ADVANCE >> CTE

State Leaders Connecting Learning to Work

2015 TWO-MINUTE ROUNDUP

SPRING MEETING 2016

CONTENTS

SUMMARY

In 2015, state CTE leaders had many things to celebrate – including national, state and philanthropic initiatives launched to support Career Technical Education (CTE), the unprecedented range of stakeholders participating in The Future of CTE Summit, and the many successes accomplished in their states.

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 our state leaders continue to strengthen CTE programs of study and career pathways, work with business and industry champions to raise the profile of CTE, and collaborate across systems and agencies to create a high-quality, seamless educational experience for all learners.
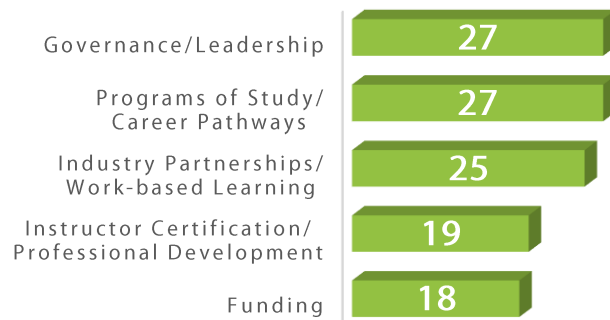
SUCCESSES

Governance: Notable in this wide-ranging category was the new levels of interagency collaboration that State CTE Directors cited as major accomplishments in 2015. For example, in **Iowa**, the governor's Future Ready Iowa Summit, a major state task force report calling for a transformation of CTE and other national initiatives, has helped position CTE as a key player in the strategy to spur the state's economic growth and preparing Iowans for future success.

TOP 5 CTE SUCCESSES IN 2015

Governance/Leadership	27
Programs of Study/ Career Pathways	27
Industry Partnerships/ Work-based Learning	25
Instructor Certification/ Professional Development	19
Funding	18

Programs of Study: **Delaware** established 10 model state programs of study aligned with the state's two-year and four-year institutions, industry-recognized credentials and work-based learning opportunities. The state's 2015 efforts saw adoption in 15 high schools with 24 pathways reaching 2,500 students – a number expected to double in 2016.

Industry Partnerships: **South Dakota**'s business and industry partners continue to play an active role in supporting postsecondary CTE through the newly established Build Dakota Scholarship, where businesses commit to pay for half of the program costs for a student's postsecondary training and the rest will be covered by the state's new scholarship program. Participating students commit to work for the employer for three years following graduation.

TOP 5 CTE CHALLENGES

Governance/Leadership	24
Instructor Certification/ Professional Development	22
CTE and Perception	20
Data, Reporting and Accountability	17
Programs of Study/ Career Pathways	17

CHALLLENGES

Governance: While states saw many administrative successes in 2015, those successes are often hard fought and rarely come without their share of challenges along the way. In 2015, the states' challenges ranged from managing the state office with limited or shrinking staff capacity to navigating the tricky waters of local control and rewriting the state's local CTE funding policies.

CTE Instructors: Recruiting, retaining and supporting high-quality CTE instructors, particularly at the K-12 level, was the greatest struggle for states in 2015 with nearly half of states citing this as a challenge.

ALABAMA
What were your state's top accomplishments in CTE?

› The Alabama State Department of Education's Counseling and Guidance Section has been put under Dr. Philip Cleveland, Assistant Superintendent for CTE & Workforce Development and is headed up by Mr. Sean Stevens. Mr. Stevens has a background in CTE Business Education and in Counseling. The result is a renewed focus on career counseling.[1]

› The Career Coach Initiative was expanded in 2015-2016 to provide a state-trained career coach in every high school in Alabama for one day a week. This initiative is in its third year and has been very successful.[2]

› Alabama is in its final year of a $50 million CTE equipment bond initiative. The legislature and Alabama industry showed their support for the direction being taken by CTE through this influx of funds to provide up-to date equipment for Alabama secondary students.

Please share your CTE-related challenges.

› Providing the teacher workforce to support the many new CTE programs throughout the state.

› Certification issues relating to providing the teacher workforce.

› Helping educators not from CTE in understanding the importance of CTE and in understanding Career Clusters, pathways and programs of study.

ALASKA
What were your state's top accomplishments in CTE?

› The state has implemented a process to convene the Rural Focus Group to address the SSQ of high-quality CTE programs and pathways for all students in the state, and particular, rural areas.

› The state has continued its work on the continuation of the CTE Exemplar Framework Process for continuous, transnational pathways with minimum levels of student performance

› The state implemented a planning grant process where postsecondary partners had to make direct connections to priority occupations and pathways for the implementation phase of the grants.

Please share your CTE-related challenges.

› The biggest challenge is addressing consistent SSQ of all programs and pathways across the state. Because of the remoteness, access to quality opportunities is limited in our rural areas.

› Another major challenge is retention and training of quality CTE instructors for our districts across the state as well as administrator turnover. This creates consistency problems for programs in schools with constant change and movement of people in and out of those positions.

› The final issue is the ability to provide quality, consistent professional development to all CTE personnel in the state's budget climate. Many districts are not able to give quality support as a result of limited resources.

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[1] More information is available at: http://www.alsde.edu/sec/cg/Pages/home.aspx
[2] For additional information, contact Mr. Sean Stevens, sstevens@alsde.edu

ARIZONA

What were your state's top accomplishments in CTE?

› The business and industry community, trade and industry associations, workforce/economic development leaders, Chambers of Commerce, education administrators, parents, teachers and students rallied in an effort to restore $30 million that had been removed from the 2017 budget to support Joint Technical Education Districts (JTEDs) in Arizona. There are 14 JTEDs in Arizona delivering high-quality CTE programs in over 100 member districts. Through the collaborative, diligent efforts uniting all CTE supporters, $29 million of the $30 million was successfully restored to the 2017 state budget.

› The Arizona Career Leadership Network was formed to champion the development of a system in which all students become career literate through the implementation of high-quality Education and Career Action Plans (ECAP). Members of the group, in addition to educators, includes business and industry partners, community advocacy groups, community entities and pathway leaders. The focus is to ensure all students through the involvement of family, educators, community members and employers, will be equipped with the knowledge and tools necessary to pursue a career pathway and achieve economic independence. Robust professional development opportunities were created to enhance school counselor's ability to focus on career readiness.

› The Premier Program Series is 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. Coursework includes Instructional Best Practices, Classroom and Lab Management, CTSO Advisor Toolbox, Work-Based Learning, Using Advisory Councils and Structured English Immersion.

Please share your CTE-related challenges.

› Data collection continues to be a challenge in identifying a system that has the ability to capture additional student data to provide reliable CTE data for use with administrators, policymakers and business and industry. The agency is transitioning to a new data standard for Arizona's education system. In collaborating and coordinating with the agency IT department, the challenge is to include all the necessary career and technical education data points into the new student information system that will provide the information needed.

› Identifying appropriate third-party industry credentials of market value for all CTE program areas and the inability to gain access and/or collect student data for industry recognized credentials.

› Establishing policies and resources that support work-based learning and will increase the number opportunities for students.

ARKANSAS

What were your state's top accomplishments in CTE?

› The Microsoft Imagine (IT) Academy is providing web-based instruction and opportunities to earn industry-recognized certifications in Arkansas's K-12 schools, adult education centers, and Workforce Centers. Arkansas has a state goal of 10,000 certifications being earned with over 5,000 certifications awarded to date. Three Arkansas teachers have earned the Microsoft Office

Specialist (MOS) Teacher Master Certification, and eleven Arkansas students have earned the MOS Student Master Certification.

› Input received from the state's CTE Regional Advisory Councils has assisted in the agency's revision of career pathways. Career pathways are being aligned to meet labor market demands and are developed to assist Arkansas students in preparing for the college/postsecondary training needed to achieve their career goals. State education agencies are working together to provide all Arkansas students with concurrent credit opportunities in academic core courses as well as career and technical courses. Also, these agencies (along with workforce development boards and economic development boards) are developing programs of study that provide clear career pathways and certification opportunities for all students.

› A new Arkansas state initiative, "Be Pro. Be Proud." was launched by Governor Asa Hutchinson and the Arkansas Chamber of Commerce to provide information concerning skilled trades and provide resources and training options to interested individuals. This initiative will hopefully help change the image of these professions and increase a skilled workforce for these occupations. This project is also supported by the Delta Regional Authority, Walmart, Truck Centers of Arkansas, Arkansas Trucking Association, Associated General Contractors of America-Arkansas, Nucor Steel, Entergy, Welsco, Haas Automation, Pace Industries, the Arkansas Economic Development Commission, the Arkansas Department of Workforce Services and the Arkansas Department of Career Education.

Please share your CTE-related challenges.
› Although a new initiative has been launched in Arkansas concerning the image of the skilled trades, many students and parents do not view CTE as a viable career path. With the introduction of the "Be Pro. Be Proud." campaign, educators and skilled professionals are hopeful that enrollments in secondary and post-secondary training programs will increase and new industries will be enticed to provide employment for Arkansas's workers.

› Two CTE subject areas have recently been placed on the Teacher Critical Shortage List--Family & Consumer Sciences and Agriculture. School districts are finding it difficult to find qualified CTE teachers, and this trend does not seem to be changing in the near future. Although teacher licensure and credentialing procedures have changed in Arkansas, CTE teachers continue to be difficult to recruit and retain.

› Career counseling for middle and secondary students is a concern. Career Coaches have been available for some districts in Arkansas, but many students are not being sufficiently advised as to their options in post-secondary education and training programs. Career planning has not been a priority in many districts, and students often seek options not suited for their interests and abilities leading to inappropriate education and mounting student debt.

CALIFORNIA
What were your state's top accomplishments in CTE?
› The passage of the CTE Incentive Grant – $900 million for CTE over three years.[3]

› Selection of seven county offices of education to be technical assistance providers for Career Technical Education Incentive Grantees.

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[3] http://www.cde.ca.gov/fg/fo/profile.asp?id=3822

> › The development of a workgroup to evaluate and make recommendations related to the CTE teacher shortage in CA.

Please share your CTE-related challenges.
> › Shortage of qualified CTE Teachers

> › The transition from two data collections systems to one.

> › The integration of data between secondary and postsecondary or labor.

COLORADO
What were your state's top accomplishments in CTE?
> › Working with other state agencies and industry to promote and use regional sector partnerships as a place to vertical team colleges, K-12, and business to make meaningful plans for their areas.

> › Revising our CTE credentialing documents and processes.

> › Development of a CTE Administrator's "101" program for our new college and district CTE compliance and leadership across the state.

Please share your CTE-related challenges.
> › Local control

> › Other initiatives from K-12 that "steal" CTE philosophy and concepts which confuse the field and public

> › Perkins' mathematics and nontraditional metrics

CONNECTICUT
What were your state's top accomplishments in CTE?
> › Connecticut developed rigorous guidelines for dual enrollment programs named Connecticut College Career Pathways (CCP) through increased collaboration between the Connecticut State Department of Education and Board of Regents. Revised policies and procedures were developed this year including faculty credentialing, professional development, articulation requirements, standards, etc.[4]

> › To increase the CTE teacher pool, the Connecticut State Departments of Education and Higher Education-Alternate Route to Certification (ARC) collaborated to combine cohorts of Technology Education and Family Consumer Sciences (FCS) teacher candidates for their teacher preparation general education coursework. Previously, the two ARC teacher preparation programs were run separately, and frequently did not operate due to low enrollment. With the combined cohorts, the program is running this year and will add Business Education candidates to the cohort in 2016-17.[5]

> › Connecticut has updated policies and program data inquiry which has raised the bar for CTE secondary programs. The process has resulted in greater accountability of LEAs and a more streamlined program quality assessment.

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[4] The CCP Guidelines can be found at http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&Q=320802
[5] http://www.ctohe.org/arc/

Please share your CTE-related challenges.

› Connecticut has difficulty filling CTE-certified teacher vacancies. There is no teacher preparation program in Business Education, no undergraduate FCS teacher preparation program and only one FCS program at a private college at the graduate level, and one in Technology Education at a state university. As a result, some secondary CTE programs are closing due to lack of CTE-certified teachers.

› When students perform poorly in academic classes, some LEAs choose to eliminate the CTE courses those students are in. In the place of CTE, they "double-up" on the academic classes, rather than seeing the value CTE provides in reinforcing academics.

› Connecticut's grant management process for intake and approval of grants is outdated and funds are not available for an electronic system.

DELAWARE

What were your state's top accomplishments in CTE?

› Governor Jack Markell launched the Delaware Pathways initiative.[6,7]

› Public-partnerships were established to revise and implement new state policy for CTE program of study approval and improvement with a focus on early college credit, credential attainment, and work experience for demand-driven occupations.[8] This includes partnerships between Departments of Education and Labor to create a public-facing website for educators to review labor market information.[9]

› Establishment of 10 state-model CTE programs of study in high-growth career areas like advanced manufacturing, engineering, finance, health care, hospitality & tourism, and information technology. All programs are aligned with in-state two- and four- year institutions of higher education and offer students opportunities to attain credentials and work experience.[10] Expansion of state-model CTE programs for all students (2015= 15 high schools, 24 pathways, and 2,500 students and 2016 = 29 high schools, 55 pathways, anticipated enrollment is greater than 5,000 students).

Please share your CTE-related challenges.

› Better connecting employers and educators, and the ability to establish and scale workforce intermediary model.

› Implementation of WIOA, coordination across stakeholder groups, ability to define outcomes for system level change.

› Efficiently managing and expanding student leadership opportunities, CTSO activities, and student competitions.

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[6] http://news.delaware.gov/2015/02/12/governor-launches-pathways-to-prosperity-initiative-for-delaware-students/
[7] http://news.delaware.gov/2015/11/23/pathways-to-prosperity-grants-will-support-55-high-school-programs-beginning-in-2016/
[8] http://www.doe.k12.de.us/Page/435
[9] http://www.edeps.org/CppDeCluster.aspx
[10] http://www.doe.k12.de.us/Page/2016

FLORIDA
What were your state's top accomplishments in CTE?
› Florida introduced a new pilot program called Florida's Integrated Career & Academic Preparation System (FICAPS) to increase the number of adults attaining career certificates and certifications. In 2014-15 students in 7-12 earned over 69,000 industry recognized certifications.

› Florida officially launched it career planning system which is called My Career Shines. This new system will now expand career guidance from kindergarten and beyond. The system was funded in its entirety by a state legislative appropriation.

› Florida continued to strengthen its programs of study by integrating this item into its Perkins monitoring process.

GEORGIA
What were your state's top accomplishments in CTE?
› Georgia CTAE hired an economic development/public relations liaison.[11] Georgia CTAE increased its public relations efforts.[12,13]

› Georgia hosted 12 partners at Educating Georgia's Future Workforce meetings across the state.[14]

› The entire Georgia CTAE staff participated in three-day externship with business & industry.[15]

Please share your CTE-related challenges.
› Consistent processes to use in implementing dual enrollment, "Move on When Ready" and articulated credit has been a challenge this year.

› Shortages in personnel within the Georgia CTAE Division has been a challenge.

› One challenge we have this year is with communicating the new and emerging image of CTAE to the public.

GUAM
What were your state's top accomplishments in CTE?
› Institutional Documents an Assessment Handbook, Academic Year (AY)2014-2015 was developed to reinforce the importance of GCC's 2-year assessment cycle which begins with developing an assessment plan, gathering data, reporting assessment results and how results will be used to improve program or course, and finally implementing the use of student learning outcomes (SLOs). All 42 secondary courses (2013-2015 CTE Secondary catalog) have course-level SLOs of which 34 courses were assessed and eight courses were under curriculum review. For postsecondary, 402 courses have course-level SLOs of which 49 are being assessed and 353

[11] http://buzzon.biz/2015/10/education-department-adds-economic-liaison-to-promote-business-needs/
[12] Information about CTAE billboards located across Georgia: http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/GFW/Pages/regional-materials.aspx
[13] Here are some of our PSAs that were aired this year: https://vimeo.com/154356377, https://vimeo.com/154912949, https://vimeo.com/156601193
[14] http://www.gadoe.org/External-Affairs-and-Policy/communications/Pages/PressReleaseDetails.aspx?PressView=default&pid=372
[15] See page four of February newsletter: http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Documents/February-2016-CTAE-Newsletter.pdf

courses were under curriculum review. Finally, GCC institutionalized the Annual Curriculum Review Cycle Schedule to review and update programs and course guides.

› Advancing Technology a 40-hour Sustainable Technologies Clinic garnered 20 participants, 15-17 years old (over half were female and two with hearing impairment). Participants received exposure to educational and technical skills in the areas of sustainability, marine biology/marine robotics, energy-fossil fuels, renewable energy (photovoltaic and wind energy), and sustainable design concepts (Green Building Design).

› Dual Credit Articulated Program of Study (DCAPS): Forty-one high school students were awarded with postsecondary credits since DCAPS was launched (spring 2012) to summer 2013. Between fall 2014 to spring 2015, 24 of the 2,329 CTE secondary concentrators received postsecondary credits primarily in the Hospitality & Tourism cluster.

Please share your CTE-related challenges.
› Developing of a reliable and consistent process to collect skill attainment data.

› Increasing graduation/completion rate.

› Scheduling and preserving enrollment of students in a secondary CTE program of study.

HAWAII
What were your state's top accomplishments in CTE?
› Met and/or exceeded all Perkins indicators.

› Increased the number of, and enhanced existing partnerships with employers, the state workforce system, and other educational entities. This was a concerted effort that is reaping great benefits. We are actively engaged in the development of the WIOA state plan and the implementation of the "career ready" aspects of the "college and career ready" goals of the K-12 system. CTE input into decisions is sought after on a scale not experienced before this.

› Building on the very successful model of the CTE Alternative Teacher Licensure program and the equally successful School Health Aide Career Pathway model, the state is developing a pathway plan for K-12 Special Education Aides that leads from certification to a Special Education teaching degree at the university. This is in response to a report to a K-12 report that highlighted the great need for this program across the state.

Please share your CTE-related challenges.
› Hawaii continues to have a great need for qualified CTE teachers around the state – especially in the more remote areas of the neighbor islands.

› Though we spend a good deal of our Perkins funds on professional development for existing teachers, staff, and administrators, there continues to be a need in Hawaii for upgrading our CTE and academic personnel so that we get the integration we hope for.

› Engaging employers for workplace learning opportunities for our CTE students is a challenge. Hawaii has a limited number of employers especially on the neighbor islands. There are a limited number of employers in the fields that most appeal to the students and that are in demand by the economy.

IDAHO

What were your state's top accomplishments in CTE?

› Idaho CTE has made significant progress in establishing a statewide articulation agreement between secondary and post-secondary CTE programs.[16]

› Idaho CTE developed an outcomes-based funding model for postsecondary programs that resulted in a 10 percent funding increase from the 2016 Idaho Legislature. In order to meet Idaho's talent needs CTE examined 30 of its postsecondary programs in health care, information technology, manufacturing and transportation with 100 percent job placement rates and over 850 students on waitlists. Idaho businesses have 2,200 annual openings with starting salaries of $30,500-$72,000 for these occupations. With a 10 percent increase ($3.8 million FY2017) PTE will increase graduates in these programs by 76 percent (400) and reduce waitlists by 48 percent.

› Idaho started offering online CTE courses through our CTE Digital Initiative to expand access to rural and non-traditional students. Initial Programs include Information Technology, Healthcare, and Business.

Please share your CTE-related challenges.

› CTE teacher shortage.

› Adequate college and career guidance and advising in the K-12 system.

› Having CTE credit apply for high school graduation requirements.

ILLINOIS

What were your state's top accomplishments in CTE?

› The STEM Learning Exchanges- the STEM Learning Exchanges have been charged over a three-year period to develop the following functions:
  o Provide e-learning curriculum resources, including on-line courses, assessments and feedback systems, reference materials, databases, and software tools.
  o Expand access to classroom and laboratory space, equipment, and related educational resources necessary to support programs of study through regional partnerships and other strategies.
  o Support student organizations and their major activities, including conferences, internships and professional networking experiences, competitions, and community projects that build leadership, communication and interpersonal skills and provide professional and peer support networks.
  o Provide internships and other work-based learning opportunities that connect students with adult mentors.
  o Sponsor challenges and project management resources for students to work in collaborative teams addressing real-world interdisciplinary problems.
  o Provide professional development resources for teachers and school administrators integrated and aligned across middle school, high school, and community college instruction, including STEM externships, support for web-based networks, and integrated professional development for academic and CTE instructors.
  o Provide career development and outreach resources to expand awareness of STEM-related programs and careers to K-12 students.

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[16]https://goo.gl/SudReQ

- o Provide tools and resources to assist students and schools with implementing personalized education plans and transitions to post-secondary academic and training programs, including establishing course articulation and dual credit opportunities.
- o Review performance of STEM Programs of Study through assessments and work with school partners to continuously improve performance. The STEM Implementation Learning Exchanges submitted their Strategic Plans to develop nine functions and are in different stages of implementation. The Learning Exchanges will continue to work towards developing the nine functions during the next fiscal year.[17]

› Curriculum Revitalization Project- The Curriculum Revitalization Project partners with Illinois State Board of Education, the Center for Workforce Development (CWD), Facilitating Coordination in Agriculture Education (FCAE), and Center for Agricultural and Environmental Research and Training, Inc. (CAERT) to develop, update, and disseminate revitalized online CTE curriculum in all content areas. Each year the goal is to develop an additional 200 online CTE curriculum lessons and supplemental materials incorporating the Illinois Learning Standards (ILS) for math and science.[18]

› CTE Special Populations Leadership Project- the CTE Special Populations Leadership Project provided trainings and technical assistance to assist and facilitate improved performance of special populations in career and technical education participation and completion in a non-traditional program. Statewide professional development and technical assistance to educators for the improvement of instructional services for special populations was provided, with an emphasis on creating equitable leaning environments. The project website (www.illinoiscte.org) hosts resources for CTE programs and the educational community. Along with the website, Facebook and Twitter provide updated information regarding newly developed and updated resources on gender equity.

Please share your CTE-related challenges.
› Teacher Shortages- CTE teacher shortages have become a challenge across the State. The number of CTE teachers coming out of teacher-prep programs have steadily decreased. Some factors such as industry drawing teachers away from the profession, few teacher-prep programs in the State, and low starting salaries have contributed to this challenge.

› Fewer CTE programs in the State- CTE programs have been closed or reduced in some high schools. Factors for the reduction of CTE programs relate primarily to teacher shortages and school finances. Educator licenses with stipulations (provisionals) have helped maintain CTE programs in some areas, but it still becomes a challenge to find individuals with work experience in those fields who want to teach.

› Elective time for CTE Courses- With the increasing demand of more core subject courses, elective time for CTE courses has become a challenge for school districts. As more legislative mandates for 4-year core subjects are enacted, elective course enrollment decreases. Advocacy for CTE courses to count as a math or science credit has alleviated some of this challenge, but the districts and community colleges must determine acceptance of this credit.

INDIANA
What were your state's top accomplishments in CTE?

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[17] http://www2.illinoisworknet.com/ilpathways/Pages/default.aspx
[18] www.ilcte.org

› Our Good News Data report shows a continuation of remarkable results for CTE concentrators - 95 percent graduation rate, compared to 89.9 percent for all graduates; only 9.4 percent of CTE concentrators who graduated the year before need remediation in math or language arts their first year in college, compared to 23 percent of all of last year's graduates needing remediation their first year in college; 15 percent of the CTE concentrators earned both Academic and Technical Honors Diplomas; and, a record 40.7 percent of CTE concentrators earned six or more dual credits.

› State funding for CTE was increased in the biennial budget on two fronts: state reimbursement for enrollments in wage/demand courses increased from by 11 percent for high/high and 20 percent for high/moderate pathway courses, generating an increase statewide of almost $10 million; allocations for career innovation earmarked $5 million per year for performance based funding to reward schools for number of CTE Concentrators, number of Concentrators earning dual credit, and number of Concentrators earning industry credentials.

› Indiana Department of Education collaborated with Commission on Higher Education and the colleges that offer dual credit to create a comprehensive dual credit crosswalk of high school courses and college courses across multiple colleges that increases consistency, transparency and accountability for the plethora of dual credit offerings available to Indiana's high school CTE students.

Please share your CTE-related challenges.
› Teacher shortages impact schools' ability to offer CTE courses and affect qualify of instruction. Aggressive teacher recruitment campaigns target high school and college students and will offer partial solutions but much remains to be done to either preserve or reinstate teacher preparation programs in critical shortage areas.

› Increased recognition of the importance of Work Based Learning as a progression of career awareness, career exploration, and career preparation has led to a need for more detailed data reporting on the kinds of WBL experiences students have in K-12, postsecondary, and adult workforce training settings. In-depth WBL information by student data collection begun just this year will take time to generate a baseline from which to measure growth in this important aspect of each student's career pathway.

› Though our CTE students have done very well on math and language arts assessments, we anticipate continuing change in the assessment system. Impact of changes is hard to predict and plan for to assure that CTE students' achievement of math and language arts standards continues.

IOWA
What were your state's top accomplishments in CTE?
› In October 2015, the Statewide Secondary Career and Technical Education Task Force issued a report and put forward five recommendations to define high quality CTE. For nearly two years, the Task Force deliberated about how to restructure and update secondary CTE in Iowa. The Task Force report described high quality CTE as a structured curriculum that includes academic and technical courses within specific career pathways leading to students graduating from high school career and college ready, thereby preparing them for education and training leading to a postsecondary certificate, diploma, degree, or industry-recognized credential tied to high demand career opportunities. Inclusion of a thoughtful career guidance plan leading to

purposeful academic and technical planning curriculum practices; an updated and modernized curriculum structure; and authentic real-world experiences that connect these students to the 21st century world of work are all part of high quality CTE. New CTE legislation, following the recommendations of the Statewide Secondary Career Technical Education Task Force, is working its way through the 2016 Iowa General Assembly.

› CTE in Iowa is front and center in many cross-sector team work that connects education to workforce and economic development. The CTE Bureau Chief has become part of the core leadership team that is driving the development of policy, processes, procedures, and products for the creation of a Future Ready Iowa. He is the co-lead for the Iowa NGA Work-Based Learning Policy Academy. The CTE Bureau was charged with developing and conducting an asset mapping that organized talent building activity by name, description of the program, overseeing agency, funding source, and, funding amount on an annualized basis. It also indicated hoe much collaboration across state agencies was occurring. The same basic framework will be used to gather information on work-based learning and college and career readiness. More broadly, the CTE State Director has been a key player in many cross-sector teamwork. Noteworthy examples include the state-led crafting of a common college and career readiness definition; the development of the Iowa Unified State Plan to meet the requirements under the Workforce Innovation and Opportunity Act (WIOA); and the business-led sector strategies/career pathways alignment work, to name a few.

› As part of Iowa's SLDS work, a Secondary CTE Reporting Application (SCTERA) was developed, updating the previous reporting application called CTE Plus. SCTERA makes 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. More broadly, at a fundamental level, the fact that CTE has been included within the SLDS development process, will now make it easier to go beyond accountability and produce reporting and analytics using the CTE data submitted into SCTERA.

Please share your CTE-related challenges.
› Iowa's reporting of Perkins/CTE data for accountability and continuous improvement needs re-examination. The way data is collected currently is not satisfactory. Iowa will be going through a thorough reexamination of its accountability processes and procedures in spring 2016 for both secondary and post-secondary. We will begin with post-secondary and then follow that with secondary.

› When Iowa school districts form a Perkins consortium, individual school districts within that consortium are simply having their Perkins dollars allocated on a pupil-based formula that prevents them from adequately capturing the benefits of scale and scope that arise because of their consortium memberships. The CTE Bureau would like to find alternative ways in maximizing Perkins funding to a consortium so every member benefits fully.

› With the growing focus across states on career pathways, incorporating secondary CTE into a career pathway system is a challenge. Finding ways to do this effectively in a recent focus for the state.

KANSAS
What were your state's top accomplishments in CTE?
› For the third consecutive year, Kansas has seen a significant increase in the number of secondary students successfully completing college credit-bearing CTE courses as well as an increase in the number of high school graduates earning industry-recognized credentials.

›	During the spring of 2015, with some designated state funding for the initiative, Kansas implemented the Microsoft IT Academy program in 150 (of the 286) school districts which provided schools free access to curriculum resources and certification exams for secondary students.

›	A standardized pathway improvement plan was implemented for all secondary-level pathways across the state. Schools applying for state pathway approval are now required to include a multi-year improvement plan that includes SMART goals for each of the following components of a quality pathway: Partnership, Professional Development, Physical Environment, and Instructional Strategies.

Please share your CTE-related challenges.

›	The limited scope of state-approved CTE pathways remains an issue. We currently have 36 state CTE pathways and are looking closely at how these could be expanded to encompass the collective career interests and increase access for all students to quality career pathways.

›	To address teacher shortages in virtually all of the CTE pathways, Kansas schools are relying more on teachers coming directly from business/industry. As a result delivery models for providing the necessary professional development and support to ensure delivery of quality instruction and supplement traditional teacher education prep need to be identified and implemented.

›	With an increased focus on credentials, establishing state criteria for credential endorsement is of extreme importance. Processes to ensure the validity/reliability of credentialing assessments, the alignment to our CTE programs and value to our business/industry partners are being developed and vetted by the staff at the Kansas Board of Regents.

KENTUCKY

What were your state's top accomplishments in CTE?

›	The successful implementation of Tech Ready Apprentices for Careers in Kentucky (TRACK), a statewide youth apprenticeship program in welding, manufacturing, electricity, and construction. Students receive credit toward the apprenticeship through the high school pathway. This is an employer-led initiative where employers determine the pathway and work-based learning experiences. This is also recognized in the state's career readiness accountability system.[19]

›	Kentucky CTE received $250,000 in 2014 from General Assembly to open a full-time regional career academy (iLead Academy). The school opened fall of 2015 where five school districts partnered with business and industry and the local community and technical college. Labor data was used to determine programming needs. Students receive dual credit and work-based learning experiences focused around their pathway of interest. By the beginning of their junior year of high-school, students will be enrolled in an associate's degree. Enrollment is projected to double for the 2016-17 year.

›	Kentucky has partnered with the Southern Regional Education Board (SREB) to expand Technology Centers That Work (TCTW) and to provide professional learning focused on project-based learning. Data from CTE teachers expressed the need for increased professional learning

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[19] http://education.ky.gov/CTE/cter/Pages/TRACK.aspx

opportunities. This need was met through project-based learning training and coaching sessions for CTE teachers.

Please share your CTE-related challenges.
- › A new governor was elected in November 2015. Anytime there is a change in administration it brings about additional barriers and additional needs for advocacy.

- › Dual credit barriers with post-secondary partners. Working to increase dual credit opportunities has always been a barrier.

- › Working to increase employer engagement for certification approvals and work-based learning opportunities.

LOUISIANA
What were your state's top accomplishments in CTE?
- › Implementation of a Workforce Development training at the postsecondary level.

- › Implementation of the Jump Start Career Diploma.

- › Increase of activities for nontraditional CTE programs at the local and regional levels.

Please share your CTE-related challenges.
- › Instructor recruitment and training in the skilled craft CTE programs.

- › Improving the image of CTE for the general population.

- › Curriculum development that embeds the requirements of business/industry and industry-based credentials.

MAINE
What were your state's top accomplishments in CTE?
- › The $1 million state funds dedicated for CTE equipment and Industry recognized standards.[20]

- › Intersections work with academics and CTE standards.[21]

- › Early College opportunities for CTE: Bridge Year as well as the mandatory articulation requirement to obtain federal funding.[22]

Please share your CTE-related challenges.
- › Data- obtaining the access and bridge for the data to follow the secondary student into their postsecondary training, credentials obtained and occupational pathways

- › Funding - federal and state

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[20] http://mainedoenews.net/2015/09/16/maine-doe-provides-1m-in-grant-funds-to-cte-schools/
[21] http://mainedoenews.net/2015/07/08/at-the-intersection-of-cte-and-academics/
[22] http://mainedoenews.net/2015/09/23/numbers-of-career-and-technical-education-cte-students-earning-postsecondary-credit-increases/

› Dated facilities- CTE schools

MARYLAND

What were your state's top accomplishments in CTE?

› Maryland expanded its CTE State Programs of Study by offering a program of study in Computer Science. The CTE Reserve Fund served as a catalyst for startup costs for school systems ready to implement this program.

› Apprenticeship Maryland, a youth apprenticeship program for students, ages 16 and up, is designed to lead sustainable employment and further education based on career pathways in manufacturing and Science, Technology, Engineering, and Mathematics (STEM) occupations. The program was established by the Maryland General Assembly and funding was appropriated to begin two pilot sites.

› There have been concentrated efforts to increase the alignment of CTE data elements within the Maryland Longitudinal Data System (MLDS). Numerous CTE related data elements have been included in standard data collections as part of this effort to make CTE an integrated part of Maryland Education data systems.

Please share your CTE-related challenges.

› Loss of staff/turnover of CTE Directors and Community College Perkins Contacts have been challenging. New staff assigned to CTE, both at the school system level and community college level often have this responsibility in addition to another major responsibility. It is challenging to constantly bring people up-to-date on CTE. It is difficult for them to advocate for CTE when they do not fully understand it. Sometimes it seems like when they "get it" they are moved on to another position. They often don't realize the numerous people involved with CTE such as data collection and reporting, career guidance, class scheduling, instructor qualifications, and the like.

› There are advocates who are vocal about increasing CTE programs of study. While this is a good thing, the challenge is that they do not understand the CTE of today with increased rigor both academically and technically, often times culminating in an industry-recognized certification for students upon completion of the CTE program of study. They are still thinking of the job specific CTE programs of yesteryear and advocating for a more narrow approach.

› CTE instructors sometimes feel that the instructional resources provided for state programs of study are not used as resources but as mandates. The instructional resources are there to assist them and still allow for their creativity as an instructional leader however, they are concerned that they must keep pace with suggested timelines as opposed to spending more time on some aspects and less time on others in a program.

MASSACHUSETTS

What were your state's top accomplishments in CTE?

› Massachusetts gathered its CTE staff together to develop a service delivery plan intended to increase student access to CTE programs, while strengthening partnerships with complementary service providers, such as the Office for College and Career Readiness and Adult and Community Learning Services. This is being done not only to increase access to CTE programs but to prepare for anticipated partnerships under the Workforce Investment Opportunity Act.

› Massachusetts worked to reform its teacher licensure standards to both improve career technical teaching training and to mitigate obstacles to teacher licensure.

› Massachusetts has worked on (and is continuing to work on) ways to increase resources to districts (more than $1 million was made available under Perkins through equipment grants) to continually improve career and technical education program opportunities (for example, working with a school district to establish educational frameworks for an Aviation Mechanic Program) based on labor market demand and student demand. Also, the emphasis in program monitoring has been shifting to technical assistance to help programs improve in addition to monitoring for compliance.

Please share your CTE-related challenges.
› There is no clear state pathway to Sheltered English Immersion training for Career and Technical Education teachers, which can have an impact on CTE program access for English language learners

› The state has been concerned that increased access to CTE programming not jeopardize program quality.

› Some of the changes necessary to increase programming and increase access to licensure require procedural and/or regulatory change, which can be a slow process.

MICHIGAN
What were your state's top accomplishments in CTE?
› The Michigan Energy Workforce Development Consortium (CEWD) agreed upon the Energy Foundation Bundle of competencies into credit-bearing course and degree offerings, enabling students to earn industry recognized certificates that will be acknowledged for credit as part of articulation agreements among post-secondary and secondary education, validated job skills for key in-demand positions, and determined education and training capabilities within Michigan's secondary and postsecondary system.

› In 2015, Michigan significantly increased support for CTE. The state increased state school aid funding for CTE programs by $10 million and added an additional $10 million in new funding for CTE Early/Middle College programs. Eighty-nine new CTE Early/Middle College programs were approved for funding, in collaboration with the Talent District Career Councils and Workforce Development Agency.

› Michigan held the first Strengthening Interagency Collaboration and Systems Alignment conference in June 2015. This conference brought together CTE educators, Vocational Rehabilitation counselors, Special Education educators and others in order to improve interagency transition supports across special education, career and technical education, and vocational rehabilitation through an enhanced understanding of:
  o Special Education, CTE, and vocational rehabilitation laws that impact services and collaboration across agencies
  o Each's systems (i.e., entrance requirements, planning processes, continuum of placement options, services, roles)
  o Practices for strengthening interagency collaboration and systems alignment so that students can maximize options to improve employment outcomes.

Please share your CTE-related challenges.

› Lack of understanding by counselors, parents, principals, superintendents and other school administrators on how to use CTE to meet the Michigan Merit Curriculum graduation requirements.

› Finding properly certificated CTE teachers.

› Offering more CTE programs in rural areas without career-technical education centers.

MISSISSIPPI
What were your state's top accomplishments in CTE?
› This year we were able to assemble a team of community college, university, and business representative to be part of the Council of Chief State School Officers' Career Readiness Initiative. This partnership provided the opportunity for CTE to become a true focus for the Mississippi Department of Education (MDE) from the Superintendent's office and the State Board of Education.

› The Governor of Mississippi organized the state to be the first to complete the WIOA plan in which MDE is a strategic partner. This opportunity has opened doors for CTE in areas we have not had the support in the past. There is a true commitment in our State at this time to make career readiness a meaningful part of the State accountability. An advisory board has been formed to help business, community colleges, and MDE identify certifications that we will use in our state for student success.

› Through the work with CCSSO we have developed a focused plan for improving CTE in our State. This plan has allowed us to begin a long term implementation focus around creating new pathways, adding career readiness to our state accountability system, and to begin the development of a K-16 career advisement system. We are current in the process of working on dual enrollment opportunities and new graduation requirement that will earn a student a CTE endorsement.

Please share your CTE-related challenges.
› Changing the overall perception of CTE across the state. There is an uphill battle for us to get non CTE individuals in our state to understand where CTE plays an important role in education. This battle also include making sure our legislators understand we are not just a workforce development program.

› At this time there is so much talk about earning certifications for students that we have to make sure we are not rushing into this movement and paying for certifications that are not valuable to our students. Trying to align with community colleges and workforce is difficult.

› Working with community college on CTE dual credit is a difficult. Not just the cost of the dual credit but having community colleges understand that secondary teachers with the correct credentials can teach dual credit courses at the same level as postsecondary.

MISSOURI
What were your state's top accomplishments in CTE?
› Continued expansion and implementation of a Teacher Externship Program that was started through our state's Pathways to Prosperity Initiative.

› Work began on expansion of Missouri Connections to include an elementary component. Missouri Connections is a comprehensive, online, career development and planning program that is provided free of charge to all Missouri citizens. Funded by the Missouri Department of Elementary and Secondary Education and the Missouri Division of Workforce Development, this program supports the career development efforts of schools, community organizations, and adult job seeker programs. Missouri Connections helps individuals learn about their talents, skills, and interests and makes the connection between planning for continued education and the work world.

› Grants in the amount of $10,000 were awarded to our nine regional College and Career Consultants (CCCs) for Nontraditional Awareness Projects. The purpose of the grants was to initiate and facilitate regionally-specific, student-centered projects that promoted non-traditional career options. The CCCs collaborated with regional school leaders to create a variety of projects within their region that included Micro messaging, Girls Coding Clubs, and Girls in STEM to name a few.

Please share your CTE-related challenges.
› Began work on rewriting our state's CTE funding reimbursement procedures. A CTE Ad Hoc Funding Committee was convened which is representative of school district administrators, teachers, and community college and four-year university representatives. This work will continue through 2016 and is being co-facilitated by the Central Comprehensive Center, the College and Career Readiness Success Center, and the Center on Innovations in Learning.

› Two CTE-related bill were introduced in the Missouri Legislature but failed to make it to the finish line. These bills included the development of a CTE Certificate of Completion and restructuring of our CTE Advisory Committee. Both bills have been reintroduced and are expected to pass this year.

› Legislation (SB1490) was passed that required committees to be convened to review and revise Missouri Learning Standards for Math, Language Arts, Science and Social Studies. Although this did not directly impact current CTE standards, the legislation was written such that all standards including CTE standards must follow a specific process to be revised and/or developed.

MONTANA
What were your state's top accomplishments in CTE?
› Montana had 937 students enrolled in CTE dual enrollment courses offered at the high schools in 2015. This number is 18 percent of the annual state dual enrollment by headcount.   We are seeing growth in new CTE courses in the field of: welding, computer science, accounting, computer applications, criminal justice and technical math.

› Fostering new workforce development & apprenticeship opportunities a new partnership was developed between the Montana Department of Labor (MTDL) & Montana University System (MUS). The goal of this partnership is to improve alignment, integration & coordination between Montana's workforce systems, programs, resources & services as well as cultivate new & innovative partnerships between education, government & economic development entities to serve priority state & local workforce needs. To facilitate this partnership, Montana University System and MTDL jointly funded a new Director of Industry Driven Workforce Development Partnerships position.[23]

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[23] https://mus.edu/board/meetings/2015/Sept2015/TwoYear/MTDLI%20MUS%20Partnership_A1.pdf

› The Montana School Counselors Association for the first time ever held a CTE Day at their spring conference. Hands-on activities were led by industry and industry oriented two-year college faculty. Sessions offered were in surveying/GIS, welding, drafting and interior design. The counselors left with a new found appreciation with the level of skill and training required for these careers.

Please share your CTE-related challenges.
› Higher Education is not able to access information about career pathway participation in secondary schools. This is been a hindrance in attempts to gather data needed to measure longitudinal outcomes of CTE students.

› Shortage of certified secondary CTE teachers.

› Due to a low unemployment rate, we have experienced a decrease in enrollment in postsecondary CTE students.

NEBRASKA
What were your state's top accomplishments in CTE?
› Nebraska launched a state school accountability system called AQuESTT. The new system is based on six tenets that provide a broader evaluation of quality than just test scores. Career and technical education is a significant part of the new accountability system.

› Completed our fourth year of reVISION. This school improvement process provides the technical assistance to have districts review career and technical education programs of study to determine alignment with labor market information, economic priorities and postsecondary expectations.[24]

› Nebraska implemented a new postsecondary data system that is a part of our P-20 statewide data system. This eliminated the need for a separate data input system for Perkins and provided for a deeper analysis of postsecondary education and the alignment of secondary and postsecondary CTE.

Please share your CTE-related challenges.
› Teacher shortages is a growing concern, especially in the Skilled and Technical Sciences area.

› Expanding meaningful work-based learning for students.

› Providing assistance for the implementation of effective K-12 systemic career guidance programs

NEVADA
What were your state's top accomplishments in CTE?
› The Nevada State Legislature authorized $16.9 million in additional state funding for career and technical education for the 2016-17 biennium for program improvement, program expansion, and program development.

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[24] http://www.education.ne.gov/nce/revision.html

> › Increased CTE program completion rates and participation in the state end-of-program assessment system, where over 95 percent of program completers participated in the state CTE assessments.

> › Demonstrated higher graduation rates for students who enroll in level 2 courses in CTE programs, where the cohort graduation rate for these students was 13 percent higher than the cohort rate for all students.

Please share your CTE-related challenges.
> › Identifying the highest priority needs for targeting CTE resources, with a focus on high priority schools and greater access to CTE pathways for students who lack access.

> › There is a need to demonstrate clear alignment of CTE to economic- and workforce-development priorities. With a variety of labor market resources, the Department with support from the Governor's Office of Economic Development collaborated to develop a consensus ranking to help school districts and colleges align programs with state priorities.

> › Implementation of a state system for recognizing industry credentials of value.

NEW HAMPSHIRE
What were your state's top accomplishments in CTE?
> › New Hampshire Legislature established, in statute, a state-level CTE Advisory Council charged with studying issues and making recommendations.

> › Third-party end-of-program assessment system was finalized and will be rolled out in spring 2016.

Please share your CTE-related challenges.
> › We are optimistic about our plan to build out career pathways that include the connections with post-secondary education institutions and training organizations. A challenge is to synergistically align all the various programs and initiatives going on throughout the state.

> › The persistent perception of CTE as something less than a path to fulfilling careers continues to be a challenge that impacts real choices made real students.

NEW JERSEY
What were your state's top accomplishments in CTE?
> › A reorganization of the New Jersey Department of Education included the renaming our office from the Office of Career and Technical Education to the Office of Career Readiness to more broadly address the importance of career readiness for all K-12 students. Moreover, the Office of Career Readiness was moved under the leadership of the Chief Academic Officer in the Division of Teaching and Learning. This positions CTE to be more fully integrated into academic areas and has already provided opportunities to address cross-disciplinary connections in various content areas.

> › There has been enhanced and ongoing collaboration with the Department of Labor and Workforce Development, the State Employment and Training Commission (State Workforce Development Board) and the Office of the Secretary of Higher Education in aligning CTE programs to higher education and the workforce. This has included an agreement on the

definition of High-Quality Employer Driven Partnerships, utilizing Talent Networks to support CTE programs, and the drafting of an industry-valued credentials list in each of the state's key industries.

› Ongoing professional development has been provided on the Career Ready Practices, which were adopted by the State Board in October 2014. There is a greater sense of awareness about the importance of career readiness throughout the K-12 community.

Please share your CTE-related challenges.
› There has been a continued downward trend in enrollment in CTE programs in comprehensive high schools (more than 20,000 fewer students served in comprehensive high schools over the past five years). This is particularly impacting on underperforming school districts that appear to lack capacity and the will to implement quality CTE programs.

› Measuring career readiness in an accountability system remains a challenge. On one hand, districts receive communication that career readiness is important; however, measuring students' career readiness in a valid, reliable manner to be included in an accountability system continues to be elusive.

› Providing all students with a comprehensive and high-quality career development system to explore interests, set goals and identify options is challenging.

NEW MEXICO
What were your state's top accomplishments in CTE?
› Data Reporting at the Student Level – Data reporting to assist in the continuous improvement of Career Technical Education (CTE) programs in New Mexico has been significantly improved. In 2015, the College and Career Readiness Bureau (CCRB) developed a more comprehensive system of reporting that allows district and school personnel to identify students who may need extra help in completing their programs of study, as well as providing them with early interventions for improving math and literacy proficiencies. This predictive and prescriptive approach to data collection and dissemination is essential for the Public Education Department, specifically the CCRB, to provide substantial support to Perkins' funded schools, as well as secondary and postsecondary institutions that provide CTE. The new reporting system allows Local Education Agencies (LEAs) and Perkins monitors to have access to a variety of data that impacts performance indicators. For example, they can now drill down to determine which students are coded as concentrators in a particular cluster, see whether students are included in each of the Consolidated Annual Report indicator numerators and denominators, or what subgroups a student is a member of for Perkins purposes. In past years, schools had only district aggregate data. The reports support data-driven decision making. Counselors now have more information to recruit students on the way to becoming concentrators in programs of study. The new reports can provide a model for other states, and recently, the CCRB showcased some of the reports at the November 2015 Federal Data Quality Institute in Baltimore, Md. One especially innovative option is a graphical interface using Tableau. This is posted on CCRB's web site at Interactive Perkins Performance Dashboard. The dashboard allows schools and the public to make comparisons that can visually identify trends in the data. Moving forward, as a result of a federal monitoring visit last year, the CCRB also is in the process of developing reports on all the data at the sub-population level, giving district and school personnel even more focused demographic information. This will allow districts and schools to not only make informed changes to their programs to meet the needs of more students, but also will show best practices from districts so they can be leaders in helping struggling districts improve as well.

› Career Readiness Initiative/HM 14 – The Public Education Department, New Mexico Higher Education Department and the Department of Workforce Solutions have collaborated on an innovative Career Readiness Initiative designed to strengthen and establish rigorous career pathways for all students. The cross-sectoral partnership bridges secondary education to postsecondary degree plans and leads students to viable careers. The New Mexico Legislature, in 2015, passed SB105 and HM14, in order to support the three entity partnership that would establish high-quality career pathways. The Career Readiness Initiative will help strengthen our efforts to bring rigorous and relevant career programs of study that are aligned to the state's priority employment sectors. The action plans being implemented are designed to blend rigorous core and career technical academics, provide focused career guidance and advisement and connect more students to work-based learning opportunities. These are similar recommendations made by the Council of Chief State School Officers and the Southern Regional Education Board after conducting independent studies of New Mexico's career technical education system. The state's educational strategic levers – of employer engagement, stronger programs of study pathways and placing a value through accountability on career technical education for all students – also will be addressed by these career readiness action plans as they continue to be rolled out.

› Programs of Study-Next Step Plan Template Implementation – A Program of Study (POS) is a comprehensive approach for delivering academic and career and technical education to prepare students for postsecondary education and career success. As a result, students earn industry credentials and/or college credit toward an Associate and/or Bachelor's degree during high school. The CCRB team, using its Student Teacher Accountability Reporting System (STARS) course manual, developed seven career pathways, and set up specific Next Step Plans to accompany the Programs of Study. Seven pathways were formally adopted before the end of the year for schools to begin using. The pathways aligned with the state's priority employment sectors, and have relevant credentials for students upon completion of the pathway.[25] CCRB has identified 92 pathways, but the formal adoption of seven gets the POS and NSP initiative started. This alignment was a big accomplishment because up until this year pathways weren't clearly defined and didn't go beyond three courses in a cluster. This initiative came about as a result of a year-long study by a state contractor who analyzed CTE in the state and came back with specific recommendations on how PED can strengthen career pathways and make them more viable to students moving into postsecondary or careers.

Please share your CTE-related challenges.

› One challenge the state and the Public Education Department faces is that there is no continuous P-20 system of tracking students beyond high school graduation. The state's Longitudinal Database has not been completed as of yet, and it would be one important way of collecting this sort of long-range data. This is not just a challenge for the PED, but for the state in general, as higher education and the Department of Workforce Solutions also would benefit greatly from having the database.

› Also as a result of the CTE Report, it was identified that there is a lack of POS implementation at a local level. Schools perceived they had a POS in place, but these were found to be not of high quality or of large enough scope. The CCRB's challenge is to help district and school personnel fully develop programs of study. To that end, the CCRB created a Program of Study Evaluation Tool, and is working to support schools and districts as they begin redesigning resources, people and finances to build stronger programs. Schools must start thinking how they can

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[25] http://www.ped.state.nm.us/ped/CCR_perkins.html

rebuild master schedules to support a four-course sequence in a program of study. So far, that has not been the case.

› The PED currently does not have a strong business/industry partnership to clearly articulate the priority sectors in state to districts and schools. Without this partnership, schools do not have established relevant credentials that mean something to business and industry. Without this business/industry input, many of New Mexico CTE students may not be getting the best certifications or have viable stackable certifications that may lead them to high-wage, high-demand jobs in New Mexico or elsewhere.

NEW YORK
What were your state's top accomplishments in CTE?
› Established CTE Pathway to high school graduation using technical assessment testing options.

› Raised visibility of challenges to expanding CTE opportunities in the state with leadership which was not previously recognized.

Please share your CTE-related challenges.
› Building awareness with state leadership of CTE benefits to students.

› Collecting, analyzing and dissemination of accurate CTE data.

NORTH CAROLINA
What were your state's top accomplishments in CTE?
› NC Works Commission approved criteria for career pathways for all workforce partners signaling a combined standard and consistent information. In addition, in early 2016, the Commission certified the first pathway that met all of the criteria.[26] The partners have dedicated staff to support and provide technical assistance for the development.

› The Governor's Office has challenged education partners to increase the number of labor force participants with some postsecondary education and/or industry credentials to 67 percent (currently 54 percent). The education providers have passes resolutions in support of the work and will enhance strategic plans to support the work and the Governor's Office will use the Education Cabinet to monitor progress. Partners will also report progress in dashboards.

› In support of career pathway development, the community college system awarded grants to facilitate the development of pathways. Twenty grants were funded to enhance systems and frameworks.

Please share your CTE-related challenges.
› Deeper understanding of what CTE is on the part of law makers, parents, community partners/stakeholders, and employers. In effect dispelling the old, dated perception of "vocational" education.

› Recruiting engaged employers to partner in the work of the workforce system including providing direction for programming, commitments for work-based learning for students and teachers, and supporting systems for pathways.

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[26] https://www.nccommerce.com/wf/about-us/ncworks-commission

> › Finding qualified faculty for technical programs. An improving economy is adding pressure to shrinking pipelines in teacher education programs. Salary differentials between industry and teacher salaries is causing even greater shortages at both secondary and postsecondary levels.

NORTH DAKOTA

What were your state's top accomplishments in CTE?

> › Rolled out a set of rubrics to measure the 12 Career Ready Practices, and are piloting it in four school settings. The rubrics are designed to be used by teachers to observe and record student performance in the 12 areas. Have had good feedback from pilot schools - the key is to provide ample professional development so teachers and administrators understand the process.

> › Distance Delivery - we continue to expand the number and variety of CTE courses and programs offered through distance learning. We have found the best resource is a teacher who is creative in how they can deliver the hands on components with a CTE program. Through distance we have been able to expand the number of students and schools that have Health Sciences. That program has grown three fold in the last few years. Other programs have had success also. A key component is that any distance delivered CTE course must be measured/assessed the same as the face to face CTE course is - distance does not mean watered down.

> › Provided a grant to six area career and technology centers to upgrade their automotive technology programs with state of the art front end alignment equipment. The grant purchased two complete units and trailers which are rotated between the area centers on a rotation basis. Instructors revise their lesson plan schedule to take full advantage of the systems which also include a road force balancer and a on the car brake lathe and a bench brake lathe. Each area center has the equipment for one third of the school year.

Please share your CTE-related challenges.

> › The North Dakota University System has ramped up its admission requirements for our two research universities. Our challenge has been to have the university system incorporate CTE courses as part of the admission requirements. We advanced two approaches - identify individual upper-level CTE course of completing a pathway as an indicator of student success.

> › Continuing challenge is the creation of career pathways that include secondary and postsecondary. We have had some success but it is limited. The pathways are well developed at the secondary level but not so much at the postsecondary level. The barriers we encounter are large rural areas and the availability of postsecondary programs that fit into a pathway due to small size and location.

OHIO

What were your state's top accomplishments in CTE?

> › Ohio implemented an Adult Diploma program to assist those 22 and older in completing their high school diploma, while also earning an industry credential. This opportunity to receive a competency-based education, in combination with career advising and outreach.

> › Developed 177 apprenticeship programs providing new learning opportunities.

> › CTE Program Application process. This improved the quality of the CTE application process making it more transparent and seamless. Ohio's Tech Prep regional centers provide training to districts on the entire application process.

Please share your CTE-related challenges.
- › Redesign of an alternative CTE Teacher Licensure – Innovative approach challenged by some teacher educators and CTE administrators in the field.

- › Moving traditional CTE programs and centers to newer models of CTE design and exposing students to CTE in the earlier grades.

- › Work-based learning and CTSO activities: Relevance of CTSO activities related to career field technical content standards. Increase competition for student involvement in other organizations that are more relevant, e.g., ProStart, Junior Achievement, etc. Many CTSO's are slow to respond nationally so change must take place on the state level. CTSO's can be a tremendous vehicle to promote work-based learning.

OKLAHOMA

What were your state's top accomplishments in CTE?
- › The launch of a new career development tool called OkCareerGuide. The OK Career Guide system offers research-based assessments that allow users to identify interests, skills and values. These results will align with the U.S. Department of Labor's 16 Career Clusters and ultimately to specific career options. The system identifies the training and education needed for each occupation, including a database of schools that offer the necessary education for that career. The robust online career tool is customized for Oklahoma and is supported by Oklahoma CareerTech.[27]

- › Since 2007, CareerTech has invested more than $6 million to increase STEM education, which is integrated throughout CareerTech offerings. Some areas of instruction include computer science, biomedical sciences, biotechnology, pre-engineering, and gateway to technology to list a few of the areas.

- › Skills Centers programs that are currently being offered at correctional facilities has been expanded to also serve a population of students in community correction facilities. The courses include culinary arts certification, heavy equipment certification, and welding certification. The programs are a partnership with various entities to help meet the local workforce needs.[28]

Please share your CTE-related challenges.
- › A challenge being faced is to make certain that federal and state legislation does not limit the ability for individuals to participate in career and technology education. From high school students to veterans wanting to further their education, career and technology education needs to be an available option.

- › Ensuring high school graduation requirements do not limit the students' ability to participate in CTE programs.

- › The implementation of WIOA planning, while working to continue to meet the guidelines of each core function. The cross agency work has been great and look forward to further federal guidance on section of the plan.

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[27] www.okcareerguide.org
[28] http://www.okcareertech.org/news/press-releases/2015/oklahoma-careertech-joins-partnership-to-train-offenders-preparing-for-work-release

OREGON

What were your state's top accomplishments in CTE?

› Building a stronger/broader legislative support structure for CTE including a 15-17 $35 million proposal in the Governor's budget for secondary CTE.[29]

› Implementing the CTE Revitalization Program and expanding business and industry partnerships.[30]

› Converging the CTE/STEM business coalition and becoming a part of the Oregon Business Plan: Connecting Education to Careers[31]

Please share your CTE-related challenges.

› The ongoing transition of leadership and restructuring of government and agencies.

› Data collection and utilization without a functional longitudinal data system.

› The ongoing secondary-postsecondary alignment challenges including dual credit, college boundaries, competing programs.

PENNSYLVANIA

What were your state's top accomplishments in CTE?

› In 2014-2015 academic year (AY), a total of 38 students were awarded SOAR Program of Study Articulated Credit and 237 total postsecondary credits were awarded. The total 2015 AY dollar value of the awarded credits is approximately $65,670, awarded to qualifying students matriculating into aligning Perkins Postsecondary Programs of Study identified in the various Agreements.

› All Perkins-allocated Postsecondary Institutions have aligned for advanced credit offerings in at least one program of study area, and offer advanced credit opportunities. As of January 29, 2016 the BCTE holds 439 active Postsecondary Statewide Articulation Agreements (Agreements) with the 28 Perkins-allocated postsecondary institutions and 13 CTE centers offering Practical Nursing Adult Programs. Currently there are 42 programs of study that the Department has developed with 1,522 program of study approvals at the secondary schools.   The Pennsylvania program of study framework includes the following components.
  o Validated statewide tasks lists
  o Aligned technical task lists to the 11th grade Pennsylvania academic standards
  o Signed statewide and out-of-state articulation agreements
  o Aligning the secondary technical assessments to the program of study performance task lists.

› The number of industry certifications earned by Pennsylvania career and technical education students increased from 18,381 certifications earned in 2010-11 to 18,571 certifications earned in 2011-12; 20,461 in 2012-13; 23,621 in 2013-14; and 27,371 during the 2014-15 school year.

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[29] https://www.youtube.com/watch?v=Y2n_RgDLO60&list=PLHqKl1VSK4IQ62h1NrNXeKpn9Lw6cc2NH&index=8
[30] http://tinyurl.com/CTEAdvocacy
[31] http://www.oregonbusinessplan.org/About-the-Plan/Summits-and-Meetings.aspx

RHODE ISLAND

What were your state's top accomplishments in CTE?

› The Rhode Island Department of Education (RIDE) supported secondary programs through Prepare RI: Increasing Student Access to High-Growth High-Wage Jobs of the Future, a grant program that provided funding to school districts committed to developing innovative programs that will:
  o Provide career and technical programming aligned to High-Growth High-Wage areas identified as key to Rhode Island's economic development
  o Foster partnerships between K-12, postsecondary institutions and private industry partners.

› The Rhode Island General Assembly passed legislation (RIGL 16-100) that called for the adoption of a statewide policy for dual enrollment that allows students to take college courses to earn credit at both the secondary school and the higher education institution. Subsequently, the Board of Education adopted regulations in April of 2015, that provide all qualified Rhode Island high school students access to college level coursework while still in high school. Students can access college level courses in two ways by taking:
  o Concurrent enrollment courses at their high school: these courses are the same courses that are taught at the college, but are approved to be taught at the high school, by the high school teacher.
  o Dual enrollment courses at the institution's campus: these courses are part of the institution's regular schedule and are taught by a college professor. Upon successful completion of a dual or concurrent course, students will earn credit toward their high school graduation requirements and they will earn credit with the higher education institution where they are enrolled for the course. Depending on their plans after high school, students can choose to transfer the credit with another institution. Ultimately, all students have the opportunity to reduce the amount of time and expense required to obtain a college degree.

› Advanced Coursework Network:
  o The Vision: Rhode Island students work diligently to meet high school graduation requirements and prepare themselves for college and career success. As a community, we must ensure all students have the opportunity to make the most of that experience through advanced coursework aligned with their passions, interests and needs. However, in high schools across the state, students' learning is limited by where they live and by the courses offered in their local school. Access is especially limited for advanced math, science and technical courses. All students must have access to high quality coursework that will allow them to pursue their interests and prepare them for their future success and the success of the state.
  o The Network: The Rhode Island Department of Education (RIDE) has developed the Network to meet this need. The Network is a statewide course access system that gives students choices beyond what is available at their high school. Through state funding, schools can seamlessly expand course opportunities for their students at no additional cost to students, families or the district. The Network will engage schools, students and families to give students access to courses that enable them to envision, pursue and complete their individualized graduation pathway. A course catalog will be provided alongside school registration in the early spring. Students will work with their family and school counselors to enroll in appropriate level coursework.
  o The Coursework: The course offerings may be half or whole year classes and will include advanced science and mathematics courses, as well as Advanced Placement, world languages, career-focused and dual/concurrent enrollment courses. Districts and

Schools will have the option to participate in the pilot year of RINAC, beginning fall 2016. The options available to schools and students will be offered through high quality, state-approved course providers, with possibilities ranging from local industry training programs to advanced courses at Rhode Island's colleges and universities. Courses will be offered in a variety of formats including face to face, blended and virtual.

Please share your CTE-related challenges.

› Capacity continues to be a tremendous problem in Rhode Island. In addition to the broad scope of responsibilities related to secondary, postsecondary and adult CTE program focused work, the CTE team led and supported work related to Perkins implementation, the Governor's Workforce Board initiatives, Workforce Innovation Act (local boards, committees), One-Stop and Youth centers, Rhode Island Apprenticeships, innovative program development, OCR visits, etc. Though the CTE staff totals a whopping four FTEs, other experienced RIDE staff members provide support, whenever available. Example: During the past year, the CTE staff led teams experienced coworkers to conduct 40+ CTE Program Reviews and Site Visits.

› Managing the proliferation of the CTE programs in traditional high schools that are interested in attracting students and per pupil funding into their under enrolled buildings and underfunded schools.

› RIDE has received a small amount of state CTE funds for the last three years. The legislation enacting these funds promised annual appropriations with incremental increases that must be petitioned for each year.

SOUTH CAROLINA

What were your state's top accomplishments in CTE?

› Through the collaborative efforts of Apprenticeship Carolina, local school districts, and the SC Department of Education, Registered Youth Apprenticeships (secondary students) have grown from only 2 counties (out of 46 participating) to 25 counties having secondary students enrolled in Registered Youth Apprenticeships. Additionally, secondary students participating in high quality Work-Based Learning Experiences increased from 82,950 to 103,251.

› South Carolina's Career and Technical Concentrator graduation rate reached an all-time high of 98 percent. The state general graduation rate is 80.3 percent. Technical Skill Attainment was 90.4 percent and our placement rate was 97.1 percent.

› Training institute for new CTE Education Administrators increased from three sessions to six sessions. Content was completely revised to better prepare new CTE Administrators with knowledge and skills to effectively administer high quality CTE Programs of Study across South Carolina.

Please share your CTE-related challenges.

› Articulation with two- and four-year institutions has many barriers due to lack of a statewide agreement among the 16 state technical colleges. Pockets of greatness are occurring across the state but many districts are still reporting 0 students earning articulated credits with post-secondary institutions.

› Address South Carolina's "Three P's" challenges: Perception, Pipeline, and Partnerships. Need to overcome the current perception related to manufacturing and other STEM-related fields and their educational pathways. Need to create a viable pipeline of qualified workers in those areas

and build upon existing collaboration and create new partnerships to ensure educational offerings and curriculum are industry driven.

› Need to change current policies and practices to make it easier for highly skilled workers to transfer into CTE Classrooms to transfer their knowledge and skill sets to our students.

SOUTH DAKOTA
What were your state's top accomplishments in CTE?
› The revision of the state's Secondary CTE Teacher Certification Rules brought consistency in how CTE teachers became certified in South Dakota across the various Career Clusters. The new rules support teachers coming through traditional teacher preparation programs, adding on CTE endorsements to their existing teacher certification, or entering the profession through alternative certification. With the revised rules, teachers can become certified through a cluster endorsement or a pathway endorsement. The cluster endorsement allows teachers to teach any course within a career cluster and requires the passage of a state certification exam or completion of 15 credits of coursework. The pathway endorsement allows teachers to teach any course within a career pathway and requires the passage of a state certification exam, completion of 9 credits of coursework, or 4,000 hours of work experience. Both endorsements also require that teachers complete a CTE methods course, and teachers who come through alternative certification must also have 4 credits of a mentored internship.[32,33,34]

› The standards for secondary CTE courses will be revised over the course of 2015-2018 to ensure they are appropriately aligned with postsecondary and industry expectations and reflect the latest knowledge and skills required. Additionally, the standards revision process is adding standards to all courses to more purposefully develop students' soft skills. For each career cluster and the foundational CTE courses like Career Exploration and Computer Applications, the process brings together 25 or more experts from the classroom, postsecondary education, and industry.[35,36]

› Throughout 2015, we made many efforts to reach out to business and industry partners to strengthen the connection between the classroom and business and to educate our staff and theirs on each other's work. The SD Retailers and the SD Chamber of Commerce are both close partners and readily share information with their membership or provide staff or board members for grant reviews, standards revisions or other advisory roles.[37] Business and industry partnerships have also been strengthened on the postsecondary side through the Build Dakota Scholarship program. Industry organizations or businesses can provide for half of a students' program expenses and the Build Dakota Scholarship picks up the remaining portion. The partnership is a win for students, the state, and the business as the student commits to working in South Dakota, at their business partner's operation for three years following graduation.[38]

Please share your CTE-related challenges.
› Staff capacity has proven a challenge for several years, especially at a time where CTE is a critical partner in the state's workforce strategy. We're strategically working to improve the quality and

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[32] Map of certification options: http://doe.sd.gov/board/packets/documents/092115/Item6doc3.pdf
[33] SD Administrative Rules for CTE Certification: http://legis.sd.gov/Rules/DisplayRule.aspx?Rule=24:15:08
[34] SD Administrative Rules for CTE Endorsements: http://legis.sd.gov/Rules/DisplayRule.aspx?Rule=24:15:10
[35] SD Content Standards: http://doe.sd.gov/contentstandards/
[36] Timeline for revisions and implementation: http://doe.sd.gov/contentstandards/documents/Strd-Timl.pdf
[37] 2015 Employer Survey Results: https://www.surveymonkey.com/results/SM-G8XJN6G9/
[38] Build Dakota Scholarship Program: https://www.builddakotascholarships.com/

alignment of our secondary programs in largely rural schools which requires frequent touch points, travel, and program adaptations to fit each of their unique environments. Our postsecondary technical institutes are working tirelessly on meeting employer needs and anticipating labor market demands several years down the road. We have to carefully prioritize work and sometimes turn down opportunities because we don't have enough man power to take on new projects.

› We continue to work with schools to fully understand what high quality CTE programs look like and what it takes to transform their programs. Most administrators, counselors and teachers are well informed on CTE; our next phase is improving their quality for students' benefit. Thankfully we have had several competitive grants available in the last three years focused on quality programming. Though progress is slow, this challenge is rewarding and important to pursue.[39,40]

› In the postsecondary realm, we are challenged with an extremely low unemployment rate. We continue to have a gap between the skills employers are seeking and the skills our available job seekers have. Our state-wide attainment goal is that 65 percent of South Dakotans aged 25-34 possess a postsecondary credential of some kind by 2025. Currently, only 38 percent of that population has a credential. We are in a difficult position to sell greater skills attainment through postsecondary education and industry credentials to meet employer needs.

TENNESSEE

What were your state's top accomplishments in CTE?

› Creation and promotion of a student industry certification policy. This includes the development of statewide agreements (for Tennessee Colleges of Applied Technology and Community Colleges) which standardize the number of postsecondary credits/hours awarded for students who enter postsecondary with specific capstone industry certifications. Additionally, we are piloting a Tennessee-specific industry certification development process intended to create industry-valued credentials in career clusters and/or programs of study that do not have capstone industry certifications. The pilot program of study is Animal Science.[41,42]

› Statewide implementation of new Work-Based Learning framework and policy, which feature revised Career Practicum course standards as well as ongoing support and development of WBL coordinators through regional Professional Learning Communities (PLCs).[43]

› Continued implementation of the statewide Professional Development Model for CTE Educators, which is driven by our Vision of Excellent Career and Technical Instruction. This model includes a PD series for district CTE administrators on coaching and developing teachers and utilizing student/teacher level data to drive decisions.[44]

Please share your CTE-related challenges.

› The ability to collect, track, and analyze meaningful data related to student experiences, achievement, and outcomes – specifically data that predicts and/or reflects student achievement in CTE courses/programs of study, early postsecondary opportunities, industry certification results, and success in postsecondary and careers.

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[39] Final report of 2014 SD Governor's Grants for CTE: http://doe.sd.gov/octe/documents/14CTEGran.pdf
[40] 2016 SD Workforce Education Grants: http://doe.sd.gov/octe/weg.aspx
[41] http://tn.gov/assets/entities/education/attachments/cte_certs_policy.pdf
[42] http://tn.gov/assets/entities/education/attachments/cte_certs_list.xlsx
[43] http://tn.gov/education/topic/work-based-learning
[44] http://tn.gov/assets/entities/education/attachments/cte_vision_of_excellent_instruction.pdf

› Outdated Perkins requirements that are misaligned with current needs and practices of educational institutions and the labor market.

› Need for additional funding to support CTE equipment, capstone industry certification fees, and early postsecondary exam fees/tuition.

TEXAS

What were your state's top accomplishments in CTE?

› Adoption of the Texas Essential Knowledge and Skills for secondary CTE. The review and revision committees started with 194 courses and recommended to the state board of education the adoption of 277 courses to include new and innovative courses.

› Implementation of the new graduation program, Foundation High School Program, including the implementation of CTE endorsements. CTE endorsements include STEM, Business and Industry, and Public Service. CTE students must complete a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course.

› CTE programs of study are now codified in Texas law (HB 2628) as a new requirement for higher education. The Texas Higher Education Coordinating Board, with the assistance of appropriate advisory committees, must develop CTE programs of study and align with student interest and academic and industry needs.

Please share your CTE-related challenges.

› Implementing the new EDGAR regulations. Providing statewide guidance and professional development.

› Addressing the CTE teacher shortage in Texas. For a second year, CTE has been identified as a teacher shortage area.

› Working with districts in the identification of third-party, industry-recognized credentials as opposed to industry-informed credentials.

UTAH

What were your state's top accomplishments in CTE?

› The Utah State Legislature created a Career & Technical Education Board to conduct a comprehensive study of secondary and postsecondary CTE in Utah. The recommendations of this board will potentially impact CTE funding, CTE governance and administration, and criteria necessary to demonstrate the need for future CTE programs.

› Continued work on our CTE reFOCUS initiative to streamline programs, courses, and pathways in Utah. Every pathway in Utah will end in a meaningful credential of value to employers and be aligned with the economic and employer needs.

› Creation of the Strengthening College & Career Readiness certificate program for school counselors that certifies that a school counselor is highly skilled at providing college and career counseling.

Please share your CTE-related challenges.
› Outdated Perkins requirements that are no longer aligned with current needs and practices of educational institutions and business and industry.

› Improving the image of CTE so that policymakers, parents, and employers understand exactly what CTE is and the benefits it offers to ALL students.

› Engaging employers in meaningful ways that allow us to work together collaboratively for the future of CTE.

VERMONT
What were your state's top accomplishments in CTE?
› Passage of a bill calling on the state's CTE system to develop statewide programs of study in six priority areas of Vermont's economy and report the Legislature about how it will be accomplished and make recommendations about how to improve CTE in Vermont.[45]

› All construction pathway teachers and partner high school math teachers began Math-in-CTE training with the National Research Center for CTE and offered as college credit through a partnering Vermont State College and Castleton University. The goal was to enhance the math that exists in construction program, help CTE teachers understand the Common Core math standards, provide context to math teachers, and help improve the perception of CTE within the high schools. The project expands to two additional pathways in the next two years.

› In three program areas, started the process of developing performance assessment portfolios as part of our end-of-program technical skill assessments.

Please share your CTE-related challenges.
› Vermont instituted personalized learning plans and proficiency based graduation requirement standards. General education is in the process of responding. CTE is trying to determine where they fit into this new landscape.

› CTE is challenged with connecting our outcomes with labor and Unemployment Insurance data. Developing a shared sense of ownership is difficult between two state agencies that are short human resources is posing a problem.

› Our regional CTE directors are interested in creating common professional development days across the entire state but are experiencing some resistance at higher administrative levels to reach agreement on those days.

VIRGINIA
What were your state's top accomplishments in CTE?
› In collaboration with the Virginia Advisory Committee for Career and Technical Education, the University of Virginia's Demographics and Workforce Group of the Weldon Cooper Center for

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[45] http://legislature.vermont.gov/assets/Legislative-Reports/edu-legislative-report-act51-career-technical-education.pdf

Public Service, and the CTE Resource Center, several tools were developed to assist schools in engaging local employers to strengthen CTE programs.[46] Using current Virginia labor market information, an online tool was developed with the "Top 15" employers within each of the state's regional Local Workforce Investment Areas (LWIA) and the "Top 15" employers within each of the state's 132 school divisions.[47]

› To increase the use of regional, state, and national labor market data and employment projections and to ensure CTE course/program offerings are in high-demand, high-skill, and high-wage occupations, the application was revised for implementing new statewide CTE programs. Beginning with the 2015-2016 school year, school divisions must use the revised application when requesting approval to offer new CTE programs and/or courses. For more details and the application process, refer to Superintendent's Memo 212-15.[48]

› During 2015, the Office of Career and Technical Education updated and developed new tools for preparing for and conducting federal civil rights on-site reviews. These tools included updated protocols for developing the report, training materials, and new webpage.[49]

Please share your CTE-related challenges.
› Increase awareness of the 21st century career preparation programs.

› Improve connections and transitions of CTE programs from middle to high school, to postsecondary education, and to the workforce.

› Increase sustainable business and industry partnerships at the local, regional and state levels.

WASHINGTON
What were your state's top accomplishments in CTE?
› 21 CTE Course Equivalencies Developed. Equivalencies were developed and approved by the State Board of Education last spring for Skill Centers and comprehensive high schools to offer Science and or Math credit for CTE Courses. In Skilled and Technical Science our work centered on gaining Math Credit. Equivalent courses and credit are as follows: Geometry 1 Credit for 100304 (Animation Technology/Video Graphic; 110803 (Video Game Design/Digital Computer Animation; and 460201 (Residential Carpentry).

› BOEING CORE Plus Curriculum developed in conjunction with Business/Industry Partners. The completion of the CORE Plus curriculum first year was a major accomplishment. This collaboration between industry and education will provide a solid foundation of instruction for courses in manufacturing, aerospace, maritime, agriculture mechanics and construction. While the initial accomplishment deals with more aerospace as a Plus component, additional effort will be designed to flush out the other instructional areas in the new future.

› Completed two statewide course equivalencies in Food Science for a math credit and Family and Consumer Sciences for a math credit. GRAD's programs showed that 20 percent of their participants had formerly dropped out and they returned to school because of the GRAD's program and they showed a 98 percent graduation rate for the students when nationwide 30 percent of this population graduate. Trained 50 teachers in Next generation Science standards.

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[46] http://www.doe.virginia.gov/boe/committees_advisory/career_teched/index.shtml
[47] http://www.doe.virginia.gov/instruction/career_technical/statistics_reports/labor_mkt_data/index.shtml
[48] http://www.doe.virginia.gov/administrators/superintendents_memos/2015/212-15.shtml
[49] http://www.doe.virginia.gov/federal_programs/civil_rights/index.shtml

Please share your CTE-related challenges.
- › Increasing the number of workplace and work-based learning opportunities for students enrolled in CTE programs of study.

- › Development of meaningful high school and beyond plans connected to comprehensive counseling and career pathways.

- › Providing pre-apprenticeship and apprenticeship connections for secondary CTE students.

WEST VIRGINIA
What were your state's top accomplishments in CTE?
- › Increased number of Simulated Workplace companies to over 400.

- › Increased attendance rates.

- › Increased the number of students getting industry recognized credentials.

Please share your CTE-related challenges.
- › School counselors understanding the value of CTE.

- › Changing the traditional culture of CTE to real world environments that are student led.

- › Funding

WISCONSIN
What were your state's top accomplishments in CTE?
- › The launching of Academic and Career Planning, or ACP, which is a student-driven, adult-supported process in which k-12 students create and cultivate their own unique and information-based visions for postsecondary success, obtained through self-exploration, career exploration, and the development of career management and planning skills.

- › The first system-wide Credit for Prior Learning Conference was held in 2015 and it was a resounding success. In the WTCS Credit for Prior Learning (CPL) refers to a process whereby technical college students may receive credit for prior learning for through formal academic work or professional/life experience. The assessments used to award credit takes on many forms and can include a review of the previously attended course syllabi, a written competency exam, a hands-on skill proficiency assessment, among others all supporting the advancement of CTE.

- › Another successful Collaborative College Connections (C3) Conference was held celebrating the partnerships that exist across Wisconsin in support of CTE. The range of topics included work with K-12, support for dislocated workers, adults upgrading their skills and knowledge or taking on a major career change.

Please share your CTE-related challenges.
- › CTE has gained quite a bit of new support in recent years and we are thrilled! Participating and managing all of the new opportunities can be daunting! Continuing to provide a "go to" resource for the many national opportunities and the resulting work accomplished is appreciated!

> CTE is being asked to ramp up even more than in the past! Capturing new and promising practices to extend that work across partnerships takes planning and communication. A great place to be, but can be challenging. Sharing work across states and systems is great, keep those webinars coming.

> Employers have always been front and center in the work in Wisconsin as it relates to CTE, keeping those partnerships fresh and moving forward opens the door for new and exciting ways to engage and support the goals of our employers and their employees. We always look forward to hearing what other states are doing and the reaction from employers and their employees as a result of their great work.

WYOMING

What were your state's top accomplishments in CTE?

> Launch of the CCSSO Career Readiness Initiative.[50]

> Second Annual Statewide STEM Conference.[51]

> State CTE Demonstration Grants.[52]

Please share your CTE-related challenges.

> Local control and the ability drive innovation.

> Being a rural state with large distances between cities and towns.

> Resignation of Perkins data and assessment contract. Have had to build a system from ground up.

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[50] http://edu.wyoming.gov/wordpress/downloads/communications/pr/2015/career-readiness.pdf
[51] https://www.youtube.com/watch?v=21teAzgvQGw
[52] http://edu.wyoming.gov/beyond-the-classroom/grants/project-grant/