DOCUMENT RESUME

ED 415 441	CE 075 700
TITLE	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 1996-1997.
INSTITUTION	North Carolina State Dept. of Public Instruction, Raleigh.; North Carolina State Dept. of Community Colleges, Raleigh.
PUB DATE	1997-00-00
NOTE	109p.
PUB TYPE	Numerical/Quantitative Data (110) Reports - Descriptive (141)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Apprenticeships; Correctional Education; Curriculum Development; Disabilities; Displaced Homemakers; Early Parenthood; Educational Legislation; Federal Legislation; High Schools; *Labor Force Development; Limited English Speaking; Models; Program Development; Program Effectiveness; Program Evaluation; Special Needs Students; *Staff Development; *State Programs; Tech Prep; *Vocational Education; *Youth Programs
IDENTIFIERS	Carl D Perkins Voc and Appl Techn Educ Act 1990; *North Carolina

ABSTRACT

For program year 1996-97, 222,639 North Carolina (NC) 9th-12th graders were enrolled in Workforce Development Education (WDE). Twenty-five curriculum products were developed, 34 course blueprints were revised to reflect business/industry practices and state/national standards, and about 3,600 business/industry personnel participated in WDE activities. Secondary programs provided 1,411 single parents, displaced homemakers, and single pregnant women with support services and employability skills. Programs funded by 17 gender equity grants provided support services and technical assistance, conducted staff development, and developed materials. The Youth Services program offered courses to help students develop marketable skills. Services were provided to 23,167 disabled and 2,107 limited English proficient students. Delivery mechanisms for professional development included satellite broadcasts, North Carolina Information Highway, Internet homepage, satellite teleconference, telephone conferences, and video segment development. Curriculum development centered on the NC Vocational Competency Achievement Tracking System. High school youth apprenticeship programs expanded. A model of NC's The ABCs of Public Education was approved. To evaluate the tech prep initiative, 25 consortia participated in the High Schools that Work assessment. (Appendixes, amounting to over one-half of the report, include enrollment tables, performance standards, and performance standards report.) (YLB)

*******	*****	*****	*****	* * * * * * * * *	****	* * * * *	******	******
*	Reproductions	supplied by	EDRS are	the best	that	can	be made	*
*	-	from the	original	document				*
******	****	*****	*****	*******	*****	****	******	******



North Carolina Performance Report

Program Year 1996-1997

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

 Points of view or opinions stated in this document do not necessarily represent official OERI position or policy. PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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



015700

ED 415 441

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, Ill 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



Workforce Development Education conducts activities and procedures without regard to race, creed, color, national origin, gender or disability.



•

Table of Contents

Introduction	5
Certification	7
Secondary Services and Activities	8
Performance Measures and Standards 1	[4
Single Parents, Displaced Homemakers and Single Pregnant Women 1	18
Gender Equity 2	20
Criminal Offenders 2	23
Special Populations	24
Disabled	24
LEP	26
Disadvantaged	27
State Leadership and Professional Development	27
Professional Development2	28
Curriculum Development	29
Research	30
Youth Apprenticeships	31
Southern Regional Education Board – High Schools That Work	52
Reform Initiatives	3
Community Based Organizations	4
Consumer and Homemaking Education	4
Tech Prep 3	6
Integrating Applied Academics into Workforce Development Education Programs	8
Career Guidance and Counseling	1
Appendices 4	3
Appendix 1 Enrollment Table 4	5
Appendix 2 Performance Standards 4	9
Appendix 3 Performance Standards Report5	1
Postsecondary Education	3



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)

<u>12-4-97</u> Date

<u> Kik</u> Chairman, NC State Board of Education

<u>12-4-97</u> Date

State Superintendent of Public Instruction



Summary of Secondary Services & Activities

Workforce Development Education	Workforce Development Education in North Carolina is orga- nized 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.
	9











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 extendional standards
Services	 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.
Grants	During the 1996-1997 school year, 17 gender equity grants were awarded to address gender equity issues. Approxi- mately \$505,000 was used to provide programs and activities for 3,296 youth in grades 9-12.
	13

.



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

Assistance to LEAs

Progress Made 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.

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.





69.0%



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 postsecondary57% in four-year colleges or universities47% 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
4. 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 LEAs and community based organizations were provided the 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. 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 Services Provided were assessed by program providers. All participants received supportive services through guidance and counseling. Services included emotional support, encouragement, self-esteem and selfconfidence 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

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



18

with their school work.

19

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.

- 1) 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

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, ser- vices, 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.
Eleven of the funded programs provided summer institutes where students participated in two or more of the following areas: assess- ment, guidance and counseling, outreach activities, and a variety of actual exploratory activities. The exploratory activities were in the areas of communication/media technology, transportation tech- nology, construction technology, forestry, drafting, auto technology, lasers, hydraulics, applied physics/mathematics, electricity/elec- tronics, agriscience, screen printing, robotics, computer graphics, bridge building, aerodynamics, and entrepreneurship. Comput- erized 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.
During the regular school year, services provided included work- shops, 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 materi- als 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 eq- uity. Career day activities planned for all students included pre- senters representing nontraditional occupations. The cost of child care and transportation services, as needed, was provided for eligible participants to enhance school attendance and achievement.



21

.

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 twoweek 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.

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:



Exemplary

Gender Equity

- 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.

Students Served



 $2_{\frac{4}{23}}$

Correctional Institution 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

Achievement in Providing Equal Access for Disabled.

The number of disabled students enrolled in workforce development 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.

Achievement in Providing Equal Access in Recruitment.

25

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.

Services Provided

Achievements



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
- 3. Making Career Connections in Family and Consumer Sciences Education
- 4. Performance System
- 5. STW: Request for Proposal
- 6. 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.

<u>Workshop</u>	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>
	2,045

Information Highway Satellite Broadcasts

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



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.

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



31

Impact

"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.



₃₁ 32

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.



33

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. Improvement The high school model approved by the State Board in March, 1997 had to Initiative 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.



34

Community Based Organizations

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 communitybased 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.

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, 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.

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



Services and Activities

Students Served

Services



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 Com- munity 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 implementa- tion cycle.
Tech Prep Criteria	In 1992 the North Carolina State Board of Education and the Com- munity 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 stu- dents 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 achieve- ment 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 assess- ment.
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.



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:

WORKSHOPS

Participants

•	Five Reading for Learning Westerland	pants
	(2 days each. High Cabacle The Min 1 (NOTHER) and a	
•	One Integration of Academic Inter Work (HSTW) Model	135
	Education Workshap and Historic Development	
•	Collaborated in tall a content of the content of th	150
•	Conference (Receivery of NC Job Ready/Tech Prep	
_	Conference (Business/industry and local school personnel)	1,300
	Facilitated five workshops via satellite broadcasts -	
_	Replacing the General Track"	
	Provided two workshops - "Writing Across the Curriculum"	,
	(2 days each)	45
	Provided one workshop - "Orientation of New HSTW Sites:	
	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 -	200
	Technology Education"	60
•	Conducted a 4-day workshop for tenth grade academic and	00
	workforce development staff (Granville County) -	
	Fundamentals of Technology	25
	Facilitated five external School-to-Work (STW) cross-function	2 <i>3</i>
	state agency teams	101 50
	Developed and promoted a marketing plan for communication	50
	benefits of high school improvement to students business	ug
	leaders, and general public	100
	-, Osterne Public	130







40

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.

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.

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.

41



Special Populations

Services and

Impact

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.	Programs
A four-day program, part of the annual Workforce Development Sum- mer Conference, was devoted to career development. Participants were given information on workforce preparedness, career assessment, career development plans, performance standards, National Career Develop- ment Guidelines, job placement, apprenticeships, work-based learning strategies, and integration of career development into classroom instruc- tion.	Activities
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 pro- cess at local levels included elementary, middle, and high school orienta- tion, interest surveys, aptitude tests, career planning activities, connect- ing activities, and work-based learning opportunities.	Services
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.



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



ERIC Full Tax Provided by ERIC



OMB No. 1830-0503

PAGE 1

STATE: North Carolina NAME: Sarah Hawes

Sarah Hawes PH. 715-1649

		ADULT COM -	LETER 1995	1611	2993	10578	1618	6921	2584	6151	2145	14204															
		SEX EO	(NON- TRAD)	151	133	541	125	447	191	804	44	*2002															
	0	HC/AS	/SPW									1411															
	OUPLICATEI	CORR										1118															
		DIS-	ABLED	3474	1186	7776	619	7474	369	5861	2045	30358															
		LEP		40	112	411	19	297	62	976	145	2107															
-		DIS-	ADV	9872	10105	34004	4257	25494	5481	42352	8082	141470															
		REG	VO-TE-ED	14843	14623	39453	3415	35441	11496	85835	13092	220057															
	DUPLICATED	TAL	FEM.	6422	14644	58901	6069	11458	14757	75423	4081	194948															
		OUPLICATE	UPLICATE	UPLICATE	UPLICATE	OUPLICATE	JUPLICATE	OUPLICATE	DUPLICATI	DUPLICATI	DUPLICAT	DUPLICAT	DUPLICAT	DUPLICAT	DUPLICAT	DUPLICAT	DUPLICAT	T(MALE	21807	11382	22743	1401	57248	2668	59601	19284
		TOT	ENR	28229	26026	81644	8310	68706	17425	135024	23365	393992															
		000	rkugkam Area	AGRICULTURE	MARKETING	CONS/ H'MAKING ED	OCC HOME EC	TRADE & INDUSTRY	HEALTH	BUSINESS	TECHNOLOGY ED	GRAND TOTAL															

*number served by funded grants

45



SECONDARY ENROLLMENT; PERIOD COVERS July 1996 - June 1997

STATE: North Carolina

NAME: Sarah Hawes

PH. 715-1649

:

PAGE 2

OMB No. 1830-0503

		LINKAGE				PLA	CEMENT		
OCC PROGRAM	TECH-PREP	CO-OP	APPR	CONT	EMPL	OYED	MIL	OTHER	CURRENT
AREA					R'LTD	OTHER			TEACHERS
AGRICULTURE	5603			606	715	227	57	0	365
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
HEALTH	1203			1967	601	473	45	22	255
BUSINESS	21255			4403	1429	914	159	53	2022
TECHNOLOGY ED	1794			1270	469	327	85	0	736
GRAND TOTAL	50762	9651	502	20887	9579	5175	871	290	6337

<u>5</u>

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

- 1. 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.





Workforce Development Education

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



51



Workforce Deveropment Education

Trend Data for School Years 1993-97

Statewide Summary of Performance Standard Two MET

Long-Range Performance **Standard Two:**

than a third in that school, it must If the enrollment of members of special populations differs more be justified by documentation in the CDP. (Program Areas Were Counted Once Per School) *Enrollment may be justified based on students' CDPs.



0
FRIC
Full Text Provided by ERIC

Workforce Development Education

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.

These summaries can be found in prior VoCATS data publications. **Performance Standard Three, Four, and Five** School Years 1993-95 **Statewide Summary** Trend Data for

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.



ERIC Full lext Provided by ERIC



(Program Areas Were Counted Once Per School)

1993 - 1994 | 1994 - 1995 |

1992 - 1993

0 0

50

ERIC Full Text Provided by ERIC

Workforce Development Education

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



* Completers finishing a technical sequence and finding full time employment as reported by job skill program areas by schools.

(Program Areas Were Counted Once Per School)

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.



64 6.3

North Carolina Community College System Postsecondary Vocational Education Table of Contents

	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 ATechnical and Vocational EnrollmentAppendix BSpecial Curriculum Student Enrollment	95 101



Appendix C

Appendix D

Community Colleges

Tech Prep Student Data Form

105

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.



Figure 1 Total Curriculum Enrollment



Vocational Education Performance Report

Program Year 1996-1997

I. 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:

1) 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



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

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.



68 71

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.



71 74

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



7376

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.



77

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



80

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 selfidentification such as academic applications, course registration forms, counseling selfreferrals, 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 curriculumrelated 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 <u>Assessment and Placement</u> <u>Services for Community College</u> (APS), <u>ASSET</u> and <u>COMPASS</u> (published by the American College Testing Program), <u>Computerized Placement Tests</u> (CPT), and the Multiple Assessment Programs and Services tests which include the <u>Descriptive Tests of Mathematics Skills</u> and the <u>Descriptive Tests of Language Skills</u>. 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.



82

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



87 84

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





83



BEST COPY AVAILABLE

- 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.



63

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 fulltime 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.



APPENDIX A

Technical and Vocational Curriculum Enrollment



ERIC
6

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)

۲

PAGE

.

REPORT # CC815CPP

SEX EQ (NON- TRAD)	I	ιή œ)	9 23	11	ΝN		15			204	(J	212	58 288	9 6 6	244 244	10.4	0	
Haras Has	13	р т т Г	900	3 11	ч м,	1 13 13	بر ترت		υ.α-	17	829	100	3 5 5 7	18 148	162	1 8 J J	2	9 14	E G
CORR			252								96	4							
DIS- Abled		5010	51		-06	ю. Г	24	6 ,03	M	10	⁵ 0,	97	513	21 145	287	11 39 28	9 - 9	16 10 16	
LEP	-	•	2	20		I	9	44		00,	1 26	'n	101	12 54	20	21 7		- 12	
DIS- Adv	8 13 13	2	247 37	45 69 111	1 65 7	1 27 26	224	23 20	15	117 27	2,246	568 358	81 392	1,290	310	2995 2995 209	920	67 87 96	
REG. VO-TE-ED	948 71 71	104 14 14	365 48	54 76 91	13 28 28	252	245 6	59 32	12	84	261 1,446	156 10 16	121	245	12 380	25 489 216	91 91	179 179 80	LARLE
FEMALE	61 36 61 36	9 J 10 8	268 57	30 23 23	11		332	81 50	11 12	61 18	3,731	525 8 6	21 207	58 288	99 97	244 244		9 77 77	СОРУ АVА
MALE	11 22 13 13 96		591 70	72 139 186	21 85	мv	165	15 7	16 8	147 24	200	25 1 2	185 655	393 2,400	28 652	952 952	1/0	49 264 107	BEST
TOT ENR	17 37 14 14	114 28 28	859 127	102 148 209	.21 96	10 R 10 R 10 R	16 7 7	96 57	27 20	208	3423,935	550 150	206 862	451 2,688	34 698	066 066	52	25 271 184	
CIP NAME	AGRICULTURAL BUSINESS AGRICULTURAL TECH. AGRI MACHINERY SERV TEC AGRICULTURAL SCIENCE SUINE MEMT TECHNILDEY	E AUINE TECHNOLOGY AQUACULTURE TECHNOLOGY E EQUINE TECHNOLOGY	HAXIJERMI HORTICULTURE TECH. HORTICULTURE BUSINESS	<pre>5 LANDSCAPE GARDENING 7 RECREATIONAL GRND. MGT. 1 FOREST MANAGEMENT</pre>	A WOOD PRODUCTS D SAWYER L FISH AND WILDLIFE MGT.) DESKTOP PUBLISHING (T S) 2 FASHION MERCHANDIS & MKT 2 DETAIL ELINDICHLITUDE	D MARKETING & RETAILING	I TRAVEL AND TOURISM TECH Customer Service Tech	L COMMUNICATIONS TECH.	A RADIO/TV BROADCAST TECH Scientific VIS COMP GRAP	L FUNERAL SERVICE ED. 5 Cosmetology	L TEACHER ASSOCIATE) AD FOR VOC INSTRUCTORS	J GEUG INFU & GLUDAL FUS I MANUFACTURING ENG. I ARCH TFCHNDINGY	I CIVIL ENGRIECH S ELECTRONICS ENGINEERING	4 LASER/ELECTRO-OPTICS TEC 9 IND ELECT/ELECTRO TECH	L BIOMEDICAL EQUIPMENT 2 COMPUTER ENGINEERING TEC	A IND MAINTENANCE TECH.	5 AUTOMATION/ROBOTICS L A/C, HEAT, & REFRI TEC 5 FNVIRDNMENTAL SCIFNCF	92
CIP CODE	01.010 01.010 01.020 01.020		090.10 090.10	01.060 01.060 03.040	03.040 03.049 03.060	07.069 08.010	020.80	08.110	10.010	10.010	12.030 12.040	13.150	14.069 14.300	15.020	15.030	15.040	15.040	15.040 15.050	

0
FRIC
Full Text Provided by ERIC
2

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)	4		277		6 6 8 9		246		30			96		99	2	96 7 2		11	. ۍ		. T	23	6 7 7	4 ⁶	1	18	80	M) M	000			
SP/DH SPH	19 33 7	. 80 (V	76	50	24 728	83	419	91	-	2 2 2	797	11	¢	203	19	25		7	Ţ	٣	2	13	. 37 F	30		22	72	N) N	סי	Ľ		
CORR			43		4	28	010	•		-	- LJ			1	436	289	666 19	291	210	5	1		333	-			153	0	011			
DIS- Abled	∞ N Þ	- M	11	20	91 <i>2</i>	1 5 5 5	74	C	• –	4 C -	235	12	-0	56	2	24	. 1	-	9	⊷ -	- 0	23	38	23	12	ب ۲	16	~`~			ı	S
LEP		44	14	- 6	25	10	12	ſ	J		30	13		2		J.	0	2	-	-	•		ю (0	-	- 9	26		4		1	ച
DIS- ADV	104 17 75	221	754	217	95 2.656	334	1,155	60	049 97	116	3,573	162	96	610	92	195	010	187	84	17	61	100	389 289	256	16	12 202	744	31	9 80 7 8 7 8	17	1	
REG. VO-TE-ED	67 23 51	1961	141	121	70	422	1,066	5	2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 2 3	24	3,465	453	12	202	56	223	109	111	1 6 5	9 C 7	18	353	782	512	81	20	786	130	110	71	;	
FEMALE	75 75 75	37	277	14 226	165	375	2,101	5,	20 20	29	2.858	96	7.0	786	2	96 7	63	11	5		- 9	23	24	29	-	22	0 80 7 80	1	∽ ∞	c		
MALE	106 34 90	2 0 K	1,292	123	4 4 4	429	524 246	6	61 92	51	102 A	594	13	77	515	604	1,402	508	312	23	20	445	1,511	63 736	103	13	1.590	160	151	9 6	Ĵ	
T OT ENR	181 41	133 133 133	1,569	208 349	169	804	528 2,347	13	125	43	208	640	13	1 1 2 1 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2	517	650	1,465	1015	316	24	20 M	468	1,535	2 2 2 2 2 2 2	104	55	079 1.678	163	159	6	HC	
CIP NAME	INDUSTRIAL ENGINEERING PLASTICS TECHNOLOGY	MANUFACIUKING STSLEMS IND SFTY SCRTY & HLTH MG	MECHANICAL ENGINEERING	SURVEYING TECHNOLOGY GENERAL OCCUPATIONAL	CHILD CARE WORKER	FOODSERVICE MANAGEMENT	FOODSERVICE SPECIALIST Parai Frai Technology	PARK & OUTDOOR REC RES	PARKS, FORESTS RANG TECH Martnf	BIOTECHNOLOGY	CORRECTIONAL SERVICES	FIRE SCIENCE	FIRE PROTECTION DIPLOMA	PUBLIC ADMINISIKALIUN Soctal Sebutce ASSOC	DUCIAL DERVICE ADDUC. MASONRY	RESIDENTIAL CARPENTRY	ELECTRICAL INSTALLATION	FACILII SEKV IECHNICIAN LIGHT CONSTRUCTION	PRACTICAL PLUMBING	INDUSTRIAL CONSTR TECH	DIGITAL ELECTRON REPAIK	FI FCTRONTC SFRVICING	A/C, HEATING, & REFRIG	HEAVY EQUIPMENT MECH	GUNSMITHING	JEWELRY PRODUCTION CRAFT	AUTO BUDY KEPAIK Antomotive technology	DIESEL VEHICLE MAINT.	SMALL ENG & EQUIP REPAIR AVIATION MAINTENANCF	MED/HEAVY VEH TECH	DKAFI I NG-BUI L DI NG	
CIP	15.0603 15.0607	15.0701	15.0805	15,1102	20.0202	20.0401	20.0409	31.0101	31.0301	41.0101	43.0102 43.0107	43.0201	43.0203	44.0401	1010.44	46.0201	46.0302	46.04UI	46.0501	46.9999	47.0104	6010 /b	47.0201	47.0302 47.0302	47,0402	47.0408	47.0603	47.0605	47.0606. 47.0607	47.0699	48.0102	

·

•

94

PAGE

2

•

PAGE

.

,

M

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)	10	144	70 5	ю	l	14 7	162 2		23	12	<u>τ</u> υ	-11	~ 00 P	27	50 40	88 16		122	26	22	1 42	14	
SP/DH SPH	2922	10 M	56	l	7	9	10	96	19 45	22	41 41 7	יע ד ריך ב	65 6 7	318	33	32	35 6	69 63		0.00	45	58 32	26
CORR		ľ	267	3 29			22	29					1								ю		
DIS- Abled	2227	61 61	64 3	92	. 10	יט ע	1∞)	74	25 15	6,	7 4 C	211	18 -	55.	14 20	17	23	24	а 1	40	14	14 8	
LEP	-0-	28 28	7			£	1	18	77		а rJ	•	-	12	11	- 7	4	10	די ר	2	7	чN	
DIS- ADV	30 12 161	578 32	484 4	22 45	- - - - - - - - - - - - - - - - - - -	30	17 6	437	105	16 78	220 115	35	114	33 972	151 117	127 103	185 20	361	154	23 26	1 182	129 63	
REG. VO-TE-ED	209 209	1,047	848 26	138 14	11	96 92	929 30	13 661	105 222	66 85	221 186	31 12	57 95	15 512	96 49	247 85	240 33	351	06 1/1	29 60	8 128	102 97	
FEMALE	101 72 179	11 144 22	70	м	82	14	162	8 600	123 336	20	448 317	51	81 215	50 1,522	220 144	302 181	192	617	232	52 68	8 279	234	
MALE	95 211 211	85 1,557 94	1,504 28	165 61	115 25	114	799 799 56	581	104 23	12	ייייבי	32	~ 87	3 27	36 40	88 16	248	122	88 26	4 22	1 42	14 47	
TOT ENR	105 390 390	107,1 11,701	1,576	165 64	117	128	961 58	1,181	227 359	175	452 322	52	223	53 1,549	256 184	390 197	640 54	739	4U3 258	56 90	9 321	248	
CIP NAME	DRAFTING-MECHANICAL FURNITURE DFT & PROD DEV GRAPHIC ARTSPRNT MGMT	UPHULSIEKING Machinist technology Todi & dif	WELDING FINE & CREATIVE WOODWKG	FURNITURE MACH OPERATION CABINETMAKING	MODD PRODUCTION CRAFTS FIRER PRODUCTION CRAFTS	AVIATION MGT & C PILOT AVIATION MGT & C PILOT HAVV FOUTD DEEATDD	TRUCK DRIVER TRAINING MARTNF MFCHANICS	TRAFFIC AND TRANS. 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 technology	HEALTH INFO CODER Medical Assisting	OCCUP. THERAPY ASST. INDUS PHARMACEUTICAL TEC	PHYSICAL THERAPIST ASST. VETERINARY MEDICAL	EMERGENCY MEDICAL	RADIOLOGIC TECH / RADPHY	KESPIKALUKT CAKE LECH SURGICAL TECH.	MEDICAL SONOGRAPHY Electrodiagnostics tech	CYTOTECHNOLOGY Medical Laboratory Tech	PHLEBOTOMY Drug & Alcohol Tech	96
CIP CODE	48.0105 48.0199 48.0201	48.0503 48.0503 48.0503	48.0508	48.0702 48.0703	48.0799			49.9999 50.0402	50.0406 50.0408	50.0602 51.0205	51.0601	51.0603	51.0705	51.0799 51.0801	51.0803 51.0805	51.0806	51.0904	51.0907	51.0909	51.0910	51.1002 51.1004	51.1099	

·

.

.

.

	2
ES	130
LEG	9
10	F.
	i Li Li
M	RT.
ີ	D L
10N	E A F
NU CO	<u>S</u>
TME	MAN
AR	N A
П П П П П	
	I N
ICU	SS:
ROI	RE E
S D D	РШ
TH	RL
40R	CA
-	OR

REPORT # CC815CPP

SEX EQ (NON-TRAD) 150 428 75 81 65 54 4 4 M 8 5 36 . 5,197 13,396 256 891 277 312 212 132 132 790 882 882 654 15 233 5 6 1 1 0 7 1 1 0 143 2] SP/DH SPH 1 128 36 3,876 CORR 26. 91 127 37 359 359 192 179 100 444 206 4,379 DIS-ABLED 51 ø 255 212 965 N うちろいう 5 ファ LEP 10 904 433 137 138 138 2264 51,530 DIS-ADV 15 na REG. VO-TE-ED 258 881 767 32 39 39 80 80 81 3,866 694 1,002 722 11 313 313 38 109 146 146 146 146 175 17823 17823 104 104 46,482 1,0920 1,094 1,094 1,094 1,035 5,053 2,515 179 172 146 39 39 4,747 2,629 278 278 589 61,476 FEMALI 2,794 1,879 1,879 1,879 502 502 214 610 744 57 5 M 00 5 M 00 5 M 00 ¢ 43,702 MALE 3 215 215 27 309 561 67 561 67 561 561 563 563 1,091 105,178 TOT 2 HUMAN SERVICES TECH. 3 PRACTICAL NURSING 5 PRACTICAL NURSING 6 NURSING ASSISTANT 5 HOMEMAKER/HOME HEALTH AI 2 OPTICIANRY 2 OPTICIANRY 9 DEVELOPMENT DISABILITIES 1 THERAPEUTIC RECREATION 9 HEALTH CARE TECHNOLOGY 1 BUSINESS ADMINISTRATION 1 DUUSINESS ADMINISTRATION 2 SECRETARIAL - EXECUTIVE 3 SECRETARIAL - EXECUTIVE 5 SECRETARIAL - LEGAL 6 SECRETARIAL - LEGAL 6 SECRETARIAL - LEGAL 6 SECRETARIAL - LEGAL 6 SECRETARIAL - LEGAL 7 DATA ENTRY OPERATIONS 8 GEN. OFFICE (TEC SPEC) 9 POSTAL SERVICE TECH. 5 DATAL BUS MGMT: ENTR DEV 5 DATAL BUS MGMT: ENTR DEV 5 DISURANG AND FINANCE 1 INTERNATIONAL BUSINESS 1 INTERNATIONAL BUSINESS 6 OMPUTER OPERATIONS 5 COMPUTER OPERATIONS 6 NETWORKING TECHNOLOGIES 7 NETWORKING TECHNO CIP NAME 51.1502 51.1614 51.1614 51.1614 51.1614 51.1614 51.1614 51.1615 52.0509 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0407 52.0701CODE

BEST COPY AVAILABLE

က တ

ი ი

PAGE

APPENDIX B

Special Curriculum Student Enrollment



100

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 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 02
TOTAL UNDUPLI- Cated SINGLE Parent or Homemaker	22240222406644384006192031877522913988803 2224022406643384006192303187752391398803 222402220061966643386006192303187752391398803 89120221550664338400606192303187752391398803 891202215506643384006061923031887523913988033 8910020144662540066438844066192303188752391398803	
SINGLE Home Maker	1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2	
SINGLE	22 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
TOTAL * UNDUPLICATED DISADVANTAGED	LISH SPORT 1, 2256 4 1, 2256 4 1,	
LIMITED ENGLISH PROFI- CIENCY	LIMIT LIMIT	
ECONOMIC DISAD- Vantaged	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ACADEMIC DISAD- VANTAGED	DEMIC 2010 0	
NUMBER Handi- Capped	LUDES 55 ACA LUDES 55 LUDES ACA LUDES 55 LUDES 5	
COLLEGE	ALAMANCE CC ANSON CC ANSON CC ANSON CC BEAUFORT COUNTY CC BLUE RIDGE CC BRUNSWICK CC CAPE FEAR CC CAPE FEAR CC CATAWBA VALLEY CC CATAWBA VALLEY CC CATAWBA VALLEY CC CATAWBA VALLEY CC CATAWBA VALLEY CC CATAWBA VALLEY CC CATAWBA CATOLINA C COLLEGE OF ALBEMAR CRAVEN CC COLLEGE OF ALBEMAR CCAVEN CC COLLEGE OF ALBEMAR CCCCCAVEN CC COLLEGE OF ALBEMAR CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	

.

• .

PAGE

,

•

۲

/

PAGE

2

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

-

1,3124 589 3,824 589 589 589 587 587 587 587 587 587 589 589 587 587 589 589 589 589 589 589 589 589 589 589
1,313 668 668 1,589 3876 1,962 1,962 1,962 1,962 1,962 1,962 1,966 1,960 1,163 76,416 34,96

BEST COPY AVAILABLE

164

103

TAGED INCLUDES ACADEMIC, ECONOMIC, AND LIMITED ENGLISH SPEAKING DTAL DISADVA

APPENDIX C

Community Colleges



The North Carolina Community College System

- STOKE 51 44 53 57 25 GUILA 1000 0 51 VAC 1 22 24 19 20 . 34 18 36 21 DOUTH 33 56 45 26 40 54 58 eer' 39 4 12 55 29 50 35 27 14 47 5 23 13 CR/ 30 17 37 46 28 21 2 41 0.0.1 15 5 43 204 Alamance Community College 1. 48 11. Catawba Valley Post Office Box 8000 9 Graham, NC 27253-8000 (910) 578-2002 Community College* 2550 Highway 70 S.E. Hickory, NC 28602 (704) 327-7000 (910) 578-1987 Fax Anson Community College* Post Office Box 126 (704) 327-7276 Fax 2. Fayetteville Technical Community College* Polkton, NC 28135 (704) 272-7635 12. Central Carolina Community College* Post Office Box 35236 Fayetteville, NC 28303-0236 1105 Kelly Drive (704) 272-8904 Fax
 - 3. Asheville-Buncombe Technical **Community College*** 340 Victoria Road Asheville, NC 28801 (704) 254-1921 (704) 251-6355 Fax
 - 4. Beaufort County Community College* Post Office Box 1069 Washington, NC 27889 (919) 946-6194 (919) 946-0271 Fax
 - 5. Bladen Community College Post Office Box 266 Dublin, NC 28332 (910) 862-2164 (910) 862-3484 Fax
 - 6. Blue Ridge Community College* College Drive Flat Rock, NC 28731 (704) 692-3572 (704) 692-2441 Fax
 - 7. Brunswick Community College* Post Office Box 30 Supply, NC 28462 (910) 754-6900 (910) 754-7805 Fax
 - 8. Caldwell Community College and Technical Institute* 1000 Hickory Boulevard Hudson, NC 28638 (704) 726-2200 (704) 726-2216 Fax
 - 9. Cape Fear Community College* 411 N. Front Street Wilmington, NC 28401 (910) 251-5100 (910) 763-2279 Fax
 - **Carteret Community College*** 10. 3505 Arendell Street Morehead City, NC 28557 (919) 247-6000 (919) 247-2514 Fax
 - * Offers College Transfer Curriculum Program

- Sanford, NC 27330 (919) 775-5401 (919) 775-1221 Fax
- 13. Central Piedmont Community College* Post Office Box 35009 Charlotte, NC 28235 (704) 330-2722 (704) 330-5045 Fax
- 14. Cleveland Community College* 137 S. Post Road Shelby, NC 28150 (704) 484-4000 (704) 484-4036 Fax
- 15. Coastal Carolina Community College* 444 Western Boulevard Jacksonville, NC 28546 (910) 455-1221 (910) 455-7027 Fax
- 16. College of The Albemarle* Post Office Box 2327 Elizabeth City, NC 27909-2327 (919) 335-0821 (919) 335-2011 Fax
- 17. Craven Community College* 800 College Court New Bern, NC 28562 (919) 638-4131 (919) 638-4232 Fax
- 18. Davidson County Community College* Post Office Box 1287 Lexington, NC 27292 (910) 249-8186 (910) 249-0088 Fax
- 19. Durham Technical Community College* 1637 Lawson Street Durham, NC 27703 (919) 686-3300 (919) 686-3412 Fax
- 20. Edgecombe Community College* 2009 W. Wilson Street Tarboro, NC 27886 (919) 823-5166 (919) 823-6817 Fax



(910) 678-8400 (910) 484-6600 Fax

- 22. Forsyth Technical Community College* 2100 Silas Creek Parkway Winston-Salem, NC 27103-5197 (910) 723-0371 (910) 761-2399 Fax
- Gaston College* 201 Highway 321 South Dallas, NC 28034-1499 (704) 922-6200 (704) 922-6440 Fax
- Guilford Technical Community College* 24. 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
- **James Sprunt Community** 28. College* Post Office Box 398 Kenansville, NC 28349-0398 (910) 296-1341 (910) 296-1636 Fax
- 29. Johnston Community College* Post Office Box 2350 Smithfield, NC 27577 (919) 934-3051 (919) 934-2823 Fax

11-96

(*)

North Carolina Community College System Lloyd V. Hackley, System President ERICEST COPY AVAILABLE (919) 733-7051

Caswell Building, 200 W. Jones Street Raleigh, NC 27603-1379 Fax (919) 733-0680 106

printed on recycled paper

Preparing North Carolina's World-class Workforce AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

The North Carolina Community College System



* Offers College Transfer Curriculum Program

(910) 629-4695 Fax

North Carolina Community College System Lloyd V. Hackley. System President Phone (919) 733-7051

Caswell Building, 200 West Jones Street Raleigh, NC 27603-1379



Preparing North Carolina's World-class Workforce A FETD ION/FOULT APPADTIN OVED

APPENDIX D

Tech Prep Student Data



Tech Prep Student Data 1996-97

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	





U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

