



State Leaders Connecting Learning to Work

2016 TWO-MINUTE ROUNDUP

SPRING MEETING 2017

Advance CTE: State Leaders Connecting Learning to Work | www.careertech.org

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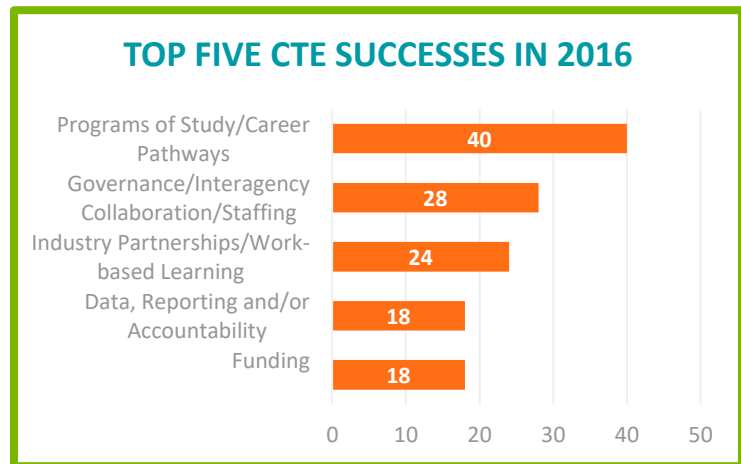
SUMMARY

In 2016, state Career Technical Education (CTE) leaders continued efforts to develop and refine effective systems and supports for all learners. Many states signed on to support the principles of *Putting Learner Success First: A Shared Vision for the Future of CTE*, and their efforts have shown their commitment to achieving this aspiration for all learners.

The *Advance CTE Two-Minute Roundup Survey* is a tradition for the organization and its members, providing an annual benchmark for the successes and challenges each state faces. This year, the responses showed how state leaders continue to make progress strengthening CTE programs of study and career pathways, working with industry partners to provide quality experiential learning, and collaborating across agencies to create a coordinated system that supports all learners.

SUCCESSSES

Programs of Study: **Iowa** passed legislation this year calling for a comprehensive reform of the state's CTE system, the first such update since the 1980s. The new law aims to support high-quality CTE by aligning programs with in-demand jobs, blending core academic subjects with hands-on technical content, providing students with meaningful career exploration and real-life work experiences, and supporting district leadership of CTE programming through regional planning partnerships. In **Arizona**, new legislation allowed for the creation of a new CTE program review process, with the goal of reviewing all existing CTE programs by December 2018. The state will use these reviews to improve programs and ensure new CTE programs are high quality.



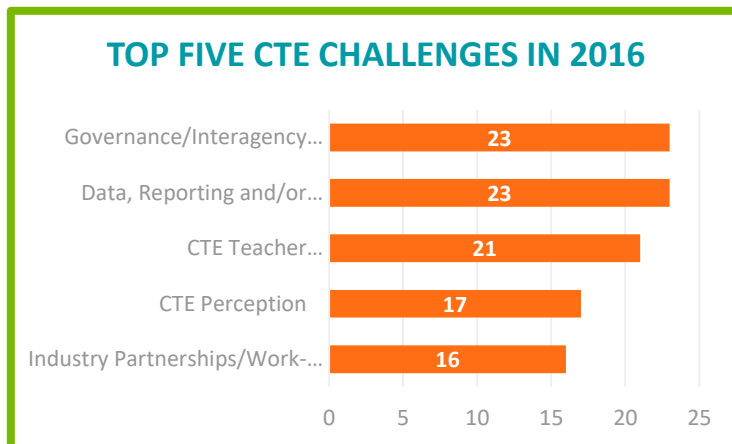
Governance: In **New Jersey**, state leaders established the Career Pathways Taskforce, which formalized a process for collaboration among state agencies to prioritize career pathways. This has been instrumental in supporting regular and strategic communication and planning between the Department of Education, the Department of Labor and Workforce Development, and the Office of the Secretary of Higher Education. The Taskforce also includes several local education and workforce representatives. Three state agencies in **California** signed Memoranda of Understanding to share data and other information. The California Department of Education, Community College Chancellor's Office and Workforce Development Board will work together to share and interpret data to improve options for all learners.

Industry Partnerships: **Nebraska** launched a new work-based learning initiative, including a new continuum of learning, new instructional materials and a new website. This happened during a year focused on strengthening partnerships through a series of stakeholder engagement meetings with employers and industry groups around the state. **Hawaii** adopted and implemented an industry-led Sector Strategy Committee model. So far, the Committee has assisted in creating two new certificate programs at community colleges by identifying certificate programs that are important to employers.

CHALLENGES

Governance: While many states cited successes with governance, the area continues to be a challenge for about half of the states. State CTE Directors cited challenges with coordination across agencies, particularly in relation to data sharing, as well as capacity challenges and initiative fatigue within their own agencies.

Data, Reporting and Accountability: As data and accountability continue to dominate national policy conversations given ongoing implementation of the Every Student Succeeds Act and Workforce Innovation and Opportunity Act, states are still struggling to develop the capacity for measuring not just student outcomes in the classroom, but student outcomes from other experiences such as work-based learning and linkages between K-12, postsecondary and workforce data.



ARIZONA

What were your state's top accomplishments in CTE?

- › SB1525 restored \$29 million of the \$30 million proposed 2017 cuts to the Joint Technical Education District (JTED) funding and established new course and program requirements. All 73 CTE program areas were reviewed based on the requirements on a statewide level for JTED eligibility. Statewide working groups were established comprised of CTE/JTED administrators, CTE teachers, business and industry representatives and state program specialists to determine program eligibility. This collaborative effort included determining industry need, identifying industry certifications, verifying laboratory, field-based or work-based learning environment and identifying specialized equipment and gave all stakeholders an opportunity to provide feedback.
- › With the new Joint Technical Education District (JTED) legislation, a program review process was developed which includes all the program/courses requirements identified in SB1525 along with Perkins requirements. The legislation requires all CTE programs throughout the state need to receive an initial review by December 2018. Once the process was developed, a rotational schedule was established for over 2200 CTE programs and state staff began the review process. Through this process, all programs will be reviewed under the same guidelines and requirements thus improving the overall quality of CTE programs throughout the state.
- › The Premier Program Series continues to be an extremely successful professional development collaboration between ACTEAZ, Joint Technical Education Districts and Arizona Department of Education/CTE which provides opportunities/classes for new teachers particularly focusing on those coming to the classroom from business and industry. The series provides professional development credit for teachers and administrators which meet requirements to move from a provisional to standard teaching certification.

Please share your CTE-related challenges.

- › CTE teacher shortage is a continuing challenge for the state. Finding qualified CTE teachers in certain program areas is difficult particularly in the rural, remote areas of the state. Additionally, due to lower teaching salaries and the additional responsibilities, teacher retention becomes more difficult. High teacher turnover is a barrier to establishing high quality CTE programs.
- › The student to counselor ratio in Arizona is extremely high (880:1-Arizona ranks 50th in student to counselor ratio) making it extremely difficult to provide adequate career development and guidance in the K-12 system. Career planning has not been a priority in some districts because of this high ratio so students seek options or are put in classes not suited for their interests and ability. Because of the counselor workload, some counselors do not understand the importance of CTE or have an understanding of CTE pathways and programs of study.
- › Even though strides have been made, changing the overall perception of CTE across the state is a continual challenge. Getting individuals who are not CTE people to understand the importance of CTE and its overall value to students is ongoing. This includes sharing success stories with legislators, district administrators, parents, counselors and business and industry and trying to dispel the old "vocational education" attitude.

ARKANSAS

What were your state's top accomplishments in CTE?

- › Fordham's study, by the University of Connecticut's Shaun M. Dougherty, used data from Arkansas to explore whether students benefit from CTE coursework—and, more specifically, from focused sequences of CTE courses aligned to certain industries. The study also describes the current landscape, including which students are taking CTE courses, how many courses they're taking, and which ones. We have expanded this study to specifically focus on CTE that is being provided at the secondary career centers in Arkansas.
- › In December, Arkansas Governor Hutchinson signed a two-year memorandum of understanding with tech giant Microsoft, formalizing a public-private partnership to strengthen digital literacy, entrepreneurship and youth involvement in science, technology, engineering and math (STEM) education. Through the partnership, the Department of Education and Microsoft will join forces to provide resources and training to students and teachers, including expanding Microsoft's TEALS Initiative, which pairs computer science professionals with teachers to improve computer science instruction.
- › Our business and industry engagement is being strengthened through a focus on outreach that involves them as partners in innovative CTE programs and projects.

Please share your CTE-related challenges.

- › As CTE is greater recognized as an important part of college and career readiness, the coordination of all parties and moving within state restraints requires constant work and communication with no increases in staffing or knowledge base.
- › The assistance with people and resources that can focus strictly on policy, initiate new programs, expand accountability and data collection or to answer policy questions in a quick and thorough manner.
- › Time and limited resources.

CALIFORNIA

What were your state's top accomplishments in CTE?

- › The CTE Incentive grant that provided funds for the start-up and expansion of CTE courses around the state. 2017-18 is the last year of the program but there is current legislation looking to extend it or make it permanent.
- › The inclusion of CTE course sequence completion as part of the statewide College Career Indicator.
- › The Data sharing MOU between three state agencies—the CDE, Workforce Development Board and Community College Chancellor's office.

Please share your CTE-related challenges.

- › The continued struggle around where to align and where to create bridges between K-12 and community college as well as trying to include our CSU and UC systems.
- › The continued struggle to raise the status of CTE in the state.

- › The CTE teacher shortage (due to expansion of pathways and retirements) and trying to create a balance between the need to increase the numbers of teachers without sacrificing teacher quality and importance of industry experience.

COLORADO

What were your state's top accomplishments in CTE?

- › Colorado CTE conducted 14 service area meetings where the community college hosted all the local service area high schools to create/revise Programs of Study for each CTE Cluster Area in that service area. Outcomes were a broadened sense of how CTE aligns to other secondary initiatives in our state such as graduation guidelines, career and academic planning, and work-based learning experiences as well as increased collaboration between colleges and high schools. For our post-secondary CTE programs, the CTE team explained the Community College System strategic plan and how CTE is a central part of all of the key measurements and desired outcomes. The Colorado CTE Team worked with 819 CTE educators from 123 school districts and all Perkins eligible colleges. This was the largest professional development experience the Colorado CTE has undergone outside of our ACTE-affiliated conferences.
- › Competency Based Education (CBE) is a central focus of our Colorado Community College System Strategic Plan. Our CTE Team worked with an IT faculty member to utilize our state level partnership with Skillful (www.skillful.com) and LinkedIn to utilize their competency based hiring toolkit for employers to create our first HLC (Higher Learning Commission) approved CBE IT course for the Colorado Community College System. Skillful conducted employer panels to review competencies ranging from core to hard-to-find in employees. These were also utilized to create case studies to be used as assessments throughout the CBE program.
- › Colorado is expanding our Career Pathways Initiatives and our sector partnerships. We currently are mapping all education and training opportunities and employment opportunities in Construction, IT, and Healthcare. We have a substantial amount of work completed in Advanced Manufacturing due to a TAACCT grant and state investment. Colorado CTE has encouraged our faculty members to take part in the sector partnerships as part of their advisory committee structure to ensure they are engaging all of the stakeholders in the industry sector in their program development, currently, we have active partnerships for Healthcare with our Greater Metro Denver Healthcare Partnership as well as our Colorado Advanced Manufacturing Association (CAMA), and Northern Colorado Manufacturing Sector Partnership. We are a core member of the pathways team and have a dedicated team member who has a counterpart at the Colorado Workforce Development Council.

Please share your CTE-related challenges.

- › Teacher shortages and how they impact programs as well as school districts opportunities to offer concurrent enrollment credit due to HLC and other accreditation concerns with credentials/occupational experience vs. Masters + 18 hours in a content area.
- › Private foundations and schools' ability to market their programs vs. our restrictions on marketing and promotion due to operating purely on Perkins funding. This lack of awareness building increases the chances that programs or causes from foundations are seen as the only opportunity for students to gain career related experiences.

- › Providing incentives for high quality CTE programs that balance CTSO, technical and academic skills attainment, and work-based learning vs. being dominate or focused on one area only in the three spheres of CTE instruction.

CONNECTICUT

What were your state's top accomplishments in CTE?

- › To increase the teacher pool for certified Business and Finance Technology (BFT) Education, the Connecticut State Department of Education (CSDE) collaborated with institutes of higher education to establish three alternates to becoming Business and Finance Technology Education certified in CT. Through the new Higher Education-Alternative Route to Certification (ARC) Program that will begin in August, 2017, the University of Bridgeport reinstated their BFT Teacher Prep Program. Also, the CSDE is accepting candidates who have completed the Grand Canyon University BFT Teacher Prep Online Program for business certification. This was such a critical need in CT since as of June 2016 there CT colleges and universities were not offering routes to earn this certification.
- › The CSDE has worked with the Connecticut State Colleges & Universities (CSCU) to increase the number of rigorous course sequences and increased pathways offered at the community colleges for College and Career Pathways (CCP).
- › The CSDE has worked closely with the Connecticut Women's Education and Legal Fund (CWEALF) to provide assistance to high schools in improving Non-Traditional participation and completion.

Please share your CTE-related challenges.

- › Connecticut is grappling with increasing the number of students who participated in CCP during high school attending the community colleges after high school graduation.
- › Many districts experience high rate of turnover and changes in Perkins administrators. Often these administrators do not have background in CTE and Perkins.
- › Outside of the professional learning offered by the CSDE, there is a lack of quality professional learning opportunities for secondary and postsecondary teachers/professors.

DELAWARE

What were your state's top accomplishments in CTE?

- › In August 2016, Governor Jack Markell signed Executive Order (EO) 61, which defines "Delaware Pathways" as "a collaborative workforce partnership which will create a fluid relationship between our public education system, post-secondary education, non-profit, and employer communities to ensure that the pathway to college and a well-paying job is accessible for every Delawarean" and further establishes a "Steering Committee" to: 1. Ensure the program's sustainability aligns to the needs of the workforce and individuals who participate; and 2. Ensure that budgetary priorities are identified in a transparent and collaborative manner. The Steering Committee consists of fourteen members, including the Secretaries of Education, Labor, Economic Development, and Health & Social Services; the President of Delaware Technical Community College; the Chair of the Delaware Workforce Development Board; the President of the State Board of Education; two school system superintendents; two business representatives; and three members of community

organizations. Mark Brainard, President of Del Tech, has been appointed to chair the Steering Committee.

- › In December 2016, the Delaware Pathways Steering Committee published the Delaware Pathways Strategic Plan. More than 800 comments were received through public forums and online feedback. The plan defines five core priority areas for future work and accomplishments. Further, the plan is cooperatively owned by a cross-sector team and a detailed set of outcome metrics have been established to guide work through 2020.
- › In 2016, the Delaware Pathways Steering Committee garnered more than \$4 million in private investments to expand the state's career pathways system, including the \$2 million New Skills for Youth grant from JP Morgan Chase, a \$750,000 grant from Delmarva Power, and a \$250,000 grant from the Strada Education Network. Additional grants were received from Capital One, Bank of America, the Delaware Business Roundtable for Education Committee, and other partners.

Please share your CTE-related challenges.

- › Delaware is building routines across the Department of Education, the Department of Labor, the Delaware Office of Economic Development, and the Delaware Technical Community College to more purposefully engage employers and develop supports to on-board youth and adults. However this work is new and other state examples are appreciated.
- › Delaware is building work-based learning policy across the K-12 and postsecondary education system. Examples of how states have mapped the sequence of work-based learning activities/experiences, in addition to how states have included work-based learning in the state accountability system are appreciated.
- › Examples of how states are building relationships with their Departments of Labor and other state agencies to coordinate student data related to employment and wage metrics is appreciated. Delaware has an agreement to share unemployment and wage metrics for secondary, postsecondary, and adult learners, but additional support is needed to capture secondary student data.

GEORGIA

What were your state's top accomplishments in CTE?

- › Continued Regional Economic Development Meetings across Georgia. This year's focus was on building and deep and sustainable partnerships between CTAE and the business community.
- › CTE graduation rate is at all time high of 94.9 percent. This is 16 points above the state graduation rate for all students.
- › Released version one of Georgia's Career Pipeline.

Please share your CTE-related challenges.

- › Marketing of CTE programs is a challenge.
- › Providing work-based learning experiences to students in rural Georgia is a big challenge for us.
- › Meeting the ever changing needs of business & industry in a timely manner.

GUAM

What were your state's top accomplishments in CTE?

- › A postsecondary CTE program was established to prepare students to become a National Institute for Automotive Service Excellence Certified Light Duty Hybrid Electric Vehicle Specialist. Three automotive faculty successfully completed the initial (Hybrid/EV Train the Trainer) training and received a High Voltage Vehicle Training Certificate. A Memorandum of Agreement (MOA), established with Triple J Auto Group, an authorized dealer for Honda, Acura, Ford, Lincoln, Mazda, Volvo, Isuzu and Kia on Guam, allows students to obtain technical training at Triple J – a local auto dealership.
- › Visual Communication and Marketing programs, offered at a newly built public high school, is a pilot project to synchronize Visual Communication and Marketing (VISCoMARK) activities. VISCoMARK clearly defined collaboration between instructors and students by co-developing student learning outcomes (skills and knowledge).
- › In partnership with the Guam Women's Chamber of Commerce (GWCC), postsecondary students taking accounting courses augmented learning by attending GWCC business and career training (business plan writing, budgeting and record keeping, accounting and taxes, personal and business and finance, and financial forecasting and analysis).

Please share your CTE-related challenges.

- › Guam's remote location in the western Pacific Ocean and time zone (local time is 17 hours ahead of Los Angeles), makes it challenging to participate in webinars, to offer continuous teacher training, and to have available qualified teachers to support CTE course offerings.
- › Training is needed to understand and establish a longitudinal data system across stakeholders (secondary, postsecondary and/or department of labor).
- › Guam Department of Education (GDOE - K-12) needs to reaffirm the Memorandum of Agreement with Guam Community College (Guam's CTE State Agency) thereby allowing secondary CTE students the opportunity to receive hands-on supervised practical training related to supplement formal classroom instruction.

HAWAII

What were your state's top accomplishments in CTE?

- › Creation and operation of a state wide cross-agency team that is developing Hawaii's Career Pathway system. We've made significant progress!
- › Development - in partnership with the Workforce Development office - of a statewide funding map of state and federal resources available for workforce education and training.
- › The adoption and implementation of a Sector Strategy Committee model that is industry-led. So far, it has resulted in the creation of two new certificate programs at the community colleges in areas that were identified by employers as important to their sector.

Please share your CTE-related challenges.

- › Hawaii's geography creates four distinct island/county identities and (to some extent, cultures) that must be respected and addressed if we want to accomplish anything state wide.

- › Approximately 85 percent of Hawaii's businesses are small. Developing access and opportunities for work-based learning for all students is a challenge.
- › There is a significant dearth of CTE teachers in our state.

INDIANA

What were your state's top accomplishments in CTE?

- › In 2016, Indiana expanded CTE opportunities for students by increasing the number of industry-recognized credentials and enrolling more than 8,600 students in dual credit courses, which resulted in a nearly \$4 million savings.
- › Indiana saw a continued increase in the graduation rate of CTE concentrators, which is now at 95.18 percent. This is compared to the 88.9 percent graduation rate for all students. Additionally, over 30 percent of CTE concentrators earned at least one type of Honors diploma.
- › On non-traditional, we saw significant increases in both 6S1 and 6S2. This is due to the innovative practices local schools have implemented. We are even seeing improvement with males in non-traditional careers, which has always been a struggle.

Please share your CTE-related challenges.

- › Teacher shortages continue to impact schools' ability to offer CTE courses and reduce the quality of instruction. While we have seen success with our teacher recruitment efforts, we continue to see teacher shortages as an issue.
- › Indiana has made progress on collecting data for WBL, but continues to run into barriers in collecting specific data on placements. In 2017, we hope to address this issue with adjustment to our data collections.
- › Non-traditional continues to be a challenge, even with improvement in our core indicators. Specifically, data shows that males are significantly lower than females on enrollment and completion. We are working with local schools to create innovative solutions to address this gap.

IOWA

What were your state's top accomplishments in CTE?

- › House File 2392, the 2016 CTE Redesign legislation represents the first comprehensive update to CTE in Iowa since the 1980s, setting the stage for raising the quality of CTE programs, better prepare students for success beyond high school, and help Iowa meet the needs of employers. The new law ensures high quality CTE by aligning programs with in-demand jobs, requiring a state developed program approval process in all six service areas – agriculture, food and natural resources; information solutions, applied sciences, technology, engineering, and manufacturing; health sciences; human services; and business; finance, marketing, and management. The new law also ensures the blending of core academic subjects with hand-on technical content; providing students with meaningful career exploration and real-life work experiences; and supporting school district leadership of CTE programming through regional planning partnerships. When successfully implemented, the legislation will ensure students from all school districts have equitable access to high quality CTE programs and concurrent enrollment opportunities.

- › The Division of Community Colleges and Workforce Preparation, within which the CTE Bureau is one of the two bureaus (Community Colleges being the other), CTE in Iowa continues to play a central role in helping meet the Future Ready Alliance Goal of having at least 70 percent of all Iowans achieve some post-secondary credential of economic value by the year 2025. The Future Ready Alliance¹ is expected to develop recommendations for how best Iowa is able to meet the 70 percent goal. The Division is helping develop materials, products, and guidance for the Alliance in several ways: community college credential completion data; asset mapping work highlighting cross-agency programs that promote education, economic and workforce development, career guidance, and work-based learning; developing new (regional CTE partnerships, statewide sector partnership council) and strengthening existing ones (state and regional workforce boards, regional and local sector partnerships, CTE program advisory committees). More generally, Iowa has positioned itself well with regard to efficient cross-sector and cross-agency collaboration with regard to developing, refining, and sustaining education, workforce and economic development services, and the Division of Community Colleges and Workforce Preparation is playing a leading role.
- › Where does secondary CTE fit in, and connect to, the state developed career pathway system? Iowa has answered this question by taking advantage of technical assistance provided by OCTAE. A cross-agency team of administrators, program officers, and local practitioners were brought together to complete a career pathways assessment tool. From the answers provided within the tool, a state plan was developed to ensure an active role for secondary CTE within Iowa's career pathway systems, with the overall goal being driven by House File 2392 – expanding equitable access to high quality CTE for all students. The long-term purpose of the Iowa Department of Education State Plan is to inform secondary CTE regarding its role within the career pathway system and redress the inadequate attention to secondary CTE within a state's overall career pathway system.

Please share your CTE-related challenges.

- › As part of HF2392, all CTE programs are to be approved. The program approval process requires the development of standards and benchmarks across service areas, within service areas, and within and career clusters and pathways. While each service area has national, state, and industry standards, and Iowa recommends to local districts to use any and all of them when developing specific CTE programming, the consistent use and application of these standards and benchmarks at the school district level is unknown. Developing a uniform process for applying standards and benchmarks has been a challenge but the CTE Bureau will begin a process of CTE standards development as part of the overall implementation of HF2392.
- › Iowa continues to develop a standardized process for collecting secondary and post-secondary CTE data for reporting for accountability, program development, and analysis. While the Secondary CTE Reporting Application (SCTERA) has made it easier for school districts to comply with federal (Carl D. Perkins) accountability requirements as well as Iowa law, which requires that each school district offer and teach a three-sequence course in at least four CTE service areas, obtaining trend data from the system has been problematic. Similarly, while less of an issue, the collection of post-secondary CTE data has been inconsistently applied, and Iowa is starting to use a three-year cohort model to produce post-secondary CTE data. Finally, the current state data system does not include variables that are of prime interest to policymakers such as work-based learning and third-party industry-based certifications. How to incorporate these variables into standard data systems has been a challenge.

¹ <https://www.futurereadyiowa.gov/future-ready-iowa-alliance>

- › Iowa has embarked on a significant state implementation on redesigning secondary CTE through House File 2392. A challenge faced by the CTE Bureau is to begin realigning the Perkins state plan to House File 2392 implementation. The CTE Bureau will begin discussions on how best to address this challenge but the uncertainty behind the reauthorization of the Carl D. Perkins federal legislation has prompted the CTE Bureau to proceed with caution.

KANSAS

What were your state's top accomplishments in CTE?

- › Military Credit Project - Articulating CTE programs for specific college credit.
- › Integrating Academics with CTE -- similar to our Accelerating Opportunity model, faculty plan curriculum together and the STEM/academic faculty provide the contextualized instruction.
- › Developed three-pronged approach to determine quality credentials.

Please share your CTE-related challenges.

- › The Kansas Board of Regents coordinates the two year colleges, rather than governing them like we do the universities.
- › The proposed merger of a university and a technical college has caused much angst in the two year sector.
- › Performance agreements with all institutions.

KENTUCKY

What were your state's top accomplishments in CTE?

- › Advanced work around youth apprenticeship models and WBL policies.
- › Received NSFY phase two funds. As a result policy changes have already taken place within the state connected to the top demand industry sectors.
- › Working to enhance career readiness indicators in accountability model.

Please share your CTE-related challenges.

- › Political climate in the state.
- › Ensuring CTE remains at the heart of career readiness.
- › Increasing dual credit opportunities within CTE.

LOUISIANA

What were your state's top accomplishments in CTE?

- › Expanded business and industry partnerships.
- › Successful marketing strategies targeting non-traditional students.

- › Successful marketing strategies that are changing the perception of CTE.

Please share your CTE-related challenges.

- › Challenges recruiting and retaining instructors.
- › Ensuring the connection between curriculum and the needs of business and industry.
- › Meeting the needs of programs in order to "move at the speed of business". This challenge has many forms, i.e., providing PD opportunities for instructors to maintain skills that are current, growing more engaged advisory committees, etc.

MAINE

What were your state's top accomplishments in CTE?

- › The passage of LD 1627. This new statute creates a CTE pathway for all students and allows students to use CTE experience for diploma requirements. Statute 20-A, subsection 6722-A.
- › Rule change to allow cosmetology programs to be offered in Maine CTE schools.
- › CTE assessment system development.

Please share your CTE-related challenges.

- › The lack of a national IRC registry.
- › The turmoil in the federal government and its effect on the reauthorization.
- › The need of being able to use social security numbers to enable us to access reliable data.

MARYLAND

What were your state's top accomplishments in CTE?

- › P-TECH – Maryland has established six (6) Pathways in Technology Early College High (P-TECH) Schools. P-TECH schools are innovative, grade nine to 14 public schools that create clear pathways from high school to college and career for young people from a variety of academic backgrounds. In six years or less, students graduate with a high school diploma and a no-cost, two-year associate's degree in a STEM (Science, Technology, Engineering, and Mathematics) career field. Each P-TECH school works with industry partners and a local community college to ensure an up-to-date curriculum that is academically rigorous and economically relevant. Hallmarks of the program include one-on-one mentoring, workplace visits and skill instruction, paid summer internships and first-in-line consideration for job openings with a school's partnering company. In the 2017-2018 school-year, Maryland will have 270 students in three school systems across the state enrolled in P-TECH programs that will prepare them for careers in Information Technology, Allied Health, Business Management, and Hospitality Management.
- › K-12 Computer Science – Maryland has taken several steps to implement computer science in grades K-12, including participating in the development of the K-12 Computer Science Framework, developing a toolkit of instructional resources for educators, implementing computer science CTE programs of study that include Advance Placement courses as well as allowing computer science to count toward students graduation requirements. These strategies are focused on increasing students' ability to engage in computational thinking. A

promising practice for school systems that offer the Project Lead the Way (PLTW) high school programs is to implement PLTW Gateway and PLTW Launch in middle and elementary schools to create a seamless vertical pathway of STEM (Science, Technology, Elementary, and Mathematics) offerings across the learning levels.

- › CTSOs – Maryland is celebrating record numbers of Career Technology Student Organization (CTSO) membership and conference participation, providing statewide support to four student organizations, DECA, Future Business Leaders of America (FBLA), FFA and SkillsUSA. CTSOs align to every Maryland CTE program of study and provide co-curricular experiences and activities designed to complement and strengthen program-related content, while developing leadership and employability skills. More than eleven thousand students currently participate.

Please share your CTE-related challenges.

- › Funding – Reduction in federal funds have had an impact on implementing CTE programs of study and other state CTE priorities. Maryland is very close to its “hold harmless” funding level of the federal fiscal year 1999. It is difficult to implement state priorities and expand and upgrade state CTE Programs of Study with diminished funds. Once a commitment is made to develop or enhance a particular CTE program of study, it requires an investment of funds over time to get to scale. Maryland has leveraged some independent funds to expand programs, but those sources have diminished as providers invest their funds in other priorities. The focus continues to be on the implementation of high-quality CTE programs of study that lead to industry-recognized credentials and early college credit.
- › State legislation – The College and Career Readiness and College Completion Act of 2013 enacted in Maryland’s legislature is having its effects on CTE programs of study. This legislation places additional requirements on local school systems regarding students being designated that they are both college and career ready when they graduate from a Maryland high school. Additional enrollment requirements in mathematics and transition courses for students who are not deemed college and career ready by 11th grade are making it difficult for students to complete a CTE program of study.
- › Teacher Shortage – Non-degreed Professional and Technical Education (PTE) teachers consistently experience difficulty in accessing the professional education coursework required to move from provisional teaching certificates to standard certificates to advanced certificates. Regulation requires that the majority of these courses be taken at institutions of higher education and not by earning continuing professional development (CPD) credits. There are no undergraduate teacher education programs in Maryland for the purpose of preparing individuals for certification in PTE, thus PTE teachers have to enroll in courses as they become available to meet the regulatory requirements. In FY 2018, Maryland will invite a group of Career and Technology Education supervisors, certification and human resource professionals as well as members of Maryland’s higher education community to review the availability and accessibility of PTE related professional education coursework. The workgroup will make recommendations to update policies and practices regarding PTE teacher certification.

MASSACHUSETTS

What were your state’s top accomplishments in CTE?

- › Massachusetts has merged the Office for Career/Vocational Technical Education with College, Career Readiness, to form the new Office for College, Career and Technical Education. This provides for complimentary collaboration amongst similar bodies of work.

- › Our state has issued Partnership Grants to promote creative initiatives to expand access for all students to participate in career education. Additionally, Massachusetts now offers a postsecondary c.74 Electrical Program, recognized by the MA Board of Electricians, and grants hours to postsecondary students, similar to our secondary program.
- › Massachusetts was awarded the New Skills for Youth Grant which will enable the development of high quality career pathways with varied entry points for access to students.

Please share your CTE-related challenges.

- › The merged offices are moving toward full integration of work.
- › Contention MGL C.74 New C.74 Programs being opened and duplicated in close proximity.
- › Recruiting high quality vocational technical teachers.

MICHIGAN

What were your state's top accomplishments in CTE?

- › For the first time in 8 years we have an increase in the number of students enrolled in at least one CTE program. Completers, concentrators and students who passed a technical skills assessment have all increased as well.
- › Interest, support and additional funding from all major officials - the Governor's Office, Legislature, State Superintendent and the Director of the Talent Investment Agency (Economic and Workforce Development).
- › Support for innovative programming including CTE Early/Middle Colleges (5 year high schools where students earn a diploma and substantial postsecondary credentials when they graduate), Cyber Security and Energy.

Please share your CTE-related challenges.

- › Linking CTE student data to employment records to evaluate program outcomes. Making this data accessible and useable to CTE stakeholders.
- › Equal access (geographically) to quality CTE programs across the state to meet employer needs.
- › Growing shortage of CTE teachers.

MINNESOTA

What were your state's top accomplishments in CTE?

- › The state leadership team worked with all stakeholder groups to refresh and update operational materials and processes including the Operational Handbook, Career Program Advisory Committee Handbook, Program Approval Process/Guide for secondary programs and an intentional state-wide communication plan.
- › Provision of technical assistance has been a strength and necessity especially as Minnesota continue to experience a significant turn-over in local Perkins leadership. Our technical assistance methodologies now include a rigorous mentor/mentee initiative, monthly Webinars, one-on-one consultation usually related to fiancé and performance indicator

questions, workshops to review and implement new operational materials, and organization of web materials, resources, and guides so that the resources are available anywhere and anytime.

- › Minnesota is experiencing a shortage of qualified career and technical education teachers. The 2016 legislature directed the Minnesota Department of Education to convene a Career and Technical Educator Licensing Advisory Task Force to review the current status of CTE educator licenses, provide recommendations on changes if deemed necessary, and provide recommendations for methods to increase access for districts to licensed CTE educators. The recommendations of that advisory task force included the following: 1. Minimum qualifications & prerequisites for teachers must stay in administrative rule and not be codified in statute. 2. In order to ensure forward progress for CTE programs and teacher workforce, establish (with appropriate funding commensurate with scope of work) an ongoing Career & Technical Education Work Group. 3. Consider alternative requirements to a baccalaureate degree for Career & Technical Education licenses. (Administrative Rule change required.) 3. Allow Minnesota's two year institutions of higher education the ability to provide content related CTE teacher preparation programs. (Administrative Rule change required.) 4. Create incentives for eligible entities to create alternative teacher preparation programs outside of the traditional credit-based system. 5. Provide adequate & sustainable funding to the agency(s) responsible for licensure. While it was very beneficial to have the stakeholder meetings, complete the research, raise the profile of the issue of getting qualified CTE teachers, the real measure of success will come if changes in rule, policy and practice are in our future.

Please share your CTE-related challenges.

- › Recruitment and retention of qualified, prepared CTE teachers is a challenge.
- › Equitable access to the career and technical programs for all students is a challenge. This challenge is not limited to but certainly a concern in our most rural areas. Scheduling, transportation, and available resources (facilities, teachers) exacerbate this challenge.
- › Concurrent enrollment opportunities for our career and technical students is a challenge.

MISSISSIPPI

What were your state's top accomplishments in CTE?

- › As part of the CRI network, we have made great strides in increases business and industry participation in very meaningful ways. We now have a true partnership with our State Workforce Investment Board for identifying which pathways to scale and which certifications that will be areas we will work toward for students.
- › Career Readiness is now a topic for all students, not just CTE students. There is a great interest in making sure all students can demonstrate career readiness and the importance of career readiness as an indicator in the state accountability system.
- › Work-based learning opportunities are expanding across the state. Partnerships between local workforce development, other state agencies, and local school districts are increasing opportunities for teachers for externship programs and internships and shadowing experiences for students.

Please share your CTE-related challenges.

- › How to begin to change the image of CTE for parents and academic teachers so students have more opportunities to participate in CTE.
- › How to find innovative ways to deliver CTE to rural areas where both teacher quality and money to scale programs is not available.
- › Improving program quality across the state by attracting and keeping high quality instructors in CTE.

MISSOURI

What were your state's top accomplishments in CTE?

- › The CTE Ad Hoc Funding Committee was convened in December of 2015. The purpose of this committee was to assist the Department in developing a new plan for redistribution of state CTE funding. Seven meetings were held over a 10-month time frame. New funding strategies were developed for Area Career Centers, Comprehensive High Schools, Postsecondary institutions, and Adults. Our new CTE funding plan will go in to effect during the 2018-19 school year.
- › Legislation passed during the 2016 legislative session requires the State Board of Education in consultation with the CTE Advisory Council to develop a CTE certificate that would be available to graduating high school seniors that is in addition to the high school diploma.
- › The Career and Technical Education Student Protection Act established the CTE Advisory Council. The Act was revised during the 2016 legislative session that requires the Commissioner of Education to appoint the 11 members of the CTE Advisory Council. In addition, four members (2 Senators and 2 Representatives) are appointed by their respective leadership. The CTE Advisory Council was appointed in fall of 2016 and was first convened in January 2017. The Council's duties include: Developing a short- and long-range plan for CTE; identifying service gaps in training needs; Identifying legislative recommendations to improve CTE among others.

Please share your CTE-related challenges.

- › Missouri ACTE is in transition due to a change in association management.
- › Consistent reporting of CTE data by LEAs in our state data systems.
- › Continuing to focus on high quality CTE programs.

MONTANA

What were your state's top accomplishments in CTE?

- › Targeted use of CTE dual enrollment to address skills gap and promote career awareness and engagement.
- › Montana is currently in the design phase of statewide career pathways.
- › Implementation of healthcare apprenticeships throughout the state.

Please share your CTE-related challenges.

- › CTE awareness at the high school level - "University for All" is still the prevailing mindset for parents, school administrators and counselors despite misalignment with the workforce needs in the state.
- › Incumbent worker training.
- › Continued low employment causing enrollment challenges.

NEBRASKA

What were your state's top accomplishments in CTE?

- › Completed a series of Stakeholder Engagement Meetings with employers in nine communities across the state. Gathered information on topics such as teacher shortages, financing CTE, career guidance, secondary/postsecondary connections, work-based learning and employer engagement.
- › Launched a renewed work-based learning initiatives including a new continuum of learning, new instructional materials and a new website.
- › Positioned CTE as a primary partner in the launch of Next Generation Sector Partnerships. First areas of emphasis are Health Care, Information Technology and Advanced Manufacturing.

Please share your CTE-related challenges.

- › Providing quality CTE in small rural schools.
- › Addressing teacher shortages, especially in Skilled and Technical Sciences.
- › Aligning CTSO competitive events to programs of study to use results as documentation of technical skill attainment.

NEVADA

What were your state's top accomplishments in CTE?

- › Collaboration with other NDE divisions on a state strategic plan.
- › Assessment results increased.
- › Focus on special populations in CTE.

Please share your CTE-related challenges.

- › Licensed teachers.
- › Rural program completers.
- › Dual credit guidelines.

NEW JERSEY

What were your state's top accomplishments in CTE?

- › The State Department of Labor and Workforce Development published a list of Industry-Valued Credentials that was informed by business and industry and will be regularly updated by the established Credential Review Board. This has provided some guidance to education and workforce entities related to credentials that may lead to employment opportunities in the state. The CTE data collection system will now be collecting data on industry-valued credentials obtained by students in secondary education.
- › The Office of Career Readiness launched an online platform for the approval and re-approval of CTE programs and programs of study. This will facilitate the approval of applications which had been a paper-based process and will also assist in having more robust information in a data base on specific programs. The creation of data dashboards and other tools for users is the next step.
- › The establishment of the Career Pathways Taskforce under the umbrella of the State Employment and Training Commission has formalized a process for collaboration among state agencies to prioritize career pathways. This has been instrumental in regular and strategic communication and planning between the Department of Education, the Department of Labor and Workforce Development and the Office of the Secretary of Higher Education and includes several local education and workforce representatives.

Please share your CTE-related challenges.

- › Starting new local CTE programs and improving the quality of existing programs requires a significant commitment to providing technical assistance and professional development. While our state team attempts to meet all these needs, there is a recognition that much more work could be done in this area. Lack of sufficient state staff to meet these needs is one issue. On the local level, the recruitment of qualified CTE teachers with industry experience is also a challenge.
- › Equity and access issues persist in many high demand CTE program areas. Despite ongoing technical assistance and professional development both statewide and locally, it takes unrelenting multi-faceted efforts to address this challenge.
- › The perception of CTE remains varied throughout the state. Educators, students and parents lack a common understanding of the value of CTE. Parents lack of awareness of CTE and current career opportunities for their children remain a challenge that the Office of Career Readiness and other stakeholders have committed to addressing over the upcoming year.

NEW MEXICO

What were your state's top accomplishments in CTE?

- › New Mexico has made some great strides in promoting the use of four course sequences for programs of study. After meeting with stakeholders throughout the state, we were able to identify a four course sequence for all of the 79 pathways identified in the 16 career clusters. Building on that work, we updated a Guide that North Carolina first developed, and we included NM wage information and the sample programs of study. The guidebook is available online.² We are distributing 17,000 copies of it this spring.

² http://www.ped.state.nm.us/ped/CCRdocuments/perkins/CareerClustersBook_2016_NM_FINAL_print.pdf

- › Our Early College High School Initiative has gained momentum. This year, representatives from over 20 ECHS sites gathered for the first New Mexico summit. Discussion focused on how to ensure that programs of study are carefully aligned to workforce needs, and how to support learners as they accelerate into their college experience. ECHS sites are actively developing advisory relationships with industry partners. One ECHS even has an office in their building for a partner from their workforce development agency.
- › Dual credit enrollment is at an all-time high. Because dual credit is one possible way for students to meet a graduation requirement, many students are taking college credits while still in high school.

Please share your CTE-related challenges.

- › We continue to struggle with silos. Postsecondary partners sometimes are not engaged with industry, and secondary CTE programs often are not engaged with either workforce or postsecondary. Early efforts are underway to start addressing this at the state level, as we also struggle to stay connected with one another’s work. Another version of the silo problem is within schools, where CTE teachers are still often segregated from core faculty.
- › The application and accountability process for receiving Perkins funding is burdensome. We have had many districts opt out of funding because they find they cannot afford the staff time required to address reporting requirements.
- › The next step in our dual credit initiative is how to make sure students take courses that are relevant to their career path. We are evaluating ways to tighten the type of courses students take, while maintaining the high levels of access we have developed in the last few years. CTE is a critical part of this, because too many CTE students are not taking CTE dual credit courses.

NEW YORK

What were your state’s top accomplishments in CTE?

- › Issued grant opportunity to identify and reduce barriers to accessing CTE programs by SWD and ELL students.
- › Began discussion with stakeholders on restructuring CTE teacher titles to simplify the certification process particularly for non-traditional candidates.
- › Increased the number of approved technical assessments that could be used as a graduation assessment option.

Please share your CTE-related challenges.

- › Accurate and complete data continues to be a challenge.
- › CTE teacher shortages continues to be an issue to expansion of programs.
- › Diminishing state-level staffing will pose a major problem to providing services to the field.

NORTH CAROLINA

What were your state's top accomplishments in CTE?

- › NC created a tool to collect data from school systems to report all types of work based learning.
- › K-12 and community colleges have added career pathway requirements to local application processes which has resulted in over 300 9-14 pathways being implemented and 15 NCWorks Certified Career Pathways throughout the state.
- › Secondary students earned a record number of industry credentials and post-secondary credits.

Please share your CTE-related challenges.

- › Access to highly qualified teachers is a major challenge especially in certain areas (health, computer science, and engineering).
- › CTE is still not held in very high regard and often stakeholders are not connecting the courses students take with the more global CTE umbrella.
- › Staying aligned to business needs in a rapidly changing environment. State standards take time to develop and implement while the industry continually changes. Having standards with more longevity and the flexibility to instruct specific technology is hard to balance.

NORTH DAKOTA

What were your state's top accomplishments in CTE?

- › Contributing part of the state ESSA planning committee, incorporating career readiness as a component of a quality school.
- › Expanded distance delivered CTE courses both two-way interactive video and online through financial incentives to schools that have existing CTE programs.
- › Created a new Energy pathway in our online career planning system to bring more focus and create more awareness to the Energy industry.

Please share your CTE-related challenges.

- › Teacher recruitment is especially difficult in rural areas. How to "grow your own" and develop successful teachers.
- › To advance the use of Registered Apprenticeships within CTE at the secondary and postsecondary levels to compliment the statewide push for more Registered Apprenticeships.
- › Create statewide articulation agreements. Have many that are local, but converting them to statewide has proven difficult.

OKLAHOMA

What were your state's top accomplishments in CTE?

- › Expansion of our agency's partnerships with other state agencies: a. Department of Corrections b. New Skills for Youth c. Assessment & Curriculum d. Military.

- › Launch and implementation of OkCareerGuide.org across the state and more than 100,000 assessments being taken.
- › Centralization and alignment of career and technology education teacher/administrative credentials within our organization with more work in this area on the horizon.

Please share your CTE-related challenges.

- › Collecting and utilizing longitudinal data to better serve our students and stakeholders.
- › Improving the perception of CTE and increasing the awareness of the diversity and positive impact that CTE has in our state.
- › Educating newly elected officials on the value of CTE with term limits shortening their ability to serve.

OREGON

What were your state's top accomplishments in CTE?

- › We have continued to struggle with the nontraditional performance indicators. As a result we have implemented a two prong approach to working to improve our performance. First two new staff were hired to strengthen our data team. The data team is now looking closely at internal and external data processes to improve the quality of our collections systems. They have also worked directly with school districts and institutions to improve data entry processes. Secondly, we have used resources to enter into a long term relationship with NAPE. We are just starting our third cohort of participants in the PIPE training. This year the focus is on postsecondary level strategies. Over 70 teachers, administrators and counselors have participated in the yearlong training so far. While it will be some time before our data begins to show the impact of the training, we have already seen some impressive growth in participation in several of our early cohorts.
- › Secondary Career Pathways Funding was a new grant source made available through the Oregon Legislature beginning last year. It is a formula grant based on program outcomes. Student earning 3+ credits in a Program of Study, focus on attainment of historically underserved populations and earned industry credentials will result in dollars being allocated directly to that classroom and program. The grants range from \$2000-\$45,000 per year. This has been a huge incentive for programs to take the next step in creating a strong pathway that leads to an approved credential. We have seen an increase in all three qualification categories in the short time it has been in place.
- › Teacher recruitment and retention is a struggle across the country and particularly so in CTE. During the past year, we have supported initiatives across the state designed to provide teachers coming from industry with instructional professional development and teachers coming to CTE without a strong technical background with opportunities working with industry. This has been particularly successful with our Health Sciences programs. Additionally, a fledgling mentoring program designed specifically for CTE teachers was launched this fall. So far the anecdotal reports coming back in are proving this is a worthwhile endeavor.

Please share your CTE-related challenges.

- › Accurate data reporting has been a challenge for us in Oregon. With the implementation of the Secondary Career Pathway grants, we have found that districts had a significant challenge

with complete submissions. As a result of this incentive funding, we have seen greater attention to data entry and reporting.

- › While mechanisms are in place for ongoing communication and partnering between secondary and postsecondary stakeholders, there continues to be a disconnect at both the state and local levels. We desire to have much better communication and understanding of the work of all partners.
- › With the focus on CTE in Oregon, there seems to be many other previously unrelated initiatives trying to partner. This has created some fabulous opportunities but has also allowed some “scope creep” taking the focus off of what we do best.

RHODE ISLAND

What were your state’s top accomplishments in CTE?

- › Rhode Island is a recipient of a New Skills for Youth \$2 million+ grant award focused on career readiness. Rhode Island's key objectives and outcomes include advancing: 1 - Employer Engagement; 2 - Rigor and Quality in Career Pathways for All Students; 3 - Career-focused Accountability Systems; 4 - Scaled Pathways that Culminate in Credentials of Value; 5 - Aligned State and Federal Funding Streams; and 6 - Cross-Institutional Alignment.
- › The industry-led Rhode Island CTE Board of Trustees have reviewed several existing career pathway standard and credentials in efforts to that ensure each meets the current needs of Rhode Island business and industry.
- › State CTE funds have been strategically directed to support the Governor's Workforce Board priority sectors. The sectors include: Bioscience, Construction, Defense, Healthcare, Hospitality and Tourism, Information Technology, Manufacturing and Marine Trades.

Please share your CTE-related challenges.

- › Rhode Island, like so many other states, has the challenge of shifting the still ingrained culture that CTE is for those individuals less likely to be successful in college.
- › Rhode Island has the challenge of coordinating many improvement efforts and initiatives concurrently.
- › Rhode Island is challenged with coordinating and satisfying the interests and needs of learners, families, business and industry, etc.

SOUTH CAROLINA

What were your state’s top accomplishments in CTE?

- › Since 2012, registered youth apprenticeship programs jumped from 5 to 131 program offerings, serving 286 youths in 29 of the 46 counties in South Carolina.
- › The number of CTE Concentrators earning Dual Credit increased from 2,948 students in FY15 to 4,945 students in FY16.
- › Proviso 1A.73 provided \$3 million to help districts pay for students to obtain Industry Certifications.

Please share your CTE-related challenges.

- › Employer engagement continues to be a challenge for many of the rural districts in South Carolina.
- › Increasing the number of students completing CTE programs of study is a challenge. Only 16 percent of the graduating class of 2016 completed a CTE program of study in South Carolina.
- › Data is a challenge particularly follow up data after a student graduates from the secondary education system.

SOUTH DAKOTA

What were your state's top accomplishments in CTE?

- › Amendment R was passed in the November SD general election. The Amendment identified our public technical colleges and their mission in the state constitution separate from the Board of Regent's public universities and the K-12 education system. It also set up the legislature's ability to define the state's oversight of those colleges going forward. During the 2017 legislative session, SB 65 was passed. The bill established the Board of Technical Education and defined the board's powers and responsibilities.³
- › In 2016, SD awarded its first round of Workforce Education Grants from a fund established in 2013 by the state legislature. The Workforce Education Grants provide school districts and private, nonprofit entities who provide specialized training in South Dakota the opportunity to make transformative change in career and technical education programs. The grant awards have helped to stress the importance of quality CTE program elements, especially alignment and partnerships with business and postsecondary education.⁴
- › On several fronts, we made resources and technical assistance available to assist with the implementation of major policy priorities in the state. Examples include:
 - Standards Unpacking: The unpacked standards for each approved secondary CTE course option provide educators more clear understanding of the knowledge, skills, and abilities students must master in each course and the academic connections to each. Example of Architectural Drafting⁵
 - Personal Learning Plan and Career Decision Making Guide⁶
 - SDMyLife Magazine and educator resources⁷
 - CTE Academy Director Meeting and Tour: Administrators from CTE Academies, multi-districts, and secondary schools who partner together to provide programs toured high quality CTE schools and programs in the region to better understand policies and administration of high quality CTE systems so they can in-turn continue to grow and improve their offerings.
 - Development of CTE Methods and CTE Mentored Internship courses for industry professionals who begin a teaching career and seek alternative CTE certification.
 - Continued development of stackable postsecondary credentials and dual credit course options.

³ <http://sdlegislature.gov/docs/legsession/2017/Bills/SB65ENR.pdf>

⁴ <http://doe.sd.gov/octe/WEG.aspx>

⁵ <http://doe.sd.gov/octe/documents/UP-ArchDraft.pdf>

⁶ <http://sdmylife.com/personal-learning-plan/>

⁷ <http://sdmylife.com/educators/mylife-magazine>

Please share your CTE-related challenges.

- › Uncertainty around Perkins reauthorization has been a challenge for our state. We would like to update several policies and practices, but wish to do so in concert with the reauthorization.
- › The implementation of ESSA has been a challenge in terms of ensuring CTE is properly represented in the state plan and in practice with the state's supports to secondary schools.
- › We continue to work on changing perceptions of modern and high quality technical education (both secondary and postsecondary). Though our current programs reach a large number of students, we have a great deal of work ahead of us to reach all students. We also have a work ahead of us to ensure postsecondary technical education is a valued and sought-after pursuit and as affordable as possible.

TENNESSEE

What were your state's top accomplishments in CTE?

- › Allowing for Tennessee department of education promoted industry certifications to count for postsecondary credit at any Tennessee College of Applied Technology throughout the state.
- › Incorporating college and career readiness measures in Tennessee's ESSA plan.
- › Vertically aligning all secondary programs of study with Tennessee Colleges of Applied Technology and Community College programs to ensure seamless transitions from secondary to postsecondary. Supporting the definition of a CTE concentrator to be three courses within a single program of study.

Please share your CTE-related challenges.

- › Communication and branding continues to be a challenge. Specifically how to create tools that the districts can utilize and encouraging middle and elementary career exploration.
- › Ensuring districts are making the right choices for programs of study aligned to REGIONAL labor market and postsecondary data. Though we do this really well at the state level, accountability for district selection continues to be a point on which to focus.
- › Access to outcomes rather than outputs in a timely fashion. We are using a longitudinal data system, but labor data is lagging which often means we are evaluating programs on outputs rather than outcomes.

UTAH

What were your state's top accomplishments in CTE?

- › Model career pathways - Utah has established three new model career pathways in partnership with industry, postsecondary education, and various state agencies at the request of industry and our state office of economic development. These include programs in Aerospace Manufacturing, Medical Device Manufacturing, and Diesel Mechanics. New programs are being discussed in Information Technology and Construction. These programs take our existing pathway programs to a higher level and tie in significant work-based learning experiences with capstone level courses driven directly by industry.

- › Talent Ready Utah - this is a new initiative driven by our Governor and will involve a major focus on Work-Based Learning and linking industry to education. Significant grant funds are tied to this initiative along with expanding partnerships with our state Economic Development office, Workforce Services, and Secondary/Postsecondary Education. The focus of this program is to target middle-skill jobs where we face a shortage of qualified workers.
- › CTE Refocus - Utah is continuing to work on streamlining our pathways, programs of study, and courses to ensure that we have high quality CTE programs. Our pathways/programs of study will now be listed by career cluster for ease of understanding by parents/students. Every pathway will lead toward an industry credential of value, and only in-demand and emerging occupations. We still have work to do but are moving forward with important changes to ensure that CTE in Utah is focused directly on career and college readiness.

Please share your CTE-related challenges.

- › We are working on new initiatives and ideas for linking industry to education. This is still a difficult proposition for us and we want to ensure that time and efforts spent by industry partners are useful to them and that they find value in their partnerships with education.
- › CTE messaging and image perception - the recent work done by Advance CTE around CTE messaging and image will be helpful, but anything else we can do to improve the image and perception of CTE will be helpful for my state.
- › Perkins reauthorization - we eagerly await the reauthorization of Perkins and are trying to look forward proactively to what we can be doing now to prepare for Perkins V. Any insights and guidance are greatly appreciated. I prefer to be proactive about new requirements rather than wait for the law to go into effect and then start thinking about what it means to us.

VIRGINIA

What were your state's top accomplishments in CTE?

- › During summer 2016, the Office of Career, Technical, and Adult Education conducted 32 cyber camps statewide to introduce students, parents, and teachers to careers in cyber security. With state grant funding of \$62,500 each, the camps provided 70+ hours that included problem-driven learning activities, career exploration, field trips, guest speakers, and a culminating recognition program. Approximately 300 educators participated in a two-day problem-driven training process facilitated by the Cyber Innovation Center, National Integrated Cyber Education Research Center. A total of 743 students (rising 10th, 11th, and 12th graders) participated in the camps. Beginning fall 2017, there will be several cyber career pathway programs available to high school students. Read more here⁸
- › Virginia conducted a review of technology education that represented a culmination of state and national research and extensive input from stakeholders representing business and industry, secondary and postsecondary educators, students, and professional organizations. The report reinforces the need for secondary education to be responsive to current and future trends in technology and engineering and it will serve as a guide for implementing strategic goals and strategies over the three years. Read more here⁹

⁸ http://www.doe.virginia.gov/instruction/career_technical/cybersecurity/index.shtml

⁹ http://www.doe.virginia.gov/instruction/career_technical/technology/index.shtml in ...A Strategic Review of Technology Education: Preparing Students for Successful Transition to College and Careers

- › As part of the rebranding efforts for Work-Based Learning (WBL) we created a new approach for the summer professional development for WBL educators. Experience Works – A Convening of Business and Leaders and Educators, this professional development brings together business, industry, and educators focusing on building positive WBL experiences for CTE students throughout the commonwealth. Highlights include: concurrent sessions featuring exemplary WBL programs, strategic discussions between business leaders and educators, and a selection of industry tours. Educators have an opportunity to see the skills students need to be successful in high-skill, high-demand, and high-wage jobs. Read more here¹⁰

Please share your CTE-related challenges.

- › Development of career advisement programs for different levels of students is a challenge. It would be helpful to learn more about career advisement models for elementary, middle and early high school years.
- › With the implementation of the Workforce Innovation and Opportunity Act (WIOA), there is a challenge how to align systems, for example, secondary and postsecondary education or federal program regulations.
- › As states address student access to non-traditional careers, examples of best practices would be beneficial.

VERMONT

What were your state's top accomplishments in CTE?

- › Being a new State CTE director and not totally bombing the first year was a huge thing!
- › With support from my colleagues in other states, we had a successful OCTAE targeted monitoring visit for Perkins.
- › Being able to tap into the resources of the state CTE directors, I was able to help decision makers understand the staffing infrastructure at other state agencies, as well as to help them understand how other issues (like seat time) were changing in other states.

Please share your CTE-related challenges.

- › Ensuring a new governor and existing education administration know and understand the role and value of career technical education in the portfolio of state education and workforce development resources.
- › Getting decision makers to understand the need for additional staffing in the state CTE office.
- › (this is also a success) Finding ways to collaborate with fellow state agencies to ensure our strategies for workforce development are aligned, and that our use of state and federal funds do not unintentionally overlap.

¹⁰ http://www.doe.virginia.gov/instruction/career_technical/work-based_learning/index.shtml

WASHINGTON

What were your state's top accomplishments in CTE?

- › NGA Policy Academy on Career Connected Learning/Work Based learning. 70 Organizations, representing business, labor, K-12, higher education, CBOs, and others, have come together to develop a sustainable policy framework to scale up career connected learning for all young people. Co-chaired by State CTE Director and Gov. Inslee's Senior Policy Advisor, the broad community of stakeholders has identified practices worth replicating, barrier to progress, and strategies to engage business as co-investors in our systems. Phase 1 of the effort will culminate in Governor's Summit on Career Connected Learning, which will be hosted by Microsoft, at their main campus, and by 30 additional sites across the state, to ensure that employer and other stakeholders from every region of the state are engaged in this dialogue. This event is also the start of Phase 2, which will involve a Governor's commission on career connected learning, which will be co-chaired by a business and public system leader.
- › State Board of Education and Workforce Board (state CTE Board) have joined forces with a commitment to advocate for fully funding CTE, and recommend policies that enhance career readiness preparation for all K-12 students. Information on the joint meeting between these two boards, including the joint resolution.¹¹
- › The state strategic plan for building the state's talent pipeline, called "Talent and Prosperity for All" was completed in June, after an 18-month, comprehensive stakeholder engagement process. The plan clearly emphasizes the value of CTE and Career Pathways in developing a fully integrated, multiple pathway system to help more individuals find pathways to economic success, and to help more business find needed talent. The plan also calls out the need to enhance business engagement strategies, identify and remove barriers for individuals, and create a new performance accountability system that measures how programs work together to accomplish goals. At the writing of the plan, 22 federal and state funded programs had signed on. As implementation efforts are under way, more programs continue to sign on!

Please share your CTE-related challenges.

- › It continues to be quite difficult to build a true system of secondary-to-postsecondary articulation/career pathway work—especially regarding dual crediting, credit transferability, and transcribing generally.
- › There seems to be a better understanding of the value of CTE, but when policy-makers are faced with funding decisions, academic education still wins out.
- › Have only minimal success with middle school CTE, and we've slipped (largely funding-related) with efforts to make effective career guidance widely available to all students.

WEST VIRGINIA

What were your state's top accomplishments in CTE?

- › Simulated Workplace (changing the culture) of CTE has produced phenomenal student outcomes.
- › The Tiny Home Project - Simulated Workplace companies across WV built 15 tiny homes and presented them to the Governor to be given to WV flood victims who lost their homes.

¹¹ <http://wtb.wa.gov/Jan11agenda.asp>

- › Aligning WV's technical assessment and accountability system with the mission and vision of Simulated Workplace.

Please share your CTE-related challenges.

- › CTE collaborating and partnering with Community and Technical Colleges.
- › Identifying the appropriate certification for the different Programs of Study offered in WV.
- › Business Involvement in our rural schools.

WISCONSIN

What were your state's top accomplishments in CTE?

- › Awarded a New Skills for Youth grant! Career Pathways are an important part of the work we do in Wisconsin. Our collaboration with our partners have provided us with another opportunity to keep our career pathway vision moving forward.
- › Credit for Prior Learning has continued to move forward following our successful launch statewide in 2015. In 2016 we were received recognition from CAEL for the great work we have accomplished but not stopping there. This year we will be collaborating on the development of system wide assessments to further our work and will be implementing a new Outcomes Based Funding Criteria for credit for prior learning.
- › We are fully engaged in the implementation of Academic and Career Planning which is student driven and supported by educators and business and industry. The focus on helping k-12 students explore and develop a personalized career plan is underway with great support state wide.

Please share your CTE-related challenges.

- › As in previous years keep up the great work as a "go to" resource. You hit all the right buttons!
- › Initiative fatigue can be a real issue but the constant communication support provided by Advance CTE help connect the dots and capture new and promising practice we can all benefit from.
- › We are in the midst of developing a new biannual budget and the resources you provide around the value and success of CTE is a great resource.

WYOMING

What were your state's top accomplishments in CTE?

- › The Wyoming Department of Education CTE section launched a state (in-house) Perkins CTE data collection system (WyCTE).
- › The Wyoming Department of Education CTE section established an ECHO project (collaborative online meetings through the University of Wyoming) for career guidance professionals and educators.
- › The Wyoming Department of Education CTE section hosted its third annual statewide STEM conference.

Please share your CTE-related challenges.

- › The greatest challenge to CTE in Wyoming currently is the lack of a pipeline of qualified CTE educators and the inability to attract new/replacement educators to small rural districts and communities.
- › Another challenge to Wyoming CTE is local control. Some school districts decide to turn down Perkins funds based on required reporting.
- › Being a large rural state, consortia and business/industry relationships are difficult to establish.