

# Perkins IV Consolidated Annual Report (CAR)

*Program Year (PY) 2008  
(July 1, 2007-June 30, 2008)*

## A. Cover Sheet (attached)

## B. Narrative Performance Information

### B1. Implementation of State Leadership Activities

#### Required Uses of Funds

##### ❖ Assessment of CTE Programs

Each CTE regional center is required, by State Board of Education rule, to have an evaluation every five years. These evaluations review requirements for Perkins, Vermont statutory compliance, and NEASC criteria for schools. Reviews are conducted on site by a team of external evaluators and a VT DOE representative. The review combines a program evaluation, based on CTE program standards of VT DOE, with a monitoring and compliance review of the recipients' local application activities. Formal evaluation reports are submitted to the regional center from the NEASC team and the VT DOE review, highlighting accomplishments and identifying areas for improvement. The regional center must respond to the required improvements and/or corrective actions defined in these reports.

There is also an annual self-assessment report that each center submits as part of the annual monitoring and review process. Centers are required to assess the performance of each of their CTE programs in relation to state thresholds and Federal Perkins performance targets. Each regional center must identify each program's objectives for improvement during the year. This is the basis for prioritizing Perkins activities and fund allocations. An assigned VT DOE coordinator reviews the center's self-evaluation and approves final objectives for program improvements, providing technical assistance to achieve these improvements. End of Year reports provide an additional reporting event for monitoring of activities.

##### ❖ Use of Technology

State leadership on the use of technology focuses on ensuring that centers engage stakeholder communities on a regular basis to identify current workplace technologies in all career education programs. Programmatic improvements must demonstrate community, business/industry engagement. Through this engagement, many industry groups donate state of the art equipment to our centers. Vermont DOE administers a State-funded

Equipment Replacement Fund to encourage centers to keep their technology current.

❖ Professional Development

*Statewide Transformation* – VT DOE continued the Statewide discussion of school transformation with high school and regional CTE educators. Focusing on the 21<sup>st</sup> Century Vermont high school, the DOE strives to ensure that each student can succeed in college, careers and citizenship. Vermont DOE has been studying for over 18 months some specific ways to bring more flexibility and innovation to the Vermont's secondary school model, including the regional CTE centers. During the reporting period, VT DOE reviewed promising practices in selected high schools/CTE programs throughout the country in order to identify opportunities for improvement for Vermont education in the 21<sup>st</sup> century. Culminating years of community engagement and multi-State discussions, the State of Vermont recently announced a partnership with Maine, New Hampshire and Rhode Island to study new approaches to secondary education with the assistance of \$1 million grant from the Nellie Mae Education Foundation and the Bill and Melinda Gates Foundation. The grant will help the four states form a regional initiative to "transform secondary education for the 21st century."

*CTE Mentor Program* – regional center sub recipients provide funding to operate a statewide Mentoring Program for new teachers who enter technical education without teacher preparation. This program offers course work through the state colleges and individual mentoring and classroom observation. This program operates under the direction of the regional CTE Directors' Association.

❖ Improve Academic & Technical Skills

*Industry skill standards* – To strengthen the rigor and relevance of technical skills taught in the CTE programs, we continue to convene industry stakeholders to review and update the learning standards of the programs. During this reporting period, VT DOE provided targeted support to programs in Construction, Automotive, Engineering, Hospitality and Tourism, Public Safety, Business and Human Services. We continue to expand our use of industry based certifications and published a revised manual of approved VT DOE certifications, requiring an assessment of student skill attainment for each approved credential. We identified the competency areas for focus in our 21<sup>st</sup> Century Skills and prepared competencies for "All Aspects of the Industry" which CTE programs must address. These include competencies in the areas of business enterprise/entrepreneurship, technical/occupational skills, academic skills and 21<sup>st</sup> Century Skills. VT DOE collaborated with the VT Chamber of Commerce and a postsecondary partner in the creation of a

new State Hospitality Certification based on a rigorous written and practical skill assessment, including academic skills.

*Career Clusters* – VT DOE prepared a Vermont model for Career Clusters which aligns to the National Career Cluster model. Through the identification of 6 super clusters, Vermont began to focus on developing a relationship with our guidance activities, educational programming and State economic needs. Through a data sharing collaboration with the VT Department of Labor, VT DOE established alignment with our CTE secondary and postsecondary programs with VT wage information, occupational projections through 2014, and skill levels of occupational areas. For the first time, we have concordance between our instructional programs (CIP, Cluster/Pathways) and the projected wage and demand data for Vermont. We established policy and criteria around Vermont’s High Skill and High Wage or High Demand Occupations using these data sets to inform program design and career guidance/counseling activities around the Career Clusters.

#### ❖ Non-traditional Preparation

Perkins funds continue to support gender equity and civil rights work. These efforts included:

- The annual “Women Can Do” conference attracted over 390 young women to have hands-on experience with nontraditional career options. Thirty-three workshops were offered this year with a focus on Green Technologies and high skills/high wage non traditional opportunities in fields such as Information Technology and STEM related careers. This has become an important recruitment mechanism for bringing young women into nontraditional CTE programs and has grown annually with VT DOE support.
- Each regional center had to evaluate nontraditional participation at their centers and to identify strategies for increasing NT participation and completion in their annual Perkins plan.
- Our civil rights monitoring reviews are conducted annually and identify any barriers to NT participation.
- The VT DOE “High Skill and High Wage or High Demand Occupations” criteria and data provide a valuable resource for program development and career guidance professionals to identify careers for students.

#### ❖ Educational Partnerships

Perkins and Tech Prep funding have provided an action-oriented collaboration between VT DOE, regional CTE centers and the Vermont State College System. State workforce development funding was approved to expand dual enrollment opportunities for secondary students, including on-site options for regional CTE centers. A State Dual Enrollment Advisory Board was

convened to coordinate activities and collaborate towards the expansion of opportunities.

A VT DOE and State College team attended workshops concerning Program of Study development and Concurrent/Dual Enrollment. New data sharing agreements were explored and data elements were shared between both educational systems.

As we move toward development of broader programs of study expanding to cover grades 9-12 and postsecondary transitions, it requires greater collaboration of sending high schools and regional CTE centers. VT DOE has supported these initiatives through technical assistance and leveraged funding. State funded grants for Program Innovation have focused on the need for higher level skills and greater span of grade levels. Our “Pre-Tech Foundations” programs for 10<sup>th</sup> graders have been developed to pilot at sending high schools, allowing some regional centers to deliver programs outside of the traditional center system. Some regional centers have collaborated with the Vermont Youth Conservation Corps to deliver highly personalized and targeted academic supportive programming while delivering learning “in the field”. Other partnerships include:

- VT Associated General Contractor-development of assessment techniques, identification of meta standards of higher thinking skills, delivery of professional development to Construction Cluster faculty, identification of Green Building/Design Competencies, sponsorship of Skills USA competition, Construction Career Day with emphasis on non traditional recruiting.
- New England Culinary Institute-development of State Hospitality Certification and Assessment, revision of secondary program standards to align with postsecondary, professional development opportunities, sponsorship of Skills USA competition.
- VT Chamber of Commerce-collaboration with the Chamber and their VT Hospitality Management Councils and Hospitality Management Education Foundation, hosted Pro Start activities, participated in Skill Standards alignment and endorsement, identification of meta standards for higher thinking skills in programs, scholarship program aligned to the new State Hospitality Certification.
- Vermont Automotive Dealers Association-developed 18 practical/scenario assessments, assisted with 600 test item bank, endorsement of standards for new General Service Technician curriculum framework and certification., provided professional development for State-wide secondary and postsecondary educators in the latest manufacturers specific training.
- Regional Technology Strategies Inc.-provided guidance in identifying Vermont’s economic clusters for development of instructional programming and State support for growth.

❖ Serving Individuals in State Institutions

The Department of Corrections received Perkins funding to support technical education programming at correctional facilities. As one example, in the Automotive Technologies Program, the Corrections instructor also participated in our VT Automotive Dealers sponsored professional development and incorporated the new VT DOE General Service Auto Technician certifications and assessments.

❖ Special Populations

Perkins funds were used to employ licensed Special Populations teachers at our regional centers. These specialists assist in the appropriate placement of special needs students and in their ongoing support for successful participation in their CTE programs.

The department drafted guidelines to resolve difficulties with admission practices that could have negative consequences for enrollment of special populations. A DOE coordinator continues to collaborate with the State's Career Start Team, providing multi-agency collaborative opportunities in support of Vermont's special population students.

Technical Assistance

VT DOE consultants work closely with career cluster teachers, center directors, guidance personnel, coop personnel, adult coordinators, and special needs instructors to assist them with the implementation of improvement practices. For example, career clusters worked on revising program competency lists, identifying skill assessment instruments, sponsored pilot administration of assessment instruments and integrated mathematics and literacy across the CTE programs.

Additionally, consultants offered numerous workshops during the reporting year to inform and support sub recipients with the new Perkins IV accountabilities. Regional professional development days as well as center-wide seminars were provided to coordinate activities in support of skill assessments, integrated academics, community engagement and postsecondary transitions.

**Permissive Uses of Funds**

❖ Improving Career Guidance and Academic Counseling Programs

The Department supported the "Career Pathways" conference with the

Vermont Student Assistance Corporation, designed to promote career awareness and counseling in pathway programs with rigorous academics and postsecondary transitions.

❖ Support for Entrepreneurship Education and Training  
&  
Support for All Aspects of the Industry

VT DOE is a partner in the National Consortium for Entrepreneurship and has endorsed the use of these competencies in Programs of Study in Business Cluster as well as in the fulfillment of incorporating the “All Aspects of the Industry” competencies. During this program year, initial steps were taken towards the development of skill standards and assessments in entrepreneurship for use in Programs of Study.

❖ Improvement and Development of New CTE Course

The Department engaged in the development of new programs in the Public Safety Cluster and participates on the national board of the National Partnership for Careers in Law, Public Safety and Corrections. As mentioned earlier in this document, the VT DOE engaged in skill standards development for Entrepreneurship to address “All Aspects of the Industry” in all Programs of Study.

❖ Development of Valid and Reliable Assessments of Technical Skills

VT DOE engaged in rigorous activities in the development of Skill Assessments. These included:

- Engineering Technologies-supported the collaborative courses in engineering and design utilizing local industry members in real problem solving situations with multi-disciplinary students at two regional centers.
- Developed a new VT General Service Automotive Technician Program with the assistance of the VT Automotive Dealers Association. Utilizing 18 scenario assessments and a 600+ test item bank created with automotive faculty from postsecondary and secondary CTE facilities, VT DOE established a State-wide industry endorsed technical skill assessment and certificate.
- Culinary Arts/Professional Foods faculty worked collaboratively with the DOE, VT Chamber of Commerce, VT Hospitality Management Council and the NE Culinary Institute to develop a State Hospitality Certification Program which included a written and practical skill assessment. Piloting of this assessment was completed at 4 regional centers during the reporting year. Statewide work continued through the reporting year and continues today in the

development of a Program of Study assessment for all Culinary Programs with a pilot date in the Spring 2009.

- ❖ Supporting Occupational and Employment Information Resources  
VT DOE established State definitions for High Skill and High Wage or High Demand Occupations in Vermont. VT DOE compiled valuable data regarding Vermont's high skill, high wage and high demand occupations in collaboration with the VT Department of Labor. This extensive project provided regional career centers and postsecondary sub recipients with critical employment and wage data for program planning and career counseling purposes.

## **B2. Progress in Developing and Implementing Technical Skill Assessments**

### **1. Current State of Assessments**

Beginning in 2006, VT DOE began addressing the Perkins IV requirement of States to measure technical skill attainment through a multi-faceted plan. Approved CTE programs could assess student proficiency through the use of the following:

- VT DOE approved industry recognized certification which measured appropriate scope of the program's standards and included a valid/reliable assessment instrument.
- State of Vermont certification or license required for the career field
- Third party developed and VT DOE approved assessment instrument
- VT DOE developed assessment instruments, validated by a recognized business/industry organization or group appropriate for the CTE program area.

<b>Vermont CTE Technical Skill Assessment Plan</b>		
<b>Program Area</b>	<b>Assessment Strategy</b>	<b>Timeline</b>
Health-Nursing	Utilize LNA State License	Existing
Carpentry	Utilize National Construction Careers Test (NCCT)	Pilot Spring 2009
IT-Networking	Utilize Cisco CNA	Existing
Emergency & Fire Management	Utilize Firefighter I State Certification	Existing
Cosmetology	Utilize State Cosmetologist License	Existing
Automotive Technology	To develop an on-line version of the Vermont GST Automotive Assessment	-Pilot completed Spring 2008 -On Line-Spring 2009
Culinary Arts	Conduct skill standards alignment with Arizona standards	Fall-winter 2008
	Test item selection, development, pilot and review	Spring 2009
Business and Marketing	Conduct skill standards alignment with Arizona	Fall-winter 2008
	Test item selection, development, pilot and review	Pilot: Spring 2009
	Investigate Mark-Ed Assessments	Spring 2009
HVAC, Electrical, Plumbing	Conduct skill standards alignment of construction core with Arizona	2008-2009
	Test item selection, development, verification	Fall 2009
	Review use of State Electrical Apprenticeship Test and HVAC Excellence Assessment.	Spring 2009
Information Technology-Unified Communications	Analysis of current secondary IT programs, compare against state-of-the-art IT skill standards, curriculum alignment	January-May 2009
	Create new program design	Summer 2009
	Test item selection, development	Fall 2009
	Pilot assessment instrument	Spring 2010

## 2. Estimated Percent of Student Concentrators

At present, we have implemented or are in the process of developing and conducting pilot administration of assessments in 12 secondary program areas, representing approximately 6% of the student concentrator population.

## 3. State Plan to Increase Participation and Coverage

Due to the nature of Vermont's shared time regional CTE center system, it was

determined that most commercially available assessments did not align well with the depth of Vermont CTE programs. Typical of many small States, Vermont's volume of students is quite small compared to most other States. The capacity to address the measurement of technical skill attainment in a timely manner will be challenged if Vermont did not investigate all available resources. Consequently, VT DOE embarked on a mission of establishing collaborative relationships aligned with this Perkins task. As a member of the VTECS Consortium, we are investigating the potential collaborative relationships with other member States. In October 2008, VT DOE convened a meeting with VTECS, Arizona DOE, Global Skills Xchange and Pittsco Technological Fluency Institute (TFI). As a result, VT DOE is in the process of delivering program assessments on-line through TFI. During the Spring 2009, VT DOE will re-evaluate the success of these collaborations and if deemed appropriate we will move forward to identify the next programs to assist in the development of technical skill assessments. We have established a number of State thresholds to measure sub recipient progress including "Technical Skill Assessment Participation Rate". Our goal is to achieve a 25% participation rate of concentrators by the completion of the FY2010 program year.

Within New England, there are a number of multi-State DOE initiatives which we will strengthen and build upon over the next year. Vermont, New Hampshire and Rhode Island collaborate in the use of the New England Comprehensive Assessment Project (NECAP), our NCLB State Assessment. In fact, OVAE awarded a Technical Assistance Grant for the three States to develop strategies in regard to improvement of NECAP CTE student performance. Likewise, these States with the addition of Maine have formed a High School Transformation collaborative; an effort that was recently awarded a Nellie Mae Education Foundation Grant to form a regional initiative to "transform secondary education for the 21st century." Additional funding was provided by the Bill and Melinda Gates Foundation.

### **B3. Implementation of State Program Improvement Plans**

#### Vermont Met All Indicators

Note: While Vermont met or exceeded all State Performance Levels for this reporting year, we realize that the future is challenging. The FAUPL targets set by OVAE for the next reporting year are substantially higher, particularly in Mathematics performance.

Due to the timing of the NECAP assessments in grade 11, measuring end of grade 10 student proficiency, CTE students are just beginning their CTE program. Academic proficiency measured at this place in time is a reflection of pre-CTE academic achievement. Improvement activities will need to focus on 9<sup>th</sup> and 10<sup>th</sup> grade strategies and will be differentiated by State initiated activities, secondary sending school activities and regional CTE center activities. While regional CTE centers are required to foster collaborative relationships and course development aimed at improving student preparedness to enter CTE 11<sup>th</sup> grade programming, the actual results of these collaborations may vary by the readiness of all partners. Regional CTE center sub recipients are also required to develop and implement plans to promote academic gain of students within the CTE programs in grade 11 and 12. These efforts will likely be more

fruitful within the CTE regional center and will provide a smooth transition for students to the workforce or to postsecondary. Thus the more productive efforts to improve “end of 10<sup>th</sup> grade” academic proficiency will rest with the VT DOE and the administration of the secondary sending schools. Towards this end, VT DOE has revised the procedure for identified schools to include CTE regional centers in the development of their improvement plans. VT DOE has also developed tools for identified secondary schools including a diagnostic test item data base aligned to the VT Grade Expectations for academic performance. Through the use of these and other initiatives, we believe that student proficiency will improve.

#### **B4. Implementation of Local Program Improvement Plans**

##### Local Recipient Data

One local eligible recipient did not meet at least 90% of the negotiated local adjusted level of performance in Reading. Four local eligible recipients did not meet at least 90% of the negotiated local adjusted level of performance in Mathematics. All sub recipients met or exceeded the graduation level. While this information may appear to be moving in a positive direction, further analysis of the data is disconcerting.

##### Noted Trends

###### 1. 1S1 Reading

Female students performed better than male students in NECAP Reading measures. Special Populations students showed disparities in proficiency when compared to all students, particularly ADA, economically disadvantaged and single parent category students. Non traditional students showed performance in Reading that measured above the average for all students (59%).

###### 2. 1S2 Math

While four local recipients failed to meet 90% of the local adjusted levels, 11 of 15 did not meet this year’s State negotiated level of performance in Mathematics. Next year’s State performance target is set by OVAE at 20%; a challenging target. Male students performed better than female students. Special Population students did not perform as well when compared to all students.

###### 3. 4S1 Graduation Rate

While all local recipients met or exceeded their local adjusted levels, we witnessed trends in ethnicity and special population student segments. Specifically, American Indian/Alaskan Native did not reach State or local levels of graduation; nor did Single Parent students.