

Carl D. Perkins Act of 2006 - Consolidated Annual Report

State of Minnesota, Fiscal Year 2009 (July 1, 2008 – June 30, 2009)

Executive Summary

Overview

The Minnesota State Colleges and Universities system (MnSCU) and the Minnesota Department of Education (MDE) jointly continue to be committed to promoting career and technical education (CTE) in Minnesota. The local eligible recipients of Perkins funds were all required to plan together at the local level for the formation of a single consortium at the local level to include secondary districts and postsecondary colleges. These efforts have been described in the 2007 Consolidated Annual Report (CAR) and detailed in the transition plan (available on the Minnesota CTE website www.cte.mnscu.edu). The transition plan was submitted to, and approved by, the Office of Vocational and Adult Education (OVAE), US Department of Education during FY2007. It is further detailed in the second common plan submitted on April 1, 2008, and approved by OVAE.

Program Administration

Both MnSCU Office of the Chancellor (OOC) and MDE Center for Postsecondary Success (CPS) are responsible for the administration of Perkins IV in Minnesota. The Perkins units within MDE CPS and within the MnSCU OOC have together conducted operations as a single Perkins unit for the State making decisions jointly on CTE programming, accountability, administration and fiscal requirements making sure that they, as individual Perkins units within their respective agencies, adhere to state and agency guidelines, rules, requirements, policies and procedures. Starting fall 2004 and long before the actual signing of Perkins IV in August 2006, the joint collaboration between the two agencies with respect to CTE enabled the following:

- ⇒ The 26 consortia that were formed during the transition year (the first year under Perkins IV) submitted their first joint local plans¹ in FY2008 in which each consortium was asked to target five broad goal areas: programs of study (POS); special populations; community, education and industry partnerships; inter-consortium relationships; and sustaining the consortium. These five Minnesota Perkins IV broad goal areas were cross-tabulated against the federal required and permissible activities and the ensuing matrix is available on the Minnesota CTE website www.cte.mnscu.edu.
- ⇒ The writing of the State CTE Plan was made easier by the fact that secondary and postsecondary Perkins staff worked as teams to develop the different parts and chapters of the State CTE Plan, with each team drawing upon its individual expertise to meet a common purpose of implementing the intent of Perkins IV.
- ⇒ State leadership funds were utilized to serve the needs of both secondary and postsecondary Perkins separately as well as jointly for statewide CTE projects (see below). When used separately, leadership funds are administered by respective state staff at the secondary or the postsecondary levels.
- ⇒ The combining of Tech Prep funds into the basic grant funds under the current State CTE Plan with an expectation that successful initiatives from tech prep be continued under the new consortium structure allowed an expanded emphasis on high school to college transitions, concurrent enrollment, articulation, college in the schools, postsecondary enrollment options and other dual enrollment strategies, as well as greater implementation of career pathways, all of which were an integral part of the Tech Prep program under Perkins III.

Within MDE, staff is assigned both to specific program areas and to different regions of the state. These staff members are employed through a combination of Perkins State Administration funds, Perkins State Leadership funds, and state general fund resources to provide program area technical assistance and monitoring, to promote targeted initiatives, new program development and Programs of Study, continuous improvement, and academic and technical skill standards integration.

¹ The transition year (the first year under Perkins IV, FFY 2007) became the final year under which separate local secondary and separate postsecondary applications were submitted to the state. Local secondary and postsecondary recipients, while submitting separate plans, focused on the formation of the single consortium, and each of the separate plans were expected to reflect the process by which the consortia were formed.

Within the OOC, Perkins State Leadership funds are used to promote targeted initiatives including new program and collaborative curriculum development, continuous improvement efforts through the application of data including developing research methodology to examine multi-year performance of Perkins funded initiatives, career pathway development and Programs of Study, and the professional development for Perkins administrators/coordinators and faculty. Postsecondary Perkins program directors are individually and simultaneously responsible for several of these projects. State secondary and postsecondary Perkins staff work together as teams to oversee specific administrative responsibilities and to serve as program and regional liaisons to the 26 different consortia and consortium administrators/coordinators.

In its State CTE Plan Minnesota required the 51 Perkins secondary recipients, 25 two-year college recipients, and 26 Tech Prep consortia that each were awarded Perkins funds under Perkins III to single entities to regionally plan for, and receive funds under the Perkins basic grant and tech prep . The recipients sorted themselves into 26 consortia that were approved by State Perkins leadership during FY2007 using a process reported in the Minnesota one-year Transition Plan. The state Perkins staff and leadership spent much of FY2008 setting in place the planning, coordination, and collaboration required for developing the State Five-Year CTE Plan and implementing that plan through the new consortium structure. Setting the ground work in FY2008 was beneficial as the consortium structure remained intact for FY2009. As required by Perkins IV, performance data will be reported in the FY2009 CAR.

Program Performance

Extensive time and effort was used during program year 2008-09 to address the new data and performance requirements of Perkins IV. Definitions were reviewed and the appropriate formulas were modified or rewritten for CTE participants, concentrators, and completers as well as for the old and new core indicator performance measures. At the secondary level, MDE continues to move forward with the seventh year of the statewide data reporting system for the core indicators and sub-indicators. MDE is able to provide data for the federal core reports and similar data for consortium/district/school building reports to assist CTE administrators with continuous program improvement.

At the postsecondary level, MnSCU provides an automated reporting system to colleges so that they can access up-to-date data to track progress and steer continuous improvement efforts. In particular, effort has been concentrated on examining disaggregated data through close examination of factors influencing performance within the sub-indicator populations to determine the extent of, and factors affecting, differences in performance. It should be noted that MnSCU, under Perkins IV, has started collecting, reporting and analyzing CTE student enrollment and performance data using an entry cohort method. The enrollment and core indicator data included in the 2009 consolidated report are primarily based on the FY2007 entering cohort. This cohort includes students who entered postsecondary in summer 2006, fall 2006 or spring 2007. These students were followed through spring 2009. The cohort used to report employment (4P1), however, is lagged one year and includes students entering in summer 2005, fall 2005 or spring 2006.

During FY2009, the MnSCU Office of the Chancellor (OOC) and MDE Center for Postsecondary Success (CPS) jointly developed its third common² Perkins State CTE Plan. Called the **Minnesota Five-Year Career and Technical Education (CTE) State Plan**, it was submitted to, and approved by OVAE on July 1, 2008. In the State CTE Plan, Minnesota has begun laying the foundation for a long-term alignment between high schools and colleges regarding administration, funding, accountability, and, most importantly, the programming of CTE. Separately, the Minnesota State Colleges and Universities (MnSCU) system and the Minnesota Department of Education (MDE) have a demonstrated history in their capacity, commitment and collaboration in promoting CTE in Minnesota. Implementing the State CTE Plan takes the relationship between the two agencies to the next stage. Now in practice, the State CTE Plan reinforces what was begun under the last State CTE Plan:

The expectation of developing efficient systems, policies, processes and procedures that increasingly intertwine learning with work; and, where increasing achievement, greater opportunities, and varied

² The transition plan was the second common Perkins plan. Under Perkins III, Minnesota submitted its first common Perkins plan in 1998.

options are not just choices but are objectively-determined outcomes that will first and foremost benefit all students.

By accomplishing the goals and objectives in the State CTE Plan, not only is the intent of the Perkins Law met, but Minnesota is making CTE a vital element in Minnesota's statewide efforts at collectively addressing policy issues embedded with the strategic triad of high school redesign, seamless education and employment transitions, and enhanced American competitiveness.

Carl D. Perkins Act of 2006 FY 2009 Consolidated Annual Report State of Minnesota

I. Implementation of State Leadership Activities [Section 124 (b) and (c)]

As Minnesota implements its five-year state CTE plan, both MDE and MnSCU have begun collectively emphasizing, both at the state and local levels, the importance of effective high school to college transitions through the now established consortium structure. While secondary to postsecondary transitions are given a strong emphasis in Minnesota's plan, other learner segments, particularly those who have entered postsecondary education through avenues other than recent high school experience, are expected to be given equal prominence and importance under the new consortium structure. State leadership has revisited its current administrative, monitoring and accountability procedures to comply with the new law taking into account established state finance and funding requirements that are applicable to either MDE only, MnSCU only, or both MDE and MnSCU, and Perkins staffs at MDE and MnSCU have been meeting monthly for over two years to jointly discuss, plan, develop and implement the intent of Perkins IV in Minnesota. Such joint planning has already resulted in a successful completion, submission, and acceptance of both the one-year Transition Plan and the Minnesota State Five-Year Plan (www.cte.mnscu.edu) in April 2008. In addition, as shown below, the two staffs have together decided on several state leadership activities even if these activities are funded either by secondary only or postsecondary only. However, in several cases, secondary and postsecondary leadership funds have been used to put in place statewide leadership projects, initiatives and activities, particularly around improved high school to college transitions through Programs of Study (POS) and with the development of Technical Skill Assessments as part of the POS, and the secondary/postsecondary consortium structure.

a. Required and Permissible Uses of Funds: Perkins Leadership Activities in Minnesota

As part of the State Plan development process, Perkins leadership and staff in Minnesota took the required and permissive Perkins IV activities and cross-tabulated them against five Perkins IV goals that each of the state's 26 consortia have to address in their local application plans. The table below shows state leadership programs, initiatives and activities jointly, separately for secondary and postsecondary, by the local consortia, as well as those state leadership programs, initiatives and activities that impact both secondary and postsecondary levels.

Statewide Activities
<p><u>Programs of Study:</u> [Sec. 134 (b)(3 & 5) and (b)(8C)]</p> <ul style="list-style-type: none"> • Clarified and disseminated the process for state approval of locally-developed programs of study • Held team meetings in Minnesota to develop an electronic template for districts to use • Electronic template housed at St Cloud Technical College is available for all consortia to use: http://www.cte.mnscu.edu/programs/index.html • Prepared regional training for all districts and Perkins Consortia regarding the POS and use of the electronic template • Worked with five pilot teams within career pathways for technical skill assessment development • Programs of Study were developed in the following areas: Applied Engineering, Manufacturing, Business Administration, Health (CNA, Nursing, Surgical Tech, Respiratory The, Dental Assisting, EMT, Paramedic), Natural Resources, IT, CISCO, A+, Oracle, MOUS, Culinary Programs (ProStart and Safe Serv), early childhood, CAD, Law Enforcement, entrepreneurship, agriculture, etc. • Ensure that all pathways have multiple exit and entry points to accommodate all learners

- Continued to work with all consortia to maintain and expand the use of dual enrollment, college in the schools, Postsecondary Student Enrollment Options (PSEO), articulation agreements, tech prep certificates, and other early college credit opportunities. [Sec. 134 (b)(3 C.), and Sec. 135 (c)(10)]

Integration of academic and technical education

- Joint Division meetings, workshops, training, and professional development
- Adult and Career Education (ACE) meetings/workshops related to the implementation of the Minnesota Graduation Standards for Career and Technical Education (CTE) instructors consistent with ESEA
- ACE meetings on integrated/applied academics and technical education
- Worked with teacher licensure to support teaching academics within CTE courses following the HOUSSE rules.

Program Approval Rubrics/Continuous Program Improvement [Sec. (b)(2 & 7) and Sec. 135 (c)(19)]

- Curriculum Frameworks for CTE programs (5 program frameworks completed and all districts' standards completed and are on file in districts)
- Local District and Regional Training for Program Improvement and Approval
- Provided workshops in the use of the self-assessment tool and the Program Approval Rubrics to evaluate alignment of program delivery for Career and Technical Education
- Into the sixth year of the regional 5-year program approval process for CTE programs
- Promoted use of the self-assessment tool and the Program Approval Rubrics
- Provided workshops for districts for program approval application/renewal process

NGA Grant on Developing STEM Programs [Sec. 134 (b)(3)(8A & 8B)]

- Received the NGA STEM grant and have staff working on the PLTW and Nontraditional portions of the grant
- Working with 4 sites around the state to enhance STEM programs for Girls with funds from NAPE. Using all Perkins data and programs.

Expanding Use of Technology in CTE

- Provided assistance in group purchasing of equipment and services for districts/consortia
- Explored need, availability and equipment requirements of career and technical education teachers and prospective teachers related to accessing career and technical teacher education courses on-line
- Provide on-line CTE courses for secondary and postsecondary students through Online College in the High School, MnOnline, MN Learning Commons, and other tools [Sec. 135 (c)(19)]
- Explored need, availability and equipment requirements of career and technical education teachers and prospective teachers related to accessing career and technical teacher education courses on-line
- Secondary NATEF/Auto Yes programs are operating with equipment purchased using federal funds
- Implemented ProStart/Safe Serv including students with Special Needs
- Develop, improve, or expand the use of technology in career and technical education. Grants – CTE faculty are recipients of *The Board of Trustees Awards for Excellence in Teaching*. Twenty-nine faculty were honored on May 20, 2009, for having made exceptional contributions to student success in the Minnesota State Colleges and Universities System. Nine of the 29 awards were presented to faculty who teach in CTE disciplines. This is an increase in representation from CTE, and we believe exposure by the Center for Teaching and Learning on campuses, in workshops, and in conferences contributed to this increase of CTE entries and award recipients.

Professional Development [Sec. 134(b)(4)]

- Worked with Bemidji State University, the University of Minnesota and Southwest Minnesota State University to increase the number of on-line, blended courses with flexible delivery options, and CD-ROM Teacher Education Courses
- Provided funding to Bemidji State University, Winona State University, Southwest Minnesota State University and the University of Minnesota for CTE Professional Teacher Development courses
- Provided funds to Bemidji State University and the University of Minnesota for professionals to evaluate teacher applicant education and work credentials to develop individualized programs leading to teacher licensure

- Professional development workshop on career guidance for Minnesota school counselors
- The Center for Teaching and Learning (CTL) provides several programs for two-year-college faculty that promote the ongoing improvement of curricula and teaching methods. One of the most broadly engaging is an annual series of 12-18 discipline or program workshops, each organized by teams of faculty from technical and community colleges (and including our system's universities). Secondary teachers were invited to participate in the workshops where appropriate. Discipline workshop funding is granted only to teams whose agendas center on collaborative development, discussion, and review of curricula and pedagogy. More information and the calendar of current and archived workshops are found at http://www.ctl.mnscu.edu/programs/discipline_work/. Discipline workshops in career and technical education typically involve presentations and workshops on new industry standards and technologies, and integration into curricula at a system-wide level. More information is available at www.ctl.mnscu.edu.
- Realizing Student Potential/ITeach Conference 2009: Two statewide conferences were combined to provide opportunities for sharing and learning about best practices in teaching and learning that are integrated with effective technology strategies. This 2-day faculty development conference organized by the Center for Teaching and Learning explored the challenges and rewards of teaching in today's higher education communities and was attended by over 1100 faculty, administrators, and staff. Presenters shared best practices and presented their experiences in creating communities and conditions that matter for student success, whether it be in the classroom or online. Two nationally known speakers and authors – George Kuh, Chancellor's Professor of Higher Education and Director, Center for Post Secondary Research at Indiana University Bloomington; and Sally Johnstone, Vice President for Academic Affairs at Winona State University presented keynote addresses around the theme of Communities in Higher Education. There were 47 sessions at the RSP/ITeach Conference that were presented for purposes of developing, improving, or expanding the use of technology in CTE. Secondary teachers were invited to participate in the workshops where appropriate. Colleagues presented: Overall there were 242 faculty, staff, and student presenters from our colleges and universities who shared best practices and instructional innovations in 137 sessions. More information is available at <http://www.ctl.mnscu.edu>.

Technical Assistance

- Designated staff within specific career and technical education program fields provided technical assistance to Perkins recipients. Program areas included: Family and Consumer Science, Business and Marketing Education, Agriculture/Agribusiness Education, Technical Education, Health and Human Services, and Work-Experience Disadvantaged and Handicapped programs.
- Conducted over 125 Technical Assistance workshops for over 5000 teachers, the state's 373 educational agencies and charter schools (for program approval, curriculum integration, frameworks, and standards)
- Staff participated in over 42 State/Regional/ National Conferences and professional development opportunities.

Special Populations

- Worked with teachers and faculty, counselors, and administration to ensure that all special education students were included in and participated in CTE courses and programs. [Sec. 134(b)(8A & 8B)]
- Encouraged secondary teachers to work with IEP committees for students with special needs [Sec. 134(b)(9)]
- All students were held to the same high standard for academic and CTE courses. [Sec. 134(b)(3)]

Adult Pathways Task Force [Sec. 135 (c)(9)]

- Established a task force consisting of secondary and postsecondary administrators and local Perkins consortium directors to develop and establish a model for the development of adult pathways to enable individuals to find multiple entry and exit points in Programs of Study. This task force will continue to work and develop the model for the adult pathway in FY10.

Core Indicator Related Activity

- Worked with local consortia to identify data collection needs required for Perkins IV. These efforts included the continued involvement of the Perkins IV postsecondary accountability task force.
- Implemented within-MDE data systems to electronically collect the necessary data to report the Core Indicators Software. Vendors developed the integrated data collection system for use since FY02. Data was collected from all districts throughout the state.
- Continued to upgrade the secondary data system to include longitudinal data and more accurate placement data.
- Worked extensively with IT staff to ensure that the new definitions for Perkins are in place for our data collection systems, and to ensure that the state and each local consortium have access to the new post secondary cohort reporting data.
- Reviewed FY05 data with the first year of a student three-year longitudinal data set to refine the system for collecting and reporting cohort data
- Gathered 1S1 Reading (MCA10) and 1S2 Mathematics (MCA11) baselines in FY09. Piloting of the test state wide-data was not reliable as the Minnesota Legislature delayed use of this test alone as a high-stakes criterion for high school graduation)
- Provided training for all Perkins consortia/district directors regarding using data for decision-making purposes.
- Continued to assign the highest priority to improving data integrity, increasing access to data, and using data for effective decision making at the local level under Perkins IV. Recommendations from the Governors Workforce Development Council (GWDC) and P-16 Committee were presented and passed into a state statute during the 2008 legislative session allowing us to compare data between secondary and postsecondary utilizing a third party (Minn. Stat.13.32, subd.11). This ability to compare data will greatly assist us with the placement and retention of students' core indicator. [Sec. 134 (b)(3B) and 135(c)(9 & 19)]
- ***Finally*** obtained a signed interagency agreement to share data (5S1) for retention and placement (This took almost 10 years to complete)
- The fulltime labor market analyst at the Office of the Chancellor, assisted Academic and Student Affairs divisions and units and local consortia with advice and guidance on:
 - Linking demand side information to existing postsecondary engagement, attainment and transitions data.
 - Producing information, reports and documents on employment and wage activity for individual colleges and universities within the Minnesota State Colleges and Universities as they develop, maintain, and adjust academic programming on their local campuses.
- Provided the critical link to the research and statistical information unit in the Department of Employment and Economic Development (DEED), allowing both agencies to share data electronically and use that data in specific projects within the Minnesota State Colleges and Universities and DEED. All of Perkins recipients are using Labor Market Information (LMI) to ensure the need for POS in their consortia
- Consulted with Meeder and Associates to advance with 5 pilot sites developing the state model of core elements taught at secondary and postsecondary levels and then to develop recommendations for assessment tool(s). [Sec. 134 (b)(3)]

Career Guidance [Sec. 134 (b)(10)]

- Regional workshops for high school counselors and preconference sessions during MnACTE/MACTA Spring and Fall 2009 conferences were provided to both secondary and post secondary staff to increase knowledge in how collaboration across agencies is important.
- Implemented several approaches including parent meetings and the creation of a parent guide, *Pathways to Success*, in four languages consistent with MN population demographics, that was distributed to all post secondary and secondary schools. It was a major focus to increase parent involvement in career decision-making for high school students.
- Provided support for development of electronic, web-based tools to enhance career exploration and

information, job seeking tools and student portfolios, including ISeek.org, careeronestop.org, MCIS, GPS LifePlan and efoliomn.

- Customized the American Career Parent Resource Guide for Minnesota; with the help of Career Communications Inc., produced easy-to-understand information for parents and their high school students about nontraditional career options. Additionally, the magazine, through a special four-page insert, has been customized for Minnesota to highlight key industries and occupations, specifically those that are in high demand. These magazines were utilized in parent orientations, high school classrooms and college orientation sessions in addition to being distributed at several career and education fairs.

SECONDARY

Directed Activities [Sec. 134(b)(2-3 & 7 & 8.C.) and Sec. 135 (c)(19)]

- Designated a staff member to provide statewide technical assistance to local Perkins IV recipients
- Leveraged Perkins funds with state and other federal and state special needs funds to provide specialized equipment and meet other needs of career and technical education students
- Maintained the program approval process for Work Experience – Handicapped program
- Clarified and strengthened relationships with local and state special education personnel and staff from the vocational rehabilitation unit at the Department of Employment and Economic Development
- Worked with MnSCU and local Perkins administrators/coordinators to identify needs and initiatives related to recruitment, retention and placement in nontraditional employment and training programs

Career Guidance Activities

- Career Counseling and Advising - Designated full-time staff member to provide statewide technical assistance to local Perkins IV recipients

Other Activities [[Sec. 134 (b) (3 C.)

- Revised Minnesota Rules for secondary career and technical education programs to be consistent with Perkins IV and the new State Plan for Career and Technical Education. Rules were reviewed by the Office of Administrative Hearings and have been implemented for FY10.
- Delivered training workshops on “all aspects of the industry,” included definitions, scope and application within curriculum by various districts.
- Presented Skill Standards Implementation at professional association meetings (MACTA and MnACTE)

Community Outreach and Education

- Provided updates to CTE administrators through the Minnesota Association for Career and Technical Administrators (MACTA)
- Updates and professional development to Minnesota Association for Career and Technical Education (MnACTE) as well as the affiliate division partners
- Provided technical assistance to 26 Perkins consortia related to the broad-based community support for Career and Technical Education secondary Perkins programs
- Supported the inclusion of the Partnerships within the Local Advisory Committees and encouraged consortia to move toward joint secondary/ postsecondary advisory committees.
- Supported work, service, and community-based interaction.
- Served over 60 students, 18 chaperones, 40 mentors, and 20 administrative and support personnel at the Camp Ripley National Guard Facilities in Little Falls, Minnesota. [Sec. 134 (b)(5)]
- Promoted career and technical education as a component of the state’s workforce development system through active participation on the Governor’s Workforce Development Council and committees
- The Governor proclaimed the last week of February as Entrepreneurial Week and provided a celebration at the State Capitol. This was staffed by a MDE program specialist.
- Worked with Advisory Committees, Industry, and the Department of Employment and Economic Development to identify High Skill, High Wage, and High Demand Occupations in this region. [Sec. 134 (b)(5 & 8 C)]

POSTSECONDARY

Expanded use of Strategic Advantage Software to respond to economic changes for program planning and development: [State Plan]

With financial assistance from the Perkins grant, 10 colleges had contracts with Economic Modeling Specialists, Inc. (EMSI) to license a web-based software called Strategic Advantage. The software assists personnel at the system level and the college level, to analyze industry, occupation, and demographic trends in their area and to tailor program offerings to effectively respond to expected economic changes in a customized workforce area.

CTE Faculty Credentialing Sec. 124, 3 A: Southwest Minnesota State University has developed the three courses at both the undergraduate and graduate levels to meet the Teaching and Learning Competency requirements of the College Faculty Credentialing Policy. There is an agreement between the Office of the Chancellor and Southwest Minnesota State University to fund the development of the course syllabi and provide a tuition match for the delivery of the courses to unlimited community and technical college faculty.

The Philosophy of Community and Technical College Education non-credit course has been developed and has been delivered online by the Center for Teaching and Learning at the Office of the Chancellor.

Each college is required to establish a policy to implement the faculty development process which shall include the development of faculty professional development plans. College faculty and administration must work together to establish the college policy on faculty professional development. Each faculty member prepares an individual professional development plan according to the timelines and criteria specified in the college professional development policy.

Using Electronic Career Guidance Tools for Raising Interest in Nontraditional Careers: [Sec. 134 (b)(10)]

The purpose of the project is to encourage young students to explore electronic resources by using the Internet System for Education Employment and Knowledge (ISEEK) www.iseek.org, to research more useful information about career options available in non-traditional careers. The end result will be the creation of a white paper report based on student feedback of existing electronic tools that can be utilized as guidelines throughout the Minnesota State Colleges and Universities system.

New Approaches to Educational Partnerships: [State Plan, Sec.135(c), Sec. 135 (b)(5), Sec. 135 (c)(9)]

The Minnesota State Colleges and Universities and the Minnesota Department of Education Adult Basic Education (ABE) have jointly received a one-year implementation grant from the Joyce Foundation, with MnSCU Educational Grants Unit being the fiscal agent. Called the “**Minnesota FastTRAC: Training, Resources and Credentialing**” initiative, the implementation grant focuses on efforts around the identification of major system and policy changes targeted towards "low wage and low skilled adult workers." The primary goal of the initiative is to set the stage for creating a state-level “stackable credentials” education and training framework for low-wage and low-skilled adults that integrates ABE, non-credit occupational training, and for-credit postsecondary degree and certificate programs. Stackable credentials are career pathway models for demand driven industries and are supported by fast track, seamless programming for students.

Environmental Scanning to Improve Perkins Annual Plan:

Minnesota Future Work continued to use its expertise in helping the OOC by using environmental scanning techniques to provide assistance in developing the state and local plans. This project included determination of the variety of information resources desired by the planners to meet the new requirements of the Carl Perkins law and to continue improvement of future applications. Minnesota Future Work <http://www.cte.mnscu.edu> This year the Minnesota Future Work team focused upon environmental scanning in green industry and occupations as it worked with ongoing MnSCU academic program planning activities including their Carl Perkins annual planning process.

Other Activities: [Sec. 134 (b)(3) (8A & B)]

- Career guidance w/Minnesota Career Information System materials/ISEEK/CareerOneStop

- State leadership funds were awarded to the MN Foundation for Student Organizations to oversee management of project grants to individual student organizations that request funds to implement student activities regarding career pathways.
- Participation in OVAE Next Steps Work Group
- Collaboration on other state initiatives led by other state agencies
- Collaboration on the STEM/NAPE Initiative.
- Continued work with V-TECS, NOCTI, Skills USA and career cluster initiatives, including Train-the-Trainer
- Provided enhancement funding for the Internet System for Education Employment and Knowledge (ISEEK) www.iseek.org

Development Of New Programs: [Sec. 134 (b)(8 C. & 10), Sec. 134 (b)(3) (8A & B)]

- Colleges compete for **Perkins Program Development Grants**, which are meant to stimulate the development of new occupational programs by colleges. Proposals must address one or more of the following:
 - Programmatic career pathways
 - Technical skill attainment assessment processes
 - Preparation for non-traditional fields
 - Support for programs for special populations
 - Support for programs that link high schools to colleges
 - Evidence of high wage and high skill or high demand occupations

These projects are especially encouraged—but not required—to include:

- Existing STEM-related coursework
- Support of initiatives to facilitate transition from sub-baccalaureate to baccalaureate programs
- Incorporation of career academies and distance education
- Industry, community, K-12 or other partners
- Leveraged funds

Subbaccalaureate to Baccalaureate Transfer

- Implemented policies and procedures to improve transfer of undergraduate credits. Policy 3.21 and 3.21.1 www.mnscu.edu.
- Redesigned mntransfer.org website to add student portal, improve navigation and visibility. The website serves as an integrated information center for MN students, transfer specialists and advisors regarding transfer of credit to and from public and private higher education institutions in Minnesota, www.mntransfer.org
- Colleges and universities submitted over 1400 articulation agreements for program to program transfer according to state guidelines.

LOCAL CONSORTIUM

Goal 1: Designing & Implementing Programs of Study

Programs of Study were developed in multiple pathways and entered onto the State POS electronic Template (see the narrative for this site). Operating as partnered consortia made the availability of concurrent enrollment, PSEO, transcribed credit, etc. for students an easier task than in the past. Certificates were presented to students under the old Tech Prep model where they articulate with postsecondary programs. Models for technical skill assessments are being developed. Six Pathways met over the summer months to develop a model for state use. Work will continue in FY10.

Goal 2: Effectively Utilize Employer, Community, and Education Partnerships

Regional program advisory committees were developed in many of the consortia. Work will continue to have shared committees in FY10. Worked with WorkForce Centers and DEED (LMI) to review local High Skill, High Wage, and High Demand occupations for all students. Students participated in mentoring, career fairs, job shadowing, and work-based opportunities within their POS and to understand All Aspects of an Industry. Students continue to job shadow at Camp Ripley as time permits (MN National Guard). ABE Students were

given the Pre-Accuplacer as a placement tool.

Goal 3: Improve Service to Special Populations

Assistive technology was made available for students with special needs to increase success. Supplemental software, tutors, support service personnel, and summer support courses were provided for students needing extra support, including ABE students. Support nontraditional students with summer camps to introduce pathways (Girls STEM/High Tech Boys, Jumpstart, etc.). ASVAB assessment tool used for individual's interest assessment.

Goal 4: Provide a Continuum of Service Provisions for Enabling Student Transitions

Programs were developed where students can receive 2-year degrees that will articulate with 4-year universities. Promotion of Career Development and Exploration activities. Testing for college ready at most secondary institutions in grade 10-11 so students can prepare to take courses during grade 12. Brokered services with programs outside the consortium structure for individuals who wanted a pathway not delivered in the consortium postsecondary institution(s). Counselor and school administrator training in POS. Developing many POS with multiple entry and exit points for adult learners.

Goal 5: Sustain the Consortium of Secondary and Postsecondary Institutions

Joint meetings were held throughout the 26 consortia. In some cases; regional meetings were conducted to see where shared resources and time in the development of POS could occur. Communication is the most important thing in the new consortia. It has been very successful but the districts and colleges have worked together under Perkins III for over 10 years. Greater opportunities for students are now available as secondary and postsecondary programs share teachers, equipment and in some cases space for courses. The STEM Project, the Technical Skills Assessment Project and common professional development have created a collegial atmosphere where there is one focus – success of the student.

Secondary and Postsecondary Statewide Collaboration Activities Funded Through Perkins Leadership Funds

Under Perkins IV implementation in Minnesota, the watchword for connecting both secondary and postsecondary CTE, both at the local and state levels, is collaboration. At the state level, leadership funds have been targeted towards programs, initiatives and activities that result in improving CTE programs for all students, secondary and postsecondary. The programs, initiatives and activities that were supported included the following:

- **P-16 College and Career Readiness**

Leadership from both the MnSCU OOC and MDE CPS were active participants on committees of the Minnesota P-16 Council to define college and career readiness. Minnesota has adopted the position that the skills for success in college are the same as the skills for success in employment, and that by identifying these skills students will be able to leave high school more prepared for postsecondary preparation whether in a 4-year University, 2-year College, or industry certification program.

- **College- and Career- Ready Policy Institute (CCRPI)**

Minnesota is partnering with Achieve, EducationCounsel, Data Quality Campaign, Jobs for the Future, and the National Governor's Association Center for Best Practices. Leadership from both the MnSCU OOC and MDE CPS were active participants on the 5 working subcommittees:

- Governors Education Council
- Anchor Assessments and Accountability
- Minnesota Early Indicator and Response System (MEIRS)
- Dual Credit
- Data Elements and Decision Making

- **Project Lead the Way (PLTW):**

Minnesota continued to promote Project Lead the Way (PLTW) by:

- Providing statewide leadership for implementing Project Lead the Way (PLTW) activities in local school districts, including the middle school Gateway program, which has resulted in an increase in participation.
 - Developing professional development opportunities for PLTW in Minnesota through a collaborative that is made up of the University of Minnesota, the PLTW affiliate, MnSCU and MDE.
 - Training for new PLTW teachers occur every summer through a partnership with the University of Minnesota. These two-week sessions are ongoing and the number of districts participating is increasing.
 - Participating as a pilot state in the Curriculum for Agricultural Science Education (CASE) and taking a national leadership role.
 - Providing support to consortia exploring and implementing PLTW Biomedical as appropriate.
- **Other Professional Development Activities:**
Regional workshops for high school counselors and preconference sessions during MnACTE/MACTA Spring and Fall 2009 conferences were provided to secondary and post secondary staff regarding services to special populations to increase knowledge and strategies on cross agency collaboration. Presentations and workshops were offered to keep agencies informed of programs or opportunities that impact those populations served. Ongoing activities through existing regional activities, webinars and other delivery methods increased to emphasize collaboration across agencies. Participants in these activities included the Association for Residential Teachers at Minnesota correctional facilities and the Office for the Economic Status of Women to address services to corrections and access to opportunities to increase self-sufficiency.
 - **Nontraditional Data Project (Phase I):**
The purpose of this data collection project was to provide baseline data on nontraditional performance indicators for improvement strategies for the FY10 Perkins plan. Phase I has been completed: a) baseline data was generated for participation and completion in nontraditional performance for each college and b) colleges were given a data report with recommendations and comments that will be useful for future program review and improvement planning. Phase II was begun in Fall 2009 with technical assistance to consortia pilot teams through the replication two national models: STEM Equity Pipeline Project and the MN New Look Project.
 - **State Leadership funds for Services to Corrections and Disabilities:**
Campus 2 Careers: is a collaborative effort between multiple state and local agencies including our MnSCU partners, to provide a systematic approach to career development and to increase access and opportunity for exploration and participation in nontraditional careers through experiential activities. Eleven regional campuses took part throughout the state with an emphasis in the manufacturing and health care fields.

Career Pathways in Construction: Minnesota Department of Corrections has developed a two-course exploration and entry level training in construction careers in a continued partnership with a technical college in Central Minnesota.
 - **State Plan Development:**
The need to transition fully from Perkins III to Perkins IV required state leadership funds to be targeted towards the State Plan development process. These included:
 - Face-to-face and electronic communication and feedback with local Perkins leadership.
 - Seeking input into program of study development by engaging a statewide advisory taskforce in national, regional and local activities.
 - Obtaining input and feedback from state-level stakeholders regarding how CTE should interact with other federal and local development programs such as Adult Basic Education (ABE) and the Workforce Investment Act (WIA).

In general, Perkins Leadership funds were targeted mainly towards the State Plan development process, technical skill assessment and Programs of Study, with additional expenditures for new programs professional development, special populations, state agencies, program improvement and technology.

II. Progress in Developing and Implementing Technical Skill Attainment

Like many states, in the past Minnesota has measured technical skill attainment using either program completion or level of participation as proxy evidence of a student gaining technical skills. Minnesota faces several issues with regard to developing a statewide strategy for measuring technical skill attainment separately from conventional student success measures (GPAs, course completion, retention, graduation etc.). Specifically, the development of technical assessments in all CTE fields at the state level goes well beyond available resources. However, whatever statewide strategy on technical skill attainment Minnesota pursues, it will ensure that such a strategy will include a portfolio of valid and reliable assessment instruments.

As Minnesota develops a consistent and uniform strategy for measuring technical skill attainment at the state level, it has already begun a process for collecting information about the various efforts measuring technical skill attainment at the local level. These include:

- At the **secondary** level, a list of appropriate third party assessments were developed in FY2006 and used to provide guidance regarding the available opportunities for, and the constraints faced when, using technical skill assessments. At the secondary level, existing programs currently offer the following capstone assessments:
 - Agriculture: Class C Water or Wildlife Ecology Certification
 - Business and Marketing Programs: The MOUS family of certifications, A+, and CISCO
 - Health Careers: Certified Nursing Assistant (CNA), Pharmacy Technician, First Aid and CPR, Emergency Medical Technician (EMT), First Responder
 - Service Occupations: SafeServ and ProStart
 - Trade and Industry/Technical: A+ Certification, CISCO, Network+, NATEF individual certifications, AYES, American Welding Society (AWS), Auto Technician
- At the **postsecondary** level, building upon the current Minnesota State Colleges and Universities system accountability measures, the use of pass rates on licensure exams were implemented for nursing, radiography and law enforcement programs. However, using the measure of licensure pass rates as a proxy for technical skill attainment impacts only a limited number of programs and students.
- Minnesota is working with Hans Meeder Consulting and V-TECS to build baseline information through a survey on the extent to which high schools and colleges are using assessments to measure technical skills of students completing CTE courses and programs.
- Some high schools and colleges have been using the National Occupational Competency Testing Institute (NOCTI) assessments to measure technical skill attainment, particularly in nursing-related and allied health programs. We will explore additional uses of NOCTI assessments for both local and statewide implementation.
- SkillsUSA has developed assessments of Technical Skill Standards in 43 occupational areas for use at a minimal cost (\$20 for non-members and \$5 for members). Upon successful completion the partnering industry logos are placed on the certificates for students to include in their portfolios. (NOTE: other student organizations are in the processing of establishing this type of assessment but have none to date).

In December 2008, Minnesota hired Meeder and Associates to develop recommendations for a framework for technical skill assessments for secondary and postsecondary programs. The contract called for a focus group of staffs from both secondary and postsecondary to develop an “Assessment Blueprint” for CTE programs. Five pilot career pathways were chosen to work thorough the Assessment Blueprint to establish a set of common core indicators of performance for their specific POS. Among the specific tasks the consultant will undertake are:

- Face-to-face and electronic communications with the Technical Skill Attainment pilot sites for five content areas (Business Accounting, Health Therapeutics, Plant Sciences, Law Enforcement, and Information Technology). Through the pilot site work, a recommended process is being developed for all other pathways to identify the common core standards between secondary and postsecondary for assessment and evaluation.

- Document assessment processes and provide input to state on interim assessment and reporting approaches for skill attainment.
- Provide input to state on long-term assessment and reporting structure for skill attainment.
- Get industry input to the process and to validate and review the items that will be used within the assessments.

As of June, 2009, Minnesota was midway through its contract with Meeder and Associates. An Interim Report on the process is posted to www.cte.mnscu.edu. A final report will be posted after the end of the contract December 31, 2009.

Minnesota is proposing to adopt a different approach to gathering accountability data for the technical skill attainment indicator. While recognizing that the approach taken by secondary may be different from that taken by postsecondary, Minnesota faces fundamentally the same problem at both levels: the use of proxy measures (enrollment in, and graduation from, CTE programs) as an indicator for technical skill attainment. Shifting from such an approach to an approach that is exclusively based on third-party assessment will require the dedication of substantial resources, time and effort. Hence, Minnesota is proposing the following general approach as an alternative to measuring technical skill attainment:

- Two “baseline” measures will be established, one for secondary and the other for postsecondary. However, they are not **baseline** measures as traditionally defined. On the contrary, they are the state **target** rates that Minnesota intends to attain at the end of Perkins IV. In other words, these **baseline** measures are equilibrium rates that will be achieved as local consortia expand student and program coverage with regard to technical skill attainment using third-party instruments.
- For the FY2009 fiscal year, all secondary and postsecondary recipients will use the respective state equilibrium targets as the local targets for technical skill attainment
- Starting in FY2009, Minnesota begins the technical skill attainment process in which each new consortium will identify how they will use, assess, and report data on student achievement in technical skills.
- Each subsequent fiscal year, local consortia will set in motion strategies to expand student and program coverage, separately for secondary and postsecondary recipients.
- Efforts will be made to use the same assessment at the secondary and postsecondary levels, particularly across similar programs. However, adjustments to the measurement process will be made to accommodate the current level at which student is performing in the program of study he or she might be pursuing.
- As each local consortium begins to expand student and program coverage at different rates, the State will adjust local targets accordingly for the fiscal years following FY2009.

As indicated in the table below, Minnesota feels that the above approach will take into account eight characteristics to describe any technical skill attainment measure and answer the basic question underlying each.

A long-term goal for Minnesota will be to apply the characteristics shown in the table below and answer the underlying questions. By so doing, Minnesota intends to build and sustain a technical skill attainment process that is based on solid rationale, using cost-effective, widely-reported, well-aligned, broadly penetrable and perfectly-estimated assessment instruments, and leading to a true measurement of student technical skill performance levels. At the end of Perkins IV, Minnesota will be able to put in place a valid and reliable third-party assessment system that enables the state to annually collect, report, and analyze technical skill attainment data both for accountability and continuous improvement purposes.

<i>Based on solid rationale, can a cost-effective, widely-reported, well-aligned, broadly penetrable, perfectly-estimated assessment instrument truly measure student technical skill performance levels?</i>				
Characteristics	<i>Skill</i>	<i>Cost</i>	<i>Rationale</i>	<i>Alignment</i>
Elements	- Definition - Level of Inclusion - Degree of Specificity	- Test Development - Update costs - Administration Costs	- Measures the Value-Added of CTE - Direct Link to Employer Perceptions	- Industry Standards; - College and Program Accreditation (Student Learning Outcomes) - State and Local Requirements (Student Success)
Basic Issue	How is technical skill attainment defined?	Who bears the burden of the cost?	Why the need for differentiated system of accountability?	Which takes precedence?
Characteristics	<i>Penetration</i>	<i>Performance</i>	<i>Estimation</i>	<i>Reporting</i>
Elements	- Program Coverage - Student Coverage	- Target - Baseline - Variability	- Validity - Reliability	- End of Course - End of Program - At Job Market Entry
Basic Issue	Who takes the assessment and in which programs?	How does one arrive at a single performance level?	Does the estimation procedure truly measure technical skill attainment?	Which provides the most consistent results?

III. Implementation of State Program Improvement Plans

Much work was already undertaken, as part of the Transition Plan development, for building the various parts of the State CTE plan under Perkins IV. Minnesota continues to implement the State Plan for CTE. Minnesota's move from transition to a full five-year plan was made much easier because of the following pre-conditions:

- Early attention to a systematic data collection process, ensuring the integrity for those data, and a formalized local planning process that made these data central to meeting core indicator target levels,
- A unique requirement of the Minnesota Perkins III local application that at least 10% of each recipient's eligible funds be reserved for collaboration, to the development of a collaborative local application for FY09 and beyond,
- A state CTE structure in which secondary and postsecondary Perkins staff and leadership are closely aligned, and
- The collaboration for FY2009 that has emphasized, *for all students*, the building of career pathways using dual enrollment, beginning the process of developing technical skill attainment, improved Math and Science performance in high schools, and targeting high-skill, high-wage, or high-demand jobs as strategies for local improvement.

To promote a heightened expectation of collaboration between secondary and postsecondary CTE at the local level, the following ***guiding principles*** were considered instrumental in moving CTE forward in Minnesota under Perkins IV:

1. CTE and academic education must be integrated in a more comprehensive way.
2. College and work readiness skills are one and the same.
3. Each student needs at least some education or advanced training past high school, whether 2-year college, 4-year university, industry certification, or advanced training through work.
4. Federal Perkins funding for CTE is not an entitlement at either the state or local level.
5. All education spending must be connected with student success outcomes.

6. High schools and colleges should continue CTE programs and activities that have worked well.
7. CTE must be strategically placed within the broader vision, mission and goals for education within the state of Minnesota.

The CTE State Plan incorporates the following key changes and will affect Minnesota's career and technical education as follows:

- **Local Consortium:** Established formal consortia of secondary and postsecondary partners to receive Perkins funds and jointly administer programs and support services for all secondary and postsecondary CTE students through an *annual joint local consortium plan*. In Minnesota, 26 CTE consortia have been formed to implement the intent of Perkins IV locally.
- **Programs of Study:** Each local consortium must design, develop and implement programs of study/career pathways that span at least two years of high school and the first two years of postsecondary education to meet a new requirement under Perkins IV. These programs of study will be implemented by each consortium in an incremental fashion over the five-year span of the Perkins legislation.
- **Accountability:** The accountability provisions have more indicators, a greater degree of precision, and higher reporting requirements than under Perkins III. Under Perkins IV the accountability provisions include requiring:
 - The development of separate technical skill attainment measures as part of the overall accountability requirements.
 - Measuring of secondary CTE performance using the No Child Left Behind accountability measures.
 - Negotiation between each local consortium and the state on all accountability indicator targets and performance.
 - The preparation for the integration of EDEN reporting will eliminate duplicative staff time and efforts and duplicative counting of students dually enrolled between secondary and postsecondary.
- **Tech Prep:** Minnesota is combining the Perkins Basic and Tech Prep funds to support and reinforce the intent of Perkins IV, which is to connect secondary and postsecondary CTE – as has been the model under Tech Prep.
- **Special Populations**³: While ensuring the continued provision of programs and services to special populations, which has been the hallmark of the Perkins legislation both at the state and local levels, consortia must address through their local plan:
 - The targeting of under-served and special populations, by advocating the use of the effective strategies within the same quality CTE programs as all students, and measurement outcomes that apply to all other student populations, and
 - Preparing non-traditional students for high-skill, high-wage, or high-demand employment in the region.

Implementing the Minnesota State CTE Plan has policy implications beyond using Perkins funds to move forward CTE in Minnesota.

Perkins IV and the State CTE Plan: Policy Implications: Minnesota receives slightly under \$20 million annually under the Perkins Law with 85% going to high schools and community and technical colleges. This federal investment has done much to provide a direction for state and local expenditures on CTE for several decades. The Perkins funds represent a small investment when compared to state education spending as a whole (about \$15 billion for K-12 education and around \$3 billion for higher education). On the other hand, the State CTE Plan will result in a significantly wider impact on state education and workforce development systems beyond just operating CTE in Minnesota. For example, the State CTE Plan will:

1. Redirect how Minnesota designs its CTE programs to support programs of study/career pathways implementation.

³ In the Perkins legislation, the term “special populations” means (1) individuals with disabilities; (2) individuals from economically disadvantaged families, including foster children; (3) individuals preparing for nontraditional training and employment; (4) single parents, including single pregnant women; (5) displaced homemakers; and, (6) individuals with limited English proficiency.

2. Establish a differentiated system of accountability for all CTE programs that distinguishes between technical skill proficiency and conventional graduation outcomes, significantly affecting how learner outcomes are assessed in high school and college CTE programs.
3. Strengthen secondary and postsecondary collaboration by requiring high schools and colleges to expend Perkins funds as a consortium of high schools and colleges who together will meet the intent of the Perkins Law through a single joint local plan.
4. Determine the process for allocating Perkins funds to high schools and colleges based on rationale agreed to by the Chancellor of the Minnesota State Colleges and Universities and the Commissioner of the Minnesota Department of Education.
5. Coordinate data systems that allow for a wider array of accountability measures as students move directly from high school to college, in and out of education, and between education and employment.
6. Require that dual enrollment and articulation strategies be addressed as consortia are implementing programs of study/career pathways.
7. Support the goal of improving college readiness by identifying the high school academic and CTE courses that are preparatory to college programs as an integral part of implementing programs of study/career pathways.
8. Target Perkins funds to complement state and other federal programs that focus primarily on support services to the underserved student, including those classified as special populations.

Thus, in the larger frame, while it may not appear so on the surface, the State CTE Plan may have broader significant policy implications beyond CTE. In other words, the State CTE Plan is not just directing the federal (Perkins) funds but how they will interact with state funds to not only implement the intent of Perkins IV, but the State Plan shows how CTE will be strategically placed within the broader vision, mission and goals for education and workforce development within the State of Minnesota.

IV. Implementation of Local Program Improvement Plans

As already outlined above, the FY08 local application plan helped to set the stage for forming the 26 local Perkins Consortia that are comprised of high schools and two-year colleges within the Minnesota State Colleges and Universities system, all of whom received Perkins funds. The FY09 consortium local application plan required these 26 consortia to lay out a process for how they would begin collaborating, designing, and implementing programs of study. Each consortium submitted at least one program of study in April 2008 that it would implement fully by 2009-2010 (although more POS were developed once the process was understood at the local level) and five more in the spring of 2009 to be fully implemented by 2010-2011. Besides programs of study, the 26 consortia were asked to target inter-consortium relationships; business, community and education partnerships; special populations; and, consortia sustainability. For each goal the consortium planning describes strategies and objectives, measurements, and budget allocations. The submitted and approved local plans have been placed on the Minnesota CTE website www.cte.mncu.edu.

The new Minnesota consortium structure is predicated on 100% collaboration within each of the 26 consortia, and between the Minnesota State Colleges and Universities Office of the Chancellor and the Minnesota Department of Education when it comes to implementing the Minnesota Five-Year State CTE Plan. Therefore, even if issues appear specific to either secondary or postsecondary, their impact will be felt throughout Minnesota CTE because of how Minnesota has structured the implementation of Perkins IV throughout the state. Some of the major issues that continue to confront CTE programs in Minnesota include the following:

The Relationship of CTE to NCLB

Tightening budgets within the school districts are becoming more prevalent. Districts are cutting elective programs and those programs where the student:teacher ratio is low or the cost of the program is higher. With standards developed to comply with NCLB requiring more of the students' time in academic core classes and schedules, the ability to enroll in CTE (usually offered as electives) gets even tighter, particularly in rural school districts where creative scheduling and curriculum and resource sharing has become the norm. As CTE becomes even more de-emphasized in school districts, students in the few remaining elective programs have not been as successful in passing the required reading or mathematics state tests or are having trouble with the state postsecondary Accuplacer assessment.

Despite the uneven relationship of NCLB requirements and CTE, Minnesota has attempted, successfully to some extent, to embed some of the required academic standards for students to graduate within the classes of CTE program areas. Agriculture is specifically noted in legislation as allowable to meet science electives other than biology, and students can gain a half credit in Economics through either business or agriculture at this time. These courses are now being taught by teachers who must hold the appropriate licensure under HOUSSE Rules and pass the licensure exams for the content area they are teaching, though new rules now clarify under what conditions students may meet science, mathematics or arts credit requirements through CTE.

Research has shown that many students are not ready for the college experience. Students are ill prepared for the self-motivation that it takes, the rigorous academic and technical study, and the need for increased reading and mathematics skills. NCLB was developed to ensure that all students graduating from high school would have the skills necessary to be successful in either the work place or postsecondary opportunities. Many high schools have developed courses and programs that assist students who need additional learning opportunities. These opportunities include integration of the mathematics and reading skills in CTE courses, after school programs (Discovery Academy, Project Discovery, Bridges Academy, Jump Start, etc.), hiring additional staffing for remediation and tutoring, and in one consortium bringing back retired teachers to work with students for contextual learning to increase their skills.

Under NCLB *schools* are measured, via student assessments, for the Annual Yearly Progress (AYP), to ensure that *schools* continue to help students meet standards in the academic core subject areas. While the state has developed assessments in 1S1 Reading (grade 10) and 1S2 Mathematics (grade 11) to measure the AYP of *schools*, the measures were not designed for identifying individual student progress. The Minnesota Department of Education (MDE) has developed a sub-set of items within each of the NCLB assessments. Students will be required to pass the sub-set items to be eligible for a high school diploma and be recognized for graduation (3S1 & 4S1). Work continues with the MDE IT and assessment programs to ensure that valid data can be obtained for CTE concentrators who are successful with the sub-set of items for each of the required assessments. These valid data elements will be used for reporting the core indicators under Perkins IV.

Career Guidance/Exploration

While Minnesota Rules dictate that CTE activities are slated for grades 9-12, dollars may be spent on middle school activities for career guidance and exploration. Students in middle school through high school participate in activities such as:

- Field trips, speakers, shadow experiences, mentors, e-mentors, Sneak-a-Peek exploration, counselor training and job shadowing experiences, industry tours.
- Career portfolios (either electronic or paper), Career planning, Minnesota Career Information System (MCIS), the Naviance System, and the MN Careers Planning Resource Guide.
- Career Fairs at colleges or other high schools, and other school career day activities, many of which include guest speakers.
- WorkForce Center collaborations and Chamber of Commerce collaborations in local areas.
- Trio Counseling, and, E-PAS (Educational Planning and Assessment System).

The more opportunities students have to become aware of the available high skill, high wage, and high demand occupations that are available the better choices they will make in selecting coursework and careers. In many instances, the above activities are done through collaborating secondary and postsecondary partners within a consortium.

Special populations

Many districts used curriculum time to update curriculum in the CTE program areas for special population students. This update will assist students transitioning into the high skill, high wage, and high demand occupations and assist with the integration of reading and mathematics core curriculum within CTE classes. Other areas where dollars and time were spent for special population students were:

- An ELL transition coordinator was hired (Minneapolis has 87 languages within the district),
- ProStart curriculum was introduced into the school,
- Tech tutors and paraprofessionals assisted in classroom activities,
- Adaptive equipment was purchased where needed to assist with hands-on activities,
- Available support services were used within the districts,
- Tree Trust was used for students to gain employment opportunities,
- A retired counselor was hired back to work with special education students with resume and career building lessons,
- Job seeking through local Private Industry Council (PIC), and
- Districts are inviting the CTE staff to participate in the IEP Process for students with disabilities.

Curriculum

School districts are becoming more creative with ways to provide courses to students due to the shortage of dollars and decline in student populations especially in the rural areas. There has been an increase with:

- On-line and ITV courses being offered for transcribed credit through both secondary and postsecondary institutions,
- Programs are offering web based curriculum for dual credit,
- More articulation and partnering with state colleges and private institutions,
- An increase in the number of concurrent courses,
- CTE student organization leadership and technical assessments have been made available and are being used as third party assessments (through local, regional, state, and national competitions),
- Some districts and institutions are using the career fields and clusters in their local registration booklets,
- There is a continuing use of the Math in CTE curriculum/integration that was offered around the state in FY2007,
- There is an increase in summer internships for teachers and counselors, and
- The STEP (Secondary Technical Education Program) model from Anoka is gaining popularity because of it's co-location with the area technical college and the ability to use the same technical labs and equipment as the postsecondary students do. There is a movement to establish more of these types of programs where there is co-location as well as co-programming so that secondary students have the ability to gain access to industry based equipment and college-rigorous curriculum (dual credit). Currently St Paul school district is establishing joint programs with their consortium partner, St Paul College in the PLTW/engineering cluster. Rochester area schools are working with Rochester Community and Technical College, and the Mayo Health Clinics, for health programs and many more districts and technical colleges are making great advances due to the programs of study/career pathways model.

Advisory Committees

In the past it has been difficult to maintain and recruit individual business, industry, and parent volunteers for the schools/programs Advisory Committees. Under Minnesota's new consortium structure, the expectation is to establish joint advisory committees for meeting the needs of both secondary and postsecondary programs through articulation of programs, transition support for students from secondary to postsecondary, and continuous program support, evaluation, improvement, and assessment opportunities. Many consortia met with joint committees for FY09 but in some consortia merging the committees will be a slower process.

Programs of Study

In their FY2009 (July 1, 2008 to June 30, 2009) plan, each of the now-established 26 Perkins consortia had to focus and concentrate on implementing at least one program of study within the consortium, as required under Perkins IV (although many consortia created and submitted more than one). The focus of the FY2009 local consortium plans was to get the programs of study framework developed at the local level. In these plans, the following were identified as the primary pathways that could be developed and prepared during FY2009: Business Management, Engineering, Health, Construction and Building Trades, Welding and Manufacturing, Information Technology, and Natural Resources and Agriculture.

Upon reviewing the submitted local consortium application plans and the Annual Program Reviews, which described in detail how at least one of program of study will be/was implemented at the local level, positive aspects surfaced:

- The consortium partners (includes at least one school district and at least one postsecondary institution) can share best practices, professional development, and in some cases they can share labs and equipment, and resources to help defray costs of individual schools establishing their programs of study,
- By shifting the focus of secondary teachers and postsecondary faculty to look at quality and not quantity in developing programs of study within their respective institutions, secondary teachers and postsecondary faculty are motivated to improve their individual programs within the defined program of study,
- Setting in place seamless transitions from secondary to postsecondary through programs of study by reviewing CTE programs/courses, current articulation agreements developed under Tech Prep, concurrent enrollment, and other postsecondary enrollment options available in CTE areas,
- While it is not a state expectation that each consortium offers both the secondary and postsecondary elements within a defined program of study, it is a state requirement that each consortium address through its local application plan how it would provide a continuum of services for all learners (the so-called brokering of services). Brokering of services will provide collaboration with other consortia, as needed, to assist learners in locating programs of study that meet their career interests and aspirations and to assist learners in locating and identifying the appropriate preparatory courses or learning activities not available locally.

While significant attention was paid to all of the above issues by the local Perkins consortia in their local application plans, the primary focus at the state level was the development, completion, submission and approval of the Five-Year State CTE Plan. At the local level, the focus has been, first, to develop the new consortium structure, and then, detailing the strategy for implementing at least one program of study at the local level. As the state moves forward, the focus will shift to accountability at the state level, particularly technical skill attainment, and addressing issues described above at the local level, beyond just implementing programs of study.

V. Looking Ahead: Implications for FY2010

On April 1, 2008, the State CTE Plan was approved by the US Department of Education. The State CTE Plan (available at www.cte.mnscu.edu) was developed to meet the intent of Perkins IV. On April 20, 2009, the state plan revisions were submitted and approved by the US Department of Education. As explained in the State CTE Plan and the revisions, much work and time, beyond just the transition year, was provided to local recipients of Perkins Basic and Tech Prep funds to develop collegial relationships for gaining the trust that will be needed for the 100% collaboration required in successfully implementing the local consortium application plans. The early results from the implementation of Perkins IV in Minnesota have been promising and show the state moving forward with few problems. There are, however, still issues that will need to be worked out in the upcoming FY10 (July 1, 2009 through June 30, 2010). They include:

- Addressing secondary licensure issues and the embedding of academic standards within CTE courses to allow CTE teachers more flexibility under NCLB requirements (as this is an on-going issue).
- Changing demographics and reduced student counts is impacting state funding of local school districts, which in turn has strained how CTE operates in high schools especially in rural areas.
- Making high school teachers and postsecondary faculty more central to local development and implementation of programs of study.
- Removing funding and geographic imbalances within and across consortia so that all partners see themselves as equal partners for delivering CTE at the local, regional and state levels.

- Formalizing secondary and postsecondary accountability frameworks that permit state-to-local negotiation of performance targets.
- Continued development of a statewide framework for measuring technical skill attainment within career pathways and programs of study coordinated at the secondary and postsecondary levels.

Implementing the intent of Perkins IV in high schools and colleges through the 26 local Perkins consortia will be the paramount focus for improving and sustaining CTE programs in Minnesota over the next four years. These local consortia will continue implementing strategies that focus on:

- Developing collaborative partnerships, with the career pathway/programs of study as the centerpiece, for providing a continuum of education programming and support services to ensure smooth transitions from secondary into postsecondary education, in and out of postsecondary education, and between education and employment.
- Applying the same continuum of education programming and support services for students of color, for under-served populations, and for special populations as those that are applied to other groups.
- Establishing a differentiated system of accountability that distinguishes between technical skill proficiency and conventional academic success outcomes.
- Sustaining a statewide CTE consortium structure in which school districts and colleges are jointly attracting large numbers of high performing successful CTE students who, after completing their education, leave with sound academic knowledge and strong technical skills, making them ready for the fast-paced 21st century economy.
- Supporting nontraditional students in programs identified as high skill, high wage, and high demand.

By successfully implementing the above strategies through its new consortium structure, the Minnesota Five-Year State CTE Plan and its revisions will make CTE front and center, and on equal footing, to directly address the education and workforce issues embedded within the triad of high school reform, education and employment transitions, and American competitiveness.