



**TEACH CTE:  
A NATIONAL TEACHER RECRUITMENT AND RETENTION SUMMIT  
CONVENING DOCUMENT**

In late February 2020, the Association for Career and Technical Education held a national convening with 100 leaders from across multiple sectors to discuss CTE teacher recruitment, preparation and retention issues. The national convening focused on actions to address the challenge of the CTE teacher pipeline and ways to replicate those practices via a national strategy. Central to this conversation was a focus on the use of common data and collaboration in sharing promising practices. An additional Summit focus on teacher preparation evolved as many of the attendees hailed from CTE teacher education programs at four-year universities.

This document provides a synopsis of the Summit and a set of recommendations derived from the event. While we did not capture all that took place during the conference, we have highlighted panel presentations and summaries of some of the important conversations. Three issue “buckets” were used during the event. These same three categories are used as organizational tools within this publication:

1. Acquisition and use of data
2. Preparation of educators
3. Teacher Recruitment and Retention

It should be noted that the planning and execution of this event are closely linked to work performed by leaders in ACTE’s Region III (Iowa, Indiana, Illinois, Minnesota, Missouri and Wisconsin). Region III leadership received funding from the ACTE Board of Directors’ Opportunity Fund to explore the topic and identify promising practices. The Summit was a logical next step in advancing Region III’s initial work and leveraging the conversation at a national level. An opening session led with background on the Region’s work to date.

In addition to the work performed by Region III, leaders of the National Association of Agricultural Educators’ National Teach Ag Campaign (Teach Ag) were instrumental in providing thought leadership and sharing best practices that have worked within their sector. Teach Ag is a national marketing campaign to attract educators from the agricultural field. The

Campaign contributed significantly to the Teach CTE Summit related to planning and implementation.

Following is a synopsis of the panel discussions and recommendations from Summit participants:

## **Acquisition and Use of Data**

### Summit Panels

Teach Ag and the American Association for Agricultural Education annually produces a “National Agricultural Education Supply & Demand Study” which provides data on topics such as the number of current agricultural educators, employment plans of license-eligible program completers, source of new hires, and reported reasons for leaving the profession. Generally, there was agreement that more of this type of data is needed so the CTE profession better understands where professionals are coming from and why they are leaving.

Summit panelists agreed that data is an important foundational element when considering CTE teacher recruitment and retention challenges. There were varying opinions about the type of data that needs to be collected. One important step for the CTE profession will be identifying the specific reasons for data collection and where to obtain the data needed. Region III discussed their particular challenges in collecting data, which either did not exist or was not allowed to be shared in some cases.

Jean Kelleher, with CTE in the State of Pennsylvania’s Department of Education, noted that she “mined” the public teacher management information system in the state for years to identify useful data related to teacher and administrator gaps. She noted the challenge of siloed state systems as well as getting separate data sources to “speak to each other,” which Pennsylvania is working to address.

Kelleher was able to share some data during the Summit which indicates the state is making progress on its teacher recruitment and retention goals. But even though Pennsylvania, like many states, has shown increases in the number of administrators and educators coming to CTE from outside the CTE system, the data also indicates an increasing candidate learning curve related to CTE knowledge and practice. This was a concern reinforced in conversations with other participants during the Summit and the assumption is that many new CTE educators are coming from outside of CTE without the knowledge and experience of CTE.

A related concern voiced at the Summit was the increasing number of CTE educators who do not have certification. Kelleher shared her tracking of the low rate of Family and Consumer Sciences teachers with certification within their profession as an example.

Carol Werhan, a clinical professor at Purdue University who has been tracking data within the FCS sector for many years, said its collection and analysis is important to better understand why teacher education programs have closed. This type of analysis might be explored to determine what data needs to be collected to determine how programs around the nation are being impacted related to teacher education.

Werhan noted that the FCS profession has one-third fewer teacher education programs today than when the field had a recognized teacher shortage years ago. She has questioned the accuracy of some of the data sources and shared that many of the state government and university-level staff positions that used to collect data have been eliminated over the years. She advocated that CTE professionals reach out to masters and doctoral departments in CTE teacher colleges to request data acquisition important to the field, since many graduate students are writing theses that require them to research such information.

Alisha Hyslop, ACTE's Senior Director of Public Policy, offered that there is a huge need for more education around data, especially related to root cause and analysis. She noted that CTE administrators need this type of training and cited that individuals can identify the gaps but don't necessarily always know what to do with the data as a next step.

Several questions to the data panel from attendees centered on the need for national data collection, but Hyslop questioned whether the national collection is as important as some other actions, and noted that trends data might be most important at the national level so that states and local practitioners understand what is happening over time.

### Recommendations

Much of the Summit involved participants in providing feedback related to the panel topics and prioritizing the suggestions from participants. Analysis of the feedback from the data panel provides the following "top tier" recommendations. (Note: items are verbatim from the information shared during the conference):

#### *Top Tier -*

- Collect and use more longitudinal data/Gather long-term data on what is working in teacher education
- Utilize Career and Technical Student Organizations to get additional data
- Build a visual dashboard of data once collected, analyzed and distributed
- Encourage researchers to collect data to be used for advocacy
- Provide national advocacy materials using data (such as one-pagers)
- Provide more education/data to legislators about CTE teacher education/educators

#### *Other -*

- Analyze exit reasons and data

- Collect what types of training CTE teachers are receiving in order to meet each state's credentialing requirements.
- Create a data clearinghouse on teacher recruitment and retention that is centralized--someplace we can go to get the data and it is similar across the states and that is available to everyone
- Define shortage more consistently
- Determine who the sources of data are in ACTE. State leaders need to tell their teachers about the outcome of the Summit.
- Develop a repository of transferability of teacher license across states
- Look at CTE retention rates, is anyone tracking this? Determine how to better support these professionals
- Perform follow up information on 3+1 programs (are they effective?)
- Provide more testing and feedback on programming
- Pull together a report on each state's requirements for CTE certification/licensing and share in central location.
- Survey teachers on needs
- Use states that have an effective data collection method as examples, provide concrete examples of what works to obtain funding.
- Utilize the CTE Research Network.

## **Preparing Educators**

### Summit Panels

The Summit's panel on teacher education addressed a concern that many in the CTE community have been interested in addressing: How to maintain CTE teacher education programs, or come up with effective alternatives if programs have already disappeared and cannot be reestablished.

In beginning the conversation, Banhi Bhattacharya with the Council on the Accreditation of Teacher Preparation shared her organization's view about the importance of standards for teacher preparation. CAEP has developed a unified set of minimum content and pedagogy standards that teacher education programs in their system have agreed upon. CAEP's membership includes 281 providers in 44 states and the organization also supports 33 state partnerships for comparison and collaboration purposes. Bhattacharya noted that standards using outcomes-based elements are critical for ensuring the quality of the program and its completers, something CTE should consider.

Wyoming CTE State Director, Michelle Aldrich, specifically encouraged teacher educators to be part of ongoing administrator conversations. Concerned that states are turning from higher education institutions to other teacher education providers, Aldrich suggested that new

partnerships are needed to be responsive to the field and suggested that states might look to each other to replicate and seek support.

Chris Zirkle, Associate Professor with Ohio State University noted that CTE educators face some differences in their environment that are not usually found in other teacher education programs such as work-based learning, safety-related issues and Career and Technical Student Organizations. While these differences are important to the efficacy of teaching CTE, the number of varied components add to the complexity and challenge of ensuring a quality teacher educator program.

Zirkle reminded attendees that the erosion of teacher education programs is not a new issue and provided a few examples of why they have closed due to issues such as waning student enrollment, fewer elective choices (due to more required academics), and redirection of Perkins dollars traditionally used for teacher education. These issues are going to need to be addressed related to program closures, said Zirkle.

In response to its teacher pipeline concerns, the State of Wyoming recently developed task forces on licensure and a few other issues to initiate a nontraditional approach to teacher education. The State is using a “3 plus 1” model where students can attend three years of community college followed by a final year in university to obtain their degrees. The approach targets students who would not ordinarily attend a four-year university track. State leaders indicate these changes have not been easy and noted that universities have not relented on some requirements.

Michelle Conrad of the University of Central Missouri urged more creative thinking as applied to the challenges inherent to teacher education. For instance, while pedagogy is important and should never go away, the panel discussed if there might be ways to look at union experience, apprenticeship, work-based learning experiences and other options and consider if credit might be provided for some of these experiences.

Other issues discussed during the panel included the following:

- Importance and value of mentoring new teachers in their first few years on the job
- Providing credit for experiences such as military service, apprenticeships or other on-the-job training
- Issues related to online teacher education programs and the importance of tracking the learning and performance through these programs
- Disincentives such as differences in teacher pay among educators who entered the profession with a temporary certification but who are teaching years later. (Is there a way to address these issues?)
- How to balance certifications requirements with the need to fill positions
- Reciprocity among states related to teacher licensure

- Need for consistent rules applying to teacher education delivery and inclusion of varying delivery models (e.g. two-year and four-year programs)
- The necessity to address the length of some programs where graduates take 5 years or more to graduate.
- How to ensure equal pay to those teachers who have earned experience in the classroom as opposed to a four-year degree; is it possible to provide credit for experience?
- How to include and secure more minority populations into teaching
- Need for a better understanding of CTE's value among other teachers in education

The Summit also included a panel of leaders representing the five High School CTE Teacher Pathway programs which have been supported by the U.S. Department of Education's Office of Career, Technical and Adult Education. The CTE-TPI program is focused on CTE programs that align to In-demand industry sectors or occupations in states and communities where shortages of such teachers exist. Panelists shared a mix of experiences, successes and some challenges related to their programs which are intended to increase the supply of high school CTE teachers. Following is a list of the awarded projects:

- Broward County Public Schools
- Southeast Kansas Education Service Center
- New Jersey Department of Education
- Portland Community College
- Tennessee Department of Education

To learn more about each grant's project goals and activities regarding CTE teacher recruitment and retention, please visit: <https://cte.ed.gov/initiatives/high-school-cte-teacher-pathway>

### Recommendations

#### *Top Tier –*

- Develop a teacher licensing division/commission managed by ACTE
- Begin practicums early by using the apprenticeship model for teaching
- Bring CTE content areas in post-secondary institutions together to discuss programs.
- Create a link with teacher education programs that could be a universal way to identify where CTE teacher prep programs are located
- Develop a hybrid model that includes industry and university working together to train teachers instead of expecting industry people to go into the traditional college setting to be trained
- Ensure that new teachers have the content knowledge and CTE pedagogical knowledge
- Ensure there is classroom experience for students early in their program
- Find ways to alleviate the silos between industry versus traditionally trained teacher (i.e. when one is asked to mentor the other. focus on collaboration versus entitlement)
- Have programs need to consider and respect prior learning and experience

- Identify state-level leaders in CTE who can ensure/monitor/measure the quality of teacher
- Pedagogy training.
- Re-engage universities with education so that the research positions return. Historically that has been a close relationship. Retention rate is there a difference if the administration has a CTE background?
- Use state Perkins leadership money for professional development

*Other –*

- Creating more reciprocity between states after initial certification/clear credential
- Engage with professional standards boards
- Ensure educational preparation is thorough and flexible using partnerships including private sector support and partnerships with community and technical colleges. Programs need to consider the needs of employers and be willing to adapt programs as needs change.
- Accreditation Do we have national voice to another route
- Agree on a set of standards when operating CTE teacher preparation - whether universities, SREB, local schools, state agencies, etc.
- Allow professional organizations access to funding to provide professional development in states where it is not happening
- Be selective about who is admitted into teacher education programs
- Conference for how do we work alternative cert programs and understanding or accepting people from other states, especially in CTE
- Create a map showing Reciprocity licensing programs between states and institutions
- Create a pathway to CTE teaching versus alternative
- Create stand-alone 1-year career certificate program in CTE teaching
- Develop a “scholarship” to help some institutions get a teacher prep program off the ground (similar to what National Teach Ag does)
- Develop a hybrid model where teaching candidates are in classrooms part of the day and in the workplace the other part of the day
- Develop intake surveys for other CTE credentialing with life experiences
- Develop online learning models for little or no cost that districts can utilize for non-traditional candidates to support pedagogy, classroom management, lab planning, curriculum development, lesson planning and surviving the first year
- Ensure all educators providing teacher prep understand quality on-boarding and PD
- Ensure anyone providing teacher prep programming follows standards when writing lesson plans
- Ensure more use of innovation such as through distance learning
- Focus on Perkins V to support teacher PD moving toward more success in CTE teachers (new cohort model - New Hampshire)
- Have teacher apprenticeships and education programs partner with employers who already have industry apprenticeships, Including building in pedagogy

- Include more flexible hybrid training models including community colleges and prior learning assessments
- Include more flexible hybrid training models including community colleges and prior learning assessments
- Make sure CTE professional standards boards are requiring the right things
- Measure content knowledge and pedagogical skills of teacher candidates all the way through college
- Measure self-efficacy within the CTE teaching profession
- Monitor progress and conduct emotional check-ins of teaching candidates
- More funding for maintaining industry certification/externships
- National apprenticeship for CTE teachers
- National language. So many standards, emphasis, tests, knowledge, skills, etc. Next year- summit on the research and putting together a more centralized collection, site for the dissemination of resources so higher education can help the states. Specialized Professional Association- where does this fit in? Might there be some standardization around CTE core for teachers and administrators?
- Pay students to student teach as in other professions (e.g. law, CPAs)
- Provide coursework via online and other technology mean so that fewer students, especially those limited by college costs, are site bound
- Provide more mentor models and on-demand support and networks for teaching candidates
- Provide pedagogy support for industry professionals who are serving in the classroom
- Provide support via co-teaching model - strong content and strong pedagogy.
- Provide teacher externships and more opportunities to get teachers into the workplace
- We have to remove barriers that we have put into place (TEDPA, 3.0 GPA to get into a program, having a system like NJ, NY, WI for applying for a job). All of this limits/excludes potential applicants.

## **Teacher Recruitment and Retention**

### Summit Panels

A highlight of the Summit included a feature presentation on the National Teach Ag Campaign, provided by Project Director Ellen Thompson who shared lessons learned from her tenure with the Campaign. Teach Ag, which is part of the National Association of Agricultural Educators, focuses on ways to recruit and retain educators within the Agriculture profession and has been one of the CTE profession's most successful campaigns. Thompson initiated and has grown and guided the Campaign since its inception, and underscored the importance of identifying a specific goal and "sticking to your mission," which she attributed to Teach Ag's success. Thompson now oversees a \$900,000 budget for the Campaign but noted that the Campaign started small and built upon the success of earlier wins.

Thompson outlined several of the practices that are suited for replication in other sectors including the following:

- Branding – Teach Ag has built a well-known brand within their profession and the brand and reputation support the organization and the work it performs today. With this in mind, Teach Ag made the conscious decision to not trademark their logo because they wanted state initiatives focused on the same efforts to be able to use the logo and branding for their purposes.
- Messaging – Think carefully about the words you use and how you convey the message positively. Teach Ag refrains from using the word “shortage” due to its negative connotation and, instead, focuses on the “demand” for teachers. Thompson noted that teachers should be speaking positively about the field, generally, as opposed to complaining, which deters students from teaching.
- Inclusion, Access, Equity and Diversity – Future Ag teachers can be anyone and come from anywhere. Teach Ag ensures that their activities are inclusive, such as ensuring that presentation panels reflect diversity in race, gender and other areas. Their meetings are accessible to everyone. These actions ensure the “door is open” for anyone wanting to pursue Ag education as a career.
- Data – Thompson said “everything we do is due to data” and noted that if Teach Ag is asking for data, the organization then provides a compilation of data back in a usable format with the people who shared the raw data to begin with. Teach Ag seeks qualitative, quantitative and anecdotal data, all important for different reasons.
- Results – Over the past five years, Teach Ag has seen a 75% conversion rate in teachers who are accepting jobs and an approximately 95% retention rate in the placements they have made. The number of students going into Ag education, Ag program enrollees, retention rates, and additional degree programs all have increased over the past 10 years.

For more information on Teach Ag’s success story and some of the specific initiatives that have been initiated (e.g. STAR program, National Teach Ag Day) be sure to read the “Teach Ag National Campaign.”

## Recommendations

### *Top Tier –*

- Address the image of teachers in general and highlight from data the rewards/satisfaction of CTE teachers (so many parents, counselors, even teachers discourage students from being a teacher)
- Change the entire nation's perception/stigmas of the profession of teaching, including teachers presenting themselves as professionals (dress, attitude, how they talk about the profession)
- Develop a CTE teacher program tuition waiver/make more scholarships available for CTE teacher candidates

- Follow the teach ag model connected to all CTSOs
- Provide mentors for new teachers, and mentor training.

*Other -*

- Cease negative messaging communicating that some people should not go into teaching
- Collaborate with business and industry to recruit teachers
- Create a national campaign to market "Teach CTE" (including public service messages about what is in it for the professional to become a teacher)
- Create a national campaign to recruit industry persons and encourage enrollment in CTE Teacher education programs
- Develop advocacy resources for funding, mentoring, funds for scholarships/loan forgiveness - in Perkins
- Develop more meaningful debt forgiveness programs for students
- Develop stronger partnerships between workforce and education
- Engage students in high school and guarantee them a teaching position
- Focus recruitment in community colleges/state colleges through articulation agreements with a university program
- Harness the CTSOs as these are great products of CTE; do the CTSOs promote teacher recruitment for CTE?
- Have postsecondary education more directly connect student teachers to jobs and use as a recruiting tool
- Help CTE teaching candidates to find the teacher prep programs that are available
- Host college Fairs/career fairs - promoting CTE teaching as a career at high schools and university career fairs
- Make it easier for students to transfer
- Market to students throughout the college experience, not just to freshmen
- Promote education as an option earlier on for students (elementary school), and involve parents
- Promote the Education and Training pathways/cluster to help produce CTE teachers
- Provide funding for an apprenticeship mentoring model for new industry teachers in the classroom
- Provide new teachers a community culture or network.
- Recruitment should be flexible and use data mindfully.
- Reduce licensing challenges such as fees, tests, time, paperwork, forms.
- Share success stories/best practices -- how are you recruiting/retaining, what is working, what is not.
- Streamline communication about how to become a teacher (maybe a national template that each state could fill in?)

The Teach CTE Summit was the continuation of an ongoing conversation about how to address the recruitment and retention challenges impacting CTE. The topic is certainly not new and not every field of study or community is impacted in the same way, but recruitment and retention

is a continuing challenge. Too many programs continue to struggle with identifying the educators needed to support students. How will we fill the void?

More work is needed. Given the comments from panelists and the input of participants, we have a starting set of recommendations built from years of collective experience. Representatives from teacher educator programs, state and federal government, local programs and other national organizations were present and engaged at the event. The next task is to build a broader coalition and identifying the work that all of us can move forward to address the problem.

ACTE will be working to advance this important work with our colleagues in the CTE space.

ACTE would like to note the particular timing of the Teach CTE Summit which occurred during the last days of February 2020 just prior to dramatic changes in daily routines caused by the COVID-19 pandemic. The outbreak forced an abrupt transition of “in-person” delivery of instruction to online teaching and learning. The teacher shortage issue will surely be further exacerbated by these events, and the assurance that our CTE teacher workforce is prepared and supported is more important than ever.

ACTE would like to thank the Teach CTE Summit sponsor, iCEV.

