North Carolina Performance Report

Program Year 1996-1997



Public Schools of North Carolina State Board of Education Phillip J. Kirk Jr., Chairman Department of Public Instruction Michael Ward, State Superintendent

North Carolina Community College System H. Martin Lancaster, President

State Board of Education

Dennis A. Wicker Lieutenant Governor Raleigh

Harlan E. Boyles State Treasurer Raleigh

Kathy A. Taft Greenville

Margaret B. Harvey Kinston

Prezell R. Robinson Vice Chairman Raleigh

Evelyn B. Monroe Pinehurst

John R. Lauritzen Burlington

Kenneth R. Harris Chairman Emeritus Charlotte

Robert R. Douglas Asheville

Jane P. Norwood Charlotte

Phillip J. Kirk Jr. Chairman Raleigh

Eddie Davis, III Durham

301 North Wilmington St. Raleigh, NC 27601-2825

North Carolina
Annual Performance Report
For the Vocational and Technical Education
State-Administered Program under the
Carl D. Perkins Vocational and Applied Technology
Education Act of 1990
P.L. 101-392

Program Year 1996-97



Table of Contents

Introduction	
Certification	
Secondary Services and Activities	8
Performance Measures and Standards	14
Single Parents, Displaced Homemakers and Single Pregnant Women	18
Gender Equity	20
Criminal Offenders	23
Special Populations	24
Disabled	
LEP	26
Disadvantaged	27
State Leadership and Professional Development	27
Professional Development	28
Curriculum Development	29
Research	30
Youth Apprenticeships	31
Southern Regional Education Board – High Schools That Work	32
Reform Initiatives	33
Community Based Organizations	34
Consumer and Homemaking Education	34
Tech Prep	36
Integrating Applied Academics into Workforce Development Education Programs	38
Career Guidance and Counseling	41
Appendices	
Appendix 1 Enrollment Table	45
Appendix 2 Performance Standards	49
Appendix 3 Performance Standards Report	51
Postsecondary Education	

Introduction

This Performance Report presents the programs, services, and activities provided to the youth in secondary and postsecondary workforce development education in North Carolina from July 1, 1996 - June 30, 1997. This report is a compliance document for the U.S. Department of Education. It also represents the efforts at all levels to improve the quality of education and training for participants in workforce development education.

As directed by the North Carolina State Board of Education, the FY 1997 federal grant and the contents of this report reflect the two-thirds/one-third split by secondary and postsecondary education and the appropriate clientele they served at each level. Data are provided to reflect services to special populations, business/industries participation, professional development activities, and performance standard summaries.

All parts of this report display coordinated efforts to provide maximum results for the students served by workforce development education in North Carolina.

June S. Atkinson Head, Workforce Development and Director, Division of Instructional Services, K-12

Certification

The State Board of Education, sole state agency, has the authority under Public School Law 115C-153, to approve and submit the FY 97 Performance Report for Workforce Development Education. This report has been prepared as authorized by 34 CFR 400. The report covers the twelve-month program year July 1 to June 30.

	North Carolina State Board of Education
	(Official Name of State Board)
12-4-97	Phillip J. Kick &
Date	Chairman, No State Board of Education
	11.1 1.1
12-4-97	Muhail Elland
Date	State Superintendent of Public Instruction

Summary of Secondary Services & Activities

Workforce Development Education

Workforce Development Education in North Carolina is organized in grades 6 through 12 in the public school system. The program begins with exploratory courses and leads to specialized classroom instruction in grades 11 and 12.

Mission

The mission of Workforce Development Education is to empower students for effective participation in an international economy as world class workers and citizens.

Purpose

The purposes of Workforce Development Education are to:

- Prepare students for further workforce development education.
- Prepare students for initial employment.
- Assist students in making educational and career decisions.
- Apply and reinforce related learnings from other disciplines.
- Prepare students to make informed consumer decisions and apply practical life skills.
- Assist members of special populations to succeed in workforce development education programs.

Served:

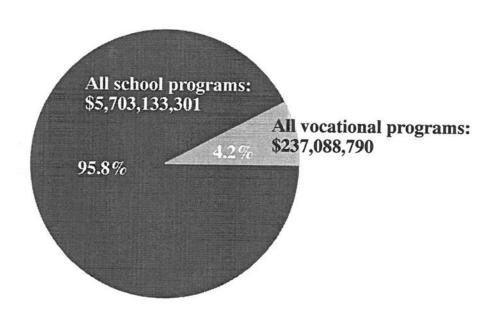
118 LEAs

308

Secondary Schools

9 Career Centers

Total Educational Expenditures: (95-96)



Total statewide enrollment in Grades 9-12:

322,958

Total statewide student enrollment in

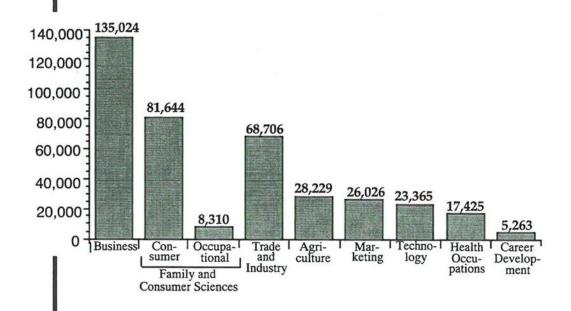
Workforce Development Education, Grades 9-12:

222,639*

(unduplicated count)



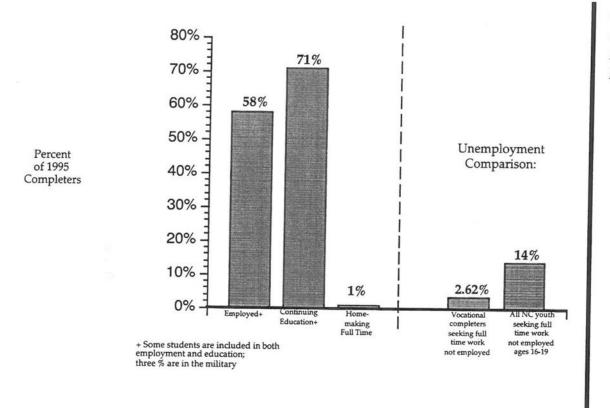
Number of Students Per Program Area** Grades 9-12 (duplicated count)



^{*}Total student enrollment for Workforce Development Education Grades 6-8: 253,884 (duplicated count)

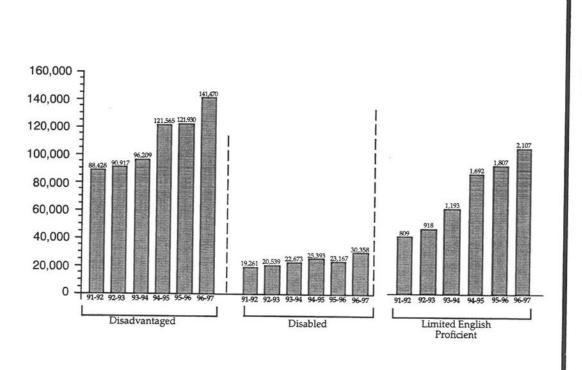
^{**} See Appendix I for additional information.

Status of the 34,601 Workforce Development Education completers:



Completers of Workforce Development Education

Number of Special Populations Students in Grades 9-12



Special Populations Enrollment Trends

Achievements

With funds provided under Titles I, II, and III of the Carl D. Perkins Vocational and Applied Technology Act of 1990, the following programs, services, activities, grants, collaboration efforts and reform initiatives were conducted:

Programs

- Development, revision and distribution of 25 new curriculum products;
- Revision of 34 course blueprints or matrices to reflect business/industry practices and state/national standards;
- Distribution of 42 VoCATS test item banks to 118 LEAs in an electronic format;
- Tech Prep collaboration with North Carolina Community College System to provide leadership and support to 118 LEAs and 58 community colleges; criteria were developed and implemented for innovative/demonstration tech prep grants;
- Continued implementation of and use of evaluation data for the established vocational performance system;
- Use of electronic system for preparation, transfer of LEA annual local plans/applications/budgets and for data collection, distribution, and review;
- Involvement of approximately 3,600 business/industry personnel in curriculum development, professional development, and vocational student organization activities.
- Coordination of professional development workshops for 4,784 teachers.

Services

Grants

During the 1996-1997 school year, 17 gender equity grants were awarded to address gender equity issues. Approximately \$505,000 was used to provide programs and activities for 3,296 youth in grades 9-12.

Seven single parent, displaced homemakers and single pregnant women grants were awarded to provide programs and services to 1,411 students at the secondary level. These students were assisted in continuing their education, developing marketable skills, and accessing vocational training.

Community based organization (CBO) funds enabled 43 special needs youth the opportunity to receive workforce development education programs. A CBO Handbook for local education agencies, administrations and faculty was developed and distributed statewide. The number of youth served from these carryover funds continued to target the disadvantaged, disabled and limited English proficient.

The Programs of Study Guide was developed for eight program areas in workforce development education. This guide will help local planning personnel organize comprehensive and appropriate sequence of workforce development education offerings for students enrolled in grades 6-12.

Performance Standard development was aligned with those of JobReady and Tech Prep to the degree possible. Three-year trend data on five of the eight performance standards were distributed in graph and electronic format to 118 LEAs.

Forty-one career focus areas were developed for secondary schools that will articulate middle school with high school, high school courses with other high school courses, high school with postsecondary, and high school with business and industry.

Collaboration

Reform Initiatives

Articulation and Alignment

Performance Measures and Standards

Contributions of the Committee of Practitioners The system of performance measures and standards has been implemented in all the school systems in North Carolina. The Committee of Practitioners continued its role in making recommendations about the performance system. The planning system was further adapted to accommodate local improvement needs tied to LEA planning cycles, as well as Perkins II requirements and performance measures.

Assistance to LEAs Highlights in the Workforce Development Education Performance System's utility to LEAs were

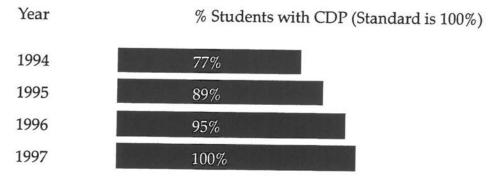
- Improved processes. Shorter turn around times for processing and returning data to LEAs were implemented. This resulted in allowing LEAs to take another month to make sure their data were correct.
- Local access to data. Performance data were formatted so that LEAs could access them across years at the state, LEA, school, and class level. Additionally, the data were formatted to allow LEAs to access data from the state to the classroom level in any one year. Workshops were held in five regions about how to access these data.
- Revision of the local planning process. The dates and requirements were further refined. A checklist was developed to assure that all requirements were being carried out. A site visitation checklist was developed for on-site monitoring.
- Interagency Follow-Up System. The interagency follow-up system reached its final stage, and inservice training was conducted with all relevant state-level agencies.
- Interagency Performance Management System.
 Additional steps were taken to pull together a
 system across agencies. Training was conducted for
 all agencies on the Baldrige system as the common
 performance operating system.
- Coordination. The Committee of Practitioners and vocational directors continued to call for greater coordination between and among groups and agencies in performance and data collection requirements.

Progress Made



Selected Statewide Results





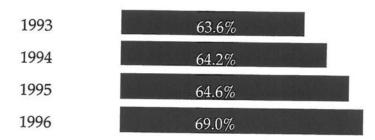
% Students Entering Further Education (Standard = 70%)



% Completers Unemployed (Standard = lower than Youth Unemployment Rate)



% Students Employed Full Time, Work Related (Standard = 70%)



Customer Satisfaction: Feedback from Customers

Impact

Results of Workforce Development Program completers:

- Three of North Carolina's eight performance standards are related to information about completers. In 1995-1996, follow-up was conducted for 34,601 students. Of these,
 - 71% are in further education, including on-the-job training (vs. the 70% standard);
 - 2.62% were unemployed versus the statewide youth average of 14%;
 - 69% of those employed full time are in jobs related to their high school career major (vs. 70% target).
- · Further education categories:

36% were enrolled in postsecondary institutions;

27% in college or university; and

8% in on-the-job training.

· Employment categories:

29% full time

29% part time

3% military

1% homemaker

5% seeking part time employment and

29% not employed, not seeking employment.

 Further education's relationship to completers' high school occupational clusters:

70% in postsecondary

57% in four-year colleges or universities

47% in on-the-job training

 Response about whether workforce development was a major reason for staying in school:

Yes, 51%

 Students enrolled in WDE programs because they related to career plans:

77%

 Percent of students wishing they had learned more in high school about:

Efficient use of resources: time, money, materials, space 39% Team work, serving customers, working with people of different backgrounds 27%

· Percent of Students continued:

Acquiring and evaluating data	41%
Monitoring and correcting performance:	
social, organizational, technical	18%
Selecting proper equipment and tools	13%
Basic skills (reading, writing, math, speaking, listening)	22%
Thinking skills (decision making, problem solving)	35%
Personal qualities (self-management, social skills,	****
responsibilities)	29%

Completers' Performance Based on Biennial Employer Feedback (Scale: % above average / rating on a 5-point scale with 5 = exceeds other new employees in like jobs; 4 = exceeds some; 3 = meets minimum; 2 = meets some; 1 = does not meet.)

WDE completers' performance based on nontechnical skills

Performance	% Above Average	Rate
Attendance	71% above average	4.1
Punctuality	69%	4.0
Ability to work with others; teamwork	77%	4.2
Attitude	74%	4.1
Appearance	72%	4.1
Dependability	74%	4.1

· Performance in technical areas

Performance	%	Rate
1. Accuracy and quality of work	72%	4.0
2. Ability to use equipment and tools	74%	4.1
3. Technical information	65%	3.9
Knowledge of job duties	72%	4.0

- How quickly did WDE completers learn in above categories compared to others? (note 1-4 correspond to technical areas listed above)
 - 1.63% / 4.0
 - 2.72% / 4.1
 - 3.64% / 3.9
 - 4.66% / 3.9
- Employing firm size (of those surveyed):

1 - 9,	19%
10 - 49	31%
50 -99	15%
100 - 499	23%
500 - 999	4%
over 1000	8%

Single Parents, Displaced Homemakers and Single Pregnant Women

Students Served

opportunity to apply for grant funds through the request-forproposal process. The proposals were to address the needs of single parents, displaced homemakers, and single pregnant women to continue their education, develop marketable skills, and make workforce development education and training more accessible and successful.

LEAs and community based organizations were provided the

During the 1996-97 school year, seven LEAs were funded to address the needs of single parents, displaced homemakers, and single pregnant women. These seven programs served a total of 1,411 students at the secondary level. The following services were provided to participants involved with these funded programs.

Assessment/Guidance. The needs of targeted program participants were assessed by program providers. All participants received supportive services through guidance and counseling. Services included emotional support, encouragement, self-esteem and self-confidence building, and crisis intervention. In addition to individualized counseling, coordinators offered workshops, seminars and group sessions to include decision-making skills, parenting skills, budgeting, time management, nutrition, medical needs, educational and career goal setting, coping, assertive training, and employability skills. Speakers, audio visual materials, and field trips enhanced these services.

Child Care and Transportation Services. Financial resources were provided for child care and transportation services to allow single parents and displaced homemakers to remain in school and acquire marketable skills.

Outreach/Referral Services. Referral services to, and contacts with, other community agencies were regular and ongoing. Advisory committees included key individuals from appropriate community/human service agencies.

Tutorial Services. Tutorial and remediation services were provided as needed to promote academic progress. Mentors were used. Home visits were made to assist confined students in continuing with their school work.

Employability Skills. In addition to workforce development training, participants received additional instruction in life skills and employability skills to assist them in obtaining employment.

Services Provided Supplies and Materials. As needed and appropriate, supplies and materials were provided to participants to enhance their educational and career success and parenting skills.

Special and Effective Delivery Methods. Each LEA used various service delivery methods to enhance the effectiveness of the program in its school system.

- Some LEAs used the single parents funds mainly to support the salary of an individual who provided direct counseling, guidance, referral, and other supportive services.
- 2) The case management approach was used effectively. Each participant was assessed, a profile developed, and plans and services developed and implemented according to individual needs.
- 3) Some programs incorporated a special incentive component for extra motivation and students accomplishments. Participants earned extra opportunities through compliance with an agreed upon goal such as reduction in absenteeism.
- 4) Two programs included a male support group for the fathers of the participants' children and for male at-risk students.
- 5) One program had provisions on the school campus for the participants to bring their children. The program incorporated an instructional component with interactions of parents with their children.

Staff Development. On-going technical assistance was provided to all programs by the state equity consultant. On-site program monitoring visits were made. Consistent communications with grant recipients were made for the purpose of sharing program resource materials and current updates. Three distance learning satellite (DLS) broadcasts were aired for all LEAs. A statewide leadership conference was held for purposes of staff development and management.

Effective Delivery Methods

Gender Equity

Gender Equity Programs

The goals of the gender equity programs are to provide programs, services, and activities to eliminate gender bias and stereotyping in workforce development education and to provide programs, services, and activities for girls and women ages 14 through 25 to support themselves and their families.

All LEAs were given an opportunity to apply for grants through the request-for-proposal process. The scope and design of each program varied according to local needs.

During the 1996-97 school year, 17 gender equity grants were awarded to LEAs to address equity issues. Services and activities were provided to 3,296 students in grades nine through twelve.

Achievements

Eleven of the funded programs provided summer institutes where students participated in two or more of the following areas: assessment, guidance and counseling, outreach activities, and a variety of actual exploratory activities. The exploratory activities were in the areas of communication/media technology, transportation technology, construction technology, forestry, drafting, auto technology, lasers, hydraulics, applied physics/mathematics, electricity/electronics, agriscience, screen printing, robotics, computer graphics, bridge building, aerodynamics, and entrepreneurship. Computerized software programs were used extensively. The activities were diverse and included nontraditional speakers, field trips, and shadowing. Tours were many and varied including aerospace sites, aircraft flight control centers, colleges, hospitals, and a virtual reality center.

Supportive Services

During the regular school year, services provided included workshops, seminars, guidance and counseling, decision-making skills, time and money management, educational and career planning, employability skills, assertive training, and tutorial assistance. Equity Leadership Teams consisting of teachers and students were organized in some individual schools. They provided training and awareness on equity issues, designed and developed equity materials for teacher advocates, monitored school activities and materials for gender bias or stereotyping, developed and disseminated speakers' bureaus list including nontraditional role models, and designed and implemented a public awareness campaign on equity. Career day activities planned for all students included presenters representing nontraditional occupations.

The cost of child care and transportation services, as needed, was provided for eligible participants to enhance school attendance and achievement.

Local follow-up surveys of program participants revealed an increase in nontraditional training (including apprenticeships) and employment, a decrease in dropouts, and a significant attitudinal change in gender role stereotyping by students and adults.

Advisory committees were instrumental in providing services to include publicity, speakers, equipment, tour sites, career day presenters, and program recommendations.

Program products were developed and included brochures, curriculum guides, career and educational plans, career packets, marketing designs, print screened products, posters, equity calendars, and video cassettes.

Grant resources were used to purchase supplies and materials for exploring technology, entrepreneurship simulations, construction projects, videos, books, and software for recruiting, exploratory activities, and training. Publications and audio visuals developed were shared with other educational agencies. These products incorporated industry and the broadcast television station of University of North Carolina Television (UNC-TV).

Staff development activities for vocational, academic and counseling staffs were conducted to increase awareness of gender bias and provide strategies to eliminate gender bias. Equity faculty from approximately 45 local educational agencies, committed to providing equity leadership on the local level, participated in a three-day Statewide Equity Leadership Conference. The conference participants included vocational and academic teachers, counselors, and administrators. Equity/School-to-Work (STW) meetings were held to foster the enhancement of meaningful equity activities and services on the local levels. Leaders from all of the funded programs and STW program leaders participated.

Technical assistance was provided to all funded programs and many that were not funded. This technical assistance included telephone calls, onsite visits, handling budgetary matters, correspondences, collection and review of progress and final reports, civil rights team participation, and presentations at conferences and workshops. Equity materials were designed, developed, and disseminated to all local school systems. Twenty local school systems were visited by the state equity consultant.

Materials developed and disseminated statewide included a booklet, <u>Effective Practices for Gender Equity and Single Parent Programs</u> and a *Workforce Development Education Newsbrief*. Also, three distance learning satellite (DSL) broadcasts were completed and viewed statewide. Activities

The Department of Public Instruction, along with East Carolina University and North Carolina A&T University, sponsored two-week residential Summer Technology Institutes for the Advancement of Gender Equity in High Technology for high school females on both university campuses in July 1997. The Summer Technology Institutes were provided to increase the participants' level of aspiration and expectation for participating in nontraditional programs and seeking nontraditional careers in high technology. Specifics about each of the two Institutes follow.

Exemplary Gender Equity

North Carolina A & T State University

Summer Institute for the Advancement of Gender Equity in High Technology

North Carolina A. & T. State University, Greensboro, provided a residential Summer Technology Institute for 48 high school females from 28 counties. The Summer Technology Institute accomplished the following objectives:

- Provided at least twelve high technology activities/ experiences for females in grades 10-12;
- Provided high technology experiences in a modern teaching/learning environment; and
- Provided counseling and mentoring by females employed in nontraditional high technology careers.

The Summer Technology Institute participants engaged in the following high technology activities: laser and fiber optics, computer numerically controlled devices (mill and lathe), videography, robotics, electronics, satellite communication, high speed transportation, desktop graphics, computer construction, computer aided design (CAD), biotechnology, and engineering concepts.

Highlights of the Institute included field trips, TechPlus modules, showcase of activities, talent show, and awards program.

East Carolina University Technology Adventures Program (TAP)

East Carolina University, Greenville, provided a two-week residential Summer Technology Program for 36 high school females representing 26 local school systems. TAP was designed to broaden the participants' understanding of technology and develop confidence in their ability to succeed in a variety of technical fields. The Summer Technology Institute accomplished the following objectives:

- Exposed participants to a broad range of technology concepts through hands-on activities;
- Demonstration integration of science, mathematics, and academic skills;
- Provided career information on nontraditional technical occupations;
- Created an awareness of gender bias and stereotyping that may prevent females from entering technical occupations; and
- Provided a mentorship and support network to facilitate career decision making.

The Technology Institute provided a variety of technology activities and modules. The modules featured were Technology Discovery Modules, Career Orientation Modules, Observing High Technology and Investigating North Carolina High Technology. The TAP participants engaged in such hands-on activities as lasers, robotics, electronics, photography, desktop publishing, presentation computer software, and Internet.

Copies of reports on both Technology Institutes are available from the state office of the Consultant for Gender Equity.

Criminal Offenders in Correctional Institutions

Youth Services, a Division of the North Carolina Department of Health and Human Services, operated five special public schools for children ages 10-17 who were committed by the courts. During the 1996-97 school year, 1,118 new students were admitted and served.

The primary purpose of the secondary vocational program has transcended from an awareness program to a program that offers courses which afford students the opportunity to develop marketable skills. This school year, high school age students were able to participate in two-hour blocks of workbased learning courses offered by the NC Department of Public Instruction (NCDPI). The middle grades' students also enrolled in the NCDPI approved middle grades program. In addition to the above, all students are able to participate in work-based activities such as the Vocational Internship Program (VIP), and an eight-hour work competency for each level. Some teachers also provided resource persons which allowed students to interview them for career information. Career days were organized on each campus to expose the students to a variety of careers.

By legislative definition, all of the students enrolled in the training schools were members of special populations. The majority of them were academically disadvantaged who had difficulty succeeding in school.

Correctional Institution

Students Served Subsequently, funds were used to accommodate the special needs of students as well as provide in-service training and purchase equipment and instructional supplies.

Services

In-service training continued to be a major focus of the improvement plan. The teachers were able to: 1) generate tests using the VoCATS software; 2) create item banks; 3) develop student and class performance reports; and 4) acquire information about current state and national trends in workforce development. Advisory council members received training in: 1) state legislation and department policy relating to advisory councils for vocational education 2) choosing favorable dates and sites for meetings; and 4) suggestions for actively involving the school advisory committees in the vocational programs.

A record number of teachers and an administrator attended the Workforce Development Summer Conference. In addition to the above training, some teachers participated in training offered by private enterprises.

The upgrading of vocational programs through the purchase of equipment significantly improved all programs taught in the schools. Each vocational teacher has at least one computer that can be used for the VoCATS programs. Most of them have a printer in their classroom or in proximity. The programs included Agricultural Education, Business Education, Career Development, Family and Consumer Sciences and Trade and Industrial Education. All program areas benefited from the purchase of equipment and instructional supplies.

Special Populations - Disabled

Services Provided

Achievement in Providing Equal Access for Disabled.

The number of disabled students enrolled in workforce develop-

ment education programs reached 23,167 of the 173,935 special populations students enrolled in all workforce development education classes in grades nine through twelve. These students were enrolled in the full range of vocational offerings and the majority of them participated in the regular vocational programs.

Achievements

Achievement in Providing Equal Access in Recruitment.

Recruitment activities were presented in the middle grades and at

the high school level for disabled students. In the eighth grade, special populations coordinators, industry-education coordinators, vocational student organization members, and guidance counselors provided orientation sessions about the workforce development education programs available in the high schools.

Brochures, open house events, and parent nights were used frequently to provide the required information to parents and students. Curriculum assistance guides were developed by the local education agencies and distributed to all students. In some cases, the support personnel visited the special education classes to ensure the students were aware of the vocational program offerings.

Achievement in Coordination Between Special Education and Workforce Development Education. Coordination improved between Workforce Development Education and the Exceptional Childrens' programs at the state and local levels.

At the state level., consultants from both programs met periodically to improve coordination. Exceptional Children's Consultants presented sessions during statewide workshops for local vocational support personnel on coordinating services at the local level and on the mandates from the Individuals with Disabilities Education Act. Workforce Development Education consultants made presentations to Exceptional Children's program administrators and teachers to explain the Perkins Legislation. At the local level, vocational personnel participated to an extent in vocational planning meetings and assisted in the development of the vocational component to the Individual Education Plan (IEP). This participation is not consistent, and remains problematic statewide. As a result, however, more disabled students have individualized vocational plans.

Achievement in Assessment. While special populations coordinators and technical assistants were employed to provide vocational assessment to members of special populations, their numbers have been decreasing. Assessments were administered to students who were unable to take successfully the paper-and-pencil inventories. The vocational assessments included: an aptitude test, interest and learning styles inventories, and information from the special education teachers.

The special education file folder, other service providers, parents, and students were used to determine the most appropriate programs for the students.

After the students entered a workforce development education program, a pretest was administered. The information from the pretest was used to plan the instructional program for the students. Preliminary data suggested that disabled students scored as well as non-disabled students, particularly in gain scores.

Achievement in Career Development. More career development plans were developed for special populations students. These numbers were monitored to determine the degree to which disabled students had access to, progress in, and success in their Workforce Development Education

Impact

courses. The CDP included a career concentration, the most appropriate sequential course of study, assessment data, and support services needed to ensure the success of the student while enrolled in the vocational program. The number of special populations students enrolled in courses specified on their CDPs was monitored. The results were plans developed to help students enroll more frequently in their CDP specified courses.

Achievement in gains and mastery of vocational and academic competencies was noted. Attainments of disabled students regarding gains on competencies in workforce development education programs were tracked through the Vocational Competency Achievement Tracking System. Mastery of these competencies also were tracked for disabled students. Appropriate course modifications were developed to help these students have higher gains and mastery.

Achievement in Providing Equal Access for Transition from School-to-Work. All disabled students participating in the Exceptional Children's programs and who were at least 16 years of age had a transition component to the Individual Education Plan (IEP). Workforce development education personnel coordinated the transition services required of them with the IEP developers. In addition to those services, disabled students received instructional services related to transition through the competency-based system. Those enrolled in cooperative education courses were employed part-time in jobs related to their respective courses of study. Some were exposed to shadowing, internships, apprenticeship experiences, and actual job placement coordinated with various businesses and agencies. The success of disabled students in attaining employment and further education was tracked through the performance system. This feedback was used to make appropriate adaptations.

Special Populations - Limited English Proficient

Students Served and Achievements

The statewide total of identified Limited English Proficient (LEP) students enrolled in all 1995-1996 workforce development education programs was 2,107. Identifying and serving those LEP students in migrant situations remains a problem. As more LEPs entered the public school system, the LEAs employed more English as a Second Language (ESL) teachers for the elementary and middle grades. By the time many of the students reached high school, some had a solid foundation in English. However, special populations coordinators worked very closely with the LEP students to ensure they understood their course work.

Tutors, peer helpers, community persons and the coordinators were available in some cases to provide the support services needed by these students enrolled in workforce development education.

Special Populations – Disadvantaged

Access. In high school, 141,470 of the 173,935 special populations enrollees were identified as disadvantaged. Disadvantaged students were enrolled in the full range of vocational offerings in the state. Special Populations coordinators and others provided supplemental services needed for the success of disadvantaged students in workforce development education.

Student Performance Progress and Success. These students were monitored in relationship to attaining performance standards. Plans were developed and carried out to help them attain performance standards, including to develop Career Development Plans (CDPs) listing the vocational and academic coursework needed to attain their course of study. Each workforce development education program was monitored to determine if enrollments of disadvantaged students were based on this career development plan. The gains and mastery of disadvantaged students based on the Vocational Competency Achievement Tracking System (VoCATS) were monitored, and corrective plans were developed to help them attain better gains. Finally, the transitions to other levels of education and training and then to employment were monitored, and corrective actions were applied through the performance system.

Achievements

Impact

State Leadership and Professional Development

Priority for professional development was given to performance standards attainment, instructional management/competency attainment through the Vocational Competency Achievement Tracking System, curriculum integration of academic and vocational education, technical updates including all aspects of industry, Tech Prep, and applied curricula.

Various delivery mechanisms were used for professional development. They included Distance Learning by Satellite broadcasts, the North Carolina Information Highway, an Internet homepage, a national satellite teleconference, telephone conferences and video segment developments. Examples of these follow.

Professional Development

DLS Broadcasts

Seven DLS broadcasts were aired:

- 1. Economics at Work
- 2. Integration of Academics and Vocational Education through HOSA
- Making Career Connections in Family and Consumer Sciences Education
- 4. Performance System
- 5. STW: Request for Proposal
- Gender Equity and STW
- 7. Gender Equity: What Schools are Doing

National Satellite Teleconference

Two teleconferences were facilitated and moderated

- . Implementing Skills Standards for World Class Service
- Getting Ready for Change: Block Funding

Video Segments Development

Two national SREB/HSTW satellite conferences on successful practices were coordinated.

One statewide Gender Equity conference using the University of North Carolina Television was coordinated.

1996 Summer Conference

A week workshop for 2,045 vocational educators was conducted.

Workshop	Participants
Agriculture Education	205
Business Education	356
Career Development	49
Family & Consumer Sciences	411
Health Occupations Education	110
Industry Education Coordinators	120
Marketing Education	123
Special Populations	83
Teacher Educators	14
Technology Education	95
Trade & Industrial Education	299
VoCATS Coordinators	56
Vocational Directors	<u>124</u>
T. (2,045

Five legislative updates for 600 participants were conducted. Three technical updates for vocational directors were facilitated. One Business Education video conference was conducted.

Information Highway Satellite Broadcasts

Curriculum Development

Development of curriculum continued to be a high priority during 1996-97. The curriculum development efforts centered on the N.C. Vocational Competency Achievement Tracking System, a computerized instructional management system that is used for the following:

Planning instruction

- Assessing students before, during, and after instruction
- Evaluating student mastery of competencies
- Documenting gains in student achievement

The system also is used to meet federal legislative mandates requiring documentation of learning gains made in workforce development education courses.

Major products that are part of this process include the following:

- Course blueprints, which specify core and supplementary skills
 that students must master in order to be prepared for further
 instruction or to enter a career. The lists of skills, called course
 objectives, are used by teachers to plan the course of work, prepare
 daily lesson plans, and integrate vocational activities with other
 disciplines.
- Banks of assessment items tied directly to the objectives and distributed electronically. These banks, which include traditional paper-and-pencil items as well as alternative measures, are used by teachers to assess student skills before, during, and after instruction.
- Supplementary banks that integrate Workforce Development objectives and the traditional academic areas through the Standard Course of Study.
- Curriculum guides, either developed in North Carolina or adopted from other sources. The guides can include teaching outlines, student activities, handouts/transparencies, and resource lists, all tied directly to the course objectives.
- Accountability assessment matrices for selected courses, which link course objectives to the skills identified in the report from the Secretary's Commission on Achieving Necessary Skills and All Aspects of the Industry.
- Generation of statewide pre and postassessments, again tied to the course objectives in the blueprints.
- Statewide purchasing of software and annual support for LEAs.
- Staff development.
- Help desk to assist LEA personnel with implementation of VoCATS and use of related software.

Statewide System Strengthened VoCATS products are available for most courses in the *Workforce Development Education Programs of Study and Support Services Guide.* Efforts continue to develop new materials, update existing materials, and keep them relevant.

Extent of use

All LEA central offices and 95 percent of all high schools have computer hardware to run curriculum software. Approximately 4,500 teachers have participated in staff development about VoCATS during the past four years. All personnel coordinating VoCATS at the local level are part of self-directed regional user groups.

Impact

Some notable examples of use are Nash/Rocky Mount Schools, McDowell County, Mecklenburg County, and Guilford County. Some LEAs are expanding the VoCATS model to incorporate other instructional areas in addition to Workforce Development.

Research

Research proposals currently being conducted on the postsecondary level are as follows:

"A Study to Determine the North Carolina Small Business Perception of Skills That Should Be Developed for Entry-Level Tech Prep Employees" - Dr. Sandra A. Howard, North Carolina Agricultural and Technical State University, Greensboro, NC

"Induction Strategies That Work to Keep Business and Marketing Beginning VTE Teachers in the Classroom" - Dr. Thelma C. King and Dr. Lillie Anderton-Lewis, North Carolina Agricultural and Technical State University, Greensboro, NC

"Induction Strategies That Work: Keeping Biotechnology/Health Care/Career Development Beginning Teachers in the Classroom" - Dr. Barbara M. Kirby and Mr. Anthony V. LeBude, North Carolina State University, Raleigh, NC

"The Impact of Block Scheduling on Instruction, FFA and SAE in Agricultural Education as Perceived by Students" - Dr. Gary E. Moore, North Carolina State University, Raleigh, NC

"A Study of Career Decision-Making Processes of University Level Minority Business/Marketing Education Students" - Dr. Carolyn Spillers Jewell, Fayetteville State University, Fayetteville, NC

"A Comparison of the Effectiveness of Work-Based Learning Strategies in North Carolina Public Schools" - Dr. Larry R. Jewell, North Carolina State University, Raleigh, NC

"A Study to Determine the North Carolina Small Business Perception of Skills That Should Be Developed for Entry-Level Employees" - Dr. Randy Joyner and Dr. Henry Peel, East Carolina University, Greenville, NC

"Irregular Certification: A Potential Solution to the Critical Shortage of Family and Consumer Sciences Education Teachers" - Dr. Cheryl L. Lee, Appalachian State University, Boone, NC

These research studies will help workforce development programs adjust their efforts for student access and success.

High School Youth Apprenticeship

The high school youth apprenticeship programs have continued to expand statewide. At the end of the 1994-95 school year, 391 high school students were participating in apprenticeship programs registered with the North Carolina Department of Labor. Apprenticeship programs existed in 103 schools and 54 local education agencies. By January 1997, 541 high school students were registered in apprenticeship programs with 932 registered programs. Many LEAs have received state and regional recognition for the innovative and enthusiastic approaches to high school youth apprenticeship. High school youth apprenticeship continued to be the highest form of high school, work-based learning. Combined classroom learning with work-based learning made the students better prepared to compete in the international job market.

Growth in High School Apprenticeship:

	Dec 1995	March 1996	Jan 1997
Number in training	465	532	541
Number of programs	674	741	932

High school/youth apprenticeship continues to be a major focus in the overall mission of developing a comprehensive and coordinated workforce preparedness system for North Carolina. Apprenticeship programs continue to bridge the gap between the education system and employers.

Southern Region Education Board (SREB) – High Schools That Work (HSTW)

North Carolina is a member state of the SREB/HSTW Consortium. The consortium was founded on the beliefs that:

- (1) All high school students, including the career-bound students, are capable of meeting higher standards;
- (2) High schools can change the way that they prepare students in general and vocational programs of study;
- (3) All students in both the general and vocational programs of study are capable of completing a challenging planned four-year program of study with a blending of high-level academic and modern vocational courses;
- (4) The program of study for career-bound students can be organized to prepare students for both work and further study; and
- (5) Teachers should use functional and applied learning strategies that are related to real world situations in order to help career-bound students.

The number of SREB/HSTW sites in the state increased from 26 to 32. Each of the 32 sites revised its annual site action plans which target the ten key practices. In revising these plans, sites utilized a variety of available data which included student performance data. Each consultant in Workforce Development received training to participate in HSTW on-site technical assistance visits. All sites have signed memorandums of agreement and have completed site demographic reports. Nine sites received three-day, technical assistance visits and a follow-up written report.

Twenty-five of the sites attended a one-day meeting during which they received detailed information related to the 1995-96 NAEP. The detailed information was useful in determining staff development needs in order to implement the key practices for raising the academic achievement of students enrolled in vocational and general studies.

Four, two-day workshops targeting "Reading For Learning" were conducted. Two, two-day workshops targeting "Writing Across the Curriculum" were conducted. During the year, a two-day orientation workshop was conducted for the six new sites; approximately 100 persons were in attendance. A one-day awareness workshop was conducted for interested schools and this workshop was attended by teams from fifty schools. Local sites provided a significant amount of staff development for their faculty at the local schools.

Reform Initiatives

North Carolina's school improvement initiative, The ABCs of Public Education, was created by legislation that outlined specifics for improving schools. The acronym ABC stands for Accountability; teaching the Basics of reading, writing, and mathematics; and Control of schools at the local level.

The ABCs program was piloted in 1995-96 in 10 school districts statewide. Following that process, the formal program began in 1996-97, but only in grades K-8.

The high school model approved by the State Board in March, 1997 had to meet these three criteria outlined in the legislation creating the ABCs: The model had to (1) focus on student performance in courses required for high school graduation, (2) hold schools accountable for educational growth of students, and (3) be a school-level model.

The following high school accountability model resulted. The North Carolina Board of Education is viewing this model as a "work in progress," with reexamination, changes, or adjustments to come.

High School Components To Be Used in 1997-98:

- Student performance on the five currently mandated end-of-course (EOC) tests: Algebra I, English I, Biology, Economic/Legal/Political Systems (ELPS) and US History. An EOC index of course-bycourse results comparing one year to the average of the previous two years will be used.
- Results on a high school writing test, the current English II test, using a common prompt and allowing students 100 minutes to write their responses. An EOC index and procedure will be used.
- Year-to-year comparison of percentages of students completing College Prep or College Tech Prep course of study.
- Administration of a comprehensive test in reading and mathematics in 10th grade (not to be measured).

(SAT scores and participation rates for the last three years will be reported but not included in the school's composite score for whether it met its ABCs standards.)

Additional High School Components To Be Used in 1998-99: All of the above plus:

- A component that addresses passing rates on the high school competency tests.
- Dropout rates, grades 9-12, with some adjustment so schools are not penalized for enforcing the Safe Schools Act or for addressing students with chronic behavior problems.

Improvement Initiative

Community Based Organizations

Students Served

Number Served. During the 1996-1997 school year, 43 (21 males and 22 females) economically and academically disadvantaged students, ages 16-21, were provided services from community-based organization grant funds. The number of youth served from the 1996-97 carryover funds targeted special population students and the amount spent depleted this categorical federal funding source.

Urban/ Rural Areas Served. Due to the limited funding amount, funds were awarded to one LEA: Guilford County. Guilford County has an economic blend of agriculture, business and industry and is considered an urban area.

Services and Activities

This program provided transition skills to severely economically and academically disadvantaged students. The students received preparation for entering the world of work after completing a workforce development education program.

The Guilford County program placed a major emphasis on limited English proficient students and provided translated materials for parents and instructional aids for students. Another goal of this program was to assist interested disadvantaged students in making a successful transition from high school to employment, a local community college or four-year institution, thereby enabling them to continue their education and skill development.

Consumer and Homemaking Education

Students Served Students, Programs and Support Services in Depressed Areas. The Vocational Education Information System data showed the 1995-96 enrollment for Consumer Home Economics in grades 6-12 increased 10 percent to 111,566 students. The Consumer Home Economics enrollment represents 18.8 percent of students enrolled in workforce development education in North Carolina; the total Family and Consumer Sciences Program represents 19.9 percent of the students enrolled in workforce development education in North Carolina.

Services

Administration and State Leadership. Two full-time staff members provided technical assistance, directed curriculum development, and coordinated professional development for improving instructional programs in Consumer Home Economics.

The most comprehensive teacher in-service training offered was the Family and Consumer Sciences Summer Conference for 420 teachers

and teacher educators. The most comprehensive student in-service training for secondary students was the FHA/HERO State Leadership Conference for 1,669 students and teacher-advisers.

At the Family and Consumer Sciences Education Summer Workshop, concurrent workshops and presentations were offered in curriculum development, technology, instructional management, and instructional innovations. A focus was on instructional improvement based on effective and visionary practices. The evaluation completed by teachers indicated an overall conference rating of excellent.

The FHA/HERO State Leadership Conference had students participate in competency-based competitive events and testing, leadership workshops, informational and project workshops, and recognition programs. North Carolina is the eighth largest state chapter in the nation and is the third largest vocational student organization in the State.

The State Family and Consumer Sciences Education staff participated in the revision of the *Programs of Study*. Examination and analysis of program effectiveness and consumer home economics societal trends were initiated in order to prepare the new *Programs of Study*. The program area description, outcomes, scope and sequence, and course descriptions were revised. The state staff collaborated with teachers, school administrators, business representatives, and other state Family and Consumer Sciences administrators in developing a program area trends analysis/implications' document and the *Programs of Study*.

A draft course blueprint, curriculum guide, and test-item bank were written for a new course, Life Management. The test-item bank for Exploring Life Skills was revised to include portfolio performance items. Currently all courses have blueprints and test-item banks. Schools can monitor student gain and mastery through the Vocational Competency Achievement Tracking System (VoCATS). New textbooks were selected to support curriculum materials.

The State Family and Consumer Sciences Education staff directed and/or collaborated to provide several professional development opportunities on topics such as Reading for Learning, Food Science, and Tech Prep. One Distance Learning by Satellite program was offered statewide on "Making the Career Connection in Family and Consumer Sciences. Lastly, an on-going perpetual mentor-protege program was initiated to meet the growing need for Family and Consumer Sciences teachers.

Achievements

TECH PREP

Background

In 1990, the State Board of Education and the North Carolina Community College Board of Trustees established the North Carolina Tech Prep Advisory Committee. The committee was charged to advise the Boards on strategies for continuous improvement for tech prep and to provide the Boards with an annual progress report. The North Carolina Tech Prep Advisory Committee recommended that a summative assessment be conducted after a five-year implementation cycle.

Tech Prep Criteria

In 1992 the North Carolina State Board of Education and the Community College Board of Trustees established the criteria for a high school tech prep student. The criteria have been used by public schools to develop student career concentrations and to help students move from the high school component of tech prep to the community college component.

Criteria for completing a North Carolina high school tech prep course of study are as follows:

- English's I, II, III and IV taught at grade level or higher.
- Algebra I, and at least two of the following: Geometry, Algebra II, Technical Math I, Technical Math II.
- Biology, and at least two additional science credits; one must be a physical science, that supports the student's career concentration.
- Four technical credits in a career concentration.

Assessment

To have evidence of the progress being made in the college tech prep initiative, 25 consortia voluntarily participated in the 1996 Southern Regional Education Board (SREB) High Schools That Work (HSTW) assessment. The assessment measured student achievement in reading, mathematics, and science. Additionally, a student transcript analysis, a student survey, and a faculty survey were conducted. Funds from Carl D. Perkins Vocational and Applied Technology Education Act of 1990 were used to conduct the assessment.

Findings

The findings from the 1996 assessment were

- North Carolina college tech prep completers scored higher in mathematics and reading than their cohorts in the SREB consortium.
- North Carolina students met the SREB goal in reading and mathematics.
- North Carolina students did not meet the HSTW goal in science

During FY 97, upon receiving the results of this assessment, the consortia were provided a workshop on interpreting and using the results.

The committee recommended to the State Board of Education that emphasis be placed on:

- More students completing the State Board of Education's recommended college tech prep course of study.
- Academic and workforce development curriculum integration.
- Greater parental involvement in the student career planning process.
- Reading in all academic and workforce development education classrooms.
- The connection of science and mathematics to workforce development education.
- · Career development and guidance.

The Community College System, the Public Schools of North Carolina, and the Governor 's Commission on Workforce Preparedness School to Work office adopted a common set of occupational clusters. They are:

Agricultural and Natural Resources Technologies
Arts and Sciences
Biological and Chemical Technologies
Business Technologies
Commercial and Artistic Production Technologies
Construction Technologies
Engineering Technologies
Health Sciences
Industrial Technologies
Public Services Technologies
Transport Systems Technologies.

The State Board of Education adopted as a part of its new high school accountability model, the gain in the percent students completing a high school college tech prep and college prep course of study. Please note the prior section entitled "Reform Initiatives" for further information on high school accountability.

Recommendations

High School Accountability

Integrating Applied Academics into Workforce Development Education Programs

Efforts to promote curriculum integration of academic and workforce development education have focused on extensive staff development for academic and workforce development education teachers, as well as including integration activities in the development of curriculum materials and supportive materials.

Many statewide workshops for teachers and administrators have focused on integrating academics. Participants have prepared and exchanged lesson plans and utilized a network that serves to affect change in the classroom. On-site technical assistance visits serve to give positive directions and identify successful practices. In addition, publications about integrated strategies have been distributed. Activities include the following:

W	ORKSHOPS Parti	cipants
•	Five Reading for Learning Workshops	•
	(2 days each - High Schools That Work (HSTW) Model	135
•	One Integration of Academics and Workforce Developmen	nt
	Education Workshop delivered via Teleconferences	150
•	Collaborated in delivery of NC Job Ready/Tech Prep	
	Conference (Business/industry and local school personne	l) 1,300
•	Facilitated five workshops via satellite broadcasts -	
	"Replacing the General Track"	
•	Provided two workshops - "Writing Across the Curriculum	n"
	(2 days each)	45
•	Provided one workshop - "Orientation of New HSTW Site	es:
	Implementing the Key Principles" (2 days)	60
•	Founded and implemented Tech Prep/HSTW Principals'	
	Academy	29
•	Collaborated with the National Association of Secondary	
	School Principals in delivering teleconferences "Breaking	
	Ranks: Restructuring the American High School"	
•	Provided one workshop "Structural Systems Integrated	
	Geometry - Technology Education"	100
•	Provided one workshop "Integrated Structural Systems -	
	Technology Education"	60
•	Conducted a 4-day workshop for tenth grade academic an	ıd
	workforce development staff (Granville County) -	
	Fundamentals of Technology	25
•	Facilitated five external School-to-Work (STW) cross-funct	ional
	state agency teams	50
•	Developed and promoted a marketing plan for communic	ating
	benefits of high school improvement to students, business	
	leaders, and general public	130

- Implemented a NC Workforce Development Education Conference - 19 sessions specifically related to integration 2,045
- Facilitated workshops for 25 Tech Prep and 25 HSTW sites:
 "Interpretation of 1996 SREB/HSTW Assessment Data" 1,000
- Facilitated a NC delegation to the National High Schools that Work Conference - Approximately 360 topics related to integration
- Coordinated a Middle Grades Critical Thinking Workshop 300
- Facilitated training sessions for Applied Geometry
 53
- Facilitated training sessions for Applied Biology/Chemistry 29

CURRICULUM DEVELOPMENT

- Revised 34 course blueprints or matrices to reflect integration of business/industry practices and state/national standards
- Revised, developed, and disseminated 25 new curriculum products to teachers supportive of the above practices and standards
- Provided 42 VoCATS test item banks to 118 LEAs reflective of the above practices and standards

ACADEMIES

 Established health science and finance academies reflecting a school within a school model and integrated curricula

PUBLICATIONS

- Developed and distributed field test copy of the NC Workforce Development Education Programs of Study Guide 5,000
- Developed and distributed "Effective Practices -Health Science Careers/School-to-Work Model
 200

TECHNICAL ASSISTANCE

- Delivered consultative services to 32 SREB-HSTW sites related to ten essential practices - including integration of curriculum
- Conducted nine, three-day, on-site technical assistance visits to HSTW sites. Involved academic and workforce development teams and faculty
- Delivered on-site technical assistance to 42 Tech Prep Model locations

Through the Southern Regional Education Board/High Schools that Work (SREB-HSTW) sites, efforts were made to combine challenging academic courses and modern workforce development studies to raise the achievement of career-bound high school students. These sites have a firm belief that all students can master complex academic and technical concepts if schools create an environment that encourages students to make the efforts to succeed. Note prior section entitled

Combined Services Southern Regional Education Board/High Schools that Work. In addition, administration of the SREB/HSTW NAEP assessments (reading, mathematics, and science) to over 3,500 senior career major completers in 50 high schools was conducted to track school improvements. A faculty survey of over 2,419 high school teachers of math, science, English and vocational/technical education about teaching and learning environments for career major completers was conducted.

Services and Special Populations

Assisting special populations and integrating curriculum were highlighted for teachers and special populations at the 1996 NC Workforce Development Summer Conference. Sessions were presented to program area participants and special populations coordinators. Overviews of enhancing students' learning and performance through integrated curriculum, diverse methodology, and a variety of assessment measures were discussed.

Participants examined integration models and practical strategies that addressed core basic skills, national skill standards, SCANS skills, and industry approved vocational/technical subject matter. The strategies included interactive skills, hands-on activities, extended time, oral communication, collaborative efforts among staff, in-service training on learning styles, individual and small group discussions, and utilization of computer-assisted instruction and networking through the INTERNET.

Impact

LEAs have reported numerous positive results from integration efforts. The impact on programs, teachers, and students included: improved student attendance and retention; lower dropout rate; curriculum enhancement/improvement; broader visions among teachers of all disciplines; increased achievement for members of special populations; hands-on approach to learning; combining theory and practice to aid in the transition from school to work; and creation of school environments that encourage students to succeed. (Information on the numbers of students served is found in Appendix 1.)

Expansion and alignment of SREB-HSTW and Tech Prep Models with the School-to-Work (STW) Systems initiative continue to strengthen North Carolina's achievement of improved student performance. To date, there are 94% of the LEAs implementing STW systems, 100% implementing Tech Prep and approximately 40% implementing SREB-HSTW.

Career Guidance and Counseling

During 1996-97, four statewide in-service activities were held for approximately 350 career development facilitators (Industry-Education Coordinators [IECs], Career Development Coordinators [CDCs], and Job Brokers). Career development facilitators advised, counseled, and provided support services for students in the areas of program planning, career guidance and counseling, job placement, and postsecondary education and training.

A four-day program, part of the annual Workforce Development Summer Conference, was devoted to career development. Participants were given information on workforce preparedness, career assessment, career development plans, performance standards, National Career Development Guidelines, job placement, apprenticeships, work-based learning strategies, and integration of career development into classroom instruction.

Description of Program Services. Industry-Education Coordinators, Career Development Coordinators and Job Brokers collaborated to develop comprehensive career development planning programs. Teams of educators worked on plans to insure all students in North Carolina had access to appropriate workforce development education. The process at local levels included elementary, middle, and high school orientation, interest surveys, aptitude tests, career planning activities, connecting activities, and work-based learning opportunities.

Some school systems provided shadowing, internship, cooperative experiences, and apprenticeship programs for students, where they were able to experience a job setting and acquire information relative to career interests and education plans.

In many school systems, senior workforce development education students were provided informational packets about career, job, and postsecondary education and training. Students prepared individual career development plans and used a career information.

Career information was delivered in a variety of ways. Career Days and Job Fairs were held. Some included opportunities for students to interview with employers. Computerized career information systems were used extensively in guidance and counseling programs. Internet access provided an additional resource for career information.

Programs

Activities

Services

Career development facilitators were involved in developing ways to use labor market information with students. They were key players in establishing business/education partnerships.

Career development programs and services were evaluated at the local level, using a state-approved performance appraisal instrument.

Collaboration

Cooperative Efforts. Career Development facilitators continued to work cooperatively with the Department of Public Instruction School Counseling staff, Workforce Development Education Career Development staff, the State Occupational Information Coordinating Committee, and the North Carolina JobReady program. This collaboration facilitated the use of occupational information materials, assessment instruments and the promotion of career information. Emphasis was on the implementation of the National Career Development Guidelines, which was endorsed by the North Carolina Board of Education.

Further detailed information can be obtained from the state Career Development Consultant.

Appendices

Appendix 1 Enrollment Table

Appendix 2 Performance Standards

Appendix 3 Performance Standards Report

PAGE 1

SECONDARY ENROLLMENT; PERIOD COVERS July 1996 - June 1997

STATE: North Carolina N.

NAME: Sarah Hawes

PH. 715-1649

*number served by funded grants

, .

SECONDARY ENROLLMENT; PERIOD COVERS July 1996 - June 1997

STATE: North Carolina

NAME: Sarah Hawes

PH. 715-1649

		LINKAGE				PLA	PLACEMENT		
OCC PROGRAM	TECH-PREP	CO-0P	APPR	CONT	EMPL	EMPLOYED	MIL	OTHER	CURRENT
AREA					R'LTD	OTHER			TEACHERS
AGRICULTURE	5603			606	715	722	57	0	398
MARKETING	2883			1801	1025	324	102	25	357
CONS/ H'MAKING ED	8652			5732	2395	1597	253	169	1205
OCC HOME EC	881			892	387	317	28	28	252
TRADE & INDUSTRY	7442			3913	2558	966	295	59	1145
НЕАГТН	1203			1967	601	473	45	22	255
BUSINESS	21255			4403	1429	914	159	53	2002
TECHNOLOGY ED	1794			1270	469	327	85	0	736
GRAND TOTAL	50762	9651	502	20887	9579	5175	871	290	6337
									1000

Secondary Vocational and Technical Education Long-Range Performance Standards Approved on 6 January 1994 by the NC State Board of Education

 Each student enrolled in vocational and technical education, grades 9-12, will have a career development plan (CDP) on file which includes academic and vocational and technical education courses appropriate for his or her designated career goal.

2. If the enrollment of members of special populations in any vocational and technical education program area differs more than a third from the overall special populations percentage enrolled in all vocational and technical education programs in that school, the enrollment must be justified by documentation of student choices as evidenced by the career development plan (CDP).

3. Eighty percent of all students completing each vocational and technical education course will have mastered 80% of the core competencies designated on the statewide

course blueprints.

4. Eighty percent of all students completing each Level I or non-sequenced vocational and technical education course will have gained a minimum of 60% of the difference between the pretest scores and the total possible score as measured by valid pretest and posttests of all core competencies designated on the statewide course blueprint.

5. Eighty percent of all students completing each Level II vocational and technical education course will have gained a minimum of 40% of the difference between the pretest score and total possible posttest score as measured by valid pretests and posttests of all core competencies designated on the statewide course blueprint.

6. Seventy percent of all vocational and technical education completers as reported by program areas for each school will enter further training or education, including that

received in the military or on-the-job.

7. The completer unemployment rate for those students seeking full-time employment will be lower than the county's youth unemployment rate as reported by job skills-related program areas by school.

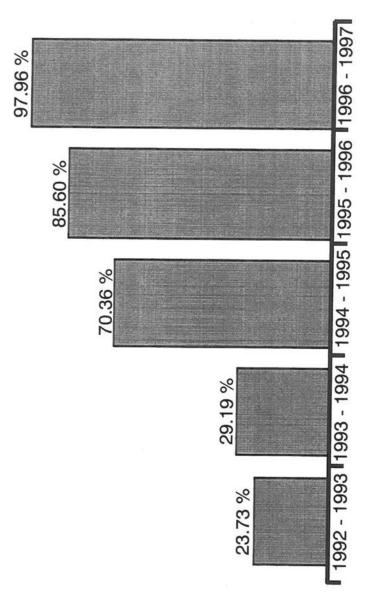
8. Of completers finding full-time employment, 70% as reported by job skills program areas by school will be employed in jobs related to their vocational programs.

Long-Range Performance Standard One:

Each student will have a Career
Development Plan (CDP) appropriate for his or her designated
career goal.

Statewide Summary of Performance Standard One Trend Data for School Years 1993-97

Percent of all Program Areas Meeting Performance Standard One



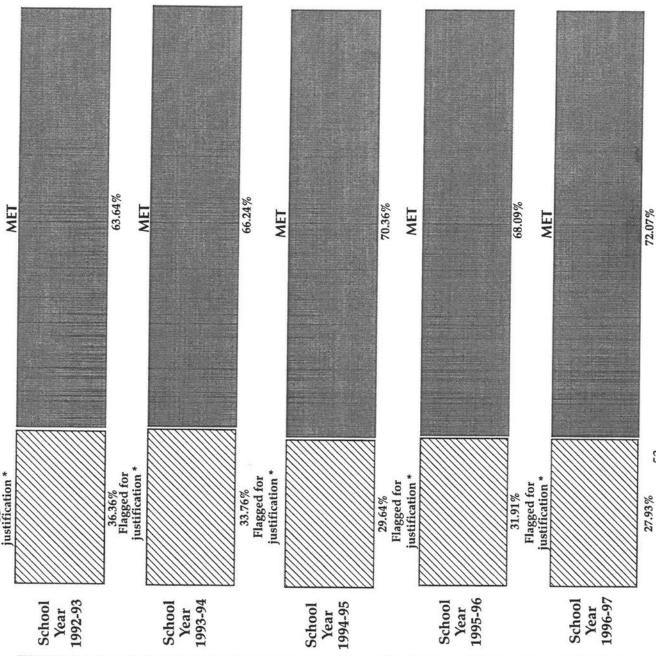
(Program Areas Were Counted Once Per School)

Workforce Development Education Frend Data for School Years 1993-97

Statewide Summary of Performance Standard Two

Long-Range Performance sch Standard Two:

If the enrollment of members of special populations differs more than a third in that school, it must be justified by documentation in the CDP.



(Program Areas Were Counted Once Per School) *Enrollment may be justified based on students' CDPs.

Long-Range Performance Standard Three:

Eighty percent of all students completing each vocational course will have mastered 80% of the course competencies.

Long-Range Performance Standard Four:

Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

Long-Range Performance Standard Five:

Eighty percent of all students completing level II vocational courses will have gained 40% from a pretest to a posttest.

Trend Data for School Years 1993-95

Statewide Summary

These summaries can be found in prior VoCATS data publications. Performance Standard Three, Four, and Five

School Years 1995-96 and 1996-97

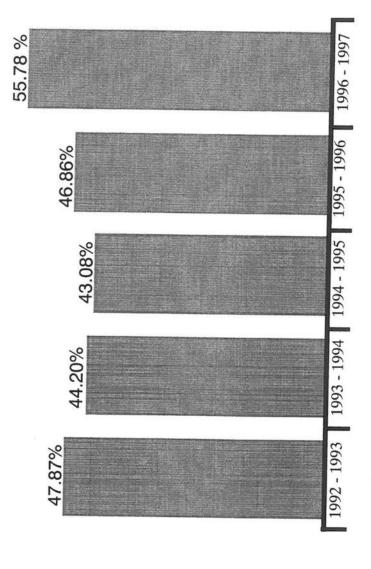
During school years 1995-96 and 1996-97 VoCATS data were compiled only at the school system level. Statewide data were not compiled during 1995-96 and 1996-97.

Long-Range Performance Standard Six:

Seventy percent of vocational and technical education completers will enter further training or education.

Trend Data for School Years 1993-97 Statewide Summary Performance Standard Six

Percent of all Program Areas Meeting Performance Standard Six

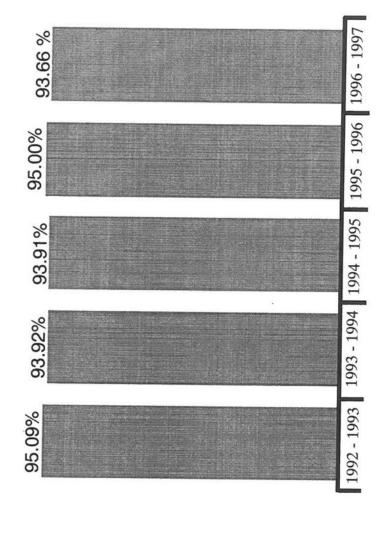


(Program Areas Were Counted Once Per School)

Long-Range Performance Standard Seven:

The completer unemployment rate will be lower than the county's youth unemployment rate reported by job skills-related program areas.

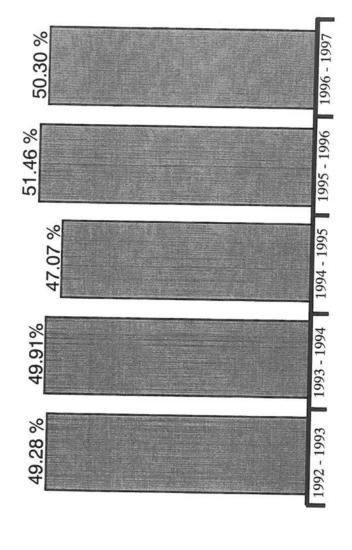
Trend Data for School Years 1993-97 Statewide Summary Performance Standard Seven Percent of all Program Areas Meeting Performance Standard Seven



Long-Range Performance Standard Eight:

Seventy percent of completers* will be employed in jobs related to their vocational program.

Trend Data for School Years 1993-97 Statewide Summary Performance Standard Eight Percent of all Program Areas Meeting Performance Standard Eight



(Program Areas Were Counted Once Per School)

sequence and finding full time employment as reported by job skill program

areas by schools.

* Completers finishing a technical

61

North Carolina Community College System

Vocational Education Performance Report

Program Year 1996-1997

"It is the intent of the General Assembly that vocational education be an integral part of the educational process." The State Board of Community Colleges shall administer, through local boards, a comprehensive program of vocational education which shall be available to all students who desire it without regard to race, color, national origin, sex, age, or disability.

North Carolina Community College System Postsecondary Vocational Education Table of Contents

P	Page
Introduction	67
Performance Standards and Core Measures	69
Postsecondary/Adult Occupational Programs, Services and Activities	71
Single Parents, Displaced Homemakers, and Single Pregnant Women	75
Sex Equity Programs	78
Criminal Offenders	79
Special Populations	81
State Leadership and Professional Development	84
Community Based Organizations	88
Consumer and Homemaking Education	88
Tech Prep	88
Integrating Applied Academics into Vocational Education	92
Career Guidance and Counseling	93
Appendices	
Appendix B Special Curriculum Student Enrollment 10 Appendix C Community Colleges 10	95 01 05 09

Introduction

The North Carolina Community College System offers a comprehensive array of training and educational opportunities. College transfer programs are available and a commitment has been made to provide literacy training for adults. The primary emphasis is, however, providing the state with a well trained workforce to meet employer's needs and help attract new business and industry.

During the 1996-97 program year, more than 780,000 individuals took advantage of the various program offerings at the 58 community colleges in the state. The students are mainly adults, but some are out-of-school youth at least 16 years of age. Technical programs attract the majority of students and lead to entry-level jobs in paraprofessional fields as technicians. The two-year programs lead to an associate in applied science degree. Vocational programs are also heavily utilized. They are designed to enable graduates to enter a skilled occupation at the entry level and to progress rapidly to the skilled or craftsman level. Diplomas or certificates are awarded to these graduates depending on the length of their course of study.

Figure 1 presents the enrollment in <u>all</u> curriculum areas: technical, vocational, general, and college transfer.

The following report deals with the approximately 105,000 students who were enrolled during the 1996-97 program year in technical and vocational programs under the auspices of the Carl D. Perkins Vocational and Applied Technology Education Act of 1990.

CURRICULUM ENROLLMENT BY PROGRAM AREA

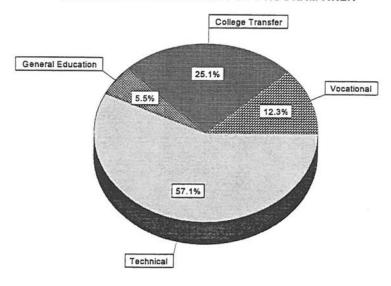


Figure 1 Total Curriculum Enrollment

Vocational Education Performance Report

Program Year 1996-1997

Performance Standards and Core Measures (Title I, Part B, Section 115 and 116; Title 5, Part B, Section 512)

1996-97 completed the third year of full implementation of performance standards and core measures. Measures one and three have tracked a cohort of students since 1993 in order to set a standard for completion and retention of students. During 1998, the postsecondary representatives of the Committee of Practitioners will meet to determine a set standard for measures one and three as well as re-examine the other standards. These recommendations will be presented to the full committee for approval. There is a concern over the decrease in the number of colleges meeting measure one and this will also be discussed. All 58 community colleges are included in the data even though there are three that consistently do not qualify for Perkins basic grant funding.

The measures and standards of performance are:

 To record the percentage of required credit hours completed for the curriculum, i.e., the number of students who completed 25%, 50%, 75%, or 100% of the courses needed for curriculum completion/graduation.

The standard is set at 15% below the mean percentage of the System average. The standard is set in the 76-100% column in order to measure those students nearing the completion of their curriculum programs. A student cohort, or those students identified as enrolled in subsequent years, will be followed over a three-year span.

1993-94 the standard was 20%; 42 of the colleges met the standard 1994-95 the standard was 32%; 41 of the colleges met the standard 1995-96 the standard was 22%; 35 of the colleges met the standard

2) Report the rates at which vocational education students are required to take and pass remedial, or developmental, basic academic courses, such as English and mathematics, and the rates at which vocational education students take and pass these as well as general education and related courses.

The standard is set at 15% below the mean percentage of the System average.

1993-94 the standard was 69% for remedial; 53 colleges met the standard the standard was 77% for general education; 54 colleges met the standard 1994-95 the standard was 69% for remedial; 53 colleges met the standard the standard was 78% for general education; 56 colleges met the standard 1995-96 the standard was 70% for remedial; 54 colleges met the standard the standard was 78% for general education; 56 colleges met the standard

3) Report retention rates by credit hour. Students are considered to be retained if they enrolled in the Fall quarter of the first recorded year, did not complete or graduate in that quarter, and completed at least one additional course during the subsequent two school years. A cohort of identified students will be followed for no less than three years.

The "snapshots" taken thus far show:

- 1993-94 the standard for 12 or > hours was 76%; 29 colleges met the standard the standard for 5 or < hours was 16%; 26 colleges met the standard
- 1994-95 the standard for 12 or > hours was 83%; 36 colleges met the standard the standard for 5 or < hours was 10%; 20 colleges met the standard
- 1995-96 the standard for 12 or > hours was 88%; 37 colleges met the standard the standard for 5 or < hours was 9%; 21 colleges met the standard

4a) Compare the number of special population students *enrolled* in vocational/technical programs to the number of special population students enrolled in all programs in the school population. The special population enrollment in technical/vocational programs should not differ more than 1/3 from the overall percentage of special populations in all programs. Standard is 0 or above.

1993-94 - 34 colleges met the standard 1994-95 - 33 colleges met the standard 1995-96 - 32 colleges met the standard

4b) Compare the difference in the percentage of special population technical/vocational completers with the percentage of all completers in technical/vocational programs. The standard is set at 15% below the mean percentage systemwide.

1993-94 the standard was 85%; 29 colleges met the standard 1994-95 the standard was 85%; 37 colleges met the standard 1995-96 the standard was 60%; 47 colleges met the standard

Collaboration with North Carolina's Governor's Commission on Workforce Preparedness has continued as the Commission has prepared its common performance management standards for all workforce training initiatives in the state. The North Carolina Community College System has been instrumental in establishing these standards.

II. Postsecondary/Adult Occupational Programs, Services and Activities (Title II, Part C, Section 231-232)

The 1996-1997 postsecondary enrollment for the North Carolina Community College System is found in Appendix A. This is a specific enrollment list for the Perkins-eligible student. The following Appendix B lists the special curriculum student enrollment report for 1996-1997, and includes vocational, technical, college transfer, and general education. Appendix C lists all of the community colleges in the system. All member institutions are two-year postsecondary community colleges offering technical and vocational curricula, general education programs, as well as college transfer programs. Each community college is committed to providing a comprehensive educational program to the citizens of North Carolina. Each college is uniquely chartered to best meet the educational and economic development needs of its local community or service area. The system office provides curriculum standards to assure that each program meets systemwide regulations.

During the 1996-1997 program year, funds under Title II, Part C, Section 235, were distributed to 55 eligible community colleges in North Carolina. These funds are grouped into broad categories of allowable activities. The percentages shown in Figure 2 below represent the approximate level of funding used in each category. These categories do not represent a total list of all services and and activities provided; they were compiled to facilitate reporting. Brief examples of activities and services provided are given for each category.

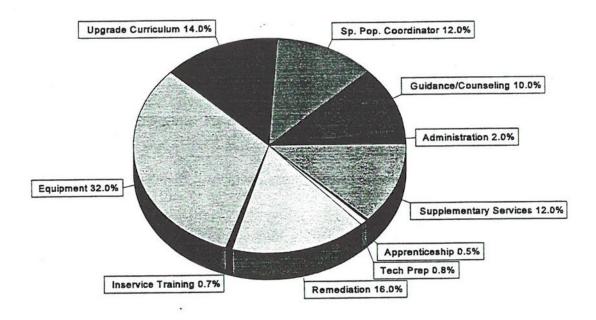


Figure 2 - Postsecondary Basic Allocation

Administration. Funds were used by 22 community colleges for administrative purposes. These services were provided on a prorated basis by existing college personnel. Only 2% of the allocated money was used statewide. The administrative responsibilities do not increase with the expanding expenditures of other Perkins line items; thus, a number of the administrative duties are handled by specific personnel within their job descriptions or they are absorbed without additional pay into existing duties.

Guidance and Counseling. Funds used for guidance and counseling were incorporated into 28 community college budgets. Most colleges used the money to help support a counseling position to work solely with special population students enrolled in eligible programs. Activities included extensive career counseling, strategies to increase retention, and ensuring each student was provided with necessary services to ensure academic success. Some of the dollars were spent in providing computerized placement testing and career assessment.

Special Populations Coordinator. Thirty colleges chose to fund, either partially or entirely, a Special Populations Coordinator to assist in providing opportunities for equal participation of students with special needs. The person in this position assures that the needs of special population students are met and ensures that the college where they are enrolled remains sensitive to future needs. These are often part-time jobs performed in conjunction with other duties. The coordinator may be in the counseling department or a dean or other administrator. Lack of self-esteem and underdeveloped personal skills have been proven to cause students to underachieve and drop out without realizing success in an academic environment. Many of the colleges have chosen, under the auspices of student development services, a comprehensive program, including personal skills mapping using computerized software to predict success. Intervention and prescriptive strategies facilitate student success and/or dropout prevention. This position works individually with students and faculty to ensure successful program completion.

Upgrading Curriculum. To assure continued economic development and to be consistent with the intent of Perkins provisions, improved curricula are an important pursuit in the community colleges. Twenty-one colleges used funds in this category. Expenditures included software upgrades, purchase of materials, faculty release time from instruction to review and revise curricula, and the hiring of additional faculty in order to lower the student/teacher ratio.

Equipment. In order to meet the employment needs of local industry, the colleges must stay current with state-of-the-art equipment. Therefore, much of the basic allotment to the colleges was used to either purchase new equipment or upgrade existing equipment. Colleges also view these dollars as a means to provide needed specialized equipment for disabled students.

Sixty-seven percent of the community colleges used a portion of their Perkins grant for equipment purchases. Computers and peripherals were widely chosen for uses in various situations. Administrative Office, Architectural Technology and Computer Engineering Technology were but a few of the programs enhanced by these purchases. Related equipment included workstations which accommodate wheel chairs, computerized projection devices, scanners, networking software and printers. Also purchased were programs and equipment to upgrade learning assistance centers, specialized equipment and devices for disabled students, computer controlled manufacturing machinery, and equipment for allied health programs.

Inservice Training. Faculty members in the community college system are encouraged to enroll in professional development programs to ensure their students receive the best education and training possible. Eleven colleges used part of their allotment to help offset inservice training costs. Examples include workshops for accounting faculty members to maintain a CPA and to meet SACS criteria, courses to meet requirements as an interpreter for the deaf, training for instructors in special issues and techniques relevant to the needs of special populations, and general upgrading of instructors' technical skills needed for various eligible programs.

Remedial Services. The second largest expenditure was for remediation. Twenty-nine community colleges used a portion of their funds to provide remedial services to their students in eligible technical and vocational programs. A wide variety of approaches were taken by the various institutions to assist their students with special needs. Learning/ Developmental/Skills labs for reading, English, and math were widely utilized. Often these labs were kept open beyond normal operating hours. Tutoring, counseling, and remedial instruction were commonly used to assist the academically disadvantaged as well as the physically impaired students. In certain schools, software was purchased to allow individualized learning in literacy and math.

Tech Prep. Title II basic grant funds were used by four colleges to help support Tech Prep activities. These activities included faculty release time to develop and/or refine articulation agreements, tutoring services for Tech Prep students, and the development of a data base to follow Tech Prep students entering and progressing through the postsecondary programs.

Apprenticeship. One college elected to budget a portion of their allotment to help with the costs associated with the employment and training of an apprentice.

Supplemental Services. Thirty-seven community colleges used funds to accommodate and assist disadvantaged and disabled students. Special services included the hiring of interpreters, tutors, signers, note takers, and translators. Special devices such as tape recorders, talking calculators, magnifying glasses, videos, large print texts, and workstation modifications were purchased. Various types of diagnostic and assessment materials and supplies were acquired, along with software for curriculum remediation.

III. Single Parents, Displaced Homemakers, and Single Pregnant Women (Title II, Part B, Section 221)

In 1996-1997 single parents/displaced homemakers/single pregnant women numbered approximately 12,000 at the 49 colleges that received Perkins grants especially for this target population.

Description of Services. The program used 89% of single parent funds for direct, material support of students. Services included child care, student transportation, tuition, and instructional materials required for class participation. Eleven percent of the funds were used statewide to provide counseling, support, and information to the single parent population. In addition, most colleges contributed other funds to maintain a one-on-one contact with the student at least once a month, and frequently bi-weekly or even weekly. Grant coordinators spend between 25% and 50% of their time on single parent activities, but charge at most a maximum of 20% of their salaries to Perkins money. Many colleges donate a single parent salary rather than use Perkins money. Further, some colleges have established small scholarship programs to help students with child care, a practice unheard of ten years ago when federal vocational education funds were the only source available for child care for college students.

In 1996-97 the North Carolina Community College System used grant funds to serve 1,063 students with child care and 804 students with transportation, instructional materials, and tuition. The grant is administered by the System Office as two programmatic components:

1) Child Care.

Forty-nine colleges offered child care to the target population at a cost to the grant between \$49 and \$61 per week per child, depending on whether the college offered this help for three or for four quarters. The service helped student retention stay at 75% (as measured from fall, 1996 to fall, 1997). The retention rate of students receiving child care from Perkins was higher than for those receiving the same assistance from other sources (70%). State staff hypothesize that the Perkins' greater success comes from the personal and frequent contact that students enjoy with grant staff. That Perkins money has been well used is demonstrated by the fact that students needing, but unable to obtain, child care were far less likely to stay in school than either of the foregoing groups; retention was 42% for those needing, but unable to get, child care.

2) Assistance with Transportation, Tuition, Books and Fees.

This support was available at 32 colleges, costing the single parent grant an average of approximately \$319 per student for the year. Retention for these recipients was 72%. By comparison, only 57% of the students who received this kind of help from other sources stayed in school. Those who were unable to receive transportation, tuition, or fees from any source were very unlikely to stay in school: 26%.

Special Delivery Methods. Community colleges in the North Carolina constellation chose to use the Perkins Single Parent money for direct support of students because they know that without the financial means, this population is simply unable to come to school. Counseling and other human services for single parents are borne almost entirely by the college from other funds. Once Single Parent grant support is awarded, one-on-one counseling remains as the greatest influence and retention factor. Some colleges participating in the grant make a point to see the beneficiaries at least every two weeks, or more if indicated. A counseling obligation often goes into a contract that the local coordinators sign jointly with students. In fact, students who experience special difficulties are much more likely to seek the grant coordinator in favor of all other counselors in the student personnel office, particularly if it is child care that the student receives. It seems that the student forms a palpable bond between student and coordinator that no other counselor can enjoy. Even if such contact is only ten minutes per session, it has a positive effect on retention.

Some colleges use off-campus visits to museums, parks, and other leisure activities, paid for by local funds, simply to get single parents to meet one another and to enjoy briefly an escape from their daily pressures. Once these students find others with common concerns, they bond and help keep each other in school when pressures become too intense to handle alone. They pick up where no counselor, no matter how sensitive, can respond as adequately as a peer.

The state office now has a history of retention rates for all programs on file in its office. Every year each college receives a report of its Single Parent retention compared to that for the program state wide. If the local Single Parent program is five points below the average for the State, then it is required to state in its proposal for the coming year what special practices it will employ to bring its retention up to the statewide average.

The method appears to be working well. One college responded with particularly meaningful plans which increased retention to 80% in 1995-96 and 81% in 1996-97. It had been in the sixties for several years in a row. The coordinator now works out a complete employability plan for each student before admitting him or her to the single parent program. The plan requires goal setting, reality checks, and time management discussions. The coordinator furthermore requires students to report to his office twice a month. In addition he actively solicits and receives monthly academic reports from instructors and

then contacts students with problems. Finally, the coordinator has organized his own tutoring program for students, a service which had not existed previously on his campus.

The grant remains an efficient vehicle for keeping students in school. Although the colleges experience increasing applications and decreasing resources, they often can help as many fifty to hundred students with tuition and books. Similarly, average costs of child care are low at \$49 to \$61 per week or less. Local coordinators accomplish all of this not because services are cheap. Rather, they work diligently with other agencies to pool many resources together to make Perkins money go as far as possible.

Exemplary programs. One college aggressively addressed its retention problems with a week-long orientation session for single parents receiving assistance from the Perkins grant. The effort has brought their retention of child care recipients to 85% from the sixties and seventies in previous years.

Attendance at orientation is required for applicants of the single parent grant. The orientation is scheduled for three hours every day. Personnel explain how the grant can help students and what is required of them. Items of the student/grant contract are gone over in detail. Reimbursement rates are discussed. Requirements for attendance and academic performance are outlined. Once the technical details of the grant are dealt with, the students undergo a variety of life management workshops. They take the Myers Briggs test, work through the Self Directed Search, and later in the week hear a discussion of the results and what they can mean. Also included during orientation are sessions on time management and goal setting, as well as individual counseling sessions. Students celebrate at the end of the week with a potluck luncheon.

The Single Parent program does not end with the orientation. During the year these single parents are required to attend at least one workshop a week on life management skills. Topics are chosen by the students themselves and include sessions on parenting, nutrition, communication, or study skills. In fact, the students organized their own Single Parent Club explicitly to attend to life management skills. The Club is complete with officers and a constitution and affords them a measure of campus visibility and official standing with the Student Government Association.

This college was cited in this space last year and appears here again for 1996-97 because their progress is sustained. Moreover, the state office delegated leadership to this college for planning and implementing 1996-97 statewide workshops for coordinators of local single parent programs. Out of those workshops came a best practices manual, a compilation of ideas and strategies from local programs. This best practices manual was completed and distributed to all local agents in time for the beginning of the latest school year.

IV. Sex Equity Program (Title II, Part B, Section 222)

During the 1996-97 school year, twelve colleges had sex equity grants designed to train men and women in the nontraditional occupations. The total cost was \$291,017, including the local salaries for counseling, coordination, and direct financial support of students. The money invested by the sex equity program has broken barriers, especially to women's training, by providing them with material support (such as child care, transportation, books, etc.); affective support (personal and group counseling, personal development seminars); and practical support (extensive personality and aptitude assessment, peer tutoring, job development and placement). Since the Perkins legislation enabled this assistance, nontraditional students have been much more likely to stay in school than they were prior to this assistance. Furthermore, the program has made the women employable at a reasonable wage for the first time in their lives.

Retention rates of nontraditional students in the program averaged 75% from fall, 1996 to fall, 1997 (the figure includes those who complete a curriculum at some point during the year). Those who went to work in a nontraditional field within six weeks after graduation were 78% of completers, up from 61% the previous year. Moreover, the number of nontraditional graduate employees as a percentage of total participants increased last year to 30%, from 22% in 1995-96, and from 18% in 1994-95.

Preparatory Services for Girls and Women. North Carolina's community college women, for whom the 14-25 age limit has been waived, are on average 30 years old; however, the sex equity program still offers the preparatory and supportive as well as the educational programs noted above. Almost all the nontraditional grants offer a battery of personal, aptitude, and placement tests as part of the orientation to nontraditional trades. Frequently, the colleges interpret the personal assessments in a group setting, a strategy which fosters the bonding of a support group. The assessment instruments, as colleges report, reinforce positive images and give the women confidence in knowing they are going into an occupation for which they are suited.

In 1996-97 the state office made plans to expand programs of preparatory services by circulating RFPs to colleges to go into the community at large with career exploration and information on nontraditional work. The program will be funded with 1996-97 carry-over funds.

Exemplary Program. Although the programs are broadly similar, each offers something unique. This was the second year that a special model program funded a broad, large-scale experimental program to make "sex equity" a household word in the entire community among college students, public school children, parents, households, business executives, and civic groups. The college already has in place a massive media campaign to make this community aware of its seriousness in promoting gender equity. This year the program added theater productions to dramatize the issues of gender equity. Plans are under way for

faculty education. Even pre-school children are being reached through puppet shows at day care centers. This year the college has amassed enough information and strategies to share with sister colleges in a workshop of its own design and making.

Another college, new to the program, has excelled in a different kind of effort. Its purpose is focused more on students and less on the community and has placed 75% of its completers in nontraditional jobs related to the students' training. Their success is due to the required workshops in math that students must attend once a week, as well as the required weekly counseling session. The capstone of the program has been a co-op program, which gave every student an opportunity for placement immediately upon graduation. This program has been unusual again because of its support by members of the administration, who have been committed players ever since the writing of the grant proposal.

V. Criminal Offenders (Title II, Part B, Section 225)

The correctional curriculum programs in North Carolina are designed to prepare individuals for skilled and semi-skilled employment opportunities upon release from incarceration. These programs offer occupational advancement significantly above the no-wage or minimum wage prospects this population might otherwise expect. Both academic and skill development programs are offered. The developmental academic studies provide remediation in basic skills. The occupational skill curriculums are primarily oriented to the development of manipulative skill competencies for use in specialized trades and professions. These programs consist of logical sequences of courses designed to prepare individuals for identifiable employment levels in specific occupation fields.

During 1996-1997 four colleges received funds to assist them in providing vocational education programs in correctional institutions. Of the four, two were for the second year of a two-year funding cycle, and two were first-year funding. All funding was limited to the colleges serving new correctional institutions and submitting a successful proposal. Proposals were reviewed jointly by staff from the Community College System Office and the Department of Correction (DOC).

Achievements, services, or programs. Collectively the four colleges were able to fund the start-up of seven programs, serving a total of 136 inmates. This represents approximately four percent of the total number of inmates enrolled in vocational education programs offered through the community colleges in North Carolina.

The following provides a brief description of the funded projects. Figure 3 displays enrollment and completion data by program.

College of the Albemarle supported three programs at the Pasquotank Correctional Institution, a new, medium/minimum security facility.

Piedmont Community College supported one program at the Dan River Work Farm, a new, minimum security facility.

McDowell Community College supported two programs at the Marion Correctional Institution, a medium/minimum security facility opened in 1995-96.

Robeson Community College supported one program at the Lumberton Correctional Institution, a medium security facility, opened in 1995-96.

	# Enrolled	# Completed
College of the Albemarle - total (Pasquotank Correctional Institution)	32	20
Air Conditioning, Heating, Refrigeration	11	5
Electrical Installation	9	7
Light Construction	12	8
McDowell Community College - total (Marion Correctional Institution)	23	14
Cabinetmaking	7	5
Microcomputers	16	9
Piedmont Community College - total (Dan River Work Farm)	20	18
Light Construction	20	18
Robeson Community College - total (Lumberton Correctional Institution)	61	29
Air Conditioning, Heating, Refrigeration	61	29
TOTAL	136	81

Figure 3 - Criminal Offenders Enrollment

VI. Special Populations (Title I, Part B, Section 118)

With an emphasis on job training, the community colleges stress increasing the access, retention and success of special population students. In order to identify the special needs of these students, colleges rely not only on assessment tests, but also on referrals from the faculty. Workshops are held locally and statewide to train personnel both in identifying various learning disabilities and in methodologies of meeting the different types of training needs. Faculty members work closely with the Student Services section at each college to provide the best learning environment possible for these students. In addition, secondary high school counselors meet with the postsecondary counselors to help provide a smooth transition from high school to community college for the special needs students.

Disabled. During the 1996-1997 program year, 4,379 disabled students were enrolled in the vocational and technical curriculum programs eligible for Perkins funds. (See enrollment table in Appendix A.) To meet the needs of these students, particular attention was given to coordinating other, compatible vocational services. Where possible, vocational rehabilitation programs are provided on community college campuses or are located nearby. This emphasis on coordination is accomplished in two steps -- identification and assessment.

The identification process includes creating voluntary, non-prejudicial mechanisms for self-identification such as academic applications, course registration forms, counseling self-referrals, and other reporting forms. Other identification programs include testing, counseling, and faculty feedback. In addition, active participation and referrals by NC Vocational Rehabilitation Services, Division of Health Services, JTPA, and area secondary schools are encouraged. This program is especially productive and effective as evidenced by numerous cooperative agreements between local colleges and the NC Vocational Rehabilitation Services, local Departments of Social Services, community action agencies, and mental health clinics. In addition, many staff development activities have dealt with recognizing disabilities and alternative teaching methods.

Assessment is accomplished by several methods which are used singly or in combination. Also, as in the identification process, full use is made of personal interviews, observations by staff, and information passed from referring agencies. A recent addition has been made to these efforts through the use of computer software to diagnose students' learning problems. Additionally, where required to ensure appropriate participation, testing is conducted by licensed clinical psychologists.

Once a disabled student has been identified and properly assessed, a wide array of supplemental services are provided by each college. These include such things as supplemental counseling, placement tests available in Braille, referral services available in the local community, specialized instructional equipment, such as large print typewriters,

hearing impaired telephone adapters, individual tape recorders, and equipment/lab modifications. Additional classroom support is provided through tutorial services, interpreters, note takers, signers, readers, and typists. Special texts and other curriculum-related material are also available when needed. Other services include special programs such as sheltered workshops or programs for the blind or hearing impaired. These, and the many other supplemental services, are provided on an individual basis.

Limited English Speaking (LEP). A total of 965 students with limited English proficiency were served in vocational and technical curriculum programs during the 1996-1997 program year. (See enrollment table in Appendix A.)

North Carolina continues to attract many people from other countries. Each year the farming harvests attract many native Spanish-speaking immigrant farm workers. These workers tend to settle in any region of the state where agriculture-related jobs are readily available. Often these workers relocate to the larger urban areas to seek employment during off-peak farming seasons. This movement has placed a steadily increasing burden upon the community college system as it attempts to meet the language needs of these citizens. Other resources, such as foreign-owned business and industry, also attract non-English speaking people to North Carolina. Recognizing the abundance and quality of higher education in North Carolina, many foreign students are attracted. Of these, many come with dependents and elect to stay for additional graduate work after initial degree completion. Another source of non-English speaking people are the dependents of military personnel stationed at the many North Carolina defense locations. All of these groups are served through the LEP programs at the community colleges.

Identification, outreach, and recruitment activities designed for those eligible for assistance under LEP programs include many different approaches. Many students are enrolled in English as a Second Language program to fulfill citizenship legalization requirements. North Carolina community colleges apply a variety of recruitment and assistance techniques to assure full and successful participation by these students. Such techniques include easily available English as a Second Language classes, subject matter tutoring in native languages, translations of technical texts into native languages, and Guided Studies Centers which offer individual or group tutoring and specialized classes for the distinct needs of LEP groups.

Disadvantaged. Community colleges in North Carolina have, as do other states, a large number of economically disadvantaged students. Information provided at registration provides a key identification element for the colleges to determine the type and extent of circumstances which contribute to classifying a student as disadvantaged. The 58 community colleges reported a total enrollment of 34,967 economically disadvantaged students. (See Appendix B.) Other identification information is received through referral

information from JTPA programs, community action agencies, and similar groups. Other students are identified by information supplied by financial aid offices within each college. Identification criteria include referral agency standards, Pell grant application guidelines, participation in JTPA programs, or a comparison of family income with the poverty guidelines established by the U.S. Office of Management and Budget.

Likewise, many educationally disadvantaged students are enrolled in North Carolina's community colleges. In 1996-1997, 76,416 students were enrolled as academically disadvantaged in all the program areas. (See Appendix B.) One method used to identify students who may be educationally disadvantaged and, thus, at risk of academic failure is the administration of standardized instruments such as the Assessment and Placement Services for Community College (APS), ASSET and COMPASS (published by the American College Testing Program), Computerized Placement Tests (CPT), and the Multiple Assessment Programs and Services tests which include the Descriptive Tests of Mathematics Skills and the Descriptive Tests of Language Skills. Also, full use is made of personal interviews, observations by staff, and information passed from referring agencies. Computerized diagnostic programs are available at many colleges to diagnose students' learning problems and enable staff and faculty to more effectively meet the student's needs.

The blending of identification and assessment plays a vital role in vocational education programs in the state's community colleges. This is especially true for the economically and educationally disadvantaged student. Colleges assess the student's interests, abilities, and special needs through preadmission conferences, career and academic guidance, personal counseling, financial assistance counseling, and academic testing. On the basis of student profile information gathered from these sources, students are often referred to service provider agencies which conduct more detailed assessment. An example of such a referral is when a student is sent to the Employment Security Commission for GATB testing or ASVAB assessment.

Once identified and assessed, disadvantaged students (both economically and educationally) are provided a wide array of supplemental counseling, tutoring, and special remedial instruction programs and services to increase their chances for success in vocational and technical curricula programs. Each college staffs a learning resource center which is available to such students on an as-needed basis. Many colleges also aggressively promote the use of developmental studies programs. These programs, and others like them, emphasize the NCCCS commitment to an open door environment and philosophy which enables students to increase whatever skills she/he may already possess, and to successfully progress to higher, more productive skills for employment.

Often the single largest impediment to successful academic performance for both the economically and educationally disadvantaged student has roots in fiscal limitations. To overcome this, community college financial aid offices strive to match needy students with the available sources such as scholarships, loans, and grants. The state of North Carolina annually makes over 1,000 grants from a scholarship fund. Additionally, many local business and civic organizations provide support by establishing scholarship funds. Whenever possible these local and state resources are augmented by Federal sources such Pell grants and JTPA programs.

51,530 disadvantaged (both academically and economically) students were served with Carl Perkins dollars.

VII. State Leadership and Professional Development (Title II, Part A, Section 201)

Curriculum Improvement Projects. A major focus of funds from Perkins for state leadership and professional development was the support of curriculum improvement projects. The goal of a curriculum improvement project (CIP) is to create a process and environment through inservice training and professional peer guidance which leads to an updated instructional program or curriculum area. Programs or areas targeted for improvement are those that are strongly affected by episodic socio-technical or economic forces in the state. Programs which meet this criteria are identified via a system-wide request for proposal process in which all colleges participate. These requests highlight what the circumstances are which require curriculum update, how the college will provide system-wide leadership to benefit all colleges offering the curriculum, and how the updated curriculum will be disseminated and implemented across the system. Strategies used by participating colleges include updating instructors' technical and professional knowledge, skills, and abilities, and updating the content of the associated curriculum and continuing education courses. Projects are funded for a two-year period.

Outcomes of Curriculum Improvement Projects Ending June 30, 1997:

All five CIPs funded during 1995-1997 were responsible for developing the curriculum standards for all programs covered by the CIP and writing courses for the Common Course Library as a part of the Systemwide Reengineering effort. These activities were major components of each project and in addition to the other project activities.

Air Conditioning, Heating, and Refrigeration - Rockingham Community College

Colleges participating - 33

Provided 71 hours of professional development training for each participant.

- Ground Source Heat Pumps
- Computer-aided Instruction
- Wheels of Learning Instructor Training
- ► Indoor Air Quality
- ▶ Problem-Based Learning
- Gas Venting

Produced and distributed curriculum manuals for Air Conditioning, Heating, and Refrigeration, and Commercial Refrigeration programs.

Commercial Graphics, Commercial Art & Advertising Design, Graphic Arts - Lenoir Community College

Colleges participating - 16

Provided 129 hours of professional development training for each participant.

- ▶ Internet Utilization
- ▶ Adobe PageMill
- Adobe Photoshop
- Advanced Adobe Photoshop
- ▶ Adobe Photoshop 4.0
- ► Macromedia Director
- Macromedia Extreme 3D
- Fractal Design Painter 4.0

Developed interactive recruitment CD-ROM incorporating skills. Distributed to all colleges offering programs, all high schools offering graphic arts, and to attendees at Graphic Arts '97 -- the largest trade show for digital publishing, printing, and finishing in the Southeast U.S.

Health Information Technology - Davidson County Community College

Colleges participating - 8

Provided 50 hours of professional development training for each participant.

- 2-day Problem Based Learning workshop
- Curriculum Development/Critical Thinking workshop
- Distance learning class on Medical Coding
- Microsoft PowerPoint workshop
- ► North Carolina Health Information Management Association Workshop

Published and distributed model curriculum for HIT program.

Published and distributed test bank for core courses in curriculum.

Human Services Technology - Sandhills Community College

Colleges participating - 21

Provided 36 hours of professional development training for each participant.

- Cultural Diversity
- Critical Thinking
- ▶ Problem Solving
- ► Curriculum Development

Developed Gerontology curriculum for NCCCS.

Produced faculty manuals with curriculum competencies for program and concentrations and course syllabi for all major courses.

Developed the practicum course and course manual.

Produced recruitment video.

Machining - Pitt Community College

Colleges participating - 38

Provided 35 hours of professional development training for each participant.

- 5th-Axis Machining
- Youth Apprenticeships
- Problem Solving
- ▶ Team Building

Developed five models for apprenticeship training in cooperation with the North Carolina Department of Labor.

Established four pilot sites for testing of graduates to certify for National Skills Standards for Metalworking.

Produced recruitment video for distribution to community colleges and high schools.

Outcomes of First Year for Projects Funded 1996-98:

Architectural Technology - Wake Technical Community College

Colleges participating - 15

Provided 96 hours of professional development training for each participant.

- Micro-station/Architectural CAD
- Architectural Imaging
- Problem-Based Learning
- ▶ Digital Architecture
- ► Emerging and Alternative Technologies in Construction and Architecture

Developed a CIP HomePage for Architectural Technology instructors.

Developed course goals and objectives, recommended texts and reference materials for all 28 new semester courses in Architectural Technology.

Activities begun--to be completed in second year of project:

- Instructors Guide for Digital Architecture
- Instructors Guide for Computer Aided Drafting 2-D & 3-D
- Curriculum Manual for Architectural Technology
- Working with State Department of Public Instruction on Tech-Prep 4+2 articulation agreement
- Working with East Carolina University, UNC-Charlotte, UNC-Greensboro, NC A& T University, and NC State University on a 4+2+2 articulation plan.

Emergency Medical Science - Asheville-Buncombe Technical Community College

Colleges participating - 10

Provided 25 hours of professional development training for each participant.

- Course Development and Upgrading
- National EMS Standards
- ► EMS for Children
- EMS Education Requirements

Activities begun-to be completed in second year of project:

- Course guidelines for all EMS courses
- Production of EMS recruitment video
- 12 Lead EKG workshop
- Interactive Software workshop
- · Clinical and Field Internship workshop

VIII. Community-Based Organizations (Title III, Part A, Sections 301 and 302)

No postsecondary programs are presented in North Carolina.

IX. Consumer and Homemaking Education (Title III, Part B, Sections 311, 312, and 313)

No postsecondary programs are presented in North Carolina.

X. Tech Prep (Title III, Part E, Sections 341-347)

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990, Title III, Part E, funding is provided to Tech Prep consortia comprised of one or more local education agencies and community colleges. In 1996-97, funds were distributed for a two-year cycle through a Request for Proposal process. Grants were available for either continued implementation or innovation and demonstration projects to address special initiatives.

Implementation projects undertaken by the funded partnerships included these efforts:

- Curriculum alignment between high schools and community colleges
- · Curriculum integration that combines academic and technical learning
- Collaboration between secondary, postsecondary, business and industry
- · Staff development for faculty, administrators, business associates
- · Career development and guidance services
- Services for special populations
- Marketing

Innovation projects undertaken during this two-year period include:

- · Assessment of and assistance to tech prep students at-risk
- Development of Novell Certified Administrator networking curriculum
- · Internet curriculum enhancement and apprenticeships
- Expansion of a scientific visualization curriculum at six high schools statewide
- Integrated automotive curriculum
- · Faculty involvement in curriculum integration

- · Alternative energy integrated curriculum
- Career empowerment for students

Reviews of the funded projects occurred during June, 1996. These reviews were held at four locations throughout North Carolina. Reviewers from the Department of Public Instruction and the Community College System compared information gathered from the oral presentations and the executive summaries to the objectives in the funded proposals. The following materials were requested from each partnership: a one-page Executive Summary; a Best Practice for the year; and a Student Data Sheet (Appendix D).

Analysis of the reviews showed that 26 of the colleges have comprehensive, multi-faceted, tech prep initiatives as part of their school-to-work system. An additional 16 colleges are now able to track students from high school into the college programs of study. Seven colleges felt they had not reached the level of confidence in their tech prep efforts that they had hoped. System staff have met with college representatives and groups to provide technical assistance which included presentations, training, suggestions of alternate grant funding sources, and promotion of business-education partnerships.

Examples of Process Outcomes

Articulation

- Over 900 articulation agreements have been established with local high schools
- A four-year component was added to the Associate Degree tech prep program sequence at Anson Community College
- Articulation agreements with four-year colleges and universities are being developed

Collaboration

- Increases in tech prep college scholarships from community college foundations and local business and industry for high school students who have completed the secondary sequence
- Development of common school calendars between some of the colleges and high schools
- Pitt Community College and the local education agency share hardware and software and ensure that purchases are compatible
- Guilford Technical Community College had a dramatic expansion of their apprenticeship programs
- Three state agencies, Department of Public Instruction, Community College System, and the Governor's Commission on Workforce Preparedness agreed that the eleven community college programs of study would be the statewide career majors

Curriculum Integration and Curriculum Improvement

- Numerous local workshops held
- Capstone final projects for seniors demonstrated integration of academic and technical studies at Wake Technical Community College
- Five of the Curriculum Improvement Projects (CIPs) have begun to produce tech
 prep pathways that sequence courses required for each project from the high
 schools
- Integration of National Skills Standards in appropriate curriculum and apprenticeship program at Guilford Technical Community College
- Summer academies for both secondary and postsecondary faculty

Guidance Services

- College entrance placement tests administered annually at local high schools to assist with early student remediation and transition to collegiate level study
- Career programs matrix in Asheville-Buncombe Technical Community College catalogue displays the required high school courses, college entrance testing requirements, program schedule, and employment opportunities.

Staff Development

- Faculty from high schools and community colleges jointly visited local businesses to ensure that their curricula are germane to employer needs
- Consortia were able to obtain external funding for professional staff development training for high school teachers at the community colleges
- Community college staff members were trained to identify appropriate quality criteria to improve the curriculum development process

Marketing

- A tech prep web page providing programmatic information was established by Forsyth Technical Community College. Potential students are able to apply online
- The Halifax County Chamber of Commerce became a main participant in the consortium, agreeing to market all workforce preparation initiatives
- Halifax county's "Pathfinder" bus provided an opportunity for students to tour businesses and industry outside of the community

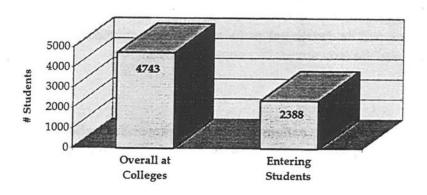
Special Populations

- A career counseling handbook was published in Spanish at James Sprunt Community College
- Wilson Technical Community College provided a tech prep handbook for Spanishspeaking students as well as one for hearing impaired students
- Specific strategies developed for ensuring success for at-risk tech prep students at Fayetteville Technical Community College

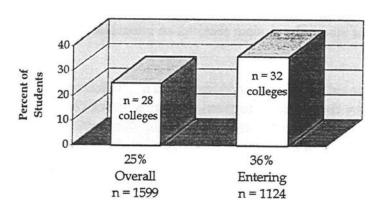
Student Outcomes

The following data was compiled from the Tech Prep Student Data Report (Appendix D) collected from each of the funded consortia during the June reviews. Unfortunately, not all of the colleges were able to collect data in all categories. Various reasons account for this: local education agencies just graduated their first tech prep students, colleges lack a data system to collect and track data on just tech prep students, and high schools only recently began identifying tech prep students on college transcripts.

1996-97 Tech Prep Students Enrolled at 35 North Carolina Community Colleges



Tech Prep Students Enrolled in One or More Developmental Courses, 1996-97



- Average GPA for tech prep students after 30 hours of curriculum enrollment (nondevelopmental courses) was 2.65 at the 32 reporting community colleges
- An average of 75% of tech prep students continued past the first semester (based on 2094 students reported from 34 colleges)
- An average of 80% of tech prep students continued education beyond community college (reported from six colleges)

Initiatives

During the 1997-98 program year, benchmarking criteria and a longitudinal system to track high school tech prep graduates within the community college system will be developed. A new strategic plan will be created by the Tech Prep Advisory Committee. New articulation agreements will be developed as the result of re-engineering the community college curricula and the conversion to a semester system.

XI. Integrating Applied Academics into Vocational Education (Title I, Part B, Section 116; Title II, Part A, Section 201; Title II, Part C, Section 235,240)

The North Carolina Department of Community Colleges recognizes the need to integrate academic and vocational content in a coherent and meaningful manner for its students. 161,065 students were enrolled in vocational and technical curriculums. Each curriculum program is reviewed by curriculum staff and teams and approved by the State Board of Community Colleges. The standards used to determine approval are consistent with regional accrediting agencies such as the Southern Association of Colleges and Schools. All approved and Perkins-eligible programs include both technical/job-specific course work as well as academic preparation courses. Therefore, by choosing a specific course of study, the student receives an integrated program of academic and vocational training.

Since the nature of postsecondary education is learner-chosen, i.e., a curriculum of interest is chosen by the student, programs are available which include both academic and vocational components. To ensure that students are successful in these programs the North Carolina Community College System provides extensive academic support services to vocational and technical students. These include counseling, career assessment, tutoring, and a wide array of remedial classes. Many of these programs have been previously described.

Another program previously described in this report is the Curriculum Improvement Project process. These projects identify all competencies, both academic and vocational, needed by students to become productive employees. As a result, the programs developed include a system of coherently developed courses to provide such. This is the nature of program development at the community college level. As such, these programs embody the concept of academic and vocational integration.

XII. Career Guidance and Counseling (Title II, Title III, Part C, Section 321-323)

Many community colleges use their basic grant funds to provide a more comprehensive guidance and counseling program at their respective campuses. Several colleges hire full-time counselors for special population students or use part-time counselors for such activities. These additional counselors are able to provide individual attention to those students who need the additional support and encouragement. Approximately 22 percent of the basic grant allotment to colleges was used for counseling activities. These counselors interpreted aptitude tests, provided academic advisement, obtained necessary services and/or equipment needed for student success, informed faculty of the special issues and techniques relevant to the needs of special populations students, and provided information on the availability of jobs in the students' area of interest.

Additionally, many colleges have increased their guidance capabilities through the purchase of computer software designed to assess a student's career interests and abilities. Some of the colleges have One-Stop Centers located on their campuses, and others have a close alliance with their local One-Stop Center. Since the mission of a comprehensive community college is to provide complete educational services to all its constituents, programs such as these are indispensable.

· ·

Vocational Education Performance Report North Carolina Community College System 1996-1997 Program Year

APPENDIX A

Technical and Vocational Curriculum Enrollment

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES
CURRICULUM POSTSECONDARY ENROLLMENT
FOR CARL PERKINS PERFORMANCE REPORT--7/1/96 TO 6/30/97
(TECHNICAL AND VOCATIONAL ONLY)

REPORT # CC815CPP

SEX EQ		τυ 8 0	23	11 3	15	204	207 207 58 288 6 6	244 65 9
SP/DH SPH	13	66 8	11,	- K L O K	11 12 12 5	17 17 829 160	35 18 148 12	4 40 40 14 14
CORR		252				46		
DIS- ABLED		2 4 4 4 5 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	1355		± 89	10 7 7 90 26		11 339 28. 1 10 10
LEP	г	2	22	1	ተ ካ	2 2 1 26 3	1 10 12 54	212 6 1
DIS-	8 1 13 76	247 37	45 69 111 1	65 1 27 26 26	23 23 20 15	17 117 27 79 2,246 368	1 392 187 1,290 22 310	466 407 36 25 87 87
REG. VO-TE-ED	354	16 14 365 48	54 76 91 1	288 25 23 25 25	59 32 12	2 84 11 261 1,446 156	16 121 433 245 1,303 12 380	23 489 314 28 179 80
FEMALE	60 T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23 8 268 57	30 23 23	11 53 53	81 81 50 11	12 61 18 142 3,731 525	21 207 288 288 6	244 65 65 77
MALE	11 2 37 13 13	5 64 591 70	72 139 186 3	85		147 24 200 204 25	2,400 655 655 655 655	746 671 43 49 264 107
TOT	17 37 37 14 134	28 72 859 127				ž,	206 862 451 2,688 698	
CIP NAME	AGRICULTURAL BUSINESS AGRICULTURAL TECH. AGRI MACHINERY SERV TECH AGRICULTURAL SCIENCE SWINE MGMT TECHNOLOGY AQUACULTURE TECHNOLOGY	EQUINE TECHNOLOGY TAXIDERMY HORTICULTURE TECH.	LANDSCAFE GARDENING RECREATIONAL GRND. MGT. FOREST MANAGEMENT WOOD PRODUCTS SAWYER		INSURANCE TRAVEL AND TOURISM TECH CUSTOMER SERVICE TECH COMMUNICATIONS TECH.	FULL STANDS SPEC. SCIENTIFIC VIS COMP GRAP FUNERAL SERVICE ED. COSMETOLOGY TEACHER ASSOCIATE AD FOR VOC. INSTRUCTORS	MANUFACTURING ENG. ARCH TECHNOLOGY CIVIL ENGR TECH ELECTRONICS ENGINEERI LASER/ELECTRO-OPTICS IND ELECT/ELECTRO-TECH RIOMFDICAL FOLITAMENT	COMPUTER ENGINEERING TECTIND MAINTENANCE TECH. INSTRUMENTATION AUTOMATION/ROBOTICS A/C, HEAT, & REFRI TEC
CIP	010	050	040	. 060 . 069 . 010 . 050	999	010	14.3001 15.0101 15.0201 15.0303 15.0304 15.0399	040000000000000000000000000000000000000

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES
CURRICULUM POSTSECONDARY ENROLLMENT
FOR CARL PERKINS PERFORMANCE REPORT--7/1/96 TO 6/30/97
(TECHNICAL AND VOCATIONAL ONLY)

REPORT # CC815CPP

SEX EQ (NON- TRAD)		277	4 89	4,0	947	30	94	99	46	63	11	11-46	242	46	18	9 M M 6	0	
SP/DH SPH	19 7 8 8	76	728	8		1110	797 11	203	119	59	4	201	37	32	22	- - -	ا م	ī.
CORR		43	4	28	9.48		чz	-	436	SP	291 210	51	333	1	7 1	118		
DIS- ABLED	3728	71	219	12	74	р по	10 235 12	1 2 2 2 2 2	2 2	36	7 / 9	0 T O	383	23	33.3	U - 4	12	2
LEP		14	725	10	12	N	30		4 F V	• •	1	1	M C	100	T 4 5	97	4	1
DIS- ADV	104 17 75 22	ユピア・	2 6 2	187	1,155	90	3,573	2	460	516	187 84	17 33 19	100	U RU LI	202	awa	38	16
REG. VO-TE-ED	67 23 51 46	17 741 128	27	422	1,066	55 58 50 50 50 50 50 50 50 50 50 50 50 50 50	3,465	14,	56		111	12 18	353	512 81	00	യവ	110	17
FEMALE	75 43 37	NNH	16	>	2,101	30	2,858 2,858	,	786	46 63	11	- L 4	23	46	22	80 M M	80	6
MALE	106 34 90 36	1,292	123	429	246	92	4,395	13 21	515	1,402	61 508 312	82	445	736	13	1,590	151	25
TOT	181 41 133 73	٦,		ď.	7		1			_			7			1,678	159	34
CIP NAME	INDUSTRIAL E PLASTICS TEC MANUFACTURIN IND SETY SCR	MECHANICAL ENGINEERING MINEYFYING TECHNOLOGY	GENERAL OCCUPATIONAL CHILD CARE MORKER	EARLY CHILDHOOD ASSOC. FOODSERVICE MANAGEMENT	FOUDSERVICE SFECIALIST PARALEGAL TECHNOLOGY DABY & DITTORN REC RES	PARKS, FORESTS RANG TECH MARINE	BIOTECHNOLOGY CORRECTIONAL SERVICES CRIM JUSTICE-PROTECT SER	FIRE SCIENCE FIRE PROTECTION DIPLOMA PUBLIC ADMINISTRATION	SOCIAL SERVICE ASSOC.	RESIDENTIAL CARPENTRY	FACILITY SERV TECHNICIAN LIGHT CONSTRUCTION	INDUSTRIAL CONSTRUCTOR DIGITAL ELECTRON REPAIR	INDUSTRIAL ELECTRONICS ELECTRONIC SERVICING A/C. HFATING. & REFRIG	HEAVY EQUIPMENT MECH INDUSTRIAL PLANT MAINT	GUNSMITHING JEWELRY PRODUCTION CRAFT	AUTOMOT	AVIATION MAINTENANCE	MED/HEAVY VEH IECH DRAFTING-BUILDING
CIP	090	070	999	020	010	030	010	020	070	020	040	999	010	030	90	0604	0000	47.0699 48.0102

M

REPORT # CC815CPP

SEX EQ	10 122 144		1 14 162 162	23	12 4 5	22 3 36 36	88 16	122 88 26 4 4	42 14
SP/DH SPH	2 3 27 80	56 56	7 6	96 19 45	22 43 41	318 318 318 339	322	69 53 40 8	58 32
CORR	37	267		29		1			м
DIS- ABLED	22 24 1	76897	- wnu.	74 25 15	12 4	18 18 14 14 14 18	23 23 2	24 10 5 2	14 14 8
LEP	1 2 1 28	7	3	18 1 2	<u> ት</u> ደገ	12 16	4 1 5	10 5 4	317
DIS- ADV	30 12 161 12 578	484 484 45	13 30 7 17 6	437 105 110	78 220 115 26 35	48 114 33 972 151	12002		182 129 63
REG. VO-TE-ED	70 14 209 57 1,047	848 26 138 14	11 99 94 36 929	13 661 105 222 44	85 221 186 31	337 952 96 96	4 8 4 W	27920	128 102 97
FEMALE	10 7 179 22 22 144	70 5	82 14 162 162	0000	163 448 317 30 51	52225181	0800	6531	279 234 129
MALE	21 211 211 85 1,557	1,504 28 165 61	15 35 114 36 799 56	581 104 23 40	12 4 32 1	7 8 3 27 36 40	8 1 1 1 1	122 88 26 26 4 22	42 14 47
TOT	1,	ή,	16 117 128 43 961 58	1,181 227 359 60	175 452 322 62 52	223 223 53 1,549 256 184	390 197 440 56	7.59 403 258 56 90	321 248 176
CIP NAME	DRAFTING-MECHANICAL FURNITURE DFT & PROD DEV GRAPHIC ARTSPRNT MGMT UPHOLSTERING MACHINIST TECHNOLOGY TOOL & DIE	WELDING FINE & CREATIVE WOODWKG FURNITURE MACH OPERATION CABINETMAKING		COM. ART & ADV. DES. PHOTOGRAPHY INTERIOR DESIGN FILM/VIDEO PROD TECH	INTERPRETER TRAINING DENTAL ASSISTING DENTAL HYGIENE DENTAL LABORATORY HOSPITAL WARD SECRETARY	HLTHCARE MGMT TECHN MED. RECORDS TECHNOLO HEALTH INFO CODER MEDICAL ASSISTING OCCUP. THERAPY ASST. INDUS PHARMACEUTICAL	PHYSICAL THERAPIST AS VETERINARY MEDICAL EMERGENCY MEDICAL NUCLEAR MEDICINE TECH	RESPIRATORY CARE TE SURGICAL TECH, MEDICAL SONOGRAPHY ELECTRODIAGNOSTICS CYTOTECHNOLOGY	MEDICAL LABURATORY TECH PHLEBOTOMY DRUG & ALCOHOL TECH
CIP	48.0109 48.0199 48.0201 48.0303 48.0503	050 070 070 070	48.0799 48.9999 49.0102 49.0202 49.0205 49.0205	040	050 060 060 060 070	51.0705 51.0707 51.0799 51.0801 51.0803	0806 0808 0904 0905	0908 0909 0910 0999	1099 1501

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES CURRICULUM POSTSECONDARY ENROLLMENT FOR CARL PERKINS PERFORMANCE REPORT--7/1/96 TO 6/30/97 (TECHNICAL AND VOCATIONAL ONLY)

REPORT # CC815CPP

SEX EQ (NON- TRAD)	150 428 75 81	30° c	7 44	57 34	3.8	36	65	Žs
SP/DH (I	256 891 277 312	49 11 49	1,132 86 790	57 70	15 233 5	21 25 2	1,143 544 11 89 83	13,396
CORR	7 7	г	263	м м	36	1 1	128	3,876
DIS- ABLED	91 127 33 22	11472	359 22 192	$\frac{179}{16}$	1 60 3	5	444 206 7 31 17	4,379
LEP	55	 -	88 12 71	24 1 17	77	13	VV WW44R	965
DIS- ADV	2,901 697 766	26 37 105	4,945	440	702	. 99 141 10	3,904 2,433 137 206 138	51,530
REG. VO-TE-ED	258 1,881 747	39 39 11	3,866 694 2,102	0,12	313 38 1	109 146 54	3,206 1,823 155 104 891	46,482
FEMALE	920 4,625 1,091 1,494	20 20 38 170	6,053 514 4,117	31,56	1,051 25	179 12 146 39	4,747 2,629 100 278 589	61,476
MALE	150 428 75 81	50 30 1	3,214 610 744	57 4 34	33 1 1	36 15 163 28	2,794 1,879 195 65 502	43,702
TOT	1,070 5,053 1,166 1,575					215 27 309 67	7,541 4,508 295 343 1,091	105,178
CIP NAME	HUMAN SERVICES TECH. ASSOC. DEGREE NURSING PRACTICAL NURSING NURSING ASSISTANT HOMEMAKEDAHOME HEALTH AT	DOTICIANS DEVELOPMENT DISABILITI THERAPEUTIC RECREATION HEALTH CARE TECHNOLOGY	BUSINESS ADMINISTRATION INDUSTRIAL MANAGEMENT ACCOUNTING	SECRETARIAL-EXECUTIVE SECRETARIAL-LEGAL SECRETARIAL-MEDICAL COURT REPORTING	DATA ENTRY OPERATIONS GEN, OFFICE (TEC SPEC) POSTAL SERVICE TECH. SMALL BUS MGMT: ENTR DEV	BANKING INSURANC HOTEL & INTERNAT		7. x
CODE	51.1502 51.1601 51.1613 51.1614	180 239 260 999	020	040	040	52.0803 52.0805 52.0902 52.1101	52.1201 52.1202 52.1204 52.1205 52.1205	

Vocational Education Performance Report North Carolina Community College System 1996-1997 Program Year

APPENDIX B

Special Curriculum Student Enrollment

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT ANNUAL: 1996-97
NOTE: SOME HEADCOUNTS ARE DUPLICATED AS STUDENTS MAY FALL INTO MORE THAN ONE GROUP

PROGRAM CC120BB

TOTAL NUMBER UNDUPLI- CATED SPECIAL POPLN	1,754 1,392 1,392 1,392 1,392 1,392 1,552 1,005
TOTAL UNDUPLI- CATED SINGLE PARENT OR HOMEMAKER	423 698 1188 1189 1189 231 231 231 1,130 1,130 1,130 1,130 1,034 1
SINGLE HOME MAKER	208 269 773 269 329 329 329 329 679 679 679 679 679 679 679 679 679 67
SINGLE	272 900 1376 1376 1376 1376 1376 1376 1376 1377 1579 1579 1673 1673 1673 1673 1673 1673 1744 1744 1744 1744 1744 1744 1744 17
TOTAL * UNDUPLICATED DISADVANTAGED	1,621 1,840 492 1,840 2,282 2,603 2,603 2,190 2,190 2,190 2,190 1,709 1,709 1,111 3,011 1,513 1,589 1,596 1,596 1,596 1,596 1,596 1,596 1,596 1,596 1,596 1,596 1,596 1,599 1,
LIMITED ENGLISH PROFI- CIENCY	36 123 123 146 96 68 68 31 12 32 161 10 46 33 17 17 17 17 17 18 19 10 10 10 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 10
ECONOMIC DISAD- VANTAGED	1,116 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,102 1,103 1,
ACADEMIC DISAD- VANTAGED	852 156 166 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1786 1787 1786 178
NUMBER HANDI- CAPPED	TO SECULO TO THE PROPERTY OF SECULO PROPERTY OF SECURO PROPERTY OF SECULO PROPERTY OF SEC
COLLEGE	ALAMANCE CC ANSON CC ANSON CC BEAUFORT COUNTY CC BLADEN CC BLOE RIDGE CC BLUE RIDGE CC BRUNSWICK CC CALDWELL CC & TI CAPE FEAR CC CARTERET CC FORSYTH TCC GASTON CC FAYETTEVILLE TCC FORSYTH TCC GASTON CC FORSYTH TCC CARTERET CC MANTIN CC MANTGOMERY CC RANDOLPH CO RANDOLPH CC RANDOLPH CO RANDOLPH CC
	TOTAL

OTAL DISADV' "* AGED INCLUDES ACADEMIC, ECONOMIC, AND LIMITED EMGLISH SPEAKING

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT
ANNUAL: 1996-97
NOTE: SOME HEADCOUNTS ARE DUPLICATED AS STUDENTS MAY FALL INTO MORE THAN ONE GROUP

PROGRAM CC120BB

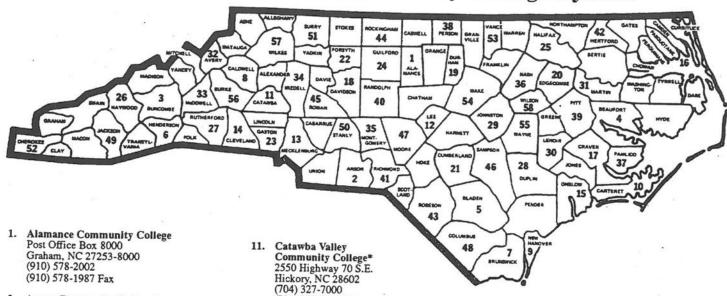
TOTAL NUMBER UNDUPLI- CATED SPECIAL POPLN	1,308 1,006 3,034 1,046 2,228 1,395 1,633 1,633 1,463 2,609 1,674 1,287 1,295
TOTAL UNDUPLI- CATED SINGLE PARENT OR	196 249 853 232 232 141 389 399 278 528 528 177 177 21,540
SINGLE HOME MAKER	98 464 56 46 62 88 209 172 142 107 232 271 271 209 271 271 271 273 273 273 273 273 273 273 273 273 273
SINGLE	131 236 523 179 179 183 277 266 170 216 339 385 235 176 1107
TOTAL * UNDUPLICATED DISADVANTAGED	1,255 822 2,795 1,018 2,205 1,341 1,540 1,359 1,359 1,263 1,263
LIMITED ENGLISH PROFI- CIENCY	21 58 17 17 17 21 371 17 17 22 17 17 17
ECONOMIC DISAD- VANTAGED	833 230 1,068 596 598 496 113 730 643 546 1,960 1,960 1,960 34,967
ACADEMIC DISAD- VANTAGED	2,666 2,401 2,872 2,036 1,151 1,313 1,313 1,313 1,305 1,143 1,143
NUMBER HANDI- CAPPED	140 166 166 61 52 27 27 133 134 173 280 216 216 216 41
COLLEGE	ROBESON CC ROCKINGHAM CC ROWAN-CABARRUS CC SAMPSON CC SANDHILLS CC SOUTHMESTERN CC SOUTHWESTERN CC STANLY CC STANLY CC TRI-COUNTY CC VANCE-GRANVILLE CC WAKE TCC WAYNE CC WAYNE CC WAYNE CC WAYNE CC WAYNE CC WAYNE CC WAYNE CC WALLSON TCC

Vocational Education Performance Report North Carolina Community College System 1996-1997 Program Year

APPENDIX C

Community Colleges

The North Carolina Community College System



- Anson Community College* Post Office Box 126 Polkton, NC 28135 (704) 272-7635 (704) 272-7635
- 3. Asheville-Buncombe Technical Community College* 340 Victoria Road Asheville, NC 28801 (704) 254-1921 (704) 251-6355 Fax
- Beaufort County Community College*
 Post Office Box 1069
 Washington, NC 27889
 (919) 946-6194
 (919) 946-0271 Fax
- Bladen Community College Post Office Box 266 Dublin, NC 28332 (910) 862-2164 (910) 862-3484 Fax
- Blue Ridge Community College*
 College Drive
 Flat Rock, NC 28731
 (704) 692-3572
 (704) 692-2441 Fax
- Brunswick Community College*
 Post Office Box 30
 Supply, NC 28462
 (910) 754-6900
 (910) 754-7805 Fax
- Caldwell Community College and Technical Institute* 1000 Hickory Boulevard Hudson, NC 28638 (704) 726-2200 (704) 726-2216 Fax
- Cape Fear Community College*
 411 N. Front Street
 Wilmington, NC 28401
 (910) 251-5100
 (910) 763-2279 Fax
- Carteret Community College* 3505 Arendell Street Morehead City, NC 28557 (919) 247-6000 (919) 247-2514 Fax

 Central Carolina Community College* 1105 Kelly Drive Sanford, NC 27330 (919) 775-5401

(704) 327-7276 Fax

(919) 775-1221 Fax

- Central Piedmont Community College* Post Office Box 35009 Charlotte, NC 28235 (704) 330-2722 (704) 330-5045 Fax
- Cleveland Community College* 137 S. Post Road Shelby, NC 28150 (704) 484-4000 (704) 484-4036 Fax
- Coastal Carolina Community College* 444 Western Boulevard Jacksonville, NC 28546 (910) 455-1221 (910) 455-7027 Fax
- College of The Albemarle*
 Post Office Box 2327
 Elizabeth City, NC 27909-2327
 (919) 335-0821
 (919) 335-2011 Fax
- Craven Community College* 800 College Court New Bern, NC 28562 (919) 638-4131 (919) 638-4232 Fax
- Davidson County Community College* Post Office Box 1287 Lexington, NC 27292 (910) 249-8186 (910) 249-0088 Fax
- Durham Technical Community College*
 1637 Lawson Street
 Durham, NC 27703
 (919) 686-3300
 (919) 686-3412 Fax
- Edgecombe Community College* 2009 W. Wilson Street Tarboro, NC 27886 (919) 823-5166 (919) 823-6817 Fax

- 21. Fayetteville Technical Community College*
 Post Office Box 35236
 Fayetteville, NC 28303-0236
 (910) 678-8400
 (910) 484-6600 Fax
- Forsyth Technical Community College* 2100 Silas Creek Parkway Winston-Salem, NC 27103-5197 (910) 723-0371 (910) 761-2399 Fax
- 23. Gaston College*
 201 Highway 321 South
 Dallas, NC 28034-1499
 (704) 922-6200
 (704) 922-6440 Fax
- 24. Guilford Technical Community College* Post Office Box 309 Jamestown, NC 27282 (910) 334-4822 (910) 454-2510 Fax
- 25. Halifax Community College*
 Post Office Drawer 809
 Weldon, NC 27890
 (919) 536-2551
 (919) 536-4144 Fax
- 26. Haywood Community College* 1 Freedlander Drive Clyde, NC 28721 (704) 627-2821 (704) 627-3606 Fax
- 27. Isothermal Community College* Post Office Box 804 Spindale, NC 28160 (704) 286-3636 (704) 286-1120 Fax
- 28. James Sprunt Community College* Post Office Box 398 Kenansville, NC 28349-0398 (910) 296-1341 (910) 296-1636 Fax
- Johnston Community College*
 Post Office Box 2350
 Smithfield, NC 27577
 (919) 934-3051
 (919) 934-2823 Fax

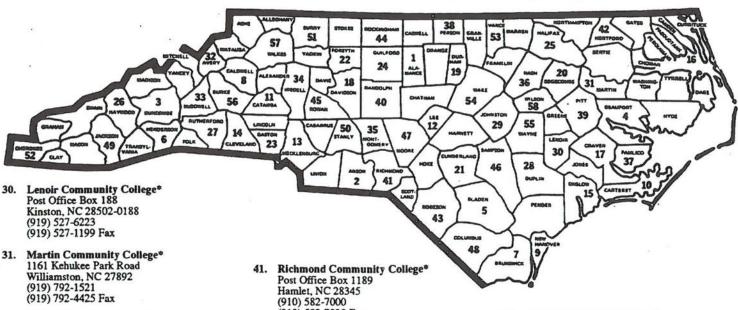
* Offers College Transfer Curriculum Program

North Carolina Community College System

Lloyd V. Hackley, System President

Caswell Building, 200 W. Jones Street Raleigh, NC 27603-1379 Fax (919) 733-0680 11-96

The North Carolina Community College System



- Williamston, NC 27892 (919) 792-1521 (919) 792-4425 Fax
- Mayland Community College* Post Office Box 547 Spruce Pine, NC 28777 (104) 765-7351 (704) 765-0728 Fax
- 33. McDowell Technical Community College* Route 1, Box 170 Marion, NC 28752 (704) 652-6021 (704) 652-1014
- Mitchell Community College* West Broad Street Statesville, NC 28677 (704) 878-3200 (704) 878-0872 Fax
- Montgomery Community College* Post Office Box 787 Troy, NC 27371 (910) 576-6222 (910) 576-2176 Fax
- Nash Community College* Post Office Box 7488 Rocky Mount, NC 27804-7488 (919) 443-4011 (919) 443-0828 Fax
- 37. Pamlico Community College* Hwy. 306 South Grantsboro, NC 28529 (919) 249-1851 (919) 249-2377 Fax
- Piedmont Community College* Post Office Box 1197 Roxboro, NC 27573 (910) 599-1181 (910) 597-3817 Fax
- Pitt Community College* Post Office Drawer 7007 Greenville, NC 27834 (919) 321-4200 (919) 321-4401 Fax
- Randolph Community College Post Office Box 1009
 Asheboro, NC 27204-1009
 (910) 633-0200
 (910) 629-4695 Fax

- Roanoke-Chowan Community College* Route 2, Box 46-A Ahoskie, NC 27910 (919) 332-5921 (919) 332-2210 Fax
- Robeson Community College* Post Office Box 1420 Lumberton, NC 28359 (910) 738-7101 (910) 671-4143 Fax

(910) 582-7028 Fax

- Rockingham Community College* Wentworth, NC 27375 (910) 342-4261 (910) 349-9986 Fax
- Rowan-Cabarrus Community College* Post Office Box 1595 Salisbury, NC 28145-1595 (704) 637-0760 (704) 637-3692 Fax
- Sampson Community College* Post Office Box 318 Clinton, NC 28328 (910) 592-8081 (910) 592-8048 Fax
- Sandhills Community College* 2200 Airport Road Pinehurst, NC 28374 (910) 692-6185 (910) 692-2756 Fax
- Southeastern Community College* Post Office Box 151 Whiteville, NC 28472 (910) 642-7141 (910) 642-5658 Fax
- Southwestern Community College* 447 College Drive Sylva, NC 28779 (704) 586-4091 (704) 586-3129 Fax
- Stanly Community College*
 141 College Drive Albemarle, NC 28001 (704) 982-0121 (704) 982-0819 Fax

- Surry Community College*
 Box 304 Dobson, NC 27017 (910) 386-8121 (910) 386-8951 Fax
- Tri-County Community College* 2300 Highway 64 East Murphy, NC 28906 (704) 837-6810 (704) 837-3266 Fax
- Vance-Granville Community College* Box 917 Henderson, NC 27536 (919) 492-2061 (919) 430-0460 Fax
- Wake Technical Community College* 9101 Fayetteville Road Raleigh, NC 27603 (919) 662-3400 (919) 779-3360 Fax
- Wayne Community College* Caller Box 8002 Goldsboro, NC 27533-8002 (919) 735-5151 (919) 736-3204 Fax
- Western Piedmont Community College* 1001 Burkemont Avenue Morganton, NC 28655 (704) 438-6000 (704) 438-6015 Fax
- Wilkes Community College* Post Office Box 120 Wilkesboro, NC 28697 (910) 838-6100 (910) 838-6277 Fax
- Wilson Technical Community College* Post Office Box 4305-Woodard Station Wilson, NC 27893 (919) 291-1195 (919) 243-7148 Fax

North Carolina Center for Applied Textile Technology (in Gaston County)
Post Office Box 1044 Belmont, NC 28012 (704) 825-3737 (704) 825-7303 Fax

* Offers College Transfer Curriculum Program

North Carolina Community College System

Lloyd V. Hackley, System President



AFFIRMATIVE ACTION/FOLIAL OPPORTUNITY EMPLOYER

Vocational Education Performance Report North Carolina Community College System 1996-1997 Program Year

APPENDIX D

Tech Prep Student Data

Tech Prep Student Data 1996-97

	T
Secondary:	1996-97
Number/percentage of self-proclaimed tech-prep students	
Number/percentage of 1997 graduates completing a tech-prep course of study	
SREB HSTW assessment data (if applicable) Reading Score	* *
Math Score	
Science Score	
Rates of tech-prep students planning to continue education beyond high school	
Number/percentage of tech-prep students in related apprenticeship after graduation	
Postsecondary:	1996-97
Number/percentage of tech-prep students enrolled Overall at the college Entered during 1996-97 academic year	
Number/percentage of tech-prep students enrolled in one or more developmental courses • Overall • Entered during 1996-97 academic year	
Average GPA for tech-prep students after 30 hours of curriculum enrollment (non-developmental courses)	
Number/percentage of tech-prep students who continue to enroll past the first semester	
Number/percentage of tech-prep students who graduated after 2, 3, 4, 5, or 6 years	
Number/percentage of tech-prep students who continue education beyond community college	
Placement rates in employment or apprenticeship after graduation	