

STATE DIRECTORS

National Association of State Directors
of Career Technical Education Consortium



**Two Minute State Round Up
And State Updates**

**Spring Meeting 2009
Washington, DC**

Introduction

One of the highest-rated portions of NASDCTEc's meetings is sharing among states. To that end, we are continuing our tradition of the 2-minute state update at the upcoming Spring Meeting. For those of you who are new, the 2 minute round up is a snapshot of each state's position on current state issues, successes and challenges. This year, the updates will be shared in an insightful, interactive session. It is a great networking resource as you will learn which states are facing similar challenges or which states have found solutions to challenges you face. You might see ideas that will inspire you or ideas you want to replicate.

PLEASE NOTE: States submitted this content through a survey of three questions. These questions are designed to showcase your state's successes, greatest challenges and progress toward engaging CTE in response to the economic downturn. NASDCTEc did not author the content, but did format it into a single document for a consistent look.

1. Please share your state's top three CTE 2008-09 accomplishments.
2. Please list the top three challenges (besides funding issues) facing CTE in your state.
3. How has CTE been engaged in your state's response to the economic downturn?

Input from OVAE

Responses to the first two questions on behalf of OVAE's Division of Academic and Technical Education (DATE):

Please share your top three CTE accomplishments.

- Meeting ALL of our Program and Performance Management Database (PPMD) Perkins performance targets!
- Awarding grants to six states to support the development of rigorous programs of study through statewide articulation agreements.
- Hosting a first-ever virtual Data Quality Institute (DQI) and involving over 450 career and technical educators and accountability specialists across the nation in a conversation about improving the quality and consistency of Perkins IV data.

Three challenges facing State CTEs nationally:

- Declining federal and state revenues to hire teachers, purchase equipment and supplies, and otherwise fund career and technical education.
- The lack of valid and reliable assessments of student's attainment of technical skills.
- The lack of definitive evidence—from scientifically-based research—that career and technical education works to improve student's educational and employment outcomes.

Input from NASDCTEc

Responses to the first two questions, from the perspective of the State Director Group as a whole:

Top 3 accomplishments:

- Successfully managed the move from Washington DC to Silver Spring, Maryland. Hired and integrated 4 new staff into the organization.
- Continue to maintain a positive presence for CTE in the public policy world of the nation's capital. This is reflected strongly in relationships that are continuing to prosper with OVAE and the National Governor's Association for example.
- Strength of membership continues: Again, all 50 states were represented as members of NASDCTEc this year.

Top challenges:

- The economic downturn and impact it is having on our membership and congressional appropriations
- Getting even more policy makers and the public to understand the positive changes that are being created by career clusters and programs of study—that there is significant change occurring in CTE and not just changes around the margins
- Technical assessment

ARKANSAS

Accomplishments:

- *Utilizing Reserve Funds the Arkansas Department of Workforce Education has developed a Leadership Academy to create a holistic understanding of career and technical education essential for our future teacher leaders. Future teacher leaders must not only be able to identify his or her personal strengths and styles, but be able to understand the diverse leadership styles of others in order to work effectively in a team setting. The ultimate goal is to provide teachers with the necessary leadership skills to ensure success in our workforce education programs and their operation on the local, regional and state levels. Attending this event will provide teachers with the skills to better serve the students in their classroom, the community and fellow teachers. We are hosting eight sessions over a two year period. One session will be held each quarter (four times a year).*

Topics will include:

AASCD conference Hot Springs Convention Center (summer)

Curriculum/Instruction

Helena/West Helena (fall) *The Agency/Workforce Cabinet*

West Memphis (winter) *Clusters/Frameworks*

Pine Bluff (spring) *Assessment and Data Accountability*

AASCD conference Hot Springs Convention Center (summer)

Curriculum/Instruction

Forrest City (fall) *Perkins*

Jonesboro (winter) *Special Populations/Bridges over Poverty*

Little Rock (spring) *Career Guidance and Management Skills/Closure*

- *Lean Manufacturing*
The Arkansas Department of Workforce Education (ADWE) is sponsoring a professional development program called "The Modern Workplace". The program is intended to demonstrate to teachers the demands & opportunities of the work environment their students will encounter. Lean 101 immerses participants in a world that is not familiar to most new or veteran teachers. The experience is a very effective tool to demonstrate many aspects of the modern workplace & it will improve teachers' ability to convey this information to their students.
- The Arkansas Economic Development Commission (AEDC) is partnering with ADWE to develop & support this initiative because it addresses an action item in the Governor's Strategic Plan to "*strengthen the relationship between educators*

& business". The ADWE's plan is to offer the program to Career, Technical, Math, & Science teachers through their network of Educational Cooperatives around the State. Improvement funds are available to help make this plan a reality.

- *Graduating to the Workplace*

The Arkansas Economic Development Commission, Arkansas Department of Workforce Education and Crowley's Ridge Educational Service Cooperative cosponsored an event at the ASU Convocation Center in Jonesboro on March 19, 2009. The event, known as "Graduating to the Workplace", is designed as an opportunity to recognize high school seniors who have completed a Career and Technical Education program of study. Attending the event were approximately 750 students from 26 schools in the CRESC area (Craighead, Crittenden, Cross, Jackson, Lawrence, Mississippi, and Poinsett counties). Many of these students have earned industry certifications and/or Arkansas Career Readiness Certificates that indicate they have prepared themselves to be successful in the workplace. Many teachers and programs have also received the industry certification.

- Businesses, industries, military recruiters, and post-secondary institutions will have booths set up highlighting their products, services and entry level qualifications and expectations.. At this time, students were able to emphasize their industry certifications and career readiness certificates that will help them successfully enter the world of work. A formal luncheon followed with students and teachers recognized who had received student, teacher, or program certification.

- *Career Development Facilitator (CDF) Training and Placement*

Arkansas similar to other states has endorsed the CDF training to enhance the skills and knowledge of individuals who work with students from middle school through postsecondary education. Career Tech Teachers and Counselors are receiving the training to work as a CDF directly with students or to assist other professionals who do so in the career planning and development process. The CDF allows the school to improve the quality of career planning interventions provided to students to help improve graduation rates, postsecondary placement, and CTE completer status. Arkansas plans to provide training to approximately 150 CTE teachers in the coming year.

Challenges:

Our greatest challenge is to more fully align with the Career Cluster knowledge and skills within our Arkansas Frameworks and to align those frameworks with Arkansas academic standards. This is an ongoing process that will take approximately two years to fully incorporate.

Response to economic downturn:

We are extremely fortunate in our state, state revenue continues to come in above state projections and we are actually cutting taxes in our state and we continue to have surplus revenue from previous projections.

CONNECTICUT

Accomplishments:

- Under the Connecticut Plan for Secondary School Reform, CTE will lead in the development of a Student Success Plan (Individual Learning Plan).
- Connecticut successfully completed an OVAE Full Federal Review in January.
- Connecticut is in the process of updating the career and technical education assessment system to include performance-based virtual on-line components.
- The Career and Technical Education Unit, Connecticut State Department of Education published the “Connecticut Career Pathways” distributed a wide range of educators and business partners as a marketing/informational tool highlighting career pathways and elements of the proposed secondary school reform.

Challenges:

- The overall economic crisis in Connecticut has placed restrictions on what we may be able to accomplish at the state level and the health of CTE programs on the local level.
- Competition with other elective course choices as academic graduation requirements increase, particularly under times of school district economic distress, may impact CTE programs and LEA staff.
- Data collection, evaluation of district/college performance and monitoring strategies for improvement in meeting core indicator targets will place increased burden on a limited CTE staff.

HAWAII

Accomplishments:

- Final Draft of the Statewide Dual Credit Articulated Program of Study Agreement Guidelines and Procedures approved by the Career and Technical Education Coordinating Advisory Council. www.hawaii.edu/cte
- One of six states selected to receive OVAE’s competitive grant “Rigorous Programs of Study through Statewide Articulation Agreements.”

- Two statewide dual credit articulated CTE program of study agreements between the Hawaii State Department of Education and the University of Hawaii Community College System signed by the respective agency's chief executive. Two additional statewide dual credit articulated CTE program of study agreements in final development phase. www.hawaii.edu/cte

Challenges:

- Sustaining quality CTE programs with less staffing.
- Technical skill assessment at the postsecondary level
- Timely development of programs of study responsive to the needs of business/industry.

Response to economic downturn:

- We have not.
- Increased dialog with other state departments to encourage non-duplication of projects and maximize leveraging of funds.

IDAHO

Accomplishments:

- The Division began development of a new model for the delivery of professional-technical education for schools in rural areas. The delivery model will include three components (1) classroom based Career Exploration and Employment Preparation class (2) on-line technical content and (3) work based learning (clinical/work experience).
- Idaho's voters created a new community college in 2007. This is the first new college created in 41 years. This new community college, The College of Western Idaho, is located in Region III which includes Boise and the greater metropolitan area. The technical college currently located at Boise State University will transfer to the community college July 1, 2009. The Division of Professional-Technical Education has worked closely with Boise State University and the College of Western Idaho to facilitate the transfer of the technical college. The technical college has been located at Boise State for 65 years. This transfer has involved accreditation issues, the closing of programs, starting new programs, staffing, addressing program needs, relocating facilities, inventory and moving issues.
- The Division continued the state initiative to make all approved professional-technical education programs "programs of study." Idaho has 789 approved secondary and 162 postsecondary professional-technical programs. School districts were required to submit an "inventory" of professional-technical

education programs including labor market data showing need, course sequence, alignment with academic standards and linkages between secondary and postsecondary programs.

- Advanced Learning Partnerships were developed at the six technical colleges to promote and support linkages between secondary and postsecondary professional-technical education programs; improve academic integration; facilitate the transition to baccalaureate degree programs; and to develop local and statewide articulation agreements.

Challenges:

- Finding ways to support local districts with the increased Math requirements. Technical Math standards have been developed. The Division staff is working with the Department of Education staff on math initiatives and certification/endorsements for PTE teachers. Professional-Technical Education is piloting several math initiatives this year.
- Finding qualified professional-technical education teachers. There continues to be a shortage of qualified professional-technical education teachers in Idaho especially in small rural school districts.
- Implementing technical skills assessments at the secondary and postsecondary levels.

Response to economic downturn:

- Enrollment at the six technical colleges has increased as laid off workers returned to school to learn new skills. The full-time equivalent enrollment at the six technical colleges increased by 5.70% during FY2008.
- Technical colleges increased the workforce training opportunities for workers in need of upgrade training/retraining to retain for their jobs or to change jobs.

LOUISIANA

Accomplishments:

- **Funding increases for secondary CTE** – Louisiana legislature appropriated \$4.5 million in state funds for secondary CTE activities. This is quite an accomplishment as Louisiana relies heavily on the Perkins funds and previously only received \$200,000 in state funds. Additionally the Louisiana Board of Secondary and Elementary Education (BESE) allocated an additional 1% earmark in the Minimum Foundation Program (MFP) for expenses incurred at the local level by CTE programs. The MFP is the main funding formula for local education agencies (LEAs) in Louisiana.

- **The 2-year colleges and their CTE programs** – both new and emerging – are seen as major contributors to Louisiana’s economic development and workforce development efforts in the state. Working with the Departments of Economic Development and the Workforce Commission has provided and will continue to provide additional funding for the development and improvement of training programs at the postsecondary level.
- **The state has embraced the concept of dual enrollment.** Secondary CTE students dually enrolled has increased 22%. The legislature appropriated \$4 million to the Board of Regents to expand dual enrollment opportunities.
- **Professional Development** – Department of Education (DOE) Office of CTE, in collaboration with the Louisiana Community and Technical College System (LCTCS) hosted two Super Summer Institutes (SSIs) in June and July. Sessions provided intensive hands-on industry training for secondary and post-secondary CTE teachers and faculty. Teachers and faculty had the opportunity to earn either continuing education units or industry-based credentials. There were 1400 participants attending 57 sessions. LCTCS sponsored a two-day Symposium on career pathways (programs of study). The Symposium brought together secondary and postsecondary teachers, faculty, administrators, business partners and WIA personnel.

Challenges:

- **Technical Skill Attainment** – the development of a process, the selection of an assessment methodology and the implementation of the methodology and process.
- **Increasing the number of secondary and postsecondary CTE completers** - ensuring that programs are relevant to secondary students (so the dropout rate decreases) and returning adults. CTE is the key to keeping more students in school until graduation and to moving more adults into the training pipeline in order to earn a credential.
- **The Provision of Quality Professional Development** - The profession of adequate professional development activities that will enhance the knowledge base of instructional personnel, counselors and administrators regarding career pathways.

Response to economic downturn:

- Within the Louisiana Department of Education (LDE) CTE is now a member of the State Superintendent’s cabinet.
- LCTCS, LDE, Department of Economic Development and the Workforce Commission and other agency heads are part of an elite group charged with

collaborating and cooperating to improve the state's delivery of CTE programs and to make sure that there is a system in place to attract new businesses to Louisiana and to address issues related to sustaining the workforce. Secondary CTE and postsecondary CTE are the pipelines leading to an improved workforce and citizens that are trained in high skill and high demand occupations.

- All state agencies are diligently planning and working with the Governor's office on proposals related to the Economic Stimulus package.

MAINE

Accomplishments:

- The Maine Legislative Ed Committee formed the Resolution Task Force on High School Graduation Requirements. This was a 17 member committee of business, government, educational organizations, and community. Maine CTE was represented by 2 CTE school directors who took a strong leadership role. The Committee report was made to the Commissioner and the public in early December 2008 and informational sessions were held around the State of Maine in February. The legislative language has been crafted from the report and will be presented for legislative action in March. CTE programs and standards as a part of high school graduation are very much a part of the language and the recommendations include providing students opportunities for learning in multiple pathways to graduation. The Resolution Task Force Report may be viewed at <http://www.maine.gov/education/diploma/finalreport.pdf>
- Maine has been engaged in Literacy Strategies training by contracting with Public Consulting Group: Center for Resource Management <http://www.crminc.com/> in the 08-09 as we were in the previous 3 school years. We have continued the work with CTE teachers incorporating the frameworks of the 21st Century Skills Partnership. All Maine high school and CTE teachers have received laptop computers which have been used in the work this year. Teachers comment that they are feeling ready to share with high schools and CTE schools what they have learned from this work. They also share that their partner high schools are asking in some instances for the CTE assistance in high school literacy efforts.
- The hiring of two new members of the CTE Department of Education team has brought our team to almost full capacity. The addition of two people has enabled MDOE/CTE to move forward on our work on Technical Skill Attainment, partnerships with business and industry, entrepreneurship, and identification of National Industry Standards with which our programs will align.

Challenges:

- Identification of the third party technical skill assessment to be used for every program.
- Alignment with National Industry Standards.
- Teacher preparation for CTE programs. The one program at the University of Southern Maine that had traditionally provided CTE teacher preparation programs and courses to prepare teachers to take 3 levels of the Praxis exams has been eliminated. The Maine Administrators of Career and Technical Education (MACTE) and MDOE have partnered with Husson University to provide the courses teachers need.

Response to economic downturn:

- One of Maine's CTE Co-Coordinators serves on the Maine Jobs Council where much of the discussion on the economic downturn takes place.
- The governor curtailed GPA funds to all school systems in late 2008. CTE schools have had to curtail their spending as have others.
- A new Essential Programs and Services funding formula for CTE moved forward an additional year. This is a formula for state subsidy dollars based on program costs not costs per pupil.

MARYLAND

Accomplishments:

- CTE is one of Maryland Governor O'Malley's three education priorities. The Governor's interest in career and technology education programs is evidenced by the appointment of the Governor's P-20 Leadership Council of Maryland Career and Technology Education (CTE) Task Force. The charge to the CTE Task Force is:

Create an action plan designed to expand the CTE programs that prepare students for entry into postsecondary education, apprenticeships and a career where there is current and future employer demands. Priority will be given to expanding programs that support critical infrastructure needs such as construction, health and biosciences, manufacturing, information technology, and consumer services; particularly those vital to industries related to Base Realignment and Closure (BRAC) and Science, Technology, Engineering, and Mathematics(STEM).

- The CTE Task Force has had numerous presentations to learn about CTE from a national, state and local perspective and has heard from the customers (students) it serves and the stakeholders (employers) for which it is responsive.

Preliminary recommendations are looking at increasing rigor, expanding programs, and increasing access to CTE programs.

- In partnership with the Maryland State Department of Education's Division of Career Technology and Adult Learning and Division of Library Services, the Carroll County Public Schools and the Carroll County Public Libraries embarked upon a CTE awareness campaign. *Career and Technology Education: Don't Go to College without It* became the theme of this event. The campaign provided resources and information about Carroll County Public School's CTE programs both at the CTE Center and at the comprehensive high schools, as well as registration information for CTE programs and career development information. The Carroll County Libraries created a display area in each branch of the library system to share this information with parents and students. Training materials were provided to library staff and at the kick-off event, CTE students, both current and graduates shared their experiences with their CTE programs and answered questions.
- Maryland continued its implementation of the State CTE Programs of Study aligned to the career cluster frameworks. At the secondary level, over 46% of all public high school students are enrolled in a CTE course. Last year's graduating class (08) had 22% of its seniors completing a CTE Program of Study. Of those completing a CTE Program of Study, 47% also met the entrance requirements for the University System of Maryland. At the postsecondary level, work continues for alignment between high school programs and community college programs through credit articulation, dual enrollment and transcript credit options. Maryland's postsecondary enrollment (more than 56,000) increased from the previous year.

Challenges:

- Implementation of technical assessments has surfaced as a challenge. More and more students are taking and passing industry certifications and state licensures. This has posed some challenges at the local implementation level as the resources to pay for these industry credentials are scarce. Some school systems have partnerships with employers who will reimburse students who pass, other school systems find the funds to cover the costs, and those who do not have these means must ask students and their parents to cover the cost. An attorney general's ruling indicated that every Maryland student is entitled to a free public education which means they cannot be required to pay for industry certifications. A workgroup has been formed to further investigate ways to overcome this challenge.
- Appropriate placement for special populations and leveraging resources to improve success rates and performance outcomes continues as a challenge. Professional development, along with increased information about Maryland's

CTE Programs of Study which have increased rigor and industry credentialing of students has been shared with guidance personnel, school administrators and parents. A workgroup is looking into ways to work more closely with special education professionals to assure resources are available to provide support.

- Integrating CTE and STEM is a challenge. Maryland is developing a cross-curricular approach to STEM. However, locals are not engaging CTE staff in their STEM discussions and STEM opportunities.

Response to economic downturn:

- The Governor's P-20 Leadership Council of Maryland Career and Technology Education Task Force has is drafting recommendations for the expansion of CTE programs and looking at those industries that support critical infrastructure needs of Maryland. CTE is one of the Governor's education priorities for the state. His commitment to ensuring that Maryland has a well-qualified workforce is more important than ever in light of the new careers coming to Maryland as a result of BRAC and that many of these will STEM related.
- Financial Literacy has become increasingly important especially in these economic times. Maryland has a Financial Literacy Task Force, established by the Maryland General Assembly which is making recommendations for financial literacy education. Currently, it is infused into Maryland's CTE Program of Study for Career Research and Development and professional development has been provided to CTE instructors on the Family Economics and Financial Education (FEFE) curriculum which can be adopted by locals.

MASSACHUSETTS

Accomplishments:

- Recognition of vocational technical education by a Pioneer Institute White Paper at <http://www.pioneerinstitute.org/pdf/wp42.pdf>.
- The formation of the Vocational Technical Education Advisory Council to the Massachusetts Board of Elementary and
- Secondary Education.
- The restructuring of Tech-Prep.

Challenges:

- The development of written and performance assessments for the Massachusetts Certificate of Occupational Proficiency.

- Ensuring that all students/families have access to current information regarding vocational technical education.
- The development of statewide articulation agreements.

Response to economic downturn:

Vocational technical schools are gearing up for retraining programs for adults.

MICHIGAN

Accomplishments:

- Michigan’s governor, Jennifer Granholm supports efforts toward innovation in high school education and has set aside state funding in support of Early/Middle Colleges for Health Care Careers. These programs not only provide students with the opportunity to earn a high school diploma and postsecondary credit at the same time, they also help to prepare students for careers in health where there are critical shortages of well qualified workers. This was the fourth year in the successful start up and growth of six Early/Middle College high schools for students interested in health care. To be eligible for funding, partnerships were formed between school districts, postsecondary institutions and hospitals. The initial six applicants have enrolled hundreds of students and have increased the interest of many other districts in pursuing Early/Middle College programs for their students. More information on these programs can be found at the following website: http://www.michigan.gov/mde/0,1607,7-140-43092_51178---.00.html
- Historically, standards for CTE programs in Michigan have been determined by local districts. However, to prepare for new accountability requirements in Perkins IV, common standards for instructional programs were selected. The Career Cluster knowledge and skills provide the foundation for CTE instruction which also include Michigan’s standards for career and employability skills, expectations for technological skills and specific business and industry technical skills for each approved CIP code. The standards were proposed to the State Board of Education in January and approved by the Board in February as the foundation for all CTE programs in Michigan.
- To prepare Michigan’s students with the knowledge and skills needed for the jobs in the 21st Century, the State of Michigan has enacted a rigorous new set of statewide graduation requirements that are among the best in the nation. With

these new graduation requirements, students will be well-prepared for future success in college and the workplace. The Michigan Merit Curriculum requires students entering 8th grade in 2006, to obtain a minimum of 16 credits for graduation, which could be met using alternative instructional delivery methods such as alternative course work, humanities course sequences, career and technology courses, industrial technology or vocational education courses, or through a combination of these programs. In addition, students entering the 3rd grade in 2006 (Class of 2016) will need to complete two credits of a language other than English in grades 9-12; or an equivalent learning experience in grades K-12 prior to graduation. The 16 credits required also have approved course content standards that must be taught. To assist students in meeting the graduation requirements through academics embedded in CTE programs, we have worked with CTE and academic teachers throughout the year. They have assisted us in identifying the specific academic standards taught through CTE program standards using a web-based, focus group system. Approximately half of our programs have a crosswalk that lists the most common core academics covered in CTE. We anticipate the rest of the programs being completed by the end of the summer.

Challenges:

- Although there are several ways for students to use CTE courses for the new, rigorous high school graduation requirements, we have experience enrollment declines in CTE with the implementation of the 16 specific credits required to earn a Michigan diploma. The required credits include Algebra II which all students are finding a challenge. We anticipate that as local districts begin to make parents and students aware of the requirements; they will begin to plan their courses more carefully to ensure adequate room in their schedule for elective courses, such as CTE. In addition, more schools are making Algebra I a requirement in 8th grade to prepare them for additional high school mathematics.
- Teacher recruitment and retention continues to be an issue in Michigan. We are working with the teacher certification office to find alternative routes to certification for CTE instructors. There are many layoffs of white collar workers in the auto companies within the state. It is our hope to find ways to encourage them to become CTE teachers.
- With the absence of a statewide single student record system at the postsecondary level, we continue to struggle with ways to collect valid and reliable data for Tech Prep. We are investigating ways for colleges to use the

Unique Identification Code used for K-12 students in order for us to connect data systems between the two levels to provide the information.

Response to economic downturn:

- Over the last couple of years, Michigan's governor, Jennifer Granholm, has championed efforts to bring alternative energy and green jobs to our state. In CTE, we have been focusing on developing programs for alternative energy and adding green concepts (such as green build certifications in construction) to CTE curriculum. Several local districts received a grant to develop curriculum in a stand-alone alternative energy instructional program and to develop green jobs concepts to be integrated into all CTE programs. Michigan will host a Green Jobs Conference in May. More information on the conference can be found at: http://www.michigan.gov/documents/nwlb/GJC_FAQ_264656_7.pdf
- We also continue to focus on Entrepreneurship within each Career Cluster to encourage students to be innovative, to begin new companies and to be their own boss to help economic growth.

MISSISSIPPI

Accomplishments:

- Continued work on Mississippi's High School Redesign project.
<http://redesign.rcu.msstate.edu>
- Smooth implementation of new Perkins requirements, including training of LEAs
- First year implementation of the Math-in-CTE pilot program

Challenges:

- Continued efforts to receive academic credit for a wider range of Career Technical courses.
- Programming issues to ensure that we are able to meet Perkins data collection and reporting requirements.
- Recruiting and retaining high quality staff

MISSOURI

Accomplishments:

Career Education Mentoring Program

(<http://missouricareereducation.org/pd/mentoring/index.html>)

The Career Education Mentoring Program is designed to:

- offer a professional learning community that includes collaboration and reflection to both protégés and mentors;
- increase familiarity with the teaching and administrative culture by occupational content area;
- Support new and returning teachers in their work with students; and build a cohort group of new and returning teachers specific to each content area.
- During the fifth year of implementation, 234 mentors and 283 protégés, both first- and second-year, participated in the mentoring program. The mentoring program for guidance counselors also continued this year. One hundred seventy-two (172) mentors and 215 protégés participated in the guidance mentoring program.
- A Mentor Resource and Certification Manual was developed to replace mentor training currently conducted at the fall orientation. Mentors who complete the mentor training are issued a multi-year certificate and placed in a database for use by DESE in assigning mentors to protégés. The Mentor Resource and Certification Manual include various practical resources for mentors to use during their mentoring experiences. Topics include, among others, classroom management, adult learning styles, collaboration, effective classroom visits, and stages of first-year teaching.
- In research conducted by the Missouri Center for Career Education, it was found that participation in the Career Education Mentoring Program translated to increased new and returning career education teacher retention rates by as much as 31%.
- Public Outreach Partnership
A new workgroup was formed during Fiscal Year 2008 that is leading a statewide public outreach project that will provide career planning information and resources for students, parents and job-seekers of all ages. The aim of the group, representing four state agencies and two non-profit organizations, is to build awareness of growing career opportunities in Missouri and stimulate interest in life-long career preparation. The ultimate goal of the partnership is to help arm Missourians with skills and education needed to be competitive and prosperous throughout their careers.
- Missouri Connections
In October, a new website for Missouri Connections was unveiled (www.missouriconnections.org). Missouri Connections now has open

navigation and expanded opportunities for career search. As part of the new website, Missouri debuted 16 new Career Clusters videos that organize students' career options with the national Career Clusters framework.

Challenges:

- Perkins Improvement Plans

As the full rollout of Perkins IV continues, it will become increasingly difficult for local Perkins grant recipients as well as the state to develop effective improvement plans that will positively impact accountability especially if the improvement plans must be research-based.

- MOSIS Implementation

Missouri continues implementation of its student-level data collection system known as the Missouri Student Information System or MOSIS.

- Technical Skill Attainment

Like many other states, Missouri continues to work on the Perkins IV indicator for technical skill attainment. Currently, a database has been developed that is maintained at the state-level which contains the name of each assessment by program area and the Internet address where more information can be collected.

- As part of our WIA Incentive Grant, a rubric is being developed that the local Perkins grant recipients can use to identify potential technical skill assessments that meet the competencies identified for their program. The process of identifying appropriate technical skill assessments is being built into the revision of the state's competency profiles for all career education programs.

- Identifying postsecondary assessments that meet the intent of Perkins IV is also a challenge for Technical Skill Attainment in Missouri.

Response to economic downturn:

As part of the Governor Nixon's *Show Me Jobs Plan*, the Quality Jobs Act would be expanded. This expansion would provide incentives for companies to provide worker training and retraining. Area Career Centers and community colleges are mentioned in the language of the Show Me Jobs Plan as eligible recipients of worker training and retraining funds as the Plan is rolled out.

MONTANA

Accomplishments:

- Pathway development

- Collaborating with MCIS to deliver Montana Pathway models and the Montana Achievement Plans.
- Bringing new staff on board and getting folks up to speed.

Challenges:

- Communication between labor, secondary, postsecondary and the governor's office
- Local control (secondary), institution autonomy (postsecondary) when implementing a statewide, multiagency initiative like Clusters.
- New data systems for both secondary and postsecondary. Montana is moving towards making data driven decisions. Because of these new systems, we are having trouble getting our footing.

Response to economic downturn:

- Montana's Governor has created an "Interagency Rapid Response team" to coordinate the delivery of government services to those impacted by the downturn. Both Mary Moe, Deputy Commissioner for Two-Year Education and Brad Eldredge, Director of Perkins, have been included on the team and are using their role to promote post-secondary CTE retraining opportunities for displaced workers.

NEBRASKA

Accomplishments:

- **NGA and RPOS Grants:**

Being selected as one of the National Governors' Association Policy Academy states has provided a platform for analysis of state policies effecting CTE and the partnership between economic development, workforce development and education.

Participation in the Rigorous Program of Study grant from OVAE has provided the funds and impetus to develop statewide articulation agreements as a part of our programs of study. The grant is focusing on our program of study in the Transportation, Distribution and Logistics cluster; however, the work completed is building the framework to follow in other clusters and pathways programs of study.

- **Nebraska Career Education Model Implementation:**

The Nebraska Career Education Model continues to provide the structure for implementing our clusters and pathways programs of study. All schools now

report curriculum as aligned to the clusters and pathways model and our programs of study rather than traditional CTE disciplines. Our community colleges are developing marketing materials showing how our secondary and postsecondary programs of study align for transition from secondary to postsecondary education.

- **Establishment of Rural Career Academies:**

Our pilot project of 16 rural districts working together to expand CTE program of study offerings in partnership with community colleges has exploded to the entire state. In its first year of operation, over 400 students are participating in the SENCAP rural career academy project. Plans are now underway to establish a similar academy delivery structure in each of our community colleges. Delivery includes on-line and blended instruction as well as laboratory and work-based learning components. The career academies are being developed to:

- expand CTE offerings in rural schools, especially in new cluster and pathways areas
- provide dual credit capstone course experiences
- align the secondary and postsecondary curriculum into a rigorous program of study

Challenges:

- Recruitment and retention of teachers in some of our CTE areas is a significant concern based on potential retirement of present personnel.
- Fiscal resources to accomplish full implementation of the Nebraska Career Education model in all secondary and postsecondary institutions.
- Recruitment of quality state staff to fill open positions in CTE administration

Response to economic downturn:

Nebraska is fortunate to not experience the highs and lows of economic swings – while that means we don't reap all the benefit of an economic boom, we also don't feel the severity of pain in an economic downturn. We have been engaged in conversation with the Governor's office and State Legislature concerning the current situation.

We are also continuing to partner with Future Force Nebraska and other initiatives designed to provide a trained workforce when recovery begins. There is an increased presence for CTE and the role it plays in delivering our needed workforce. A special emphasis continues to be placed on entrepreneurship. Significant leadership for this initiative is provided by our state CTE staff.

NEVADA

Accomplishments:

- The Office of Career, Technical, and Adult Education was moved to a different facility with more space that alleviated the overcrowding of staff. Since Nevada's budget has gone from boom to bust, the installation of videoconferencing equipment in our new location's conference room has been a tremendous aid to CTE. Videoconferencing has given us a less expensive method to provide professional development to CTE administrators and teachers; a method for standards writing teams to meet; a forum for advisory committees to meet; CTSO advisors and students training to occur; and numerous other uses.
- CTE's involvement and major role in Nevada's Department of Education's restructuring high schools to include the 21st Century Skills has been challenging and exciting. CTE's staff is more closely aligned with the academic staff due to this involvement.
- Nevada's statewide marketing campaign focusing on CTE students' lower dropout rates, higher graduation rates, and higher scores on proficiency tests has been continued. It was a huge success in securing State funds during the last legislative session. Highlights of the campaign are as follows: one-page CTE briefs with charts illustrating CTE students' lower dropout rates, higher graduation rates, and higher scores on proficiency tests; slick brochures; and CTE videos aired across the state on major TV stations. Another element of the campaign is a pocket-size fact card that contains all pertinent secondary and postsecondary data.

Challenges:

- Developing statewide technical skills assessments with very little funds has been one of our greatest challenges.
- Due to the State Legislature changing the health benefits' law last session, many CTE teachers retired early due to the fiscal impact. This left many districts without CTE teachers. In rural school districts where the impact was the most damaging, CTE programs closed when the teachers retired.
- Insufficient CTE staff to accomplish the major tenets of Perkins IV while maintaining existing CTE programs, standards development, managing the six CTSO's, etc.

Response to economic downturn:

The economic downturn has increased CTE's collaboration with Nevada's Department of Employment, Training, and Rehabilitation through the use of WIA, Title I funds.

NEW JERSEY

Accomplishments:

- New Jersey has proposed CTE standards in conjunction with the revision of the New Jersey Core Curriculum Content Standards. These CTE standards were developed based on the Sixteen Career Clusters and represent New Jersey's first introduction of CTE standards. The CTE standards are part of the state's effort to redesign all state standards using the framework of the partnership for 21st century skills. These 21st century life and career skills enable students to make informed life and career decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the global workplace. The CTE standards broadly require that all students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. The adoption of these standards will elevate the importance of CTE in the state as well as contribute to the enhancement of quality CTE secondary programs. <http://www.nj.gov/education/aps/cccs/2009/career/index.html>
- The Office of Career and Technical Education (OCTE) has been integrally involved in the state's efforts to transform secondary education. The State Board of Education approved a proposal to develop and implement a two year pilot program to assess the effectiveness of implementing personalized student learning plans for all students in grades 6 through 12. OCTE is providing leadership on this initiative which focuses on requiring all students to set goals and address their personal, academic and career development. This will lead to further opportunities for career education for all students. Additionally, OCTE has been providing professional development opportunities for schools interested in enhancing existing approved CTE programs or programs of study to develop career academies. This will also contribute to secondary education redesign efforts.
- The state has also made significant strides in addressing improvement of the quality of CTE programs by implementing a program re-approval process and by ratcheting up the requirements related to the review of program performance data in the local annual funding application to drive funding decisions. The re-approval process requires all secondary CTE programs and programs of study to address a number of program standards in the submission of their re-approval application. During this first year, OCTE is reviewing all programs in the clusters of Information Technology, STEM and Finance. Over the course of 5 years, all programs will have undergone a re-approval process. <http://www.nj.gov/education/voc/occprapp.htm>

Additionally, all annual funding applications require local secondary and postsecondary grant recipients to address all program areas which have not met performance standards and identify strategies to improve program performance.

Challenges:

- With the state's focus on secondary education transformation, 21st century skills and college and workplace readiness for all, the status of CTE remains fluid with an overall sense of lack of clarity of mission and role in this larger body of work. Although there have been great opportunities to engage in discussions and planning in the state with multiple stakeholders, there remain many factions that appear to have disparate beliefs about the purpose, function and focus of CTE.
- Reduction in state staff has required OCTE to think creatively about providing the technical assistance and professional development to local grantees. Currently, there is an overall lack of professional expertise available to provide the guidance and assistance to our secondary and postsecondary programs to fully engage them in moving their programs forward. There is also a concern that due to the time and effort required to meet current CTE standards and to report CTE program data, many schools will eliminate their CTE programs. This may result in the reduction of secondary CTE programs and limited access and opportunity for CTE for all students.
- The ability to obtain information for data requirements for industry credentialing and for placement remains very challenging on both the secondary and postsecondary levels.

Response to economic downturn:

- Colleges are responding by providing additional opportunities at reduced rates or waived tuition.
- There is ongoing collaboration with state agencies to discuss the economic stimulus package and ways in which we can work together in support of work related to the American Recovery and Reinvestment Act. This includes, but is not limited to: 1) identifying stimulus projects within each of the agencies relating to workforce development and education; 2) identifying projects in support of the summer youth component; and 3) coordination on reporting requirements.

NEW MEXICO

Accomplishments:

- Data collected on 1S1, 2S1, and 4S1 reflect CTE concentrator performance levels that met or exceeded the performance of the 'all students' groups of the standards based assessment.
- New Mexico Summer Symposium sponsored by the Career Technical and Workforce Education Bureau of the New Mexico Public Education Department. The summer symposiums were facilitated by the Southern Regional Education Board (SREB) and the Schlechty Center for Leadership in School Reform. The symposium was hosted to ensure that the students of New Mexico will experience the integration of rigorous and challenging academic and career-technical instruction through collaborative planning between secondary and postsecondary faculty.
- Collaborative planning and work toward commonly identified State Agency goals addressing workforce preparation continues. Some commonly identified goals shared among the Public Education Department, Higher Education Department, Department of Workforce Solutions, and the Economic Development Department are reflected in New Mexico's Seven (7) Career Clusters that are cross-walked back to the National 16; educational redesign elements that underscore and bring into focus the need for workplace readiness courses and relevant coursework leading to career preparation; collaboration among agencies to ensure that EDD and DWS grants targeting educational resources use common educational pathways to accomplish workforce training and preparedness

Challenges:

- It is difficult at the state level to address the education and training needs of emerging industries;
- Support for CTE is provided to expand and improve academic and CTE integration, however, the foundation of the delivery system is often founded in 'traditional' settings that do not reflect emerging industry training needs;
- Employing industry experts for instructional capacity in courses such as engineering that require a certain licensure requirement to meet NCLB specifications; and
- Technical skill assessments/reporting, and reporting of placement.

Response to economic downturn:

- Multi-agency dialogue and planning to address statewide needs.

NEW YORK

Accomplishments:

- **Policy:** The development of the Five-Year Perkins Plan framed areas of CTE policy requiring review. The New York State Board of Regents began discussing possible policy adjustments that could be made to address the quality, access and delivery of CTE programs. The Regents determined the need to form an internal workgroup to address the challenge of increasing the supply of certified CTE teachers in New York State. The workgroup continues to work with the field on issues concerning the preparation of CTE teachers; increasing the number of institutions that prepare CTE teachers, including Community Colleges, and certification flexibility that accommodates the need for teachers in emerging fields.
- **Practice:** The implementation of Perkins programs of study has been a new means to further expand the use of New York's CTE Program Approval Process. In New York, programs of study are defined as those approvable under the 2001 Regents CTE Policy. Establishing the state approval process as the cornerstone of program of study structure has encouraged growth in the number of approved programs.
- **Progress:** Work on the redesign of the State Education Department's web site is almost complete. The CTE portion of the site will transition to the new design in the next program year. Refinements to the CTE Program Re-approval Process have returned stronger program design submissions, particularly in the area of articulation agreements.

Challenges:

- Implementing the individual student record system continues to be a challenge for CTE, particularly in the area of follow-up surveys for placement and post-secondary data.
- creating better connections between learner-levels throughout the CTE continuum, with new attention needed to ways CTE can be used in the middle grades to foster student engagement
- expanding LEA involvement in the CTE Program Approval Process

Response to economic downturn:

New York has defined high skill, high wage, and high demand careers through the use of a regional approach. CTE program development is more closely tied to labor market conditions that are determined by regional differences. The use of real-time labor market data is being investigated.

NORTH CAROLINA

Accomplishments:

- The state has produced and released aligned curriculum products developed using the Revised Bloom's Taxonomy (RBT) for essential questions, instructional activities, instructional support materials, and formative, benchmark and summative assessments. Curriculum products for six courses were released in summer 2008. During 2008-2009, the state is field-testing courses in the first release and continuing to move forward with additional courses.
- The state also is including more industry credentials in the secondary curriculum offerings. This project focuses on assessing the needs of business and industry and finding meaningful industry credentials, and, if necessary, aligned curriculum, to meet those needs. The long-range plan is to incorporate student performance on industry credentials into the state's measure of technical attainment in Perkins IV.
- Refinement of NC Strategic Plan for CTE is providing a mechanism for promotion of CTE in the business and education communities and among the general public. The Strategic Plan is the vision of CTE as a means for helping students achieve their educational and career goals and consequently developing a more talented workforce statewide, which becomes a tool for recruiting and retaining business and industry in North Carolina.
- The current emphasis brings a team approach to strategic planning. It includes significant involvement of local CTE personnel, particularly CTE administrators, who have taken the leadership in providing financial resources necessary to begin implementation of the strategic plan.
- Continued efforts to enhance the use of technology in managing CTE have led to three major projects in various stages of completion.
- The web-based Local Planning System provides a strategic planning tool that enables local CTE administrators to coordinate their efforts and align expenditures to areas of greatest need demonstrated by accountability data. This project was updated in 2008 to incorporate changes made necessary by Perkins IV.

- A major project to update software used for collection and analysis of data for Perkins reporting led to the development of the CTE Analysis and Reporting System. These web-enabled systems allow local and state users to access data and analyze it in new ways.
- The NCCTE Instructional Management System began an effort to move from a PC-based to web-enabled technology that will allow real-time dissemination of curriculum and both formative and summative assessments, and simplify the process of reporting technical attainment data at both the local and state levels.

Challenges:

- North Carolina is experiencing a significant budget crisis. With a state budget shortfall of over 2 billion dollars, Secondary CTE is projected to loosen up to 290 teaching positions or the equivalent of 16.6 million dollars. Personnel freezes and projections of cash flow problems are making staffing at the state agency increasingly difficult
- New NC graduation requirements focus on a single set of standards that emphasize preparing students for careers and college learning in the 21st Century. The requirements provide for counting CTE courses as a math credit for students not choosing college. Four credit concentrations are recommended instead of required.
- Recruitment and retention of career and technical personnel is a continuing challenge facing a crisis in a few years with the potential retirement.

Response to economic downturn:

- CTE continues to play an important role in providing North Carolina with a skilled workforce required for economic development. This and the increased focus on business partnerships has energized education and made it more responsive to student and economic needs.
- NCCTE is analyzing activities to identify those that are mission critical, increasing efforts to streamline those activities while making them more meaningful to participants.
- State staff has identified alternate ways of providing information to local participants, including such things as use of technology to provide “virtual meeting solutions” in lieu of travel.

NORTH DAKOTA

Accomplishments:

- Implementation of Math-in-CTE which had shown a positive impact on students' math scores. The study of the impact on students was scientifically conducted and resulted in students attaining a 5 to 10% increase in math scores on standardized tests. Plans include continued teacher professional development in this area and expanding the program service areas.
- Received governors' policy and budget support to use a new position "Career Advisors" to work with school counselors to effectively reduce the counselor to student ratio to 1 to 300. These advisors will become part of a counseling staff of schools and be certified by CTE and will need to complete the national CDF credential.
- Through the Governor's Education Improvement Commission have created a Technical Honors Scholarship certificate which mirrors the Academic Honors certificate which will provide a \$750 per semester scholarship if a student maintains a B average in college.

Challenges:

- Implementation of technical assessments at secondary and postsecondary. The costs and time required is a distinct barrier to implementation through all program areas.
- The ability to sustain CTE class options for students when more emphasis is being placed on academic content. The push for increased academics is having a negative impact on CTE programming.
- Due to the rural nature of much of our state, the delivery of traditional CTE classes/programs through alternative delivery methods such as interactive video networks, online, and other blended learning methods.

Response to economic downturn:

- We are an integral part of the Workforce Development Council's Consolidated Biennial Strategic Plan looking at how to provide a better supply of skilled workers for the pipeline.
- CTE is funding new and expanded programming in areas of the state that is in greatest need of skilled workers, ND still has a low unemployment rate, 3.4%, and there are worker shortages.

OHIO

Accomplishments:

- Established the infrastructure to move to 100% of secondary programs having a state-approved Program of Study (POS). Provided sample POS for 11 pathways in 10 career clusters (www.education.ohio.gov Path: Career Tech; Career Fields (on left); Perkins IV Programs of Study). Identified the elements required and the authorizing signatures required for locals to submit a POS for state approval. Doing regional and statewide technical assistance meetings to prepare local recipients to submit POS for all programs that are to begin 2009/2010 and to transition existing programs to a POS by 2014/2015.
- Continued to build statewide articulation and transfer for career-technical programs through initiatives like the Career-Technical Credit Transfer (guaranteed statewide transcript credit from secondary or adult workforce to higher education (www.regents.ohio.gov/careertechtransfer)).
- Initiated an articulation through assessment project. Secondary and postsecondary faculty will unpack the technical content taught in given pathways within each system, identify overlapping content. They will build a pathway-level secondary technical skill assessment based significantly on overlapping content. Thus, the assessment will become the documentation of learning needed to create a statewide articulation of CTE programs/courses within the Career-Technical Credit Transfer initiative.

Challenges:

- Ohio's vision for applying Tech Prep standards to all programs and all students will require increased support for educators to ensure student success. Educators need skills in delivering differentiated instruction to a diverse population and in maintaining high expectations for the quality of student work required.
- Business and industry increasingly identifies the attainment of 21st century skills as a gap in education results. Workforce development research increasingly looks to these skills as necessary for inclusion in global economic collaborations. However, it is difficult to document the attainment of these skills by learners, creating a gap in the alignment between this identified need and accountability systems.
- There is a lack of consensus about the level of education needed to meet the needs of the 21st century workforce. Ohio has established well-defined goals for a more highly educated workforce often measured by an associate degree or higher, but there continues to be debate as to whether employers actually want and need that level of education for entry-level workers. In other words, are there jobs available, do employers hire by the holding of a degree and do salaries reflect the attainment of a degree?

Response to economic downturn:

In general, there is much more recognition of the importance of career-technical education and the development of middle skills in the workforce in order to create and retain jobs. Thus, CTE stakeholders are part of most strategic economic efforts in the state. However, there is still a need for a more coherent, single CTE voice in the state. CTE efforts are too often fragmented among secondary programs, adult workforce education and higher education. Likewise, funding streams are mutually exclusive and unable to be leveraged.

OKLAHOMA

Accomplishments:

- **Partnership Development:** We have developed strong partnerships with other state agencies, business & industry to be more response and cost effective to the needs of all Oklahomans and the nations. Those strong ties include Economic Development Council, Governor's Council on Economic Development, and the Dept. of Commerce. We are also working with Industry Sectors such as: Wind Power Initiative, Aerospace, Healthcare, Manufacturing, Green Technology Programs, Alternative Energy and Construction. This has led to Joint Partnership with Oklahoma Department of Commerce to hire a Wind Energy Specialist to focus on this emerging industry. The results are clearly evident, as Oklahoma has received a National Governor's Association grant and has been awarded the Government Partner of the Year by the American Indian Chamber of Commerce of Oklahoma for the Oklahoma Bid Assistance program. These partnerships have also led to expansion of testing and certification efforts for other agencies, other states, CareerTech Student Organizations, Clusters, expanding of [iC@t](#) (online professional development system) and investigation of expanded technology delivery options. We have also launched a fully operational **STEM** division (pre-engineering, biomed, biotech, related math/science courses, FIRST Robotics, nanotech) to meet the needs of our students and business & industry.
- **Statewide Marketing Initiative:** The collaborative effort to market the value of the CareerTech system has resulted in positive awareness by key opinion leaders and legislators in our state as evidenced by the survey results. It has positioned CareerTech to be part of the solution during these uncertain economic times. By using an outside economist from Oklahoma State University, Dr. Mark Snead, values have been placed on our training that show a graduating class from our schools can have an economic impact of 2.4 billion dollars over their lifetime earnings. We have also used a marketing firm to assess our campaign and the study shows that the level of satisfaction is further seen in that 85% of Oklahoma voters believe that state tax dollars spent on the Oklahoma CareerTech system are a good investment. Horizon, the agency produced television show is the top

rated show on Public Broadcasting System (PBS) with over 250,000 viewers each week, syndicated on national Rural Free Delivery (RFD) television and aired internationally.

- **Alliance Agreements:** Cooperative Alliance Credit for CTE students is available for our students at all 29 Technology Center Districts. Partnering with Higher Education Institutions across Oklahoma, college credit may be received for their CareerTech course work. This last year alone 2,100 high school students and 2,300 adult students were enrolled in more than 78,000 college credit hours. The cost is \$8 per credit hour and if the student is on a Free and Reduced Lunch list, they attend free. This has also led to Oklahoma being named a pilot state for Technology Centers That Work, focusing on improving instruction and student achievement.
- **Industry Needs:** Oklahoma CareerTech has been quick to respond to the changing needs of business and industry, even as the economy is forcing many changes daily. In a partnership with several business & industries and our own Pioneer Technology Center, we helped develop a Manufacturing Education Training System (METS) Mobile Lab unit focusing on the manufacturing sector to recruit, engage, and train. Our focus was targeting future engineers, manufacturing careers, CAD design, retraining existing employees and a stronger awareness of the relevance of math and science in the careers of tomorrow. More information can be viewed at the following web site: <http://www.pioneertech.org/Portals/0/METS%20LAB%20PWRPT.pdf>
- **Career Clusters:** The transition from CTE Programs to Career Pathways, Career Majors and courses has been long and sometimes difficult. But progress on career clusters and our new CareerTech Information System (CTIS), is in full swing and on July 1, 2009, we will take down our old legacy system and begin using our new system to take enrollments and follow-up. Transforming our system into a new and modern educational philosophy to embrace the Career Clusters Framework will be a great accomplishment of which we will be very proud.

Challenges:

- **Student Achievement:** How do we raise student technical skill levels and academic achievement of CTE students? Statewide academic initiatives that impact CareerTech enrollment i.e. Financial Literacy, Achieving Classroom Excellence, remediation/intervention, and increased graduation requirements must be addressed. There is a continued struggle to have CareerTech classes count as rigorous, worthwhile instruction as our politicians continue to demand accountability and focus on test scores. We also want to establish distance education/online programs for just-in-time offerings and to reach constituents who cannot / will not come to our campuses.

- **Dropout/At Risk/Young Offenders Students:** Addressing the drop out problem in our state is a major, complex problem, not in the future but **NOW**. We are losing an entire workforce each year and no one notices but business and industry. Drop out Issues, At Risk Students and Young Offenders have caused huge problems for our much needed workforce development efforts. CareerTech is positioned to address this vigorously if we choose to make it a priority, but it comes with costs and risks.
- **Measuring Performance:** We must identify the future CareerTech Information System (CTIS) performance measures. What data should we be collecting, how will we collect it, then how do we use the data for system improvement and also mesh databases with other educational/employment entities in the state for longitudinal student data? We need to update our accreditation process making it less cumbersome and less staff intensive and focus on compliance versus how do we inspire schools to be centers of excellence. We need to create new centralized information systems with real-time access and dashboards. This will help insure student/teachers/program quality in our system.
- **Service to Existing/Emerging Industries:** How do we do a better job serving our existing and emerging industries and evolve the traditional CTE programs to high-skill, high-wage rigorous program so that we will continue to meet the needs of Aerospace, Healthcare, Biotechnology, Energy, Manufacturing, etc. There are needs for new and incumbent worker training in all key industry sectors. Do we grow biomed or meet traditional demands in construction? We can't afford both. We cannot "fix" everything, so we must set priorities. And industry has to be a key player in the direction of this change.
- **Teacher Shortage:** This is an ever-increasing problem and is approaching the critical stage caused by the decrease in teacher prep programs, increase in teacher requirements, and increase in alternative certified teachers. An adequate number of qualified teachers coming out of traditional Teacher Education programs are essential for growth and quality.
- **Political Issues:** "Walking the tightrope". Our state has made an historic shift from Democratic control of both the House and Senate to the Republican party. This transformation has presented our system with many challenges, but we seem to be surviving very well. We are working on clearing the political hurdles to train and certify our own teachers, administrators and school board members. Attacks on our Ad Valorem and tax levies are a very real risk with a downturn in the economy.

Response to economic downturn:

- **Collaboration:** We are working with many state agencies to focus on rapid response efforts. We are vital partners with Oklahoma Employment Security Commission (OESC), Oklahoma Department of Commerce (ODOC), Governor's Workforce and Economic Development Council, and faith-based organizations. We share timely information with the local areas for quick response to personnel terminations and plant closures. We are fortunate to be able to find other employers in our state that can absorb the dislocated workers in many cases. If training is needed we are there to use federal, state and local resources to meet the challenge. The support given to closing plants and their employees - career counseling, re-training, up-skilling - is a high priority.
- **Business & Industry:** The support given to closing plants and their employees - career counseling, re-training, and up-skilling - is a high priority. We are helping companies find new ways to develop and produce products more efficiently and more profitably. We are retraining existing employees as well as helping fill the pipeline with new workers as the baby boomers retire. Industry focused career majors that are shorter in length are allowing us to serve more students faster and with better outcomes.
- **Communication:** We are constantly providing technology centers information and support to respond with workshops, programs, and services to assist these individuals with transition assistance. Oklahoma Department of Career and Technology Education (ODCTE) has established the Employee Assistance Resource Network (EARN) to use state resources to fill in the eligibility gaps with the Federal Displaced Worker Funds. For example, an individual with a Masters Degree would not be eligible for trade act funding (TAA) for skills training in technology center. The EARN program is an application process that allows this individual to receive aid for helping with the skill development needed for retraining and retooling that employee for a new industry. The increased information about Existing Industry, Incumbent Worker, Safety, and Training for Industry Programs that help business & industry opportunities is essential.
- **State Agency:** We are doing things differently as a coordinated response to the economic downturn such as cautious spending, Alternative Work Schedules & work locations, limiting travel budgets, and moving at a slower pace when refilling open positions while maintaining a high level of service to the field. This also has a down side in the fact that employees were at a full workload capacity which has increased. There will come a point when services have to be reduced to produce a healthy work atmosphere or cost our agency great employees. This is a severe worry for me as State Director.

OREGON

Accomplishments:

- CTE Study:
Completion of a CTE Study (seven states) requested by the state legislature for the purpose of identifying CTE funding needs and possible funding scenarios.
- Math-In -CTE
Expansion of Math-in-CTE and recognition of the role CTE has in improving secondary student academic performance; expanding train-the-trainer network.
- Transition to secondary-postsecondary standards based instruction:
Guiding the transition of over 800 high school programs and 600 community college programs to CTE Programs of Study based on a continuum of industry standards.

Challenges:

- Lack of understanding relating to high wage-high demand opportunities:
Lack of information and misinformation abound regarding high wage career opportunities; the pervasive message is that "value and success" equal college directly out of high school; the critical importance of lifelong learning is not communicated to the general public. Issues include understanding the value of CTE and the universe of middle-skill jobs that CTE prepares students for, and evidence that a four-year college experience is not the only or best path to high wage, high demand jobs.
- CTE Teacher Supply and Training:
Oregon is challenged with expanding and maintaining CTE programs with the CTE teacher shortage and lack of CTE teacher preparation programs.
Oregon continues to be challenged with sustaining existing programs when veteran CTE teachers retire. Oregon is challenged with expanding CTE capacity because of the severely limited CTE teacher supply. Oregon's reliance on alternatively licensed CTE teachers, primarily from industry, has caused a void in a solid, pedagogical foundation for these individuals. There is also a need for understanding of adolescent development and classroom management.
- Technical Skill Assessment Policy and Process Development:
Oregon does not have a statewide CTE assessment system and does not have the resources to develop and maintain. Progress has been made on the development of the policy and process for identifying commercial assessments and locally developed technical skill assessments.

Response to economic downturn:

- Focus on Clean and Green Community College Programs:

Microelectronics Technology Associate of Applied Science
Solar Voltaic Manufacturing Technology Certificate of Completion
Electronic Engineering Technology Associate of Applied Science

- Also includes options in:
Biomedical Engineering Technology,
Wireless and Data Communications Engineering Technology
Renewable Energy Technology
Bioscience Technology Associate of Applied Science
Bioscience Technician Certificate
Diagnostic Imaging Certificate of Completion
Health Informatics Associate of Applied Science (transferable to OIT) and
Bachelor's of Science

PENNSYLVANIA

Accomplishments:

- Each accomplishment is collaboration between the state directors' association, Pennsylvania Career and Technical Administrators and the Bureau of Career and Technical Education, PA Department of Education.
- Pennsylvania had developed a holistic technical assistance program. We have designed this program for administrators (school district and career and technical education), guidance counselors (school district and career and technical education), and instructors (school district and career and technical education). We are utilizing research based strategies and working with nationally recognized reform models (The Education Trust, Southern Regional Education Board and the Technical Centers That Work Model, and MAX Teaching).
- The purpose of the technical assistance is to significantly raise the academic and technical achievement of all students at the CTCs which take advantage of this opportunity. Through this technical assistance project, PDE assists career and technical centers with raising student performance on the PSSA and technical end of program assessments. Each participating CTC agrees to develop an improvement plan for increasing student achievement, work with the Career and Technical Distinguished School Leader and participate in all professional development activities provided by BCTE.

The program includes the following:

- Pennsylvania Inspired Leadership program focused on technical skill and academic achievement.
- Participate in Southern Regional Education Board Technical Centers That Work and literacy and numeracy sessions throughout the year.

- Participate in training provided by Education Trust and conduct transcript and master schedule analysis.
 - Work with the assigned Career and Technical Distinguished School Leader.
 - Participate in MAX Teaching Literacy training.
 - Follow academic and technical curriculum planning processes.
 - Use NOCTI study guides and pre-assessments.
- Developed a Career and Technical Distinguished Leader Program. The CTDSL will work as part of a team, providing expertise to assist career and technical centers in identifying instructional or systemic barriers and critical gaps to improving achievement. The DCTE also works the CTC staff to overcome barriers and gaps. The CTDSL role is flexible in its implementation and focused on three core goals: 1) Improve 11th grade PSSA reading achievement, 2) Improve 11th grade PSSA math achievement, 3) Improve achievement in end of course occupational assessments.
- Development of a Career and Technical Education Leadership Council as Subcommittee of the State Workforce Investment Board The Pennsylvania Departments of Education and Labor and Industry have joined together to assist in strengthening and enhancing the Commonwealth's career and technical education system. In order to insure that the career and technical education system is aligned with the state's overall workforce development efforts, the two agencies are proposing the establishment of a Career and Technical Education Leadership Council (CTE Council) which will serve as a free-standing Sub Committee of the Pennsylvania Workforce Investment Board (PA WIB).
- This CTE Council will consist of 17 individuals appointed by the Governor who are knowledgeable and concerned about career and technical education in Pennsylvania. Its function is to assist in providing information about the needs of career and technical education students and programs to all Commonwealth agencies and to make recommendations regarding career and technical education. The overall mission will be to strengthen and enhance the career and technical education system and to assist the State in providing quality programs so graduates are prepared for higher education and employment.
- The CTE Council will conduct evaluations, review programs, services and plans and make policy recommendations to commonwealth agencies on matters pertaining to career and technical education in the State. The CTE Council will also:
 - identify, recognize, and establish workforce development needs, issues, and strategies of importance to the Commonwealth;
 - recommend policies that the Bureau of Career and Technical Education (BCTE) should pursue to strengthen career and technical education and related initiatives;

- assist in reviewing and evaluating CTE programs; and
- Promote the coordination, collaboration, and effective partnerships among business, industry, labor, education, and employment and training programs to meet the economic needs of the state.

Challenges:

- Academic achievement. Pennsylvania fully supports all CTE students obtaining the same academic education as their cohort. This means the negotiated levels of performance on academic (math and reading) achievement is identical to the negotiated levels of performance for No Child Left Behind. Currently CTE student academic achievement is well below the Adequate Yearly Targets.
- Postsecondary technical skill attainment is a challenge. Currently Pennsylvania does not have a “system” in place.

Response to economic downturn:

CTE has been recognized as a viable partner in economic growth. At the state level we participate on a number of cross agency committees that are engaged in “growing” those career fields that will lead to high skill, high wage positions. These committees include the Human Capital Committee, Leadership Council for Health Careers and Energy Subcommittee.

SOUTH CAROLINA

Accomplishments:

- Increased *High Schools That Work* Sites to 177 and *Making Middle Grades That Work* Sites to 97 and implemented Career Centers That Work Model into 16 Career and Technology Centers.
- South Carolina was selected as one of two states to participate in the Organization for Economic Co-Operation and Development (OECD) review of Career and Technology Education (vocational education) in 15 countries. The purpose of the 3-year review is to assist countries to increase the responsiveness of Career and Technology Education System and Vocational Education and Training (VET) to labor market requirements. The goal is to improve the evidence base, identify a set of quality options, and develop tools to appraise VET national and international policy initiatives. International team visits will occur in South Carolina in 2009 and in the United Kingdom, Australia, Norway, Mexico, Korea, and Switzerland. In 2009, the International review visits will occur in Belgium, Canada, the Czech Republic, Germany, Ireland, and Portugal. An international comparative report will be written, and a draft will be presented to participating countries in early 2010.
- Developed an international exchange program with the countries of Denmark and Germany. South Carolina has hosted teachers from both countries and teachers from South Carolina participated in exchange visits to both countries. The goal is to move to the level of career and technical student exchanges.

Challenges:

- Continue to seek statewide college prep and honors recognition of career and technical education courses.
- Continue to develop a seamless 9-14-16 system that is driven by articulation and dual credit recognition.
- Create a comprehensive Green STEM secondary curriculum that creates a seamless pathway to two-year and four-year colleges.

Response to economic downturn:

We are engaged with the state's workforce planning groups as a partner in helping to develop strategies to address the high unemployment rate and fill the 21,000 jobs that are available statewide. Plans are to research the number of adult education and career and technical graduates of 2009 and to determine the number that plan to enter the workforce to fill jobs that need specific skill sets.

TENNESSEE

Accomplishments:

- Implemented 71 state approved programs of study.
- CTE programs of study were approved by the State Board of Education as meeting the states graduation requirement that all students complete a three credit focus of study.
- Implementation and refinement of the Tennessee Career Information system linked to Kuder. The system is available on line at no cost to parents, counselors, students, teachers or other interested parties.

Challenges:

- Shortage of high quality teachers
- Expanding and taking to scale dual enrollment and dual credit opportunities.
- Data collection - especially at the post secondary level

Response to economic downturn:

- Canceled conferences
- Travel and hiring freezes

- Use alternative on line methods to maintain high quality communication with LEAs.

TEXAS

Accomplishments:

- Completion of new state standards for all CTE courses based on the 16 career clusters and integrating the new Texas college readiness standards.
- Alignment of postsecondary technical programs by clusters.
- Revision of teacher credential accountability for statewide articulated courses

Challenges:

- New 4x4 graduation requirements and alignment of CTE courses with graduation requirements including four years of math, science, social studies, and language arts.
- Adoption and implementation of revised secondary state standards for CTE and teacher certification requirements for new standards.
- Vertical alignment of secondary and postsecondary technical programs and developing and implementing quality programs of study

Response to economic downturn:

- Developing curriculum materials and classroom toolkits for new rigorous, relevant CTE courses based on new state standards, aligned with the national career clusters and new Texas college readiness standards
- Teacher professional development training and new teacher certification based on new CTE state standards and career pathways.
- Moving CTE to the 21st Century!

VERMONT

Accomplishments:

- **Technical Skill Assessment:** Vermont is proceeding with pilot assessment implementation in Automotive, Culinary, Construction and Business programs. This work is conducted in collaboration with VTECS, Global Skills Exchange and the Arizona assessment project. Faculty workshops have been conducted in assessment development, standards alignment and test item design. Collaborative assessment development discussions with other New England states have been conducted with an anticipated meeting in May 2009.
- **All Aspects of the Industry/Entrepreneurship:** We are near completion of a project to design, develop, and pilot an assessment process in secondary CTE

entrepreneurship education. The project will target skills identified under the Business Enterprise and 21st Century Employability aspects of the Vermont “All Aspects of The Industry” criteria for all CTE programs.

- **Creation of the first “Industry and Education Center of Excellence”**: The first is focused on Hospitality/Tourism and local foods. The goals of the IECE are to strengthen the state’s workforce education and training programs, provide Vermonters with incentives to hold careers in Vermont, and to support sustainable economic and socially responsible commerce. The Center is funded by Vermont DOE-CTE, Vermont Department of Labor and the State Workforce Development Council. The second Center will focus on Green Industries/Technologies.

Challenges:

- As staff reductions have occurred over the last few months, we need to identify critical missions of our office which we will sustain.
- Recruitment and retention of highly qualified CTE faculty at the secondary and postsecondary levels will continue to challenge our resources.
- In a time of declining enrollments, we need to address academic skill attainment at an earlier age in order to prepare high school graduates for college and career. Our continued collaborations with postsecondary partners will be critical.

Response to economic downturn:

While awaiting to see the State’s response to the receipt of Stimulus funds, CTE has strengthened collaborative relationships with labor, economic development, industry stakeholders to seek additional ways of delivering education and training to youth and adults. Training grants may facilitate adult enrollment in CTE programs and creation of modular training components for rapid response.

VIRGINIA

Accomplishments:

- STEM Governor's Academies
(http://www.doe.virginia.gov/VDOE/Instruction/ct_academies/index.html)
- Industry Credentials
(<http://www.doe.virginia.gov/VDOE/Instruction/CTE/certification/>)
- Academic and Career Plans for All Students (This is scheduled for Board of Education approval next week. I can send a link if it is approved.)

Challenges:

- Communications among state agencies responsible for CTE.

- Helping local school divisions to understand the long-term benefit of professional development rather than spending funds on equipment.
- Although much improved, image continues to be a problem as far as recognition of current programs and initiatives by parents, schools counselors, administrators, and even business and industry personnel.

Response to economic downturn:

- At the state level, CTE continues services with a reduced staff because open positions are not being filled.
- Local school divisions are looking to elective areas, including CTE, to handle local budget cuts
- On the positive side, new uses of technology are being initiated to meet statewide professional development, i.e., state meetings with administrators for career and technical education via WebEx.
- CTE programs at the postsecondary level have a renewed emphasis for retraining

WASHINGTON

Accomplishments:

- CORE 24
The Washington State Board of Education identified a new set of credit requirements for high school graduation. Entitled CORE 24, this endeavor requires students to develop a plan for their future and choose classes to help them achieve their goals. The CORE 24 requirements will provide students with a strong academic foundation, with flexibility that will prepare them for whatever path they choose – entering the workforce, apprenticeship in the trades, or attending a community/technical college or four year institution. This effort encourages students to align their course work to achieve their career aspirations. The Washington Workforce Training Board, together with its partners including the Office of Superintendent of Public Instruction, provided support for the inclusion of three credits of the CORE 24 in career concentration. A career concentration is a career and technical education (CTE) program of study or course sequence which helps a student prepare for their intended postsecondary studies or career field. The current requirements for graduation include only a single occupational education credit. This accomplishment is huge for the career and technical education community in Washington State. Implementation of the CORE 24 Graduation Requirements Policy Framework will be contingent on funding and a phase-in process is expected over the next few years.
- Credit Equivalency

Tens of thousands of Washington high school students taking career and technical education (CTE) classes and learning real-life work skills are also earning high school academic credit in core subject areas such as math, English and science. In some districts, CTE classes also meet college credit requirements and are tuition free. Credit equivalency is a valuable tool during difficult economic times and increased tuition costs for postsecondary education.

- Programs of Study

The state has enjoyed success in efforts to have programs of study viewed as valuable pathways rather than a required activity for receipt of federal funds. Local school district personnel are partnering more with postsecondary counterparts and embracing the value of programs of study for student achievement. What began as a minimalist approach and federal mandate orientation perception has evolved into a professional and respected acceptance of programs of study as truly benefiting students and making the transition from secondary to postsecondary both meaningful and productive for students. Where pockets of articulation and experimentation existed haphazardly, there is now a unified statewide initiative with leadership and local advocacy among peers and colleagues.

Challenges:

- CTE Instructor Recruitment and Retention

The state continues to experience a challenging environment in its staffing needs. Career and technical education instructors in many areas are highly sought after and local areas often compete vigorously in filling vacant positions. Related to this issue is curtailment of career and technical education instructor preparation in some of our higher education institutions that previously produced graduates that could enter the field out of college. Probably like many other states, retaining good instructors while competing with private sector remuneration remains a challenge.

- Technical Skills Assessments

Washington State continues to struggle with the technical skills assessments required under Perkins IV. There are reporting issues that include identifying appropriate data elements at the local district level that need resolution. We have work to do in this area.

- Administrator Communication and Advocacy

The state has made considerable stride in a greater awareness and support of career and technical education especially by the state legislature. We need to do a better job of communicating and gaining the support of local level building administrators, including principals, superintendents, counselors, and others.

This is particularly crucial as pressures mount to address increased academic performance and achievement.

WISCONSIN

Accomplishments:

- ***Rapid response to current, anticipated, emerging, and regional workforce needs.*** Successful efforts included that the WTCS:
 - Revised the state level program approval process to shorten approval time from nine months to as few as three months.
 - Approved 157 new postsecondary programs in response to workforce needs.
 - Established Manufacturing Skill Standards Centers that by 2016 will certify the skills of 120,000 workers in safety, quality, manufacturing processes, or maintenance.

- 2) ***Ensured the success of all learners.*** Successful efforts included that the WTCS:
 - Used a grant from the Joyce Foundation to support collaboration with other agencies to develop and implement career pathways and bridge programs that help low skill working adults achieve greater labor market success.
 - Began implementation of the Prepared Learner Initiative to help WTCS students enter postsecondary programs with the academic preparation needed to succeed.
 - Collaborated with Wisconsin Department of Public Instruction, University of Wisconsin System and Wisconsin Association of Independent Colleges and Universities in efforts such as the America Diploma Project, Partnership for 21st Century Skills, and Liberal Education and America's Promise.
 - Increased online learning options in Wisconsin technical colleges to better meet the needs of place-bound and working adults. In the last five years, on-line enrollments increased more than 118% to nearly 42,500 students.

- 3) ***Enhanced seamless educational pathways.*** Successful efforts include that the WTCS:
 - Worked with the University of Wisconsin System to expand transfer and degree completion opportunities through innovative new programming and degree options for technical college students.
 - Lead efforts to ensure that technical college students enrolled in new kinds of transfer programs would continue to have access to state and federal financial aid.
 - Expanded outreach and advising to middle and high school students through collaborative K12-WTCS career exploration projects, outreach

and advising projects such as the Wisconsin Covenant and KnowHow2Go.

- Collaborated with K12 and other Wisconsin higher education providers in becoming one of 11 states awarded a Lumina Foundation grant to address barriers that will make higher education more accessible and affordable.

Challenges:

- ***Intense interest in the WTCS by elected officials:*** At least six committees in the Wisconsin State Legislature have identified WTCS education and training as issues of interest. While this level of attention can be helpful for highlighting needs and successes, it also presents a unique set of challenges in providing timely information and ensuring a consistent message as we work with stakeholders who advocate on our behalf.
- ***Changing student profile:*** While the WTCS experienced major changes in our student population over the last several years, increases in enrollment of dislocated workers and returning veterans affects the type of services and support needed to ensure student retention and success.
- ***Responding to burgeoning enrollments without new resources:*** Almost one-half of our 16 colleges are experiencing or expecting double-digit increases in full-time equivalent enrollment. Blackhawk Technical College (in Janesville, Wisconsin where the closing of a General Motors plant affected over 3,000 workers) saw enrollment increase 35% from spring 2008 to spring 2009. These sharp increases continue recent upward recent enrollment trends experienced over the last several years. Enrollment increases seem likely to continue even though state general aid has been stagnant for the past 10 years.

Response to economic downturn:

- At the system level, the WTCS response to the economic downturn has emphasized state and federal advocacy to secure additional resources needed to meet increased demands. For example, the WTCS biennial budget request for the fiscal year that begins on July 1, 2009 includes a proposal called Next Generation Workforce. This proposal consists of targeted local and regional initiatives that respond to current and emerging workforce needs in advanced manufacturing, health care, energy and student success. State investment in Next Generation Workforce will result in 4,700 new skilled workers each year; business and community leaders have sent almost 2,000 letters of support for the proposal to state legislators and Wisconsin Governor Jim Doyle. Details about the proposal are available at http://www.wtcsystem.edu/legislative/state/budget_09_11.htm.

- At the local level, WTCS Colleges are basing their response to the economic downturn to the specific needs of dislocated workers in their areas. For example, WTCS colleges have added more sections to high-demand courses, collaborated with neighboring technical colleges in a regional approach to program delivery and expanded the number of courses offered on evenings and weekends. Colleges also are working hard to address personal needs of workers who have suffered the trauma of job loss. For example, one college hired a counselor with mental health credentials to help address the ancillary impacts of job loss on individuals and families. A recent press release about WTCS efforts to serve dislocated workers is available at http://www.wtcsystem.edu/news/releases/dislocated_workers.htm.

WYOMING

Accomplishments:

- Wyoming implemented three state-funded CTE demonstration projects required to run a minimum of three years and include a consortium of a community college, high school and business/industry: one in wind energy and two in hospitality and tourism.
- The systemic development of CTE competencies in the Agriculture, Manufacturing and Construction program of study areas has been outstanding, producing competencies that will lead to productive assessments for our CTE students.
- Last November, Wyoming successfully completed its first targeting visit from OVAE with an emphasis on Perkins IV, producing positive input from the OVAE team which has been incorporated.

Challenges:

- We need to redesign CTE teacher endorsements to provide the districts with the flexibility necessary to meet our state's economic and workforce needs.
- The autonomy under which our community colleges and single university function remain challenging as we work towards a P-16 educational enterprise.
- Many of our educators remain rooted in the past with their teaching and need to advance to 21st century ideals. Perhaps this will change with our newly placed professional development program.

Response to economic downturn:

- Wyoming's three CTE demonstration projects focus on workforce and economic areas identified by Wyoming's Department of Workforce Services, energy and hospitality. Both of these industries are booming and need qualified people.
- We have created a professional development program using Perkins IV funding, mainly targeting CTE and core teachers with an emphasis on integration, career guidance certification and leadership in the classroom.

Responses from the following states were not received in time for the printing cut-off date:

AL,AK,AZ,CA,CO,DC,DE,FL,GA,IL,IN,IA,KS,KY,MN,NH,RI,SD,UT,WV,PR