

CONSOLIDATED ANNUAL REPORT (CAR)
FOR THE CARL D. PERKINS
CAREER AND TECHNICAL EDUCATION ACT OF
2006

North Carolina
2007/2008

Combined Submission: Secondary and Postsecondary

1. Implementation of State Leadership Activities

North Carolina has performed multiple activities utilizing State Leadership Funds and addressing each of the nine Required Uses of Funds as required by Section 124(b) of Perkins IV. The following are the major initiatives and activities undertaken during 2007-2008.

SA Development of Secondary Career and Technical Education Curriculum
During 2007-2008, secondary CTE continued its focus on improving curriculum. Working with Dr. Loren Anderson, principal author and editor of *A Taxonomy for Learning, Teaching, and Assessing*, state staff used Revised Bloom's Taxonomy (RBT) to work with teachers, community college and university faculty, and working professionals to develop essential standards, related curriculum products, and aligned assessments. In Summer 2008, materials were released for seven courses. Resulting curriculum has received national recognition and is now being used as a model for curriculum development for non-CTE areas in North Carolina K-12 education.

This ongoing curriculum improvement project started in 2005. In addition to the courses released in 2008, 12 courses also were under development with an additional 15 projects slated to begin during 2008-2009.

Curriculum developed using this process is designed to meet the needs of new teachers, particularly teachers coming directly to the profession from business and industry. A professional development plan guides the training that accompanies release of each new curriculum product. Extensive training for teachers and other users was conducted at the annual NC CTE Summer Conference. This training included instruction on how to use the RBT curriculum, technical updating of content, and information on best instructional practices. Additional training was also provided to CTE Administrators and eligible agency

personnel who work with teachers to improve the use of curriculum and instructional practices.

SB Services to Non-Traditional Students

To address the two Perkins nontraditional Perkins performance indicators we have initiated implementation of the National Alliance for Partnerships in Equity's [NAPE] "Guide for Program Improvement for Perkins IV: Nontraditional CTE Program Participation and Completion." Presentations have been made to Special Population Coordinators and CTE Administrators throughout North Carolina to identify possible root causes of the lack of nontraditional students participating in one or more courses that lead to nontraditional occupations and how to improve. The list of NC nontraditional courses was revised to align to the list of Nontraditional Occupations for Males and Females based on 2006 Bureau of Labor Statistics Data.

North Carolina CTE continues to evaluate LEA student demographic data to assist LEAs to improve their nontraditional enrollment and completion percentages. CTE staff presented at several statewide conferences on "Perkins IV and Five-Year Plan for Special Populations," and "Understanding Equity and Diversity." CTE brought nationally recognized speakers to NC's Tech Prep Conference to present on Special Populations and STEM topics. The parent supplement for American Careers magazine was purchased for students in exploratory CTE programs and their parents. CTE also developed booklets and brochures as well as Powerpoint presentations on Training on Harassment and Bullying Prevention, believing that harassment and bullying contribute to nontraditional students not enrolling or declining to continue in nontraditional courses.

SC Focus on 21st Century Technologies

North Carolina is working continuously to utilize 21st Century technologies in instruction and administration to take advantage of improvements in functionality and operational efficiencies. In 2007-08, these efforts focused in three areas:

- 1. Updating of the Planning and Performance Management System/Local Planning System.** This application, which is used by local school systems to analyze current performance and to plan strategically for continuous improvement, was updated to align with standards in the 2006 Carl Perkins Career and Technical Education Improvement Act. This updating included cosmetic improvements to make the system more user friendly as well as extensive reprogramming to incorporate Perkins IV performance indicators. The new version of this tool was renamed the Local Planning System to communicate its purpose more clearly with local users. Version 1.0 was launched in April 2008 and local administrators were able to use it for planning for the 2008-2009 academic year. The launch also included training and user support for local administrators. Version 1.1 is currently under development and should be released in Fall 2008 to provide additional functionality.

- 2. Migration/consolidation of data collection and analysis tools.** A decision was made by the state of North Carolina to phase out the software previously used to analyze CTE data and create reports for local and state use and to generate reports required under federal accountability guidelines. Funding for migration of these operations was supported in part by the state of North Carolina. The resulting application, the Career and Technical Education Analysis and Reporting System, eventually will be able to collect CTE enrollment data, match it to performance data from CTE and from the Division of Accountability, link that to information about students' classification in special populations from multiple other sources, and generate reports to submit to the U.S. Education Department. This report will be used by CTE at the state level for planning and providing technical assistance and at the local level for strategic planning and planning for instructional improvements. Version 1.0 of the application, which will generate data needed for the Consolidated Annual Report, will be released in Fall 2008. The system should be fully functional by Spring 2009.
- 3. Computerized Instructional Management System.** After extensive study, a decision has been made to move North Carolina's CTE Instructional Management System, formerly known as VoCATS, to a web-based platform. The system currently operates using PC-based applications and out-of-date software. During 2007-2008, CTE and Information Technology staff worked with local users to review packages available off-the-shelf to see what features are readily available and what additional functionality is needed. A detailed requirements document was produced and a RFP was drafted. The RFP is scheduled for release in January 2009 and a pilot will be conducted in Spring or Fall 2009. The long-range plan is to have an application in place that will fully integrate the instructional management system with NC WISE, the state's student information management system. Using the Internet will allow the state to push information directly to teachers and to collect data directly, eliminating significant amounts of time and resources spent in transfer of information to paper forms and manual electronic transmittal of files.

SD Assistance to Districts and Schools

North Carolina Career and Technical Education has worked closely with statewide school improvement initiatives. During 2007-2008, this involvement has focused on Comprehensive Assistance to Districts and Schools, a state-directed project to focus attention and resources on schools with the greatest opportunity for growth, based primarily on No Child Left Behind measures. State CTE staff worked with representatives from throughout the agency to develop strategies for locating schools and local systems most at risk, helping these organizations assess their own needs, and targeting resources as needed. Regional-based CTE staff have worked with targeted organizations to integrate CTE data into the planning process and CTE resources into the solutions.

CTE also worked with other statewide initiatives that focus on improvement of students' competency in mathematics and language and in increasing the graduation rate, including development of resource materials aligned to the Future-Ready Core graduation standards, development of a new statewide accountability model, and strengthening of mathematics and language content and instruction in CTE classes.

Finally, North Carolina began work to transition from the state's existing 10 pathways to the 16 Career Clusters that are part of the federal Career Clusters initiative. This new plan is expected to be in effect with entering freshmen in 2009-2010, which is also when the state's new graduation requirements begin.

PA Expansion of the Virtual Learning Community (VLC) – an NCCCS repository of online courses available for download by individual colleges.

In 2007-2008, eight CTE courses were completed. Available courses in the VLC library enable colleges to build programs of study to offer seven complete AAS degrees online.

PB Support and Expansion of the North Carolina Network for Excellence in Teaching (NC-NET) – online access to quality professional development for NCCCS CTE faculty. NC-NET offers, based on identified faculty need, online courses and tutorials, planning tools, databases, resource exchange, and a discussion room. Resources are organized into five areas: Teaching and Learning, Discipline-Specific, Career and Personal Development, Technology in the Classroom, and Online Teaching. In 2007-2008, three regional centers were supported and numerous modules were added.

PC Career Counseling Information – Each college received publications designed specifically for North Carolina that are intended to assist in the guidance of students as they choose careers. Each of the careers highlights CTE and specifically encouraged non-traditional participation in these careers.

PD Professional Development Activities – opportunities for NCCCS CTE faculty, staff, and counselors to improve teaching skills and remain current with the needs, expectations, and methods of industry. Projects included the following.

Using Technology to Enhance Instruction – professional development and modules developed to assist V/T faculty in preparing online courses.

Assessment for Excellence: Accomplishing Our Mission – series of assessment related events and activities with an emphasis on career and technical faculty, the project heightened faculty awareness and understanding of assessment at the classroom and institutional levels.

Core Competency Instructor Training Series – developed 12 tutorials that addressed aspects of four core competencies that are important for workplace success (communication, critical thinking, personal growth and responsibility, information technology and quantitative literacy).

Preparing a Cadre of Master Distance Learning and Instructional Technology Trainers – professional development and modules developed master instructors and to assist V/T faculty in preparing online courses.

Using Live Streaming Audio/Video Technology as Classroom Enhancement Tool—professional development and modules developed to assist CTE faculty in preparing online courses.

Electric Arc-Flash Hazards Training—training for welding instructors from multiple colleges on hazards, safety requirements, and personal protective equipment.

Enhancing Instructional Effectiveness for a 21st Century Learning Environment – workshops on classroom instructional strategies related to student learning, student incivility, and classroom management techniques.

Speaking Across the Curriculum – training for CTE faculty on the improving oral communication skills of all students, with a particular emphasis on Hispanic/Latino students.

Achieving Distance Learning - Career & Technical Instructor Training – professional development and modules developed to assist CTE faculty in preparing online courses.

Developing Quality Online Instruction – professional development and modules developed to assist CTE faculty in preparing online courses.

Videographic Skills Building to Increase Effective Teaching in the Distance Education Environment – professional development and modules developed to assist CTE faculty in preparing online courses.

**Required Uses and Permissible Activity Charts
2007-2008**

Project	Required Uses								
	1	2	3	4	5	6	7*	8	9
SA	X	X	X	X		X		X	X
SB		X	X		X			X	X
SC	X	X	X			X			X
SD	X	X	X	X		X			X
PA		X	X			X		X	X
PB	X	X	X	X		X		X	X
PC	X				X				
PD		X	X	X		X		X	X

* North Carolina meets Required Use #7 through a direct allocation to the North Carolina Department of Juvenile Justice and Delinquency Prevention.

Project	Permissible Activities																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
SA	X		X			X	X		X					X		X	
SB	X			X													X
SC														X	X		X
SD	X		X					X	X						X	X	
PA									X								
PB		X				X			X					X			
PC	X												X				
PD	X					X			X					X		X	

2. Progress in Developing and Implementing Technical Skill Assessments

Secondary

Technical Skills Assessments are offered in all eight program areas in North Carolina: Agricultural Education, Business and Information Technology, Career Development, Family and Consumer Sciences Education, Health Occupations Education, Marketing Education, Technology Education, and Trade and Industrial Education.

One focus of efforts during 2007-2008 was to clean up enrollments to assist local school systems in determining exactly which students are expected to be assessed. Previously, issues with the enrollment system resulted in counting students who never actually started a particular course or who transferred prior to availability of the assessment. In addition, the formula for calculation of performance indicator 2S1, Technical Attainment, was revised to include a mathematical penalty for testing fewer than 95 percent of enrolled students in courses for which an assessment was available.

For this baseline year, scores were reported for 80.29 percent of students enrolled in courses for which an assessment was provided. Future efforts will focus on obtaining data about student achievement of industry-recognized certifications in addition to or in lieu of statewide assessment scores, alignment to industry-recognized certifications of upper level CTE courses for which paper-and-pencil assessments are of questionable validity, and collection of data on performance of students who take alternate assessments based upon their Individualized Education Plans.

Postsecondary

The number of programs with Technical Skill Assessments has not changed since the approval of the North Carolina State Plan for Career and Technical Education. As was listed in the approved State Plan, licensing and certification exam results are provided to the State by the individual licensing agencies in 11 program areas. Those program areas are: Aviation Maintenance, Basic Law Enforcement Training, Cosmetic Arts, Dental Hygiene, Emergency Medical Technician, Nursing, Opticianry, Physical Therapist Assistant, Radiologic Technology, Real Estate, and Veterinary Medical Technology.

The estimated percentage of CTE concentrators who participated in a technical skill assessment is 12 percent and less than 9 percent for all CTE test takers. Within these percentages, duplicated counts and non-curriculum students are reported.

Progress regarding the plan and timeframe to increase the number of technical skill assessments is dependent on external credentialing services making useable data available to the State. Because of the inability to unduplicate or receive additional information, GPA continues to be used as the measure of technical skill attainment. By using this method, all relevant CTE students are included in this indicator with an accurate and nearly universally accepted measurement.

Many programs also use capstone courses and the Accountability Committee will be examining the use of these courses as an alternate measure.

3. Implementation of State Program Improvement Plans

Not applicable because the State of North Carolina had no State Improvement Plan in effect for 2007-2008.

4. Implementation of Local Program Improvement Plans

Not applicable. No North Carolina community colleges (postsecondary) or local education agencies (secondary) have been identified as needing a Local Improvement Plan.

5. Tech Prep Grant Award Information

Effectiveness of Tech Prep Programs

During 2007-2008, North Carolina continued and concluded a two-year cycle of Tech Prep funding for a total of 34 consortia consisting of at least one LEA and at least one community college.

The effectiveness of the Tech Prep programs assisted through these funds is significant. The relevant findings are as follows:

- There is increase in secondary students enrolled in the Tech Prep course of study.
- Beginning with freshmen entering high school in 2009-2010, new graduation standards require high school graduates to complete four units of math to graduate.
- More Tech Prep high school seniors indicate they will be attending two-year postsecondary institutions.
- Enrollment of Tech Prep students in community colleges in rural areas of the state is increasing.
- More secondary Tech Prep students are earning postsecondary credit prior to HS graduation. Increase in concurrent enrollment and Huskins enrollment is noted.
- Recording of articulated credit on the high school transcript is increasing.
- Tracking of employment of graduates is challenging. North Carolina needs to look for additional sources of information on student placements.
- Remediation rates in reading and mathematics appear to have leveled. Additional work needs to be done to reduce the number of students requiring remedial reading and mathematics as they enroll in college.
- Good data on enrollment and remediation are available. Consortia have been encouraged to use these data to improve programs.

Awards Process

In the spring 2006, consortia were invited to submit proposals to the State for competitive Tech Prep funding. The guidelines for competition were clearly outlined in a formal request for proposals, which was made available to every eligible consortia member within the State. Upon receipt by the State, the proposals were evaluated competitively by panels of reviewers, all of whom were familiar with CTE and Tech Prep. The following represents the responses received during this grant cycle.

	<u>Applied</u>	<u>Recommended</u>
Total number of Proposals/Consortia:	46	34
Total number of Community Colleges:	44	34
Total number of LEAs:	69	51

Tech Prep Consortia Funded in 2007-2008

LEA	Community College	Allocation to LEA	Allocation to Community College	Total Allocation
Alamance County Schools	Alamance Community College	61,272	30,728	92,000
Ashe County Schools, Alleghany County Schools, and Wilkes County Schools	Wilkes Community College	56,610	28,390	85,000
Beaufort County	Beaufort Community College	47,286	23,714	71,000
Brunswick County Schools	Brunswick Community College	47,286	23,714	71,000
Buncombe County Schools, Madison County Schools, and Asheville City Schools	Asheville-Buncombe Technical Community College	60,000	-	60,000
Caldwell County Schools	Caldwell Technical Institute and Community College	51,948	26,052	78,000
Carteret County Schools	Carteret Community College	42,624	21,376	64,000
Catawba County Schools, Hickory Public Schools, Newton-Conover City Schools, and Alexander County Schools	Catawba Valley Community College	70,596	35,404	106,000
Charlotte-Mecklenburg Schools	Central Piedmont Community College	121,878	61,122	183,000
Cherokee County, Clay County Schools, and Graham County Schools	Tri-County Community College	61,272	30,728	92,000
Cleveland County Schools	Cleveland Community College	47,286	23,714	71,000
Craven County Schools	Craven Community College	42,624	21,376	64,000
Dare County Schools	College of the Albemarle	47,286	23,714	71,000
Davidson County Schools	Davidson County Community College	56,610	28,390	85,000
Edenton-Chowan Schools and Perquimans County Schools	College of the Albemarle	37,962	19,038	57,000
Edgecombe County Schools	Edgecombe Community College	42,624	21,376	64,000
Franklin County Schools	Vance-Granville Community College	23,522	-	23,522
Guilford County Schools	Guilford Technical Community College	98,568	49,432	148,000
Henderson County Schools and Transylvania County Schools	Blue Ridge Community College	65,934	33,066	99,000
Hyde County Schools	Beaufort Community College	37,962	19,038	57,000
Iredell-Statesville Schools and Mooresville Graded Schools	Mitchell Community College	65,934	33,066	99,000
Johnston County Schools	Johnston Community College	61,272	30,728	92,000
Onslow County Schools	Coastal Carolina Community College	61,272	30,728	92,000
Person County Schools	Piedmont Community College	28,638	14,362	43,000
Pitt County Schools	Pitt Community College	56,610	28,390	85,000
Richmond County Schools	Richmond Community College	33,300	16,700	50,000
Robeson County	Robeson Community College	61,272	30,728	92,000
Rutherford County Schools	Isothermal Community College	42,624	21,376	64,000
Sampson County Schools	Sampson Community College	51,948	26,052	78,000
Stokes County Schools	Forsyth Technical Community College	42,624	21,376	64,000
Washington County Schools	Beaufort Community College	37,962	19,038	57,000
Wayne County Schools	Wayne Community College	56,610	28,390	85,000
Winston-Salem/Forsyth County Schools	Forsyth Technical Community College	89,244	44,756	134,000
Yadkin County Schools, Surry County Schools, Elkin City Schools, and Mt. Airy City Schools	Surry Community College	61,272	30,728	92,000
Totals		\$ 1,871,732	\$ 896,790	\$2,768,522