their instructor, who also works in the field.

CTE programs in the Student Reporting Labs network value the real-world connections students make from the classroom to possible career paths. Holistic learning experiences give student journalists the training and the authority to speak about issues they see as important while helping them meet the

technical and journalistic standards of the industry.

In a day when the voices and leadership of young people drive change, experiential learning opportunities like Student Reporting Labs provide valuable entry into a dynamic field. ■

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Elis Estrada is the senior director for PBS NewsHour Student Reporting Labs, where she oversees the development, work and content of SRL's growing national network of schools and partner public media stations. She loves puzzling through large-scale projects that aim to motivate and inspire students and teachers. Estrada is deeply invested in creating fun, educational opportunities for young people to engage with news media. Before joining the NewsHour, she held dual titles at the News Literacy Project, as program manager for the Washington, D.C., region and associate communications director for digital media. Email her at eestrada@newshour.org.

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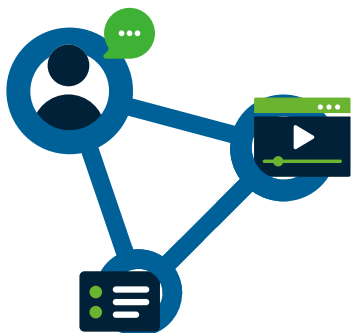
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A Mixed Reality Alternative to Performance Testing

By Michael Carbenia, John Foster & Eamonn Powers



Career and technical education (CTE) is all about competency! Competence can be broken down into individual components: attributes, knowledge and skills. An attribute is a trait, quality or characteristic — something that an individual already has. Typically, attributes are not tested, so it makes sense to remove that piece from the discussion.

Knowledge is focused on a theoretical or practical understanding of the way something works. Cognitive ability is measured as CTE teachers deliver written tests about context, theory or the steps involved in a process.

The CTE community can also relate competence to credentialing. A credential can be defined as a license, certification, certificate, digital badge or any number of other forms of recognition bestowed on an individual by an authorized third party. Many of these credentials rely solely on knowledge related to competence of a particular job or task.

Skills-based performance testing is the gold standard.

While CTE focuses on competence of performance, only a very small handful of states require it. What's more, performance-based credentialing also lags behind. So, if CTE is all about competence, and competence is best measured by performance, why is it that so few states and credentialing providers utilize it?

Challenges

A credential involving performance requires additional human and capital resources. A performance test is more expensive to administer because it utilizes materials. It requires human capital for both set up and coordination of subject matter expert evaluators.

Over the years, other methods of performance have been implemented. In some cases, these alternative measures have become as widely accepted as the cognitive measurement described earlier. In some instances, this acceptance has been forced by a greater need, and many times the acceptance has been largely informed by research. The COVID-19 global pandemic that began very early in 2020 will likely spur additional alternative measures to be considered as learners and educators are

more likely to be engaged in social distancing protocols.

A few examples

Prior to the mid-1980s, there was no federal license for commercial drivers crossing state lines, nor were there any nationally consistent requirements to verify one's ability to understand road signs or ensure safe operation of the vehicle transporting goods. Once the federal government implemented the commercial driver's license (CDL) program, there was an immediate, strong demand. Members of the existing workforce, as well as those looking for a career in the transportation industry, wanted to become certified and they needed the training to do so.

Career and technical education programs answered the call. They knew licensing would require a performance test — a road test. And, so, in order to promote the highest quality programs, CTE had to find a cost effective and practical method for training learners to work with a large truck. The options were, real trucks or simulators. Simulators were selected to mimic the cab of a truck, with on screen film clips that appear as mirrors would in the real world. In this example, simulation was a cost-effective method for development of a performance skill.

Simulations are important to the military because of cost and scalability, like in the other examples, but they are also important for safety reasons. Through educator collaboration projects across the country, CTE teachers have assessed simulated parachute landing, bomb diffusing, Humvee desert driving, use of heavy assault weapons and drone aviation.

Pilot training organizations within the airline, corporate and military sectors have long used advanced full-motion flight simulators as a means to train and assess candidates. On the other hand, training methods for inspection, troubleshooting and repair are still largely based around practical experience on live aircraft and formative knowledge testing. Working on live aircraft is desirable in many ways, but it is also prohibitive for a number of reasons, including ease of access, class size constraints, and costs associated with an incorrect performance.

Original equipment manufacturers (OEMs) and professional aviation training organizations were among the earliest adopters of both virtual training environments and simulated performance assessments for aircraft maintenance and repair. Flight Safety International offers an advanced troubleshooting program as a capstone experience at many of their global

training locations. This program features a comprehensive aircraft simulation and performance measures based on real-world considerations (e.g., component cost, time to perform work, and accuracy of decision making) within specific repair scenarios.

The path forward

Programs will continue to improve not only simulation fidelity but also the ability to capture meaningful performance data from specific learner interactions.

Look through the lenses of evolution surrounding memory and technology and the impact on the CTE world, and it seems obvious that these two worlds have collided. One could argue that the same acceleration has taken place with CTE equipment, particularly machine learning, and now training resources are taking giant leaps.

Machine learning and training resources for CTE are taking giant leaps. These surges build on the use of augmented reality (AR) and virtual reality (VR) for hands-on training applications. Companies like zSpace have expanded their hardware to meet growing demand for increased memory and processing power, to support increasingly sophisticated simulation platforms.

There is a solid rationale for simulations as an alternative to in-person performance

Perspective on the speed of evolution

The iPad didn't exist 10 years ago. Oculus VR was only launched in 2012 (acquired by Facebook in 2014). For additional evidence, compare the storage capacity of the Apple iPod. The first-generation iPod contained five or 10 gigabytes of storage — approximately 2000 songs — at its launch in 2001. The latest generation, the iPod Touch, offers 256 gigabytes of storage.



testing and several use cases in related technical fields — based on the fact that hardware and software technology are increasingly available — but an important question remains:

How do we effectively simulate content, especially CTE content?

zSpace and NOCTI began to explore solutions a few years ago. At zSpace, mixed reality content is curated by individuals who know and understand the needs of the CTE community. Similarly, NOCTI establishes industry standards and the certifications that measure an individual's competence against standards — working with CTE practitioners for many years.

Capitalizing on extensive experience in CTE, the companies began researching performance components of various NOCTI credentials to see which would provide the best experience for CTE learners. The idea was to blend the world of credentials and technology to provide a prototype that could present an alternative to in-person performance testing.

In 2019, more than 30 NOCTI industry credentials were identified that aligned to the mixed reality content offered through zSpace.

In addition to the credential alignment work, NOCTI provided national performance standards in welding so that students could have an immersive experience in a mixed reality setting. The partnership produced mixed reality equivalents for all tasks required in a traditional performance assessment. While it is recognized that a performance exam conducted virtually will not have the same impact as an in-person assessment, it takes a step above a written content assessment and offers advantages such as cost, safety, scalability and experimentation.

When the collaborative project began, neither firm had any indication of the global pandemic that would unfold. CTE facilities shuttered for months on end, and CTE learners moved to 100% remote learning structures. Perhaps the environment under which the nation is currently operating (at this writing) will be the tipping point for an ever-increasing sophistication, and use, of simulation and AR/VR. Platforms like zSpace working with industry experts like NOCTI have made it possible for CTE students to experience CTE content in a remote, blended or face-to-face learning environment. Through the use of this technology, a stu-

dent at home can practice disassembling and assembling an engine, suspension, brakes, transmission or air conditioning systems. Furthermore, the instructors are able to use teleconferencing software to review the students' work and provide actionable feedback.

It was originally envisioned that this mixed reality performance alternative could act as an intermediate step in the technical credentialing landscape for CTE — by providing an additional measure of skill development that falls somewhere between teacher demonstration and guided practice. The current reality may have a great deal to do with the speed of implementation, as will employer recognition of these sorts of alternatives, but these tools are more than a novelty. Mixed reality will likely become part of the CTE landscape for the foreseeable future. ■

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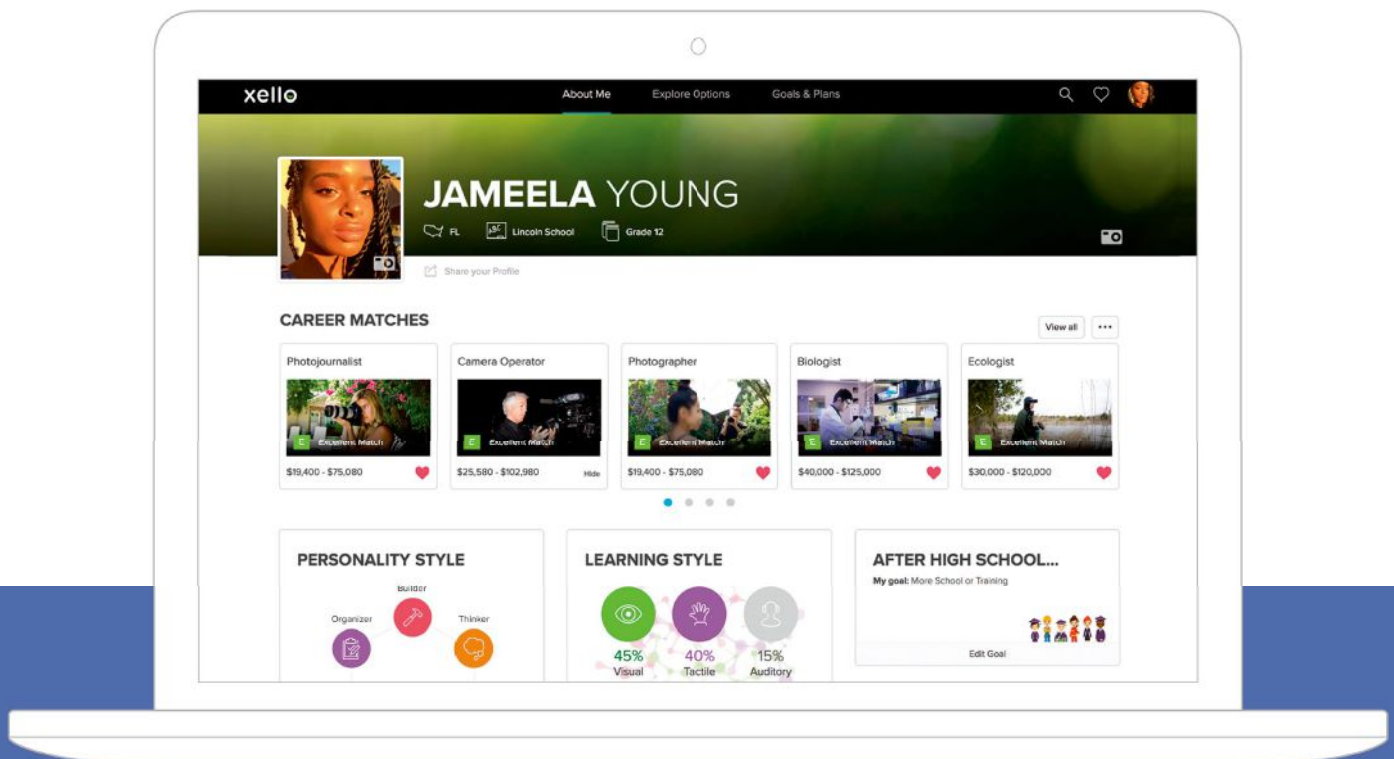
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Embracing the Word



s equity, inclusion and social justice gain momentum in educational institutions, we must support and empower women to succeed in career and technical education (CTE) — beyond initial recruitment.

Five women serving as leaders and role models in CTE propose that one pathway is to reframe negative beliefs associated with women in CTE and embrace such aptitudes and characteristics as strengths. Here are our voices.

Vocational

by Denise Ojeda

My father was an airplane mechanic for the Flying Tigers during World War II. I am the youngest in a family of daughters. My father taught me how to use my hands to do activities that other girls in my family did not do.

When I got to high school, there were “shop” classes. (Work in the trades has experienced an evolution of terminology: shop classes, vocational classes, career and technical education, essential workers.)

But these shop classes were only offered to boys. And not only just for boys, but for the boys who were not considered “college” material.

My experiences working as an electrician were not always easy. Learning my craft required a mixture of resilience, tenacity and a simple refusal to accept no as an answer. And as an educator, I meet with parents, faculty, advisors and administrators who still believe trades are reserved for those who may not be good enough for academic work.

Trades workers are educated and skilled. We trust them with our lives, when we drive over bridges and board airplanes. We take it for granted that there will always be someone to help when the power goes out.

Despite high wages and plenty of work, the United States is experiencing a serious shortage of trained and educated workers entering CTE fields. In the construction trades — where women make wages that are close to or the same as their male counterparts — women make up less than 7% of the workforce.

So, I ask,

Why are women underrepresented in CTE?

In the days of my father, in WWII, women proved that not only could they do these jobs, they excelled. Now is the time to recognize the contributions of women and to encourage all young people, men and women—to pursue these essential careers.

Victoria Denise Ojeda is a full-time instructor in the electrical trades program at Central New Mexico College (CNM). She is also an authorized OSHA training instructor. Ojeda has worked as an electrician for nearly 25 years. She began teaching as an apprenticeship instructor and has now taught at CNM for 17 years. Currently, Ojeda works as an industry liaison for the college and is involved in several projects involving professionalism and gender equity for middle and high school students. Email her at vojeda@cnm.edu.

Vulnerability

by Sharon Gordon-Moffett

“Vulnerability is a weakness.”

“To be vulnerable you are exposed and weak.”

These have been common myths within CTE culture for decades. Women, especially in CTE, are often thought of as vulnerable, which is actually a strength!

After being a nurse for 20 years, I switched gears and became a

To be vulnerable is the greatest measure of courage we can demonstrate.

welder and machinist. With no previous experience, I had to learn quickly how to seek help; acknowledge I didn’t know processes or have answers; and apologize while admitting my mistakes.

When I would ask, “Can you help me with this?” Or when I said, “I’m not sure what I should do here...” I was actually expressing vulnerabilities in a courageous and positive way.

Being vulnerable isn’t a bad thing, and it doesn’t make you weak; in fact, it makes you a better leader because you stop wasting energy protecting yourself from what you think other people shouldn’t see. Vulnerability shows your authentic self.

With vulnerability comes emotional exposure, risk and uncertainty. It means taking responsibility for something that went wrong. We have to have courage and, when you choose to be courageous, you give up comfort. Being vulnerable is uncomfortable, but if you are comfortable... then you are not challenged.

Vulnerability is a strength!

Stop worrying about having every answer; it’s okay to be wrong. The more willing we are to admit and own our mistakes, the more others will trust us and want to follow our lead. It’s also very important to have a sense of humor — and don’t take ourselves too seriously.

As leaders in CTE, we must embrace vulnerability as a strength. It takes courage and confidence. Vulnerability lies at the root of social human connection.

Sharon Gordon-Moffett is an interim associate dean in the school of applied technologies at Central New Mexico Community College. Gordon-Moffett began her journey in postsecondary education in 2003, and she continues to support CTE through CNM’s vision of “changing lives and building community.” She is the current president of NCLA and is a strengths-based leader who believes long-lasting partnerships are the key to success. Email her at sgordon@cnm.edu.

Village

by Jessica Medrano

When raising a child, the parent often hears, “It takes a village.”

The same holds true when nurturing a brand-new emergency medical technician (EMT) or firefighter.

My journey began as a 20-year-old college student; I wasn’t sure where to focus my efforts. Deciding what to do for the rest of your life, at that age, is daunting. I had a desire to be in medicine, but I also took an interest in the business track.

No matter where my mind led me in academia, physical fitness was a constant in my life. It served as stress relief, proved that I could set and reach goals, and played a major role in maintaining my mental health. As I progressed through school while working a full-time job, I found that I was not fulfilled with either path. I also lost my scholarship and had to change directions.

I stumbled into an EMT class. I had a few peers who encouraged me to go this route. It seemed to offer the perfect combination of medical science, serving others and physical fitness. Fast forward: I became an EMT. I started working at our level one trauma center and fell more in love with this job. I realized that I wanted to go all the way to becoming a paramedic.

As I progressed through my education, I had many mentors and cheerleaders along the way, both educationally and professionally. I do not know if I would have stayed the course had it not been for these mentors. To name a few...

My EMT intermediate instructor, Kyle Thornton
My mentor/program director, Cy Stockhoff
Ann Martinez, EMT intermediate at Bernalillo EMS

Paramedics work in teams. The paramedic is seen as the most highly trained responder, so the responsibility of directing patient care is yours. You must guide the team. You must be aware of each member’s skill and experience levels. You must earn and keep their trust. Oddly, team members can change frequently, so, you must do all the above, with new people, and produce great results for your patients. But there is an accepted degree of trust within this village. I loved the camaraderie and teamwork that came with each day of work as a paramedic. I learned that the village is imperative to success — of the individual, the group and the patient(s).

Those who mentored you to this point, those who taught you, those who gave you harsh feedback — even those who discredited you because you were a woman in this profession: All of those people led you to be exactly who and what you need to be for your team and for your patient.

Jessica Medrano is currently the academic affairs director of the emergency medical services (EMS) and community health worker programs at CNM. She has been a paramedic since 2003, and a firefighter since 2005. Medrano worked in a level one trauma center, an urban EMS transport system, and a rural fire department. She transitioned to EMS education at CNM as a part time faculty member and expectant mom. She advanced to full time faculty, then program director of the emergency medical services program. Additionally, Medrano served as the chair of the New Mexico Joint Organization on EMS Education for four years. Email her at jmiller72@cnm.edu.

Virtue

By Carol Ash

Webster’s dictionary defines virtue with the phrases “manly strength or courage,” “commendable quality or trait” and “a capacity to act.” All too often these definitions are only seen as positive characteristics when describing men.

When Sen. Kamala Harris, a Black woman, emerged as the front runner for the vice presidential nomination in 2020, the sexist attacks that followed were plentiful. She is widely accused of being “too ambitious.”

Sadly, it’s a story to which many women in higher education — particularly in CTE — can relate. Women have been taught since birth that the virtues of strength, courage, and the ability to act, aggressively, are traits that belong only to men.

When was the last time you saw a national conversation about a man who was too ambitious? It’s this kind of coded language that prevents women from owning their strengths.

Rise to the top! Utilize your power.

We must change the narrative. Alter expectations and change the negative connotations. Women manage and lead in the same effective, up-front and ambitious ways that men openly embrace from each other.

Carol Ash, Ed.D., is the dean of the school of health, wellness and public safety at CNM where she leads a faculty and staff of almost 500 in the instruction of 44 CTE degree and certificate programs at multiple campuses. She is a 2020 fellow of the Postsecondary Leadership Success Program at ACTE – Sponsored by ECMC Foundation and a 2019 graduate of Leadership Albuquerque. Email her at cash2@cnm.edu.

Venus

by Asa Stone

"You don't look like you know what you're doing."

You aren't _____ enough. You don't belong here."

"You are too _____. What are you doing here?"

Whether overt or covert, whether through an explicit comment or an implicit attitude, the myth of women as "the weaker gender" persists. Even when we successfully recruit women into a CTE field, retaining them with adequate support for success continues to be a challenge. When the bare minimum of retention is a challenge, how can we inspire, encourage and empower them?

When I became an Advanced Cicerone (a certified beer professional), my credentials and expertise were met with skepticism.

"I bet it's a useless certification." "I bet I could get certified if you got it." "I'm sure I know more than you do." "You don't even drink beer, do you?"


I quickly learned that it was a shared experience with my fellow Cicerones and other beer professionals in the industry. This realization led us to create a volunteer-based international mentorship program to support other women, especially women of color, by mentoring them through certification processes.

Research shows that mentoring works well for inclusion, which leads to positive outcomes for a sense of belonging and retention. Affinity, proximity and interests are some of the factors that make mentorship effective. In other words, women supporting women — and Black, Indigenous and people of color (BIPOC) supporting BIPOC — is key to successful mentorship. In addition, creating an eclectic social network helps mentees and students have diverse experiences that enhance their cultural fluidity.

To create an environment in which women feel seen, heard, included and welcomed, we need more women in leadership roles.

And we must counteract the persistent sexist myth by repeatedly demonstrating, "If I can, you can too." In other words, establishing gender equity as a social norm will take an adequate representation and normalization of women as leaders in CTE. ■

Asa Stone, Ph.D., is a beer scholar specialized in enriching life with beer. With her doctorate in psychology and an Advanced Cicerone title, she examines intersections of beer and culture at the University of New Mexico and travels around the world for scientific research, educating future beer sommeliers, hosting antiracism workshops, and advocating for racial and gender equity in the beer industry. At CNM, she serves as a member of the Equity Council. Email her at astone10@cnm.edu.



These five stories come from five women, playing five different roles in CTE, embracing five different V words. Together we have one call to action: Empower women. Create education that is equitable, inclusive and just.

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Aligned for Success:

Resources and Lessons Learned from CTE in Georgia

By Rebecca McIver, Barbara Wall & Greg Wilson

HOW CAN WE ENSURE OUR GRADUATES HAVE CLEAR PATHWAYS TO JOBS AFTER GRADUATION?

How can we meet the needs of in-demand local and regional industries? How do we map out the current and future needs of local employers and infuse those needs into our programs? If any of these questions sound familiar, then you may need to consider undertaking an alignment process.

Alignment is a process by which educational partners — secondary and post-secondary institutions — and employers work together to identify and match career and technical education (CTE) programs with the occupations and skills required in the regional economy. It is an intentional process guided by employer feedback, labor market data, and a willingness to rethink CTE programs.

Define a regional economy.

A regional economy is larger than a county or a city, encompassing an area with a high level of economic connectedness. Regions may be defined by your state (e.g., planning regions or economic development regions) or the U.S. Census Bureau (such as metropolitan and micropolitan statistical areas). Or they may be more informally defined, such as a region comprising three communities: an economic hub and two-bedroom communities.

Figure 1 demonstrates the career pathway pipeline that alignment seeks to build.

The Georgia Department of Education (GaDOE) is helping districts examine and align their program offerings to needs in the regional economies in the state. In recent years, the GaDOE has prioritized strengthening coordination and collaboration with economic development partners at both the state and district levels. In 2018, the GaDOE partnered with the University of Georgia's Carl Vinson Institute of Government to develop and publish the *Georgia Alignment Toolkit*. This resource is designed to prepare CTE leaders with the processes, data, guidance and templates to undertake alignment activities in their local districts or institutions. The alignment toolkit also served as a key resource for districts completing their first comprehensive local needs assessment for Perkins V.

Aligning CTE programs to your regional economy is important for many reasons:

- **A key goal for CTE programs involves creating opportunities for graduates.** Alignment will ensure that CTE programs prepare students with the skills, knowledge and certifications to acquire a related job in the regional economy.
 - **Helping students to complete programs and degrees efficiently can be achieved through alignment between secondary and postsecondary institutions.** This alignment involves leveraging dual enrollment and articulated credit and ensuring the community has clear postsecondary pathways.
 - **Educational institutions are being asked to do more with less.** Alignment is about making the best use
- **Perkins V ushered in a new expectation for conversations around data, stakeholder engagement, and labor market alignment.** Alignment is a key tenet of Perkins V. The alignment process and associated resources will help your institution meet the requirements and spirit of the law.
 - **Economic development efforts continue to be driven by the availability of a skilled labor force.** *Area Development Magazine*, a publication for economic development professionals, conducts an annual survey of selection factors for new investment, and workforce availability continues to top the list. Alignment will help meet those economic development needs.

of the limited resources (e.g., money, teachers, classroom space, schedule availability) to meet the region's biggest needs.

Alignment is not a one-time event or process. Instead it requires ongoing attention and continual reassessments. Your local economy will not remain static; new companies will open up shop and others will go out of business. Technology will change the nature of some jobs. Pathways and programs that were important 10 years ago may not be as relevant today. Likewise, pathways and programs will need to stay up to date on skills, certifications, software programs and expectations required.

Figure 1 Career Pathway Pipeline

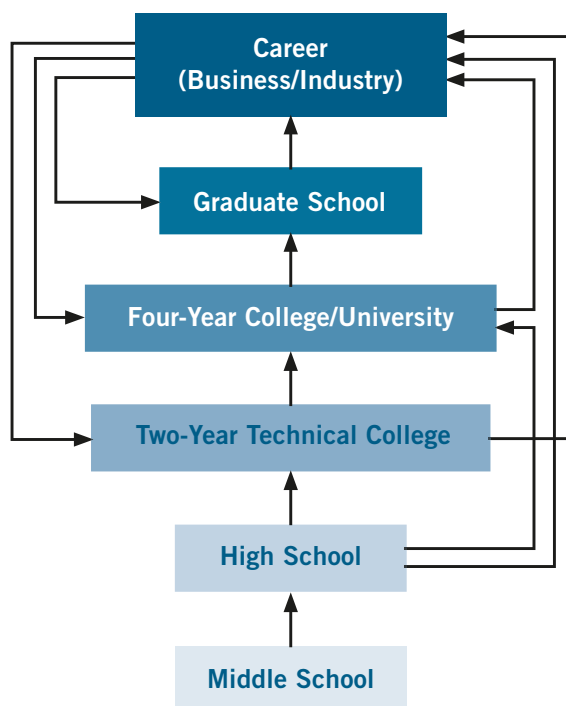
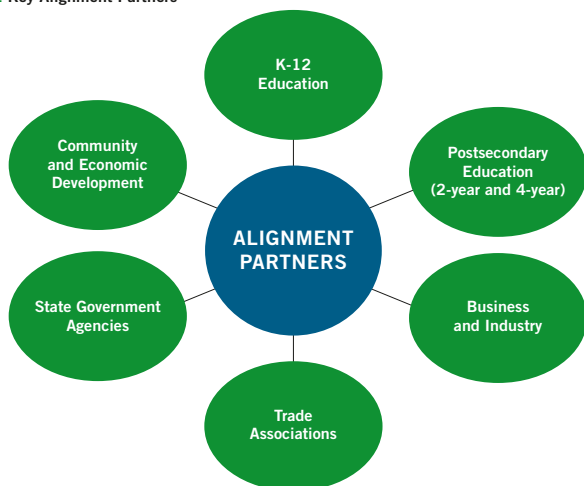


Figure 2 Key Alignment Partners



Alignment partnerships

At the center of successful alignment is partnership. Alignment requires ongoing communication between all relevant stakeholders. While many CTE programs in Georgia and across the United States have advisory committees that meet a few times a year to help support specific programs, true alignment must go deeper than that. Figure 2 details the wide variety of people and organizations involved in an alignment process. Bringing all of these partners to the table is important because, as Figure 1 showed, students flow in and out of the workforce pipeline, moving from education to the labor force and back throughout their lifetime.

Alignment needs assessment

Once the groundwork has been laid and partnerships have been developed, it is time for an honest community needs assessment. Conducting a needs assessment means listening to what local employers need, consulting labor market data, and having open conversations about what is currently happening.

Data can be a good place to start in a needs assessment because they provide common understanding for all community stakeholders. Data analysis should include educational data (e.g., pathway enrollment and completions, graduation rate, high school progression data if available) as well as labor market information (e.g., industry information and trends, occupational projections, wage data). Be sure to include both trend data and

comparative data to get a full picture of your workforce. Each of these data points likely comes from a different source (e.g., Bureau of Labor Statistics, Census Bureau, state Department of Labor, local school district), so call on your partners to help you compile a comprehensive data packet.

In addition to compiling and analyzing

data, it is important to hear about local employer and community stakeholder needs and desires. This can be accomplished through interviews, listening sessions or a survey. With all of that information in mind, it can be helpful to consider the following:

- **Number of jobs in your region —** For a pathway to be viable, your region must have a sufficient number of jobs in the relevant industry for students upon graduation.
- **Preparation for entry-level roles:** Does the pathway provide the knowledge, skills and experiences to help students secure entry-level jobs? Program-industry alignment should allow for

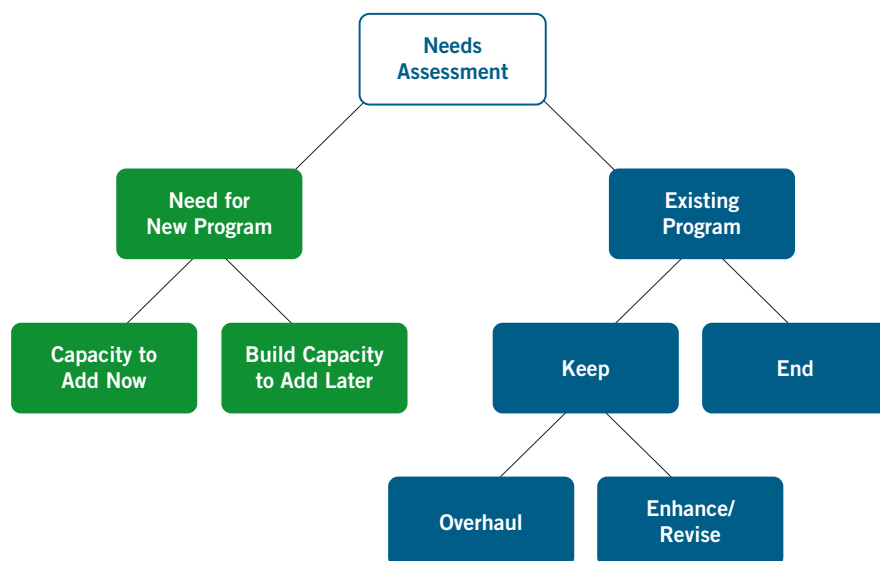
students to graduate high school and start work the following week.

- **Relationships with employers —** Does the program have relationships with employers who can hire its graduates, help guide the curriculum and enhance the educational experience?
- **End-of-pathway assessment / industry-recognized credential —** Aligned programs must work with their business partners and regional employers to ensure the credential helps prepare students for the workforce and adequately reflects the learning attained during the pathway.
- **Integrating aligned work-based learning opportunities —** Work-based or experiential learning opportunities are critical for developing student interest in a career pathway and providing hands-on application. Does your work-based learning program include relationships and placements that can help your pathway completers apply their classroom learning?

The topics above primarily focus on assessing your existing programs and can help you walk through the right side of the decision tree found in Figure 3.

Deciding to end a program can be hard. There are teachers who are teaching those courses and students interested in that topic, but, for the community as a whole, it

Figure 3 Needs Assessment Flowchart



may be better to reallocate those resources to another program. After reviewing your current programs to determine what tweaks might be needed, focus on the gaps between programs offered and employer needs.

What new programs might be needed? You don't want to create a bunch of unique programs to fill very specific needs. Instead, think about common themes or skills needed across industries or employers; these can be the basis for a new program. Note: You may not have the capacity to create a new program right now, but do not lose sight of community needs.

Next, determine the best approach to alignment. Georgia communities have found several ways to align programs.

If a particular industry is very specific to your area, employs a large portion of the local workforce and is not being served by current programs, then local development of a pathway may be the way to go — especially if the companies are willing to offer instructional support or experiences for the students.

If local employers do not require any postsecondary or additional training after high school, then end-of-pathway credentials and experiential learning experiences might be the best option.

If an industry prefers hiring students with some postsecondary experience, consider dual enrollment or articulation to align your CTE program. These options each have their pros and cons, and you may have others that work for your regional economy. Remember, alignment is all about doing what is best for students and local employers.

Application and takeaways

The work of career and technical educators is shifting due to Perkins V, rapidly changing technology, new trends in the nature of work, and growing interest in workforce development from local community and business leaders. Alignment is not a one-time event nor will it be easy, but it will help your school district or institution best connect its instructional programs with the needs in the regional economy, which will meet the needs of employer partners and prepare students for postgraduation success.

CASE STUDY: Health Care at Fayette County Schools

Health care is an important industry in Fayette County, located in the southern portion of metro Atlanta, Georgia, accounting for more than 6,700 jobs in 2018. Fayette County Schools has long worked with Piedmont Fayette Hospital, a 282-bed facility located in the community, to place students from four high schools in clinical rotations for the third class in the Allied Health and Medicine pathway. Several years ago, Piedmont Fayette Hospital approached the school system seeking to streamline processes and paperwork for the clinical rotations.

A larger conversation emerged between school district and hospital leadership. Fayette County CTE leaders worked with local health science teachers to expand the county's program using limited resources. The new strategy involved combining traditional high school classes with additional pathway courses, offered through dual enrollment and taught by a postsecondary partner.

Students take the first two classes in a Therapeutic Services pathway at their base high school by a teacher employed by the school district. Four third-level pathway courses are taught at a central CTE building by either a Southern Crescent Technical College instructor or a Fayette County teacher. Transportation is provided from each

area high school. After completing the pathway, students receive high school credit, technical college credit, a technical college certificate and a health care industry credential.

Industry partners, growing student interest and a review of labor market information drove the changes made to the Fayette County health science programs. Close alignment between the district's health care programs and local needs, alongside an enhanced partnership with Piedmont Fayette Hospital have had several benefits.

1. The district has increased its capacity to train students for high-demand, high-wage careers.
2. Health care employers in Fayette County and the region have a deeper talent pool from which to draw when filling open positions.
3. The program has grown to encompass other health care professions (e.g., phlebotomy and emergency medical responder) that industry partners have identified as in-demand.
4. The partnership with Piedmont Fayette Hospital and the school system has helped the district secure resources to support health care pathways, including equipment and supplies for several health care labs.

District and state leaders should also consider how the alignment process can help influence and enhance their Perkins V comprehensive local needs assessment process in future years. Fundamentally, alignment is about creating shared goals and making decisions about how to best utilize resources to serve students and local employers. ■

Portions of this material were adapted from the *Georgia Alignment Toolkit*. A digital version can be found at gaworkforce.org/alignment.

Lafayette College and a master's in public administration from the University of Georgia. Email her at rcmciver@uga.edu.

Barbara Wall, Ed.D., is the career, technical and agricultural education (CTAE) director at the Georgia Department of Education. She is a dedicated CTAE educator who has teaching experience in middle and high schools, as well as administrative experience at school, district and state levels. She holds three degrees from Georgia College and State University and a doctor of education in workforce education development from the University of Georgia. Email her at bwall@doe.k12.ga.us.

Greg Wilson is the workforce development and economic analysis unit manager at the University of Georgia's Carl Vinson Institute of Government. He works to help school systems, communities and state agencies design data-driven strategies for advancing workforce development and economic development efforts. Wilson holds a bachelor's degree in political science and a master's degree in public administration. Email him at gjwilson@uga.edu.

Rebecca Mclver is a fiscal analyst with the Carl Vinson Institute of Government at the University of Georgia. Her work focuses on workforce and economic development at all levels ranging from local communities and school districts to regional and state efforts. She specializes in the use of labor market and education data to inform organizational priorities and strategies. Mclver holds a bachelor's degree from

2021 ACTE BOARD OF DIRECTORS ELECTIONS

YOUR VOTE, YOUR VOICE



From Dec. 4, 2020, to 11:59 p.m. ET on Jan. 4, 2021, members of the Association for Career and Technical Education (ACTE) will elect officers for the following board of directors positions:

- **President-elect:** Serves a one-year term beginning in July 2021, followed by one year as president and one year as past president
- **Region V Vice President:** Serves a three-year term beginning July 2021
- **Agriculture Education Division Vice President:** Serves a three-year term beginning July 2021
- **Health Science Education Division Vice President:** Serves a three-year term beginning July 2021
- **New and Related Services Vice President-elect:** Serves a three-year term beginning July 2022
- **Region II Vice President-elect:** Serves a three-year term beginning July 2022
- **Region III Vice President-elect:** Serves a three-year term beginning July 2022.

All ACTE individual professional, retired, educational institution members, and national affiliate organizations whose membership dues are received at ACTE headquarters by Nov. 4, 2020, are eligible to vote. Please review the biographical information and platform statements for the nominees and exercise your right to vote for ACTE's leadership. This information is also posted online at acteonline.org/board_election_candidates.

The election process will be conducted via electronic ballot only. Ballots will be sent to member email addresses listed in the ACTE database. ACTE works with Survey and Ballot Systems (SBS) to manage the board of directors elections. You will

receive an e-signature via email that must be used with your member number to vote electronically. If you do not receive an e-signature by midnight on Dec. 5, please contact support@directvote.net. Electronic ballots must be cast by 11:59 p.m. ET on Jan. 4, 2021. Ballots will be counted and audited at the offices of SBS, and the results will be posted on ACTE's website and announced in *Techniques*.

In order to facilitate a smooth election process, please be sure to:

- Verify your email address with ACTE. If ACTE does not have your email address, it is imperative that you update your member profile immediately. You can do this on the ACTE website by:
 1. Visiting acteonline.org
 2. Logging in (Username: your email address; password: your ACTE ID number plus your first and last initials — e.g., 123456AH)
 3. Clicking on "View Profile"
 Or email acte@acteonline.org
- Make sure you/your IT department puts Survey and Ballot Systems on your email server's "white list" so your voting information will not be marked as spam. The email will come from noreply@directvote.net.
- Remember that in order to vote, you must be a member of ACTE as of Nov. 4, 2020. Members are only allowed to vote in elections for their region and any divisions of which they are a member.



PRESIDENT-ELECT

Jon Quatman

Region: I

Division: Administration

Occupation: Retired

Education

M.Ed., educational administration, Xavier University: 1986; B.A., secondary education – mathematics, Thomas More College: 1976; A.A., economics, Thomas More College: 1976

National ACTE Involvement

Board of directors, Region I vice president: 2017–2020; Region I vice president-elect: 2016–17; Executive committee member, finance chair: 2018–19; legislative committee chair 2001–08; allowable expenses task force member: 2018; division affiliate task force member: 2019; Educators in Action volunteer: 2015–2020; CTE Support Fund supporter: 2003–2020; National Policy Seminar attendee: 2001–2019; ACTE's CareerTech VISION attendee: 1996, 2002–2019; ACTE/NLCA Best Practices & Innovations in CTE Conference attendee: 1996–2015, 2019; public policy advocate – a responsibility of all CTE professionals: 1996–present; Assembly of Delegates: 2010–16

Regional ACTE Involvement

Policy committee member: 2015–2020; policy and bylaws revision task force member: 2018; awards revision task force member: 2018; awards revision committee chair: 2016–18; Scott Westbrook Award winner: 2015; conference presenter: 2017–2020

Divisional ACTE Involvement

Policy committee member: 2002–2015; legislative committee member; legislative committee chair: 2004–06; policy and bylaws revision task force chair: 2014; VISION planning committee for the Administration Division: 2004–08, 2015

I have also served at various times on the Administration Division's policy committee.

State ACTE Involvement

Ohio Association for Career and Technical Education (OACTE) past president: 2011–12; OACTE president: 2010–11; OACTE president-elect: 2009–2010; OACTE Administration Division president: 2004–05; OACTE president of the council of presidents: 2004–06; OACTE Beryl Shoemaker Leadership Advisory Committee member: 2011–13; OACTE Leadership Task Force: 2011; OACTE Professional Development Committee member: 2004–05; testified to the Ohio House Higher Education Committee on behalf of OACTE: 2010; testified to the Ohio House Higher Education Committee on behalf of High Schools that Work and CTE: 2007; Assembly of Delegates: 2006–2011

Other CTE Involvement

I have served as a board member and officer of the National Council of Local Administrators.

Application Summary

I have been involved in education for 45 years in various positions in both middle and high school. My experiences include urban, suburban and rural schools. Twenty-three years ago, I was hired by Great Oaks Career Campuses, and I found my passion, career and technical education. I discovered how the educational system makes sense for the students I served. It links the academic and technical skills with the passion of each student and allows the student to participate in the economic system. I immediately joined

ACTE, recognizing the importance it plays in professional development and advocacy for the students, instructors, administrators and communities we serve. For 24 years, I have actively served on the state and national level as president of Ohio ACTE, president of the National Council of Local Administrators (NCLA), committee chair for ACTE and, presently, as finance chair on the executive committee and as vice president of Region I.

Through the efforts of many we have made, and continue to make, significant progress in the perception of CTE in the educational and legislative environments. Through our strategic plan, we need to increase our member engagement, grow our high-quality CTE program work, look to expand our professional and leadership development, and build on our advocacy and awareness efforts. I would look forward to continuing to serve our members and building on this momentum as president-elect.

Platform Statement

I have been a member of ACTE for 24 years. I recognize the important role the association plays in supporting our members in professional growth, leadership development, and advocacy at the local, state and national levels. As a candidate for president-elect, it is my goal to grow this support for our members. To do this, I will work not only to expand the current activities but to identify new and innovative ways for our members to be engaged and supported.

When I ran for Region I vice president, I said, "Career and technical educators have dramatically changed the face of education. First, hands-on learning with integrated academics and measurable outcomes has been proven to be an effective educational model. Secondly, leaders now realize that students need to be prepared for a career, not just the next educational step."

As Mark Perna said, "Students must have an education with a purpose, not an education for the sake of education." That is what we provide as career and technical educators. I believe the same should be said for our association. That is why, as a board, we established a robust comprehensive strategic plan that has allowed ACTE and career and technical education to make significant progress in the educational and legislative environments. Our challenge is to keep this momentum moving forward and not rest on our current successes, implementing innovative approaches and programs for membership growth, engagement and ACTE awareness. I will work to ensure all our members' voices are heard through the board of directors, vice presidents of the regions, and divisions.

I would be honored to serve as your president-elect of ACTE to meet the challenge of continuing the momentum forward for you, our members and the association.



PRESIDENT-ELECT

Scott Stone

Region: III

Division: Agricultural Education

Occupation: Agriculture instructor

Employment History

Agriculture instructor, Centralia R-VI School District: 1997–present

Education

M.S., agriculture education, University of Missouri – Columbia; B.S., agriculture education, University of Missouri – Columbia

National ACTE Involvement

Board of directors member: 2018–present; executive committee member: 2020–present; finance committee chair: 2020–present; ACTE's CareerTech VISION presenter: 2015; VISION attendee: 2008–2011, 2013–19; National Policy Seminar attendee: 2015, 2017–19; Educators in Action volunteer: 2019–present; CTE Support Fund supporter: 2018–present

Regional ACTE Involvement

Region IV Outstanding Mentor Award winner: 2010

Divisional ACTE Involvement

Policy committee chair: 2018–present; policy committee member: 2016–present

State ACTE Involvement

Missouri ACTE (MOACTE) board of directors member: 2009–2011; MOACTE conference attendee; MOACTE committee member

Other CTE Involvement

National Association of Agricultural Educators (NAAE) past president: 2018–19; NAAE president: 2016–17; NAAE president-elect: 2015–16; NAAE Region IV vice president: 2012–15; NAAE Region IV secretary: 2011–12; NAAE professional development committee chair: 2010; NAAE professional development committee member: 2008–2016; NAAE Region IV conference presenter: 2012, 2014; ; conference attendee: 2008–2017; Missouri Vocational Agriculture Teachers' Association (MVATA) past president: 2011–12; MVATA president: 2010–11; MVATA president-elect: 2009–2010; MVATA secretary: 2008–09

Application Summary

I am Scott Stone, an agriculture science instructor in Centralia, Missouri, and ACTE's Agricultural Education Division vice president. I have also served as the National Association of Agricultural Educators president. I have served on the NAAE board of directors for six years as the Region IV secretary and vice president. I have been a member of ACTE since my first day in the classroom because I feel it is my professional responsibility to belong to our career and technical organization. It is my sincere desire to serve as the ACTE president-elect in order to continue the mission of serving all career and technical educators across the United States.

Platform Statement

I am sure each of you could recite numerous campaign promises and slogans that never came true. I listen to hundreds of political candidates who make promises that, in reality, they have no way of making happen. This is very unfortunate as it only leads to heartbreak within constituents and a huge loss of credibility in our leaders. That is why, as a leader, I never make promises I do not feel I can keep. My mission as the ACTE president-elect is simple: I want to work on behalf of career and technical educators across the country. I will work to communicate the needs of teachers to the ACTE board. I will fight for career and technical education and educators every day. I will first listen to you, the members, develop a plan, and then will vigorously work to move ACTE in a positive direction while carrying out its mission and goals. If our organization is better, at the end of my service, than when I started, I will have achieved my goal.

professor, agricultural education, University of Georgia: 2014–15; instructor, agricultural education, Oregon State University: 2011–14; secondary agricultural educator, Sheldon High School: 2009–2011

Education

Ph.D., science education, Oregon State University; M.S., agricultural education, California Polytechnic State University; B.S., agriculture, California Polytechnic State University

National ACTE Involvement

Led strategic planning process for Counseling and Career Development Division executive team: 2018; Inclusion, Access, Equity and Diversity (IAED) Advisory Group member: 2020; ACTE's CareerTech VISION presenter: 2017–19; VISION attendee: 2015–19; National Policy Seminar attendee: 2015; public policy advocate; *Educators in Action Techniques* writer — “Teaching Outside the Box” (October 2018)

State ACTE Involvement

State Association for Career and Technical Education member (Georgia, Tennessee and Oregon): 2015–present

Other CTE Involvement

American Association for Agricultural Education (AAAE) member: 2011–present; National Association of Agricultural Educators member: 2001–2011; National Career Academy Coalition national trainer; State of Oregon Career and Technical Education Task Force member: 2014; National Science Teaching Association STEM is CTE Working Group; conducted CTE training for middle Tennessee educators: 2012; conducted many trainings and curriculum writing for National FFA Organization.

Application Summary

Hello, my name is Kris Elliott, and I hope to earn your vote to serve as the Agriculture Education Division vice president in ACTE. I have served in many CTE and agricultural education roles that I believe have uniquely prepared me for this role. I will work tirelessly to continue to enhance and strengthen the breadth and reach of CTE and agricultural education in our nation's schools. Having served as a secondary agriculture educator, university teacher educator in agriculture, and in nontraditional extension programs, I believe I can help us reach more students and support more teachers in delivering excellent agricultural CTE programming.

Platform Statement

Hello, Agricultural Education Division members, I'm Kris Elliott, and I would be honored to serve as your next division vice president. I have been involved in agricultural education and other areas of CTE for 20 years, serving as a high school agriculture teacher, university teacher educator, district CTE administrator, and an extension educator. I hope to use my broad experiences to further enhance and grow our membership while continuing to expand the reach of agricultural education throughout our organization and beyond. As your vice president, I will seek ways to help every member feel connected and their input valued as we continue to build a more inclusive and active organization. More policymakers, community members and administrators need to hear about the positive impact that agricultural education can have on the lives of students. To accomplish this, I will work with all of you to ensure you feel more connected to the work of our division and ACTE as a whole. I will work to enhance our social media presence and communication between members and leadership. Most of all, I will work to continuously seek your feedback and input to ensure the full value of your membership dues.



Agricultural Education Division Vice President

Kristopher Elliot

Region: V

Division: Agricultural Education, Counseling & Career Development

Occupation: Assistant director, extension service

Employment History

Assistant director, Oregon State University Extension Service: 2017–present; director of STEM, Metro Nashville Public Schools: 2015–17; assistant pro-



Agricultural Education Division Vice President

Robert Torres

Region: V

Division: Agricultural Education

Occupation: Professor and department head

Employment History

University of Arizona: present; University of Missouri: 2002–2010; New Mexico State University: 1993–2002; The Ohio State University: 1990–93; Willcox Unified School District: 1986–1990

Education

Ph.D., The Ohio State University; M.S., New Mexico State University; B.S., New Mexico State University

State ACTE Involvement

Arizona Association for Career and Technical Education (ACTE) member: 1986–1990, 2010–2020; Missouri ACTE member: 2002–2010; New Mexico ACTE member: 1993–2002; Ohio ACTE: 1990–93

Other CTE Involvement

Arizona CTE advisory committee member: 2010–14; Arizona CTE Skills Commission member: 2010–present; Arizona Agriculture Teachers Association member: 1986–1990, 2010–present; Arizona Agricultural Education/FFA Foundation board of trustees member: 2010–present

Application Summary

I have always been a teacher by choice, not by chance. An essential part of being a professional is service to my professional associations. As a former school-based agricultural teacher, I have spent the majority of my 33-year career in higher education serving CTE as a teacher educator. My current role as professor and department head of agricultural education, technology and innovation allows me to exercise an influence in my university, my community, my state and my country. During the span of my career, I have served my professional associations diligently. I look forward to serving ACTE in the same manner, with passion and commitment.

Platform Statement

I run on a platform of inclusivity and diversity, so that all members identify ACTE as a body of highly motivated professionals who desire to equip the next generation of graduates to become employed, with personal and professional skill sets and also with an entrepreneurial mindset. Toward this end, the CTE teacher must be the focus of ACTE. Through a suite of professional development opportunities that occur year-round through a variety of delivery modalities, ACTE can be part of the solution to the teacher skills gap. My role, if elected, will be to explore and enhance low-cost, high-quality, and a variety of teacher and program development activities. Further, I would desire to explore the creation of teacher career ladders as a means of recognizing CTE teachers for their accomplishments and commitment to their skill areas, to teaching and program development, and to student success.



Health Science Education Vice President

Kandy Smitha

Region: III

Division: Health Science Education

Occupation: Instructor

Employment History

Veterinary careers instructor, J. Everett Light Career Center: 2001–present; health occupations instructor, J. Everett Light Career Center: 1997–2001;

nurse, Rehabilitation Hospital of Indiana: 1995–2000; nurse, St. Vincent Hospital Indianapolis, 1992–95

Education

Licensed practical nurse certification, Vincennes University; Indiana state nursing license; massage certificate, Midwest Academy of Healing Arts; Indiana massage license; 120 credit hours, Purdue University

National ACTE Involvement

CTE Support Fund committee member: 2013–15; bylaws committee member: 2019; National Leadership Fellowship Program fellow: 2013; Educators in Action volunteer: 2019–present; National Policy Seminar attendee: 2013–19; ACTE's CareerTech VISION attendee: 2013–19; VISION presenter: 2016, 2018; Teach CTE Summit attendee: 2020

Regional ACTE Involvement

Policy committee member: 2019–present; Region III Conference attendee: 2014–2020; assisted Region III with Teach CTE Summit

Divisional ACTE Involvement

Policy committee member: 2013–present; committee member: 2013–present; committee co-chair: 2016–present

State ACTE Involvement

Indiana ACTE secretary: 2013; Indiana ACTE vice president/vendor chair: 2014; president-elect/conference chair: 2015; president: 2016; past president: 2017–19; legislative committee chair: 2019–present

Other CTE Involvement

HOSA – Future Health Professionals local advisor: 1997–present; HOSA State Leadership Conference event manager: 2001–present; HOSA International Leadership Conference event manager: 2003–2019

I have worked with the CTE division of the Indiana Department of Education on certification for veterinary assistants in Indiana. I have also been involved with the Governor's Workforce Cabinet (GWC), providing training in advocacy for members and advocating with legislators for CTE in Indiana. I have also worked with the grant from GWC for Indiana ACTE to provide professional development and to help provide budget for the grant.

Application Summary

I am a strong believer that, if you want to see changes made, you need to get involved. I would like to help the Health Science Education Division to become a stronger and more involved division – able to provide support, professional development opportunities and membership growth. Because of COVID-19, we now see how health care professionals must have a collective voice to effect change. That begins with a strong Health Science Education Division to create and deploy future health care providers with the best educational opportunities, both secondary and postsecondary. I think I can help with these goals and would like the chance to try.

Platform Statement

If there is anything this pandemic has shown me, it is how vital our health care system, our health care providers and health care educators are. What better time to find new ways to recruit and represent those who choose to follow this calling. We need to help those who are in education to find the courage to find their own voices. We know what has to be taught to create these heroes. We know what equipment is needed to best prepare all aspects of health providers. Here in ACTE, we have the opportunity to join together and make a difference, to join other educators as a group to affect change. We are the largest group of professionals in the workplace industry. We must encourage and challenge our colleagues to become part of a collective, to bring ideas, techniques and challenges to our profession, and to encourage young people that this is a worthwhile and rewarding profession. We need to grow our membership so we can collectively get others to listen to us and for us to feel supported and listened to individually. I would be happy to help lead the way.



Health Science Education Division Vice President Holly Strand-Rysgaard

Region: V

Division: Health Science Education

Occupation: Health sciences instructor

Employment History

Health sciences instructor, West Fargo Public Schools: 2013-present; polysomnography technician, North Dakota Center for Sleep: 2008-2016; health sciences instructor, Fargo Public Schools: 2010-13

Education

M.A., educational leadership, North Dakota State University; B.S., respiratory care, North Dakota State University; A.A./A.S., University of North Dakota - Williston

National ACTE Involvement

Nominating committee member: 2018-present; ACTE's CareerTech VISION attendee: 2017

Regional ACTE Involvement

Awards committee member: 2015-17, 2019-present; Region V Conference attendee: 2016, 2019

I serve on the Region V planning committee as committee lead for the 2023 conference that will be held in Fargo, North Dakota.

Divisional ACTE Involvement

Policy committee chair: 2017-18

State ACTE Involvement

Appointed North Dakota ACTE (NDACTE) president-elect: 2020; NDACTE president: 2017-18; NDACTE president-elect: 2016-17; NDACTE vice president: 2015-16; NDACTE Health Science Education Division president: four years; NDACTE Teacher of the Year Award winner: 2018

Other CTE Involvement

HOSA Outstanding Advisor of the Year for North Dakota: 2020; National Consortium of Health Science Education (NCHSE) 100x Leader Summit participant: 2019; North Dakota CTE guest site evaluator: 2014-present; Health Science Educators Association charter member: 2018-present; Health Sciences Instructor Association president: 2014-18; North Dakota CTE Professional Development Conference presenter: 2014-present; North Dakota CTE Professional Development Conference attendee: 2013-present

I have attended many NCHSE conferences.

Application Summary

I am an organized and dedicated leader in health sciences who has a passion for CTE. I have held numerous leadership positions within my division, state and region, and I am currently on the nominating committee at the national level. The Health Science Education Division vice president position has been a goal of mine for many years, and I am thankful for the opportunity to submit my application of interest.

Platform Statement

Like all of you, I have a passion for CTE. It has been part of me my entire life as my father was a career counselor. The same conferences I attend as an adult are ones I ran around the hotel at as a kid. After 10 years in the medical field as a registered respiratory therapist, I found that teaching was my calling.

As a health science instructor for the past decade, I now have the best of both worlds — between the world of medicine and preparing future health professionals through my teaching. If elected as the ACTE vice president in health science education, my mission will be simple: I will advocate for health science educators across the country and will not tire until our voices are heard.

I bring a wealth of leadership experience in ACTE and beyond to represent our division well. This position has been my goal since I first started down the path of ACTE leadership. I have served on local, state and national committees, and I am so grateful for the mentors I have had along this journey. I hope to be that mentor for you and to represent our division with integrity.



Region V Vice President Snehal Bhakta

Region: V

Division: Administration, Business Education, Trade & Industrial Education

Occupation: CTE administrator

Employment History

CTE administrator, Clark County School District (CCSD): 2019-present; CTE project facilitator, CCSD: 2015-18; CTE teacher, West Career & Technical Academy/CCSD: 2010-15; business/technology consultant, MHD LLC: 2003-2010; business process manager, Accenture: 1999-2002

Education

M.S., educational leadership, Nova Southeastern University; B.S., secondary education, Kansas State University; B.S., computer engineering, Kansas State University

National ACTE Involvement

Inclusion, Access, Equity and Diversity (IAED) Advisory Group member: 2020-present; ACTE's CareerTech VISION presenter: 2017-19; VISION attendee: 2013, 2015-19; National Policy Seminar attendee: 2016; completed ACTE State Leadership Training Program: 2017; Educators in Action *Techniques* writer: March 2019, "Advancing Access and Equity"

Regional ACTE Involvement

Committee member: 2015; Region V Conference presenter: 2013-15, 2020; Region V Conference planning committee representative: 2020

Divisional ACTE Involvement

Engineering & Technology Education Division policy committee member: 2018-present; Information Technology section committee member: 2015-present; conference attendee: 2018-19

State ACTE Involvement

Nevada ACTE (NACTE) membership/marketing chair: 2013-17; Nevada ACTE Summer Conference planning committee: 2013-17; Nevada New Teacher of the Year Award winner: 2013

Applied and administered Region V membership and marketing grant to help grow our membership by 20%; supported and assisted in the planning/process for Nevada to become an affiliated state by providing relevant information and data to membership and the NACTE board.

Other CTE Involvement

National Alliance for Partnerships in Equity intermountain STEM steering committee member: 2017-present; National Center for Women & Information Technology affiliate coordinator: 2016-present; International Society for

Technology Educators Technology Standards Task Force member: 2017; CUE, Computer-using Educators, board member: 2011-16

Application Summary

Currently, I'm employed as a CTE administrator in the Clark County School District, focusing on ensuring Nevada's future workforce is prepared for success. I've had the pleasure to work on projects related to increasing student and community participation with National Job Shadow Day, started an annual Student Workforce & Innovation Summit, increased promotion and growth of career and technical student organizations, and lead our #GirlsInSTEM and #GirlsInTECH initiatives to encourage and support more young women and students of color to consider CTE pathways in middle and high schools.

I've always had a passion to help others and am running for this office to ensure we are doing the right things to support CTE teachers and programs so that all of our students are prepared no matter what the future holds... even if it is a global pandemic.

Platform Statement

I want to serve as your next Region V vice president. Why? Because I believe that we are at a crossroads. The choice will be to continue moving education forward the way we have been successful in the past, or to take a different approach and a chance by making a change and trying something different.

What better time to make changes to education than during and after a global pandemic that many of us weren't ready to handle. I can't promise that my leadership will better prepare Region V or ACTE to handle what the future holds... but I can promise you that I will leave Region V and ACTE in a much better place for our members and our students at the end of my term through leadership that focuses on innovation, equity and diversity.

Take care and be well!



Region V Vice President Craig Statucki

Region: V

Division: Administration

Occupation: Director of career readiness, adult learning & education options

Employment History

Director, Nevada Department of Education: 2020-present; assistant principal, East Career and Technical Academy: 2018-2020; dean of students, East Career and Technical Academy: 2017-18; community partnership coordinator, Southwest Career and Technical Academy: 2011-17; digital game development program leader/teacher, Southwest Career and Technical Academy: 2008-2013

Education

Administrative leadership, Sierra Nevada College; teaching endorsement in secondary education, University of Phoenix; MBA, University of Nevada, Las Vegas; B.S., business administration, University of Nevada, Las Vegas

National ACTE Involvement

CTE Support Fund committee member: 2015-17; membership advisory group member: 2015-16; National Policy Seminar attendee: 2015-19; ACTE's CareerTech VISION attendee: 2009, 2011-19; State Leadership Training Program completer: 2013-14

Regional ACTE Involvement

Policy committee member: 2016-19; legislative committee member: 2015; marketing, membership and new ideas committee member: 2014-15; Re-

gion V Conference presenter: 2012, 2014, 2016-18; conference attendee: 2012, 2014-19; Region V interim fellows coordinator: 2017-18; ACTE Region V Fellow Program: 2015-17

State ACTE Involvement

Nevada ACTE (NACTE) executive director: 2015-present; NACTE past president: 2015; NACTE president: 2014-15; NACTE president-elect: 2013-14; NACTE Information and Media Technology Division vice president: 2012-13

Other CTE Involvement

Perkins V professional development working group for Nevada: 2019

Application Summary

I currently work as the director of career readiness, adult learning and education options for the Nevada Department of Education. I previously served as an assistant principal at East Career and Technical Academy in Las Vegas, Nevada, which provides nine different CTE programs of study to almost 1,900 students. In addition, I have continued my involvement in ACTE by serving as the executive director for Nevada ACTE since 2015 and on the Region V Policy Committee since 2016. ACTE has provided me opportunities to serve the association and, as the Region V vice president, I wish to be able to serve and lead all of the members of Region V.

Platform Statement

ACTE has made a significant impact on me as an educator and a leader, and I welcome the opportunity to give back to an association that has given me and my students so much. Through ACTE, I improved as an educator, a leader and an advocate for CTE. I pledge to continue to work with all of the Region V states to create effective professional development opportunities, advocate for CTE and grow membership in each state. As educators, we want to provide the best opportunities for our students to learn, grow and become successful. The same is necessary for educators. As Region V vice president, I will work tirelessly with region members and ACTE to develop more opportunities to improve as educators, leaders and advocates to engage members throughout the whole year. The world is changing, and we need to create innovative strategic plans to ensure that all members are knowledgeable about legislative concerns, instructional strategies, and partnerships in order to engage members and provide membership value. I am honored to be nominated as the Region V vice president. I promise to work with all divisions and board members to strengthen state, regional and national associations.



Region V Vice President Shani Watkins

Region: V

Division: Administration

Occupation: Director

Employment History

Director, West Sound Tech Skills Center: 2015-present; principal, Seattle Skills Center: 2013-present; assistant CTE director, Tacoma Public Schools: 2010-13; director, bachelor's degree program, Central Washington University: 2006-2010; instructional facilitator, CTE, Tacoma Public Schools: 2002-06

Education

MBA, Grand Canyon University; M.Ed., organizational systems, Grand Canyon University; M.Ed., focus on business and marketing education, Central Washington University; B.S., business education, Central Washington University; B.S., accounting, Central Washington University

National ACTE Involvement

ACTE's CareerTech VISION presenter: 2016, 2018; VISION attendee: 2015-19; ACTE/NCLA Best Practices and Innovations in CTE Conference presenter: 2016-17; National Policy Seminar attendee: 2015-17, 2019; CTE Support Fund supporter: 2015-16; won scholarship to attend Best Practices in 2016 as a first-time attendee

Regional ACTE Involvement

Policy committee member: 2017-2020; membership committee member: 2017-19; Region V Conference presenter: 2018-19

State ACTE Involvement

Washington ACTE (WA-ACTE) past president: 2019-2020; WA-ACTE president: 2018-19; president-elect: 2017-18; legislative committee member; membership committee member; awards committee member; in-service committee member; annual attendee and presenter of the WA-ACTE summer conference

Other CTE Involvement

Washington Association of Career and Technical Administrators (WACTA) past president – president – president-elect: 2014-17; WACTA secretary: 2012-13; legislative committee member; awards committee member; in-service committee member; WACTA fall and spring conference presenter: annually; Washington State Skills Center Association member and web master: 2013-present; Washington State Business Education Association member and conference participant

Application Summary

Career and technical education is truly my heart and my passion. As the director of West Sound Technical Skills Center in Bremerton, Washington, I am able to really immerse myself in career and technical education programs and ensuring that our students find success today and in the future. Over the past several years, I have held various positions within my state professional organizations, including as secretary, president-elect, president and past-president of the Washington Association of Career and Technical Administrators; president-elect, president and past-president of the Washington Association of Career and Technical Education, and as a Region V Policy Committee member for three years. It is a privilege to work in career and technical education, and I want to support the great work Region V does in supporting educators developing and promoting best practices in CTE. As the Region V vice president, I will support and encourage your great work in CTE and support you at a national level.

Platform Statement

My name is Shani Watkins, and I am running for ACTE Region V vice president. I am excited to represent ACTE and Region V members for the next three years. I will do my best to represent your needs and support your work in career and technical education.

I have been fortunate to be a part of the Region V Policy Committee for the past three years as well as president-elect, president and past-president of Washington ACTE, and president-elect, president and past-president of the Washington Association of Career and Technical Administrators. I believe that these experiences can help me support both ACTE and Region V.

Career and technical education is my heart and passion. I believe that, to provide relevant, engaging, educational leadership that ensures all students are positioned for career success, we must work collaboratively to ensure success for all. I want to celebrate the success happening locally, regionally and nationally together and encourage models that can be replicated. We are in a critical time of change; let's work together to create opportunities and overcome barriers! Together, we can ensure all CTE teachers are prepared for change and support student career success.



New and Related Services Vice President-elect

Kevin English

Region: V

Division: New and Related Services (NRS),
Business Education

Occupation: Senior director of knowledge management

Employment History

Senior director of knowledge management, NAF: 2013-present; CTE teacher, Peoria Unified School District: 1993-2013; CTE teacher, Flowing Wells Unified School District: 1991-93; grad student instructor, University of Arizona: 1990-91; CTE teacher, Marana Unified School District: 1986-1990

Education

Ph.D. (in progress), Grand Canyon University; M.A., University of Arizona: 1990; B.A., University of Arizona: 1986

National ACTE Involvement

Executive committee member: 2009; professional development committee: 2003; sustainability task force member and chair: 2005-06, 2010; advisory group member: 2015, 2018; Teacher of the Year award winner: 2005-06; National Leadership Fellowship Program program coordinator: 2006-2012; ACTE's CareerTech VISION presenter: many conferences, 2003-2017; VISION attendee: many conferences, 2003-2019; National Policy Seminar (NPS) attendee: many conferences, 2003-2018; Educators in Action volunteer: 2015-present; CTE Support Fund supporter 2003-present; public policy advocate: 2003-2019

As I reflect on all my professional activities over the past 30 years, I am excited to say my involvement has spanned leadership in ACTE divisions and sections, such as Agricultural Education, Engineering and Technology Education, and Marketing Education. I served at the regional level as the vice president and as a policy committee member, and also on the Region V board and on many committees. I have been a member of Association for Career and Technical Education of Arizona (ACTEAZ) and California ACTE. As an ACTE board member, I worked with that team to develop the ACTE fellows program; I served as the first coordinator for this work. I have attended VISION and NPS many times, and I have advocated for career and technical education all my career. I have been a consistent supporter of the ACTE legislative fund over my 30 years of involvement as well. This involvement was my key professional development activity, and I have grown as an educational professional through this work.

Regional ACTE Involvement

Policy committee member: 2003-2010; policy committee chair: 2006-09; awards committee member: 2003-05; awards task force member: 2003-05; public information committee chair: 2003-05; conference presenter: 2002-09; Region V Teacher of the Year award winner: 2005; Region V Program of the Year award winner: 2002

As a young ACTE member, my professional introduction to ACTE was through state and regional activities. Presenting sessions, serving on committees and in leadership positions at the regional level were a critical part of my professional growth and development. Many of my lifetime mentors and friends have come from this involvement in ACTE Region V. I love the regional activities and very proud of my involvement and service to Region V.

Divisional ACTE Involvement

Policy committee member; awards committee member: 2019-2020; Career Academies section growth task force member: 2019-2020; Career Academies section committee chair: 2015-present; Program of the Year award winner: 2003

In my role on the policy committee, I have worked with Ford NGL to increase membership in the Career Academies section. I am working on the awards committee, this year, to institute an awards program.

State ACTE Involvement

ACTE of Arizona (ACTEAZ) president: 2001–04; Arizona CTE Summer Conference presenter: 1987–2015; workshop presenter at ACTEAZ, Nevada ACTE and Wyoming ACTE conferences: 2010–12

Other CTE Involvement

Mountain Ridge DECA and FBLA CTE leadership/public speaking coach/volunteer: 2016–19; Mountain Ridge DECA and FBLA chaperone/volunteer to national CTSO competitions: 2016–19; Arizona Agriculture Teachers Association (AATA) member; AATA policy committee chair: 1998; Arizona Industrial Technology Association president: 1999–2001; Marketing Educators' Association (MEA) member; MEA Conference presenter: 2016–19

Application Summary

ACTEAZ is where my foundation in career and technical education began. I served as a member of the Arizona Agriculture Teachers Association at the start of my career. I served the Arizona Industrial Technology Association as president in a revitalization of that organization. I then served on the Arizona ACTE board as president in years of substantial growth for our association. I have grown at all leadership levels within the organization, which has led to this decision to serve in this role of leadership for ACTE.

Currently, I am the senior director of knowledge management at NAF. My duties include curriculum development and maintenance, professional learning, teacher-facing platforms and educational partnerships.

As a career and technical educator for over 30 years, I am excited to bring my passion, experience and high energy level to service. My hope is that we work together developing the mission, vision and goals for our association.

Platform Statement

Serving the association, the members in the New and Related Services Division is my basic goal. To provide leadership for growth of the NRS Division, all of its sections and the association. To develop a system and processes within the NRS Division to encourage growth in membership, services and products to the members so that they can serve their student populations in this new era of educational development. Many challenges are facing all educators, and it is time for our leadership to listen, build relationships and work collaboratively to create an association that provides for and meets the needs of our membership.

Specifically developing a program of work for the NRS Division, working with section leaders to use this as an example to develop their programs of work, develop a calendar of professional development for the NRS Division that is both in person and virtual in delivery, to provide leadership at the board level — using these examples and leading from a position of success in our division.



New and Related Services Vice President-elect

Susan Leon

Region: V

Division: New and Related Services (NRS)

Occupation: Instructional specialist

Employment History

Instructional specialist, West-MEC: 2017–present; internship coordinator/business and culinary instructor, Peoria Unified School District: 2011–17; technology life careers instructor, Peoria Unified School District: 2009–2011

Education

M.Ed., CTE/business and marketing, Arizona State University; B.S., business administration and marketing, University of Arizona

National ACTE Involvement

ACTE's CareerTech VISION presenter: 2019; VISION attendee: 2014, 2018–19; National Policy Seminar attendee: 2015; Educators in Action *Techniques* writer: 2020 (January); National Work-based Learning Virtual Conference presenter: 2020

Regional ACTE Involvement

Nomination committee member: 2019–present; Region V Conference presenter: 2019; conference attendee: 2015, 2019–2020; Region V Innovative Program Award winner: 2015; ACTE Region V fellow: 2018–2020

Divisional ACTE Involvement

NRS Division member: 2018–present; committee member, integration of academics and CTE: 2020–present; Work-based Learning section involvement (secretary during meetings, committee chair): 2019–present

State ACTE Involvement

Association for Career and Technical Association of Arizona Premier Series presenter, work-based learning: 2017–present; Premier Series presenter, CTE program management: 2017–present; ACTEAZ fellow: 2012–15

Application Summary

I am Susan Leon, a curriculum and instructional specialist for West-MEC in Arizona. In my role, I coach instructors on best curricular practices surrounding the CTE delivery model. I also champion projects for the district, mainly quality evaluator training, work-based learning and our teacher induction academy.

I have been involved with ACTEAZ through the fellowship program, as well as being a frequent presenter for summer conference and throughout the year with the Premier Series program. For the past two years, I have been an ACTE Region V fellow, attending conferences, presenting and holding a position on the nominations committee. I hold a personal passion for work-based learning and have been active in the Work-Based Learning section this year.

I am honored to apply for this position. It is a strong next step for me to be involved at the national level, while continuing to support teachers through professional development, networking and advocacy. I look forward to serving CTE professionals.

Platform Statement

I am excited to apply for the position of New and Related Services Division vice president-elect. I would bring enthusiasm and leadership to the position, as I am extremely passionate about CTE and the opportunities it provides students. Within the division, I would like to organize the membership to maximize its full potential. This includes utilizing each person in an appropriate role, employing appropriate subcommittees, and connecting individuals that are either in like programs or that can benefit from each other through small groups.

I would focus on providing opportunities for connection, either through networking or personal introduction. Personally, I have learned many of my own skills and knowledge through other people, or what others have shown me, and want to provide similar opportunities.

I would also inquire as to what members find the most value in and focus on providing that to them. If it is utilizing resources provided by ACTE or taking advantage of networking opportunities, I would be sure to provide and clearly communicate that value.



Region II Vice President-elect Katherine Kandalec Holm

Region: II

Division: Postsecondary, Adult and Career Education (PACE)

Occupation: Assistant professor, career and technical education

Employment History

Assistant professor, career and technical education, Athens State University: 2017–present; research office coordinator, University of Georgia: 2014–17; academic affairs coordinator, Athens Technical College: 2012–14; business and general education faculty, Athens Technical College: 2006–2012; program director, Paxen Learning: 2009–2012

Education

Ed.D., adult and community college education, North Carolina State University; M.Ed., workforce education and development, University of Georgia; B.S., business education, University of Georgia; A.A.T., accounting and general business Studies, Athens Technical College

National ACTE Involvement

ACTE LEAD award winner: 2018–19; ACTE's CareerTech VISION presenter: 2018–19; VISION attendee: 2014–19

Regional ACTE Involvement

Region II Conference presenter: 2014

Other CTE Involvement

Association for Career and Technical Education Research (ACTER) membership secretary: 2017–2021; ACTER webmaster: 2019–2021; Omicron Tau Theta board-at-large: 2018–present; *Career and Technical Education Research (CTER) Journal* Editorial Board chair: 2019; *CTER Journal* Editorial Board member: 2017–present; American Educational Research Association special interest groups, CTE & Workforce Education: 2014–present

Application Summary

I am a longtime, passionate advocate of CTE who has recently realized that the best way to make a bigger difference in our visibility is by taking a larger role in the advocacy and outreach to non-CTE constituencies. I currently work as an assistant professor of CTE and have long focused my research on how to best change the narrative surrounding career and technical education among those who are not as well-versed in its opportunities and benefits. I would love to have the opportunity to work closely with the other members of Region II in developing partnerships and outreach to policymakers, non-CTE faculty and staff, and the larger business community. While it seems that every few years a think piece on the "newly" discovered benefits of CTE reaches a broader audience, I want to move the dial to where CTE is the default, not a novel idea.

Platform Statement

As Region II vice president-elect, I would like to work toward bridging the perceived gap between career and technical education and academic content. I believe this can be accomplished by highlighting the amazing work our educators are doing, especially in times of crisis, and publicizing that work beyond our own sphere of influence. In recent years, CTE has gotten slightly more frequent, but still only occasional, feel-good features on social media; I'd like those feelings and perceptions to become the norm, not the exception.



Region II Vice President-elect Beth Caryn Parks

Region: II

Division: Administration

Occupation: Director of career, technical and agricultural education (CTAE)

Employment History

Director of CTAE and federal programs, Oconee County Schools: 2017–present; director of CTAE, Barrow County Schools: 2015–17; youth apprenticeship coordinator/business education teacher, Barrow County Schools: 2004–2017

Education

Education performance leadership certification, Northeast Georgia RESA & University of North Georgia Collaborative; education specialist degree in teaching & learning; exemplary teaching, Valdosta State University; M.S., foundations of education, Troy University; B.S., business education, University of Georgia

State ACTE Involvement

Georgia ACTE (GACTE) Summer Leadership Conference attendee: 2005–present; GACTE Outstanding New Teacher of the Year in Business & Computer Science, 2010; GACTE Successful YAP Completer: 2011

Other CTE Involvement

Georgia Business Education Association (GBEA) president: 2010–11; GBEA president-elect: 2008–2010; awards representative to the national Business Education Association: 2011–13; National Careers Pathway Network leadership certification received: 2019

Application Summary

Since serving as the president of the Georgia Business Education Association, I have been desiring to get back into serving my state through an educational CTAE association. As my leadership role in CTAE has progressed to the director position, I look forward to the opportunity to get back involved in CTAE at the state level. I spent the past year participating in the CTAE leadership certification program through the National Careers Pathway Network, and I am now ready to seek the next opportunity.

Platform Statement

As a region vice president, I hope to work with other CTAE professionals to continue to drive forward our amazing programs in such uncertain times. I hope to assist ACTE in continuing to provide the most effective and relevant professional development for our teachers and administrators to ensure they are able to meet the always changing needs of our students and communities. CTAE is powerful in providing learners with the skills, talents, and knowledge necessary to not only be successful in the workplace, but in being the leaders of our great nation. CTAE is for all and that is the message that I desire to market in my region. Through partnering with businesses and organizations, we can strengthen our CTAE programs to meet the changing needs of our society, while maintaining the academic rigor that is expected. Through collaboration and teamwork, ACTE will be the driving force that moves CTAE into the forefront of education and our communities.



Region III Vice President-elect Brandon Russell

Region: III

Division: Administration

Occupation: Director of career, technical and adult education (CTAE)

Employment History

Director of CTAE, Columbia Public Schools: 2014–present; adjunct professor, University of Central Missouri: 2015–present; director of Jefferson College Area Technical School, Jefferson College: 2010–14; assistant superintendent, Marshall Public Schools; 2008–2010; director of Lex La-Ray Technical Center, Lexington R-V School District: 2002–08; graphic arts instructor; Carrollton R-VII School District: 1996–2002

Education

Ed.D., educational leadership, Saint Louis University; educational specialist, educational administration – superintendency, University of Central Missouri; M.S., industrial vocational technical education, Central Missouri State University; B.S., journalism/graphic communications, Northwest Missouri State University; A.A., general studies, Kansas City Kansas Community College

National ACTE Involvement

Nominating committee: 2017–present; ACTE's CareerTech VISION presenter: 2016; VISION attendee: 2011, 2014–19 (and other years prior to 2010); National Policy Seminar attendee: 2019

Regional ACTE Involvement

Conference attendee: 2016, 2019–2020

State ACTE Involvement

Missouri ACTE president: 2019–2020; president-elect: 2018–19; Missouri Council of Career and Technical Administrators (MCCTA) president: 2006–07; 2014–15; MCCTA Administrator of the Year: 2017

I have been a member of Missouri ACTE for 22 years and served the association in a variety of ways during my career. I served as a member of the board of directors for the past six years, as well as three years surrounding my first division presidency.

Other CTE Involvement

SkillsUSA Career Pathways Showcase technical chair: 2020; SkillsUSA Career Pathways Showcase national education team: 2015–2020; Missouri SkillsUSA Career Pathways Showcase contest chair: 2011–present

Application Summary

Over the past 23 years, I have served in a variety of roles in career and technical education, starting as a graphic arts teacher for six years, then 17 years as an administrator, currently as director of career, technical & adult education at Columbia Public Schools/Columbia Area Career Center in Columbia, Missouri. I have been a member of Missouri ACTE for 22 years and served the association in a variety of ways during my career, serving on the board of directors for nine years, and currently serving as president of the association. I served as the president of MCCTA twice.

The past few years, I have been serving as member of the ACTE selection committee representing Region III. Getting more actively involved in Region III and in ACTE, beyond attending conferences, has been a goal of mine for several years. It would be a privilege serving the region and national association.

Platform Statement

As the vice president-elect representing Region III, I will first strive to lead others on the policy committee to further the excellent work that is occurring in strategic planning. This work is critical for growth and member benefits. I would also encourage my colleagues to become active members by providing engaging networking opportunities at ACTE's CareerTech VISION and beyond. As a member of the ACTE board of directors, I will be an active participant in all board functions, contributing to the review, revision and implementation of a strategic plan that supports and enhances the goals of the association, especially in membership growth and member engagement. I believe, to move any organization forward, committed leaders must come together to collaborate, engage in honest dialogue and make decisions based on the benefit of the membership. I learned from my father at an early age that if you are going to have an impact on an organization, it is important to not just be a member, but to serve others by taking an active role in a leadership position. I seek this office not for personal reasons, but to actively serve ACTE in its mission to be a national leader in CTE.



Region III Vice President-elect Shelley Rust

Region: III

Division: Family and Consumer Sciences (FCS) Education

Occupation: Culinary arts instructor

Employment History

Culinary arts instructor, J Everett Light Career Center; Culinary arts teacher, Area 31 Career Center: 2019–present; CTE specialist, Indiana Department of Education: 2019; culinary arts/baking pastry teacher, Kokomo Area Career Center: 2006–2019

Education

B.S. [in progress], business administration, Indiana Wesleyan; A.A., business/Indiana Wesleyan University; director licensure program, Purdue University

National ACTE Involvement

Bylaws committee member: 2018–2020; National Leadership Fellowship Program fellow: 2014; ACTE's CareerTech VISION presenter: 2017–18; VISION attendee: 2014–present; National Policy Seminar attendee: 2017–18; Educators in Action volunteer: 2018–present

Regional ACTE Involvement

Conference attendee: 2017, 2020


State ACTE Involvement

Indiana ACTE professional development committee chair: 2020; past president: 2019; president: 2017–18; vice president: 2016; professional development committee chair: 2020; vendor chair: 2016; planned conference: 2017–19; new and newer teacher conference organizer/planner: 2019

Application Summary

Currently, I am the chair for the professional development committee for Indiana ACTE and also new/newer teacher conference organizer. I have held the vice president, president-elect, president (for two years) and past president positions in Indiana ACTE. CTE is my passion! Being able to work on behalf of all teachers and students to provide the best opportunities, training and resources is a priority for me. Showing CTE instructors the value that ACTE, at the state, regional and national levels, can provide for their professional and personal growth, and the growth of their students, is a priority for me. CTE made me who I am! I believe that my journey and path is to help others become their best self and give the best to their students in CTE.

Platform Statement

I want to grow the membership of ACTE at the state, regional and national levels. However, I don't want just to grow it; I want to retain those members. We must show our members the value of ACTE membership. There are incredible resources available online and an outstanding network of instructors, administrators and industry partners to support them. However, I want to offer them more. I would like to develop free or minimal cost professional development opportunities throughout Region III for all CTE teachers. Professional development classes on program-specific topics, classroom management and best practices. This pandemic has put fear into many CTE teachers. How do they do labs if they have to be virtual? How are they going to give their students all that they want to if we are not full time in the classroom? Classes that can be done in person in each state, or even virtually for the entire region, to help all teachers maneuver this uncharted time. We need to show members value to get them to join and, more importantly, get them to continue their membership. Developing free or low-cost professional development to strengthen our members and give them confidence is absolutely essential. 



The Next Stage in CTE's Evolution

By Patrick Michel

JOHN DEWEY WAS ONE OF OUR COUNTRY'S EARLIEST SUPPORTERS OF CAREER AND

technical education (CTE). Not to be confused with Melvil Dewey — the architect of the Dewey Decimal System — the Vermont-born John Dewey believed that the strength of our country ultimately depended on the strength of our education system.

Education, Dewey argued, was something students must play an active role in; they need not be passive bystanders (Hildebrand, 2018). How else can they make informed connections between the classroom and their everyday, lived experiences?

Due to overwhelming criticism of his ideas or his personal politics and beliefs — perhaps a little of both — John Dewey's philosophies were largely ignored for decades. His school of thought was restricted to the outskirts of larger learning and academic movements. And for generations, school districts in every region and in every state undercut the fundamental

benefits of experiential learning — the kind that John Dewey ardently fought for.

Much like John Dewey's story, the story of blended and online schooling has been fraught with dismissal, criticism and, in some cases, condemnation. Additionally, much like John Dewey's academic mantra, many critics have overlooked the advantages of experiential learning in the context of virtual and online education.

Thankfully, the tides are changing on both accounts. Brick-and-mortar schools and traditional learning programs are not only embracing Dewey's philosophy of hands-on learning, they are also recognizing the importance of online education in this endeavor. This has become even more apparent amid the coronavirus pandemic.

Embracing online education

John Dewey long argued that interactive, ongoing student engagement is a leading predictor of academic and long-term success. Officials at the University of Washington (2020) assert that "instructors who

adopt a student-centered approach to instruction increase opportunities for student engagement, which then helps everyone more successfully achieve the course's learning objectives." Online and blended learning platforms offer innovative and interactive curriculum and instructional delivery options that can help engage students in CTE.

Erica Young, an online CTE teacher at Insight Academy of Arizona, uses project-based learning (PBL) to teach students in the school's business management pathway. Students work hands-on with an actual startup company to develop its social media platforms — such as a Facebook business page — and promotional materials. Young explained, "This allows my students to learn about marketing research and creating marketing tools."

Today's students need, and they seek out, a variety of rich learning perspectives. They've come to expect virtual learning experiences. Postsecondary institutions are taking notice: "A third of all students now take at least one online course." Doug Leder-

man (2018), editor and co-founder of *Inside Higher Ed* went so far as to say that “without online education, college and university enrollments would be declining even more.”

Parents, too, are realizing that online learning can help give their kids a leg-up when it comes to employment. In a recent survey, nearly 87% of respondents agreed that having access to career-focused coursework in an online format would help more people thrive in the workforce (K12 Inc., 2020). School leaders in states like West Virginia have also received this message. Education officials there are driving more career education-related initiatives designed to “make a difference for students, for business and industry, for West Virginia and for the global economy” (West Virginia Department of Education, n.d.).

Parents, colleges and state officials are on the right track, but, until the COVID-19 pandemic, most primary and secondary schools were reluctant to embrace the innovative use of technology to immerse students in a modern workspace. By restructuring the traditional learning environment and helping students join digital communities, we can better prepare them for success.

Public perception and the role of CTSOs

We have made significant strides when it comes to both online schooling and career and technical education. However, we still have a long way to go to address what I consider a perception problem — an issue John Dewey grappled with too.

CTE, often, has been perceived as a path/option for the students who just “couldn’t cut it” in traditional schooling. Of course, we know that could not be further from the truth. Career and technical education is about preparing the next generation for a rapidly evolving and creative workforce. It’s about matching employers with eager, qualified candidates. And it’s about ensuring that our students don’t just find jobs — they find fulfilling, long-lasting careers.

Many of us in the online learning space have had to contend with this perception problem as well. However, today, CTE offers a wide range of pathways to engage students of all interests; career and technical student organizations (CTSOs) promote a sense of belonging, and they’re fun! Amid the COVID-19 pandemic, many CTSOs

conducted virtual events. When learners begin to see the value, perception improves for CTE and virtual educators, alike.

In 2020–21, for example, Arkansas Virtual Academy (ARVA) and Indiana Digital Learning School (INDLS) — two online and blended schools — launched the first-ever virtual chapters of National FFA Organization. INDLS agriculture teacher Amber Lewis said her school’s FFA chapter is preparing students for future agriculture careers while connecting students to their peers and experts across the state. “We’re very excited. These kids are ready and geared up to get out there and be involved” (Slacian, 2020). With a nod to online and blended schools — and due in part to coronavirus-related school closures — CTSOs are beginning to recognize the value of technology, as they bring students and businesses together in collaborative virtual environments.

Bipartisan support for CTE

Career and technical education truly has bipartisan support. In a 2018 report, the Center for American Progress — a progressive organization — referred to “high-quality CTE programs” as one of the “foundational elements” for boosting high school students’ engagement (Batel, Roth & Campbell, 2018).

Similarly, Michael J. Petrilli, president of the Thomas B. Fordham Institute — a conservative-leaning think tank — has acknowledged the importance of providing students with multiple road maps to success: “I think where high schools have gotten it wrong, or let’s be honest, those of us in the policy world have gotten it wrong, is in thinking that high schools’ only job is preparing kids for a four-year liberal arts degree” (Gonser, 2018). This convergence of thought is sure to benefit CTE students across the country. I have no doubt that John Dewey would be proud of us.

Conclusion

I’ve devoted most of my professional life — more than 30 years — to public education. I started my career as a ninth and twelfth grade social studies and earth science teacher. To date, that’s been the most rewarding part of my career. I received a gift that few people receive — the chance to play a role in helping dozens of young leaders learn and grow. No matter what

zip code they lived in or what their background was, my students all wanted the same thing — an opportunity to build a successful future.

As John Dewey continues to teach us, we cannot adequately support our students along this journey if we do not expose them to experiences that boost their confidence, cultivate their decision-making skills and build their creative capacities. CTE offers them these experiences and so much more. ■

Patrick Michel is vice president of career readiness program design for K12 Inc. He is a 30-year veteran of public education as a teacher, principal and superintendent. Email him at pmichel@k12.inc.us.

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Virtual VISION 2020: It's the most important event of the year for career and technical educators!

ACTE is excited to "see" you at CareerTech Virtual VISION 2020, a fully online, virtual experience, happening **Nov. 30–Dec. 4!** From the comfort and convenience of your own home, school or office, Virtual VISION will offer enhanced and expanded programming that addresses cutting-edge career and technical education (CTE) issues during these unprecedented times. Attendees will have an abundance of opportunities to participate in vital virtual interactions, including:

- #ACTEengage interactive sessions on best practices in virtual, hybrid and in-person learning environments for CTE
- Sessions covering culturally responsive classrooms, and inclusion, access, equity and diversity in CTE
- The reimagined online Expo featuring an abundance of resources and gamification activities with up-to-date leaderboard
- Live chat in real-time with presenters and CTE educators from around the world
- Virtual receptions and engaging experiences in a dynamic platform

There's still time to register! The ACTE member rate is \$350. The nonmember rate is \$400. Learn more and register at careertechvision.com.

New student video contest, themed "Advancing Space Exploration Through Manufacturing"

ACTE, host of CTE Month®, and NASA HUNCH are excited to once again collaborate on the 2020–21 student video challenge, showcasing CTE and project-based learning programs in high-demand career fields on earth and in space. This year's theme is "Advancing Space Exploration Through Manufacturing" and encompasses multiple CTE sectors, including health care, transportation,

family and consumer sciences, energy, robotics and more! The deadline to submit a video is **April 1**. Learn more at acteonline.org/video-challenge.

New resource for CTSO students

Rachael Mann, author of *The CTSO Competition Companion*, offers CTSO students specific components of winning strategies and approaches in this easy-to-read book, covering such topics as:

- How to excel in competitions and win at life
- Building skills that will open doors and opportunities
- How to prepare for unknown variables and predict worst-case scenarios

The member price is \$19.95. Purchase your copy at acteonline.org/shop.

Respect for diversity in the classroom – a free resource from ACTE and Asia Society

The rise in diversity across the United States means today's students will be working and living with people from a wide array of backgrounds. It also means instructors increasingly have diverse populations of students in their classrooms. ACTE has partnered with Asia Society to create new free tools and online professional development to assist educators in creating a culturally responsive classroom that is respectful of diversity and inclusive of all perspectives and backgrounds. To learn more, visit ctelearn.org/cte-lessons/career-readiness-stem-cte/CT107/deep-dive-into-global-competence-and-respecting-diversity.

No bylaws amendments

No bylaws amendments were received or approved by the 2020 deadline. As a result, none will be considered at the Assembly of Delegates. ■

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Developing CTE leaders for the future at the University of Central Missouri

By Michelle Conrad, Michael Pantleo, Larae Watkins, Bart Washer & Krystle Gremaud

AS WE CONTINUE TO NAVIGATE THE COVID-19 PANDEMIC, LEADERSHIP IN EDUCATION IS

being tested. We are looking for new ways to teach and engage students while maintaining the integrity of leadership development in career and technical education (CTE). As we think about

- What's next for the profession?
- What role will I (and my students and colleagues) play in the next generation of CTE?

We all can lead the discussion and vision on future trends in CTE, regardless of our positions. At the University of Central Missouri (UCM), we believe leadership occurs in any position — not limited to school principals, program coordinators, deans or supervisors. Any person in any position can emerge as a leader.

Offering the only comprehensive CTE program in Missouri, UCM strives to build future CTE leaders in the state and beyond. We offer advanced graduate degree programs, continued professional development and teacher education programs to help educators develop skills in all aspects of CTE leadership.

The UCM School of Professional Education & Leadership offers two online graduate degrees for CTE professionals: a master of science in CTE leadership (with options in teaching leadership, CTE administration leadership and industry training leadership), and an education

specialist degree in professional leadership with an option in adult, career & technical education. These degrees can be used to enhance an individual's career, to pursue initial credentialing through post-baccalaureate certification, or to build stackable credentials into a doctoral program.

These 30-hour leadership-based programs are tailored to the candidate's personal and professional goals and include coursework in any of the CTE content areas. Coursework can also be tailored with increasing capacity in online teaching and learning, adult learning theories and practices, or postsecondary teaching credentials.

UCM partners with ACTE to offer college credit for CTE Learn courses.

The CTE Learn platform provides a convenient and timely source for engaging professional development. Participants may obtain continuing education or regular college credits for career advancement. Topics cover a range of foundational and cutting edge issues of importance to CTE professionals, including academic integration, effective CTE leadership, online teaching and learning, developing global competence, and more. With the support of content development partners like UCM, new offerings and options continue to be added to the online community.

Further, UCM provides training to new teachers that will ensure they become

leaders in their programs and school districts. UCM faculty often partner with school districts — in and outside Missouri — to offer professional development sessions on academic integration, instructional planning, project-based learning, global competence, instructional strategies, classroom management, classroom assessment and data analysis. These sessions allow veteran teachers the opportunity to attend and enroll in reduced tuition course credit toward their bachelor's, master's or education specialist degree.

To develop a future generation of classroom leaders.

If you're a CTE classroom leader and your students want to become leaders like you, UCM undergraduate CTE teacher education programs can help students achieve those goals. These programs offer unique opportunities to develop leadership skills; a clinical model exposes students to the teaching classroom early in the program. To obtain this context for coursework is invaluable.

The UCM agriculture education program provides leadership to future and practicing teachers through an updated curriculum based on national trends and issues. Revisions are supported by local agriculture instructors and the program's statewide advisory committee. Agriculture education students gain experiences in a multitude of specific agricultural learning environments.

UCM's business and marketing teacher education program provides leadership via cooperative partnerships with other universities. The various Missouri public university business and marketing teacher education programs collaborate to offer teacher certification courses on a rotating basis for the entire state, an approach approved by the National Business Education Association. This partnership not only increases collegiality among faculty but also builds relationships in the next generation of business and marketing teachers.

The UCM engineering and technology teacher education (ETTE) program offers a combination of pre-engineering and traditional lab-based courses so new ETTE teachers can meet their future school's mission and vision. Students graduate with national portable credentials in Project Lead The Way (PLTW) and Engineering by Design (EbD). In addition, UCM offers university credit for teachers pursuing PLTW or EbD certifications in their home state, oftentimes at reduced tuition rates that may be applied toward a graduate degree.

The UCM family consumer science education (FCSE) program is the only nationally accredited program in Missouri. FCSE students work one on one with highly skilled instructors who have firsthand experience in FCS content. Students develop culinary, textile, marketing and child care skills as applicable to living and working in a global and sustainable world. FCS students are

prepared to be progressive, forward-thinking change agents for the FCS profession.

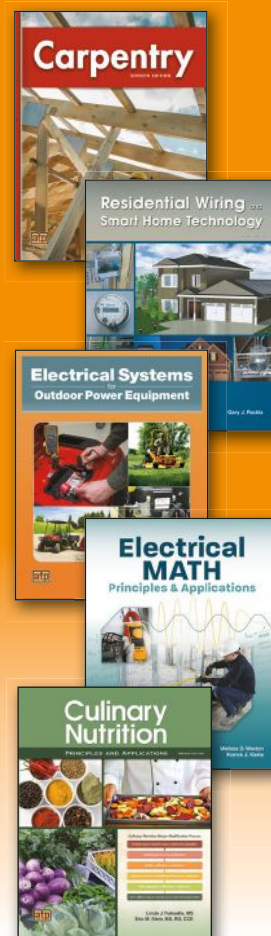
What if you're a new trade/industrial or health sciences instructor working on your initial certification courses while teaching? UCM offers a bachelor of science degree in educational studies and training (EST) that is designed specifically for technical professionals who teach or plan on transitioning from industry into CTE at the secondary, postsecondary or adult level. The EST program complements the candidate's prior college credits, professional credentials and/or related work experience. Faculty provide a personalized plan, regardless of current educational level (e.g., certification coursework, industry credentials, military training, earned associate degree), culminating in a bachelor's degree.

In today's highly fluid educational environment, UCM's CTE programs prepare competent, caring educators. Regardless of whether you want to become a more effective CTE teacher, administrator or industry trainer, UCM has multiple opportunities to help develop professional futures, through the development of knowledge and skills unique to the profession. ■

LEARN MORE

UCM's career and technical education programs are poised to help CTE professionals at all levels reach their goals.
ucmo.edu/cte

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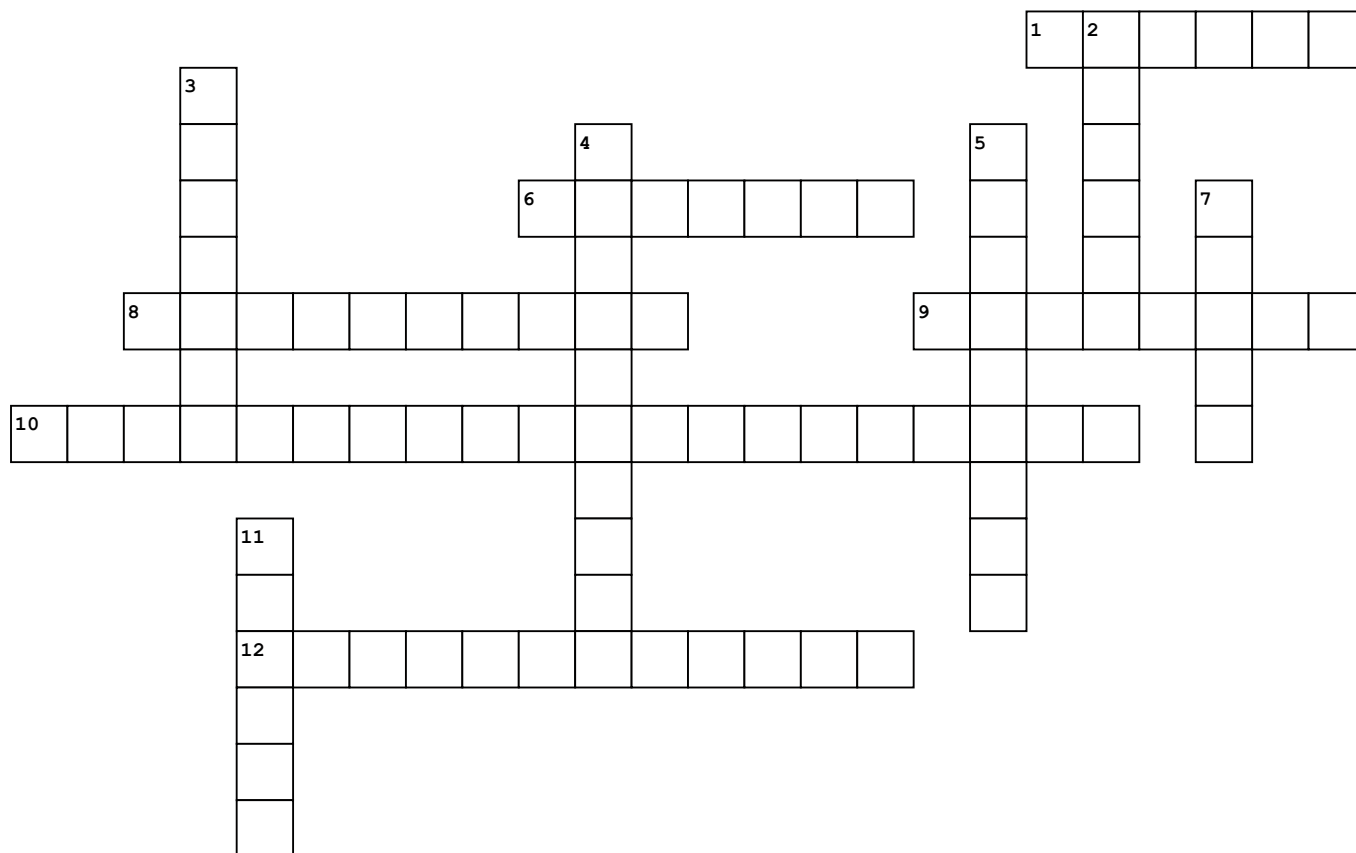
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acteonline.org/leading-the-education-revolution-conference



Please check acteonline.org for the latest event information.

The Future is Emerging



Across

1. Site of a new Technical Exploration Center for eighth grade students
6. Last name of candidate for ACTE president-elect, Jon
8. Site of ACTE's CareerTech VISION 2021
9. PBS program hosted by Jim Lehrer
10. Teaching style defined by Zaretta Hammond as "an educator's ability to recognize students' cultural displays of learning and respond positively"
12. Proposed alternative to traditional performance testing

Down

2. Inclusion, _____, equity & diversity
3. Alabama county in which Beth Brumley, ACTE's New Teacher of the Year 2020, teaches
4. "To be _____ is the greatest measure of courage we can demonstrate."
5. Wrote Darlene Miller & Josh Davies, "For CTE... 2020 can be" what?
7. Last name of candidate for ACTE president-elect, Scott
11. To apply typical elements of game playing to encourage engagement

discovering their passion, purpose,
and the opportunities available
to them.

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