North Carolina Performance Report Performance Performa

Program Year 1997-1998 9

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Department of Public Instruction
Workforce Development Education

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

Program Year 1997-98



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Introduction

This Performance Report presents the programs, services, and activities provided to the youth in secondary and postsecondary Workforce Development Education (WDE) in North Carolina from July 1, 1997 - June 30, 1998. 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 1998 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 standards 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, 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 98 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)

Date

Chairman, NC State Board of Ed

Date State Superintendent of Public Instruction

Summary of Secondary Services & Activities

Workforce Development Education

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

Mission

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

Purpose

The purposes of Workforce Development Education are to:

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

Served:

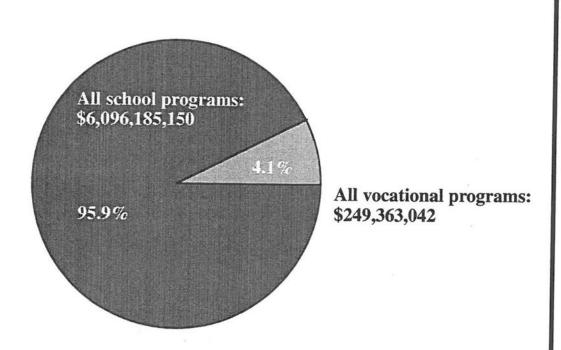
117 Local Education Agencies (LEAs)

311

Secondary Schools

10 Career Centers

Total Educational Expenditures: (96-97)

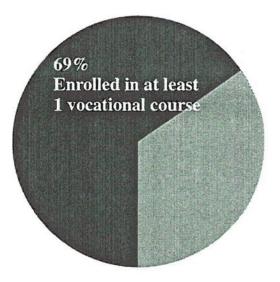


Total statewide enrollment in Grades 9-12:

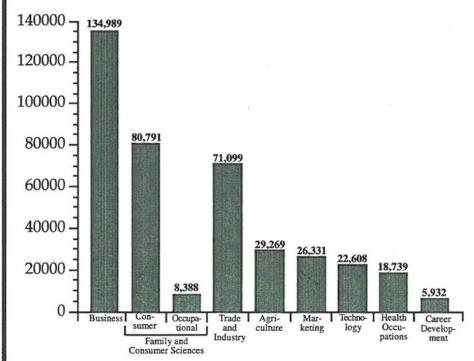
328,214

Total statewide student enrollment in

Workforce Development Education, Grades 9-12: 226,115* (unduplicated count)



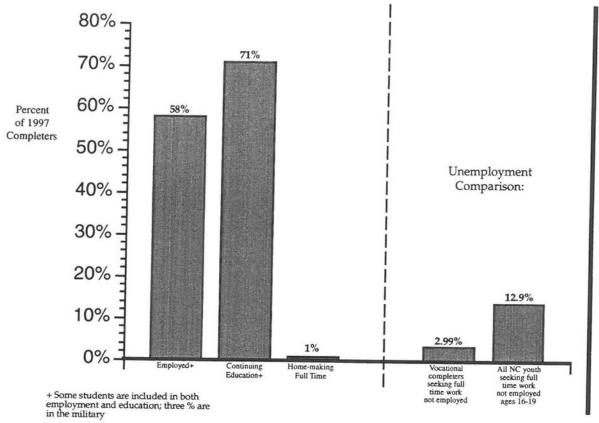
Number of Students Per Program Area** Grades 9-12 (duplicated count)



^{*}Total student enrollment for Workforce Development Education Grades 6-8: 190,070 (unduplicated count)

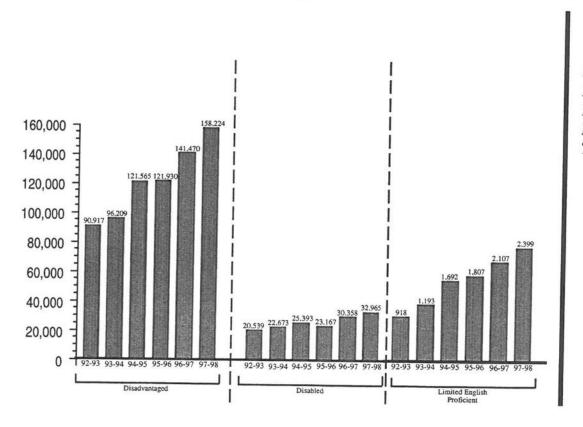
^{**} See Appendix I for additional information.

Status of the 42,440 Workforce Development Education completers:



Completers of Workforce Development Education

Number of Special Populations Students in Grades 9-12



Special Populations Education 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 and Services

- Development, revision and distribution of 132 curriculum products;
- Revision of course blueprints or matrices to reflect business/industry practices and state/national standards;
- Distribution of VoCATS test item banks to 117 LEAs in an electronic format;
- Tech Prep collaboration with North Carolina Community College System to provide leadership and support to 117 LEAs and 58 community colleges; criteria were developed and implemented for innovative/demonstration tech prep grants;
- Continued implementation of and use of evaluation data for the established vocational performance system;
- Use of external and internal 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 638 state leadership and professional development workshops for 15,767 participants.

Grants

During the 1997-1998 school year, 11 gender equity grants were awarded to address gender equity issues. Approximately \$436,887 was used to provide programs and activities for youth in grades 9-12.

Five single parent, displaced homemakers and single pregnant women grants were implemented to provide programs and services to 1,388 students at the secondary level. These students were assisted in continuing their education, developing marketable skills, and accessing vocational training.

The North Carolina Workforce Development Education (WDE) Programs of Study and Support Services Guide [hereafter referred to as Programs of Study (POS)] was implemented for eight program areas in WDE. This guide helped local planning personnel organize comprehensive and appropriate sequence of WDE courses for students enrolled in grades 6-12.

Performance Standards development was aligned with those of NC JobReady (School-to-Work) and Tech Prep to the degree possible. Trend data on five of the eight performance standards and other WDE student data were distributed in graph and electronic formats to 117 LEAs.

Workforce Development Education information was placed on the World Wide Web. A wide range of information regarding curriculum, program areas and publications were located at the URL: www.dpi.state.nc.us/workforce_development.

Articulation and Alignment

The Secondary Statewide System of Performance Measures and Standards

Committee of Practitioners

Assistance to LEAs

Trend data

Revision of the planning

Progress Made

Performance Monitoring

Coordination

The system of performance measures and standards has been implemented in all school systems in North Carolina. The Committee of Practitioners continued its role in making recommendations. One such recommendation was to change the definition of secondary vocational completer to coincide with the definition of the Southern Region Education Board. The new definition changed to the following: a vocational student completer is one who has completed four related technical credits within a career pathway. State staff adopted this definition after consulting and providing technical assistance to all 117 LEAs.

Highlights in the Workforce Development Education's Performance System usefulness to LEAs were the following: improved cycle times of receipt, processing, return of enrollment and follow-up data to LEAs. This gave them more time to use the data.

Building on ways for LEAs to use prior data, each LEA was given status reports about performance standards from Vocational Education Information System (VEIS) data for three years in graph form, both at the LEA level and at the school level. This allowed them to visualize their substantial progress over the last three years.

The local planning process continued to be refined. Modification to fit state and local schedules were made. Training was provided regionally for all administrative staff completing the electronic local plan. Steps were made to put local planning on the Internet. The planning process was explained to charter schools potentially interested in the local planning process.

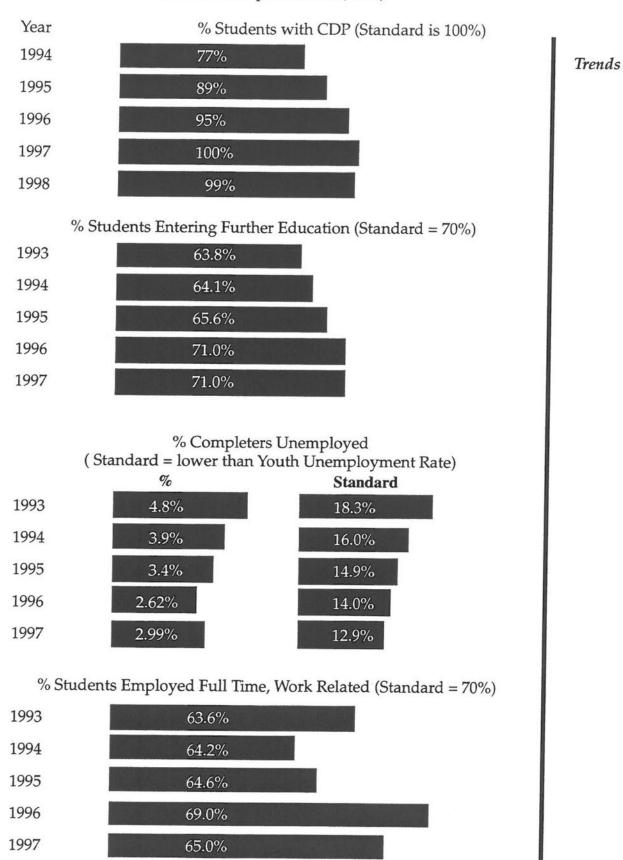
An Interagency Follow-Up System was initiated. One report was completed on the outcomes of completers. It was done in conjunction with the Governor's Commission on Workforce Preparedness. Another will be done in conjunction with the State Occupational Information Coordinating Committee.

All regional coordinators completed performance monitoring forms for at least 20% of the LEAs in their respective areas. They also approved the local plans for implementing the next steps indicating substantial progress for each LEA attaining the eight performance standards.

The various agencies and the local vocational directors continue to work towards coordination of the various funding streams into one collaborated system. Also, all agencies continue to be committed to align all educational goals.

Selected Statewide Results

Career Development Plan (CDP)



Customer Satisfaction: Feedback from Customers

Impact

Results of Workforce Development Education completers were as follows:

- Three of North Carolina's eight performance standards were related to information about completers. The 1996-1997 data indicate follow-up was conducted with 42,440 students. Of these,
 - 71% were in further education, including on-the-job training (vs. the 70% standard);
 - 2.99% were unemployed versus the statewide youth average of 12.9%;
 - 76% of those employed full time were in jobs related to their high school career major (vs. 70% target).
- Further education categories:
 36% were enrolled in postsecondary institutions;
 28% in college or university; and
 7% in on-the-job training.
- Employment categories:
 29% full time
 29% part time
 3% military
 1% homemaker
 5% seeking part time employment and
 30% not employed, not seeking employment.
- Further education's relationship to completers' high school occupational clusters:

71% in postsecondary 61% in four-year colleges or universities 61% in on-the-job training

- Response about whether workforce development was a major reason for staying in school: Yes, 50%
- Students enrolled in WDE programs because they related to career plans:
 76%

Percent of students:

Personal qualities (self-management, social skills,	
responsibilities)	.29%
Team work, serving customers, working with people of	
different backgrounds	.25%
Basic skills (reading, writing, math, speaking, listening)	.21%
Monitoring and correcting performance:	
social, organizational, technical	.16%
Selecting proper equipment and tools	.12%

Completers' Performance Reported on Biennially from 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
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 Served LEAs and community based organizations were provided the opportunity to apply for grant funds through the request-for-proposal 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 1997-98 school year, five LEAs were funded to address the needs of single parents, displaced homemakers, and single pregnant women. These seven programs served a total of 1,388 students at the secondary level. The following services were provided to participants involved with these funded programs.

Services Provided Assessment/Guidance: The needs of targeted program participants were assessed by program providers. All participants received supportive services through guidance and counseling. Services included emotional support, encouragement, self-esteem and self-confidence building, and crisis intervention. In addition to individualized counseling, coordinators offered workshops, seminars, and group sessions to include decision-making skills, parenting skills, budgeting, time management, nutrition, medical needs, educational and career goal setting, coping, assertiveness 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 to acquire marketable skills.

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

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

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

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

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

- Some LEAs used the single parents funds mainly to support the salary of an individual who provided direct counseling, guidance, referral, and other supportive services.
- 2. The case management approach was used effectively. Each participant was assessed, a profile developed, and plans and services developed and implemented according to individual needs.
- Some programs incorporated a special incentive component for extra motivation and student accomplishments. Participants earned extra opportunities through compliance with an agreed upon goal such as reduction in absenteeism and reduction in drop-out rates.
- Two programs included a male support group for the fathers of the participants' children and for male at-risk students.
- 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. Twelve 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. A statewide leadership conference was held for purposes of staff development and management. Collaboration was implemented with three state government agencies and one private non-profit agency.

Effective Delivery Methods

Gender Equity

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

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

During the 1997-98 school year, 14 gender equity grants were awarded to LEAs to address equity issues. Services and activities were provided to 3,375 students in grades nine through twelve.

Achievements

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

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

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

and a virtual reality center.

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. Products also incorporated industry and business partnerships for promoting gender equity.

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 73 LEAs, committed to providing equity leadership on the local level, participated in a three-day NC Equity Leadership Conference. The conference participants included vocational and academic teachers, counselors, and administrators. Another leadership conference was held in conjunction with postsecondary staff for purposes of staff development. A special training event was held for state vocational student organization officers for equity and leadership training. Publications developed and distributed statewide included: "Think Purple" and "Education Equity Evaluation". Two equity workshops were held during the 1998 Workforce Development Education Summer Conference. Also, North Carolina was tapped to be the nations' model for gender equity and School-to-Work by the Institute for Women in Trades, Technology, and Sciences. This model program has resulted in additional gender equity training for fifteen school systems.

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, correspondence, 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.

Activities

Eighteen local school systems were visited by the state equity consultant.

The Department of Public Instruction, along with East Carolina University and North Carolina A&T University, sponsored two-week residential Summer Technology Institutes for the Advancement of Gender Equity in High Technology for high school females on both university campuses in July 1998. The Summer Technology Institutes were provided to increase the participants' level of aspiration and expectation for participating in nontraditional programs and seeking nontraditional careers in high technology. Specifics about each of the two Institutes follow.

Exemplary Gender Equity Programs

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 40 high school females from 26 LEAs. 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 40 high school females representing 28 LEAs. The program was designed to broaden the participants' understanding of technology and develop confidence in their ability to succeed in a variety of technical fields. The Summer Technology Institute accomplished the following objectives:

- Exposed participants to a broad range of technology concepts through hands-on activities;
- Demonstrated 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 activities and modules. The modules featured were "Technology Discovery," "Career Orientation," "Observing High Technology," and Investigating North Carolina High Technology." The 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 1997-1998 school year, 1149 new students were admitted and served.

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

Improving the Workforce Development Education continued to be a major goal of the Division. Two teachers were trained to instruct the Computer Engineering Technology and Networking courses. The new courses were offered at The Juvenile Evaluation Center and Dobbs School. The ultimate goals were to teach the students how to network the computers for the Internet as well as service the computers on the campuses. In addition to the above new courses, Dobbs School offered Radio and Communications and Building Maintenance. The students enrolled in the cleaning program attained employability skills working at the facility cleaning, painting and maintaining buildings. Strenthening WDE courses at the school also afforded the opportunity for Construction Technology students to build a two-story storage building, the Automotive Technology students to maintain the fleet of automobiles for the facility and the Horticulture students to landscape the campus.

Correctional Institution

Students Served

Services

To achieve an effective educational delivery system that promotes the integration of academic and occupational skills, the schools implemented integration projects. At Stonewall Jackson School the Horticulture and Construction Technology students built a new greenhouse. The Radio and Communications students at Dobbs School worked with Science and Math classes to broadcast a daily news program. The Science classes calculated the atmospheric pressure, predicted the weather, provided weather advisories, and a question of the day. Other items of interest included campus life, current news and food service information.

At Samarkand Manor, the Drafting students drew house plans for the Horticulture classes who designed the landscapes for the drawings. One student drew plans of the buildings currently on campus and the school used the drawings in the bidding procedures for renovations. Keyboarding students typed the "Samarkand Expressions," written by the English Language Arts students. The Construction Technology, Horticulture and Science classes continued their garden project. The students designed a flower garden to attract birds and butterflies. Birdhouses were also built.

During Black History Month the Workforce Development Education teachers joined in with the academic teachers to inform students of African American inventors in the occupational areas being taught. The students wrote and presented their papers in class. The Horticulture teacher also worked with the Girl Scout group on campus to assist them in earning badges related to plants.

To foster a seamless approach to educating students, the schools continued to offer a middle grades program that provides career development courses. They were designed to prepare students for the secondary level program.

Progress was also made in training all of the WDE teachers in creating interim tests using the VoCATS software and utilizing pretest scores for planning instruction. Personalized Education Plans (PEPs) were developed based on the information gathered from the pre- and interim assessments. As a result, the schools were able to submit uniform accountability reports to indicate student achievement. Improvement plans were developed to assist teachers in improving student achievement.

Career development in the training schools has become another major focus of the WDE. Career Development Plans (CDPs) and Career Development Plan Plus (CDPPs) forms were created, along with a planning guide and the POS. The students received career information, assessment and planning which were documented and shared with the public schools when the students returned to their home schools.

To ensure program compliance with state and federal guidelines, each program was monitored once during the year. In addition, the schools received routine visits from the consultant to assist in meeting goals for the year.

Services Provided

Achievements

Special Populations - Disabled

Achievement in Providing Equal Access for Disabled. The number of disabled students enrolled in Workforce Development Enrollment reached 32,965 of the 193,588 special populations students enrolled in all Workforce Development Education classes. This data reflected enrollment in grades nine through twelve during the 1997-98 school year. These students were enrolled in the full range of vocational offerings and a majority of them participated in regular WDE.

Achievement in Providing Equal Access in Recruitment. Recruitment activities were presented in the middle grades and at the high school level for disabled students. In the eighth grade, Special Populations Coordinators, Career Development Coordinators, vocational student organization members, and guidance counselors provided orientation sessions about WDE available in the high schools.

Brochures, open house events, news media, and parent nights were used frequently to provide required information to parents and students. Curriculum assistance guides were developed by LEAs and distributed to all students. In some cases, the support personnel visited Special Education classes to ensure the students were aware of WDE.

Achievement in Coordination Between Special Education and Workforce Development Education. Coordination improved between Workforce Development Education and the Exceptional Children's 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 WDE support personnel. Topics included coordinating services at the local level and 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. The two areas, along with Gender Equity, also sponsored one state-wide staff development conference for their program coordinators. At the local level, WDE 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 was not consistent, and remains problematic statewide. As a result, however, more disabled students have Individualized Education Plans (IEPs).

Students Served

Services

Achievements

Achievement in Assessment. While Special Populations Coordinators (SPCs) and technical assistants were employed to provide vocational assessments 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. Vocational assessments included: an aptitude test, interest and learning styles inventories, and information from the Special Education teachers. A Special Education file folder, other service providers, parents, and students were used to determine 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 an 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 (CDPs) 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 WDE courses. The CDP included a career concentration, the most appropriate sequential course of study, assessment data, and support services needed to ensure success of a student while enrolled in the WDE. The number of special population 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 were tracked through the Vocational Competency Achievement Tracking System (VoCATS). Mastery of these competencies also was 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 IEP. Workforce Development Education personnel coordinated the transition services required of them with the IEP developers.

Impact

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. 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

The statewide total of identified Limited English Proficient (LEP) students enrolled in all 1997-1998 Workforce Development Education was 2,399. Identifying and serving those LEP students in migrant situations remained 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 coursework.

Students Served

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

Special Populations - Disadvantaged

Access. In high school, 158,224 of the 193,588 special population enrollees were identified as disadvantaged during the 1997-98 school year. Disadvantaged students were enrolled in the full range of Workforce Development Education. Special Populations Coordinators and others provided supplemental services needed for the success of disadvantaged students in WDE.

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 development of CDPs that listed the WDE and academic course work. Each WDE course was monitored to determine if enrollments of disadvantaged students were based on identified CDPs.

Students Served and Achievements 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, transitions to other levels of education and training and then to employment were monitored. Corrective actions were applied through the performance system.

State Leadership and Professional Development

State Leadership

standards attainment, instructional management/competency attainment through VoCATS, curriculum integration of academic and WDE, technical updates including Tech Prep, and applied curricula. A total of 638 state leadership and professional development activities were conducted/facilitated for a total of 15,767 participants.

Priority for professional development was given to performance

Professional Development

Various delivery mechanisms were used for professional development. They included the North Carolina Information Highway, an Internet homepage, a statewide summer conference, telephone conferences and video developments. Examples of these follow:

Information Highway Satellite Broadcasts

- Seven technical updates for WDE administrators were facilitated
- Two Family and Consumer Sciences Career Pathways broadcasts were conducted
- Five Computer Technology broadcasts were facilitated
- Six Career Development Education broadcasts were conducted
- Five Administrative Grantees workshops were conducted

Other Statewide Development Activities

- Six Workforce Development Education related conferences were co-sponsored
- Four new teacher workshops were conducted
- Thirty-seven Leadership Academies and Institutes were coordinated
- One WDE New Director Internship program was conducted for 14 newly hired administrators

Professional Development

1998 Workforce Development Education Summer Conference A week-long workshop for 3,322 WDE personnel was conducted.

Program Areas/Specific Groups	Participants
Agriculture Education	325
Business Education	600
Career Development	300
Family & Consumer Sciences	511
Health Occupations Education	126
Industry Education Coordinators	147
Marketing Education	125
Special Populations/Gender Equity	360
Teacher Educators	25
Technology Education	140
Trade & Industrial Education	399
VoCATS Coordinators	129
Vocational Directors	135
TOTAL	3,322

Video Productions for Professional Development

Videos were prepared for the following workshops/conferences:

- Eight Regional on-site Programs of Study workshops
- One statewide Gender Equity resource/activity using the Institute for Women in Trades, Technology and Sciences
- Five video conferences for three different program areas.

Curriculum Development

Statewide System Strengthened Development of curriculum continued to be a high priority during 1997-98. The curriculum development efforts centered on the North Carolina Vocational Competency Achievement Tracking System (VoCATS), 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.

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

- Course blueprints were completed 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 blueprints, were used by teachers to plan a course of work, prepare daily lesson plans, and integrate WDE activities with other disciplines.
- Banks of assessment items tied directly to course blueprints were distributed electronically. These banks, which include traditional paper-and-pencil items as well as alternative measures, were used by teachers to assess student skills before, during, and after instruction.
- Supplementary banks that integrate WDE objectives and traditional academic areas through the Standard Course of Study were used.
- Curriculum guides were either developed in North Carolina or adopted from other sources. The guides could include teaching outlines, student activities, handouts/transparencies, and resource lists, all tied directly to 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 (SCANS) and All Aspects of the Industry (AAI) were used.
- Statewide pre and postassessments, again tied to the course objectives in the blueprints, were generated.

- Software was purchased statewide and annual support for LEAs was afforded.
- Staff development was provided.
- Help desk to assist LEA personnel with implementation of VoCATS and use of related software was provided.

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 VoCATS curriculum software. Approximately 4,500 teachers have participated in staff development about VoCATS during the past five years. All personnel coordinating VoCATS at the local level are part of self-directed regional user groups.

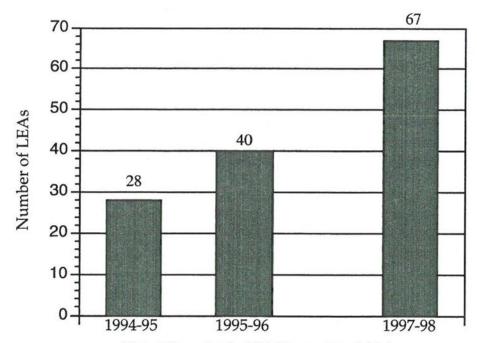
Some notable examples of use are Nash/Rocky Mount Schools, McDowell County, Mecklenburg County, and Guilford County. Some LEAs are expanding the VoCATS model to incorporate other instructional areas in addition to Workforce Development Education.

Impact

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 28 local education agencies. By March of 1998, the program had grown by 41% to 765 high school apprentices and had increased the number of local education agencies by 58% to 67 different local education agencies.

LEAs Involved with Apprenticeships



(Note: Information for 1996-97 was not available.)

Many programs received state and regional recognition for the innovative and enthusiastic approaches to High School Youth Apprenticeship. The apprenticeship continued to be a major focus in the overall mission of developing a comprehensive and coordinated workforce preparedness system for North Carolina.

Southern Regional 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 fouryear 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 32 to 55. Each of the sites revised annual site action plans which target ten key practices. Site plans incorporate a variety of available data which included student performance data. Each of the 18 sites received a three-day, technical assistance visit and a follow-up written report. Over 135 different individuals were involved on technical assistance teams. Team members consisted of local school administrators, classroom teachers, guidance personnel, community college representatives, business and industry representatives, and consultants from the North Carolina Department of Public Instruction.

Fifty-five of the sites attended a one-day workshop during which they received detailed information and training to assist in their preparations for the 1998 *High Schools That Work Assessment*. During the year, numerous local sites provided a significant amount of staff development for their faculty regarding HSTW. Site coordinators from the new sites attended a state-conducted, one day orientation workshop/meeting.

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 ten school districts statewide. Following that process, the formal program began in 1996-97 in grades K-8.

Improvement Initiative

Improvement Initiative

The high school model approved by the State Board in March, 1997 had to meet three criteria outlined in the legislation creating the ABCs: (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 has viewed this model as a "work in progress," with reexamination, changes, or adjustments forthcoming.

High School Components Used in 1997-98:

- Student performance on the five currently mandated endof-course (EOC) tests: Algebra I, English I, Biology, Economic/Legal/Political Systems (ELPS) and US History. An EOC index of course-by-course 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)

(Scholastic Apptitude Test 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; and 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.

ABCs Results

According to the ABCs high school accountability results, 59.7 percent of 1996-97 graduating seniors completed a college prep and/or college tech prep course of study. In 1997-98, 66.4 percent completed these courses of study, an increase of 6.7 percent.

Collaborative Initiative

Workforce Development Education involved business and industry in the development of curriculum the 1997-98 school year. There were 363 business/industry personnel involved in revising the curriculum products including guides, teacher resources, blueprints and test-item banks. There were 244 individuals and /or associations who helped deliver professional development to our teachers. The vocational student organizations were strongly supported by business/industry as was evident in the 2,565 people who helped deliver leadership sessions and competitive events.

Community Based Organizations

The 1996-97 carryover funds were spent and depleted from this categorical federal funding source. During the 1997-98 school year, school systems continued to receive technical assistance regarding the inclusion of Community Based Organizations. Sixty-one schools located in both urban and rural settings requested and received information. This information focused on implementing services for special population students (i. e. economically and academically disadvantaged) by collaborating with Community Based Organizations.

Consumer and Homemaking Education

Programs and Support Services in Depressed Areas

The Vocational Education Information System (VIES) data indicated the 1997-98 enrollment for the Consumer Component of Home Economics Education grades 6-12 increased .3 % over the previous year to 122,980 students. The Consumer component represents 93.6 % of the total Family and Consumer Sciences Program enrollment (Consumer and Occupational components) and 18.2 % of the WDE enrollment in North Carolina. The Consumer and Homemaking Education funds were depleted from this categorical federal funding source during the 1997-98 school year.

Collaboration

Services

Students Served

Students Served

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

The most comprehensive teacher in-service training offered was the Family and Consumer Sciences Education Summer Workshop for 499 teachers and teacher educators. The most comprehensive student in-service training for middle and secondary students was the FHA/HERO State Leadership Conference for approximately 1,500 students, teacher-advisers, parents, and business representatives.

At the Family and Consumer Sciences Education Summer Conference, concurrent workshops and presentations were offered on curriculum development, technology, instructional management, and instructional innovations. A focus was on developing career pathways in the areas of Community and Family Services, Culinary Arts and Hospitality, Early Childhood Education, Food Science, and Interior Design. The evaluation completed by teachers indicated an overall conference rating of excellent (which was a rating of 5 on a 5 point scale).

Achievements

The State Family and Consumer Sciences Education staff broadcasted a teleconference to 10 North Carolina sites; approximately 175 teacher and school administrators attended the teleconference. The teleconference, "The ABCs and XYZs in Family and Consumer Sciences Education," focused on developing college tech prep completer programs and integrating the basics. Regional Leadership Councils serve as an extension of the state staff to provide additional locally identified staff development needs.

The State Family and Consumer Sciences Education staff has actively participated in the development of National Family and Consumer Sciences Education Content Standards. Two state staff members attended a preconference at the American Vocational Association and 3 state staff members, 2 teachers, and 1 teacher educator attended a national assembly on the implementation of these standards. A state plan for implementation of the national standards was drafted at the national assembly.

COLLEGE TECH PREP

College Tech Prep is the program title the State Board of Education and Community College Board have adopted for Tech Prep in North Carolina. The boards adopted the following criteria to be classified as a high school college tech prep completer:

English I, II, III and IV taught at grade level or higher

- Algebra I, Geometry, Algebra II or Algebra I, Technical Mathematics I, Technical Mathematics II
- Biology and at level two, additional science credits, one must be a physical science that supports the student's career concentration
- Four technical credits in a career concentration, one credit must be in a completer/starred course

Tech Prep Major Accomplishments

The following are significant accomplishments from the 1996-1998 funding cycle:

- Developed Scientific Visualization Curriculum and established two model training labs - Asheville High School and Northern Vance High School. Provided introductory training to over 300 high school and community college staff. The pilot curriculum served 125 students.
- Developed Certified Novell Network Administration Program. Two
 consortia: Nash/Rocky Mount Schools, Nash Technical Community
 College; Charlotte-Mecklenburg Schools and
 Central Piedmont Community College established
 demonstration programs for Certified Network Administration.
 Sixteen high school teachers have been CNA certified at the
 instructor level. During 1998, 65% of the students taking the

Certified Network Administration exam received their CNA credential.

- Implemented articulation agreements, cooperative agreements, Huskins Bill courses, including math, science, and technical studies between the high schools and community colleges.
- Aligned the purchase of equipment, software, and text materials between high schools and community colleges.
- Implemented the High School Accountability Model to increase effectiveness of College Tech Prep.
- Expanded to over 100 high schools voluntarily participating in the 1998 High Schools That Work Assessment.
- Developed computer program to analyze high school graduate transcripts to determine completers of high school College Tech Prep course of study.
- Developed and disseminated over 5,000 copies of the North Carolina Career Opportunity Pathway Guides. The guide aligns high school courses, community college and university majors.

Tech Prep Criteria

Accomplishments

- Developed and disseminated over 5,000 copies of High School College Tech Prep Technical Credit Requirements.
- Conducted 1996 High Schools That Work Assessment to track college tech prep student progress in Reading, Mathematics and Science. The results follow:

Assessment/ Evaluation

HSTW Assessment - NAEP Items: Reading

HSTW Goal	279
All North Carolina College Tech Prep Sites	282.1
All HSTW Sites	272.6

1996 HSTW Assessment NAEP Items: Mathematics

HSTW Goal	295
All North Carolina College Tech Prep Sites	298.9
All HSTW Sites	285.2

1996 HSTW Assessment NAEP Items: Science

HSTW Goal	292
All North Carolina College Tech Prep Sites	289.9
All HSTW Sites	282.6

Achievements

1996 Southern Regional Education Board (SREB) Certificate of Education Achievement Follow Up

Students participating in the 1996 HSTW Assessment using NAEP items, meeting the Reading, Mathematics, Science academic goals and completing the curriculum requirements for College Tech Prep were awarded a Education Testing Services (ETS) SREB Certificate of Educational Achievement. Thirty percent of North Carolina College Tech Prep students earned this distinction compared to 17% national average. A follow-up study was conducted of these students enrolled in community colleges and NC public universities to determine their postsecondary academic achievements.

These results of this follow up are for community college enrollees:

- A higher percentage of College Tech Prep graduates (83.2%) were still enrolled at a community college at the end of the school year than were all 1996 high school graduates enrolled at a community college (63.7%).
- College Tech Prep graduates had a higher average GPA score for both the fall semester (2.93) and the entire school year (3.00) than all graduates enrolled in a community college, (2.36) Fall semester and (2.44) entire year.
- Over half (53.2%) of all 1996 graduates had to take developmental course work. In comparison (40.4%) College Tech Prep graduates had to do likewise.

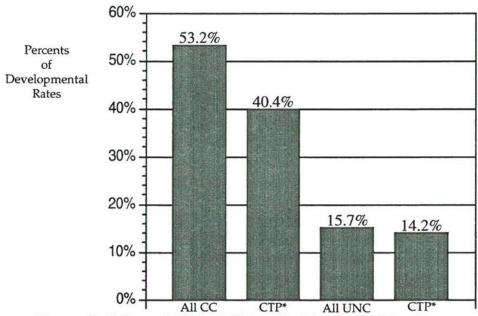
These results are for NC public university enrollees:

- College Tech Prep graduates attending four-year North Carolina public universities still enrolled at the end of 1996-1997 school year were 92% in comparison 87.3% of the 1996 high school graduates.
- College Tech Prep graduates attending four-year universities had a higher average GPA score for both the fall semester (2.72) and the entire school year (2.80) than all 1996 graduates (Fall, 2.62) and (2.60) entire year.
- There was little difference in the percentage of all graduates (15.7) and College Tech Prep graduates (14.2) having to take developmental courses at the four year level.

The following graph illustrates the developmental rate data for both categories of postsecondary enrollees:

1996 SREB Certificate of Education Achievement Follow-up

(Developmental Studies)



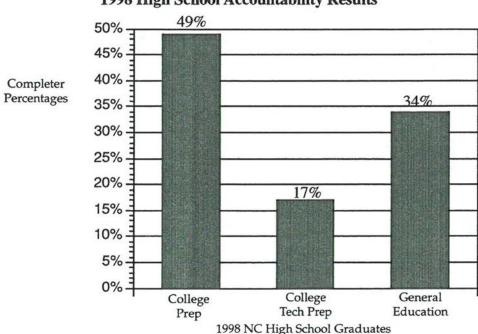
Community College and NC Public Universities Education Participants

*CTP based upon College Tech Prep Student followup for 1996 SREB Certificate of Ed

High School Accountability

The State Board of Education included the percentage of high school graduates completing a College Tech Prep Course of Study as one of the seven components of high school accountability. To obtain a consistent measure, a computer program was developed to evaluate each high school graduate's transcript. The class of 1998 transcript analysis revealed 17% of the graduates mastered the North Carolina College Tech Prep graduate requirements; 49% met the College Prep requirements and 34% were still classified as general education students. The following graph illustrates this data:

1998 High School Accountability Results



ABC's 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 these teachers, as well as including integration activities in the development of curriculum and supportive materials. Many statewide workshops for teachers and administrators have focused on integrating academics. Participants have prepared, exchanged lesson plans, and utilized a network that sought to affect change in the classroom. On-site technical assistance visits offered positive directions and identify successful practices. In addition, publications about integrated strategies have been distributed. Activities include the following:

WOI	RKSHOPS	PARTICIPANTS
7	Agricultural Education Summer Institutes	100
	Topics included: "Computer Applications"	17.7.3
4	Business Education Workshops	198
	Topics included: "New Teacher Workshop"	
	"Network Administration Workshop"	
18	3 Career Development Workshops	433
	Topics included: "National Career Developm Guidelines"	ent
	"What's Up With Factories"	
	"LEA Guide to Career Development	
	Program Planning"	
3	Health Occupations Education Workshops	261
	Topics included: "Health Science Career Path	
	Integrated Model"	
	"Test Bank Validation"	
18	Marketing Education Workshops	317
	Topics included: "Portfolio Development"	02.
	"Regional DECA Officer Training"	
	"New Teacher Workshop"	
	"Test Bank Validation"	
	"Curriculum Development"	
3	Middle Grades Workshops	204
	Topics included: "Exploring Career Decisions"	"
	"The REAL Game"	
	"Career Day"	
1	Technology Education Workshop	22
	Topic: "Integration Matrix for Fundamentals of	of
	Technology"	
1	Western Region Applied Biology/Chemistry V	Workshop 13

Workshops and Conferences

WORKSHOPS (continued)

PARTICIPANTS

8 Workforce Development Education Program of Studies Workshops 650

REGIONAL AND STATE CONFERENCES

- 1 Atlantic Coast Business and Marketing Education Conference 550
- 6 Vocational student organization state conferences 11,413 with 224 competitive events that reflect integration of academic and WDE concepts
- 1 NC Workforce Development Education Summer 3,102 Conference with 451 topics related to integration of academic and Workforce Development Education standards
- 1 NC Special Populations and Equity Conference in 86 which topics addressed the NC Department of Public Instruction's ABCs Plan (Integration concepts/practices included)

Academies

ACADEMIES

Assisted in implementing 3 new health sciences academies in which the school-within-a-school model included integrated curricula

Curriculum Development

CURRICULUM DEVELOPMENT

- Developed/revised <u>60</u> course blueprints or matrices, which included integration of business/industry practices and state/national standards
- Developed/revised and disseminated <u>31</u> new curriculum products supportive of integration concepts/practices
- Provided <u>48</u> VoCATS test item banks to 118 LEAs reflective of assessing integration concepts/practices

Videoconferences and Videotapes

VIDEOCONFERENCES/VIDEOTAPES

Business Education Videoconferences

 Topics included: "Business Education and the ABCs"
 "Work-based Learning and Business Education"

 Family and Consumer Sciences Videoconference

 Topic included: ABCs and XYZs of FACS

 Technology On-Line Connection for Curriculum

 Materials Support
 Workforce Development Education Program of Studies

Videotapes (1 set provided for each of six regions)

SUPPORT PUBLICATIONS/DOCUMENTS Distribution of COPIES Publications and Developed and distributed NC Workforce Development Documents Education Programs of Study 5,000 Developed and distributed NC Workforce Development Secondary and Postsecondary Educational Opportunities 5,000 Developed and distributed NC Workforce Development Technical Credits for College Tech Prep and College Prep 5,000 Developed and distributed a draft copy of the NC Workforce Development Education Work-based Learning Guide 300 Developed and distributed NC Workforce Development Challenge Handbook designed to serve as a guide to Special Populations Coordinators/teachers 400 Developed and distributed NC Workforce Development Education Student Portfolio Model 5,000 Developed and distributed NC Workforce Development Education Advanced Studies Implementation Guide - included reference to integrated learning as a process skill Revised the NC Health Occupations Education Instructional Guide for New Teachers - included a section on integration of academic and Health Sciences concepts 100 TECHNICAL ASSISTANCE **PARTICIPANTS** Impact Delivered consultative services to 55 SREB-HSTW sites related to ten essential practices - including interdisciplinary integration of curriculum approximately 3,300 Conducted 18, three-day, on-site technical assistance visits to SREB/HSTW sites - involved academic and Workforce Development Education teams/faculty 144 Delivered on-site technical assistance to 42 Tech Prep

840

Model locations

- Developed draft of Grades 6, 7, & 8 Integrating Curriculum Manual - included both academic and middle grades course goals and objectives
- Developed and distributed a Technology Education "crosswalk" of Physical Science state competencies and Fundamentals of Technology competencies

Through the SREB-HSTW sites, efforts were made to combine challenging academic courses and modern workforce development studies to raise the achievement of career-bound high school students. These sites have a firm belief that all students can master complex academic and technical concepts if schools create an environment that encourages students to make the efforts to succeed. (Note prior section entitled Southern Regional Education Board/High Schools that Work). In addition, administration of the SREB/HSTW National Assessment of Educational Performance (NAPE) assessments (Reading, Mathematics, and Science) to approximately 3,300 senior career major completers in 55 high schools was conducted to account for school improvements. A faculty survey of approximately 2,500 high school teachers of Math, Science, English and WDE about teaching and learning environments for career major completers was conducted.

"Assisting Special Populations" and "Integrating Curriculum" were highlighted topics for WDE teachers and Special Populations Coordinators at the 1997 NC Workforce Development Summer Conference and at the 1998 NC Special Populations and Equity 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 encouraged 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 STW system's initiative continued 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 30% implementing SREB-HSTW.

Career Guidance and Counseling

Programs

During 1997-1998, four statewide staff development activities were held for approximately 400 Career Development Facilitators (Career Development Coordinators [CDCs], Industry Education Coordinators [IECs], and JobBrokers). Career Development Facilitators advised, counseled, and provided support services for students in the area of program planning, career guidance and counseling, job placement, and postsecondary education and training.

Activities

- Two workshops for LEA teams to develop career development programs
- Program Area Leadership Council (PALC) meetings to update career pathways information and technical completer competencies
- Three-day program, part of the annual North Carolina WDE Summer Conference, devoted to career development. Participants were given information on workforce preparedness, assessment, promising practices for integrating career development, work-based learning strategies, job placement, National Career Development Guidelines, portfolios, and career planning activities.

Services

Career Development Facilitators (CDCs, IECs, and JobBrokers) collaborated to develop comprehensive career planning programs. Teams of educators worked on plans to insure that all students in North Carolina had access to appropriate WDE. The process at the local level included elementary, middle, and high school orientation, interest surveys, aptitude tests, career planning activities, connecting activities, and work-based learning opportunities. All students developed an individual CDP to guide their high school course of study and help them prepare for postsecondary opportunities.

Programs

Activities

Services

Many school systems provided shadowing, internship, cooperative education experiences, and apprenticeship programs for students to enable them to experience a job setting and acquire information relative to career interests and education plans.

Collaboration

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, and for employers to assist in teaching employability skills. Computerized career information systems were used extensively in guidance and counseling programs. Internet access provided additional resources for acquiring career information.

Career Development Facilitators served as liaisons with higher education, military, the media, and middle schools to insure that transition from one level of education and training to another was smooth and that the career development activities going on in the schools were clearly and accurately shared with the public.

Appendices

Appendix 1 Enrollment Table

Appendix 2 Performance Standards

Appendix 3 Performance Standards Report

*:			
*			

SECONDARY ENROLLMENT; PERIOD COVERS July 1997 - June 1998

STATE: North Carolina

NAME: Sarah Hawes

PH. 715-1649

			COM- PLETER 1997		1890	3933	12028	2289	9584	3421	7165	2130	42440
		THE REAL PROPERTY.	ADOLI										
		CEV EO	(NON-TRAD)	147	120	130	470	119	374	167	579	38	3375*
	Ω	HU/d5	Wqs/										1388*
	DUPLICATED	CORR											1149
		DIS-	ABLED	3628	1193	8120	7710	641	8043	486	7087	1987	32965
		LEP		08	114	526		23	339	101	1076	118	2399
		DIS-	ADV	10219	12716	35663		4648	28511	6738	49008	8529	158224
		REG	VO-TE-ED	15342	12308	36473		3076	36893	11414	77818	11974	204558
ED		TOTAL	FEM.	7173	14686	58709		7077	12095	15823	73647	3943	195893
DUPLICATED		TC	MALE	22096	11645	22082	100000000000000000000000000000000000000	1311	59004	2916	61342	18665	202253
		TOT	ENR	29269	26331	80791		8388	71099	18739	134989	22608	398146
		OCC	AREA	AGRICULTURE	MARKETING	CONS/ H'MAKING ED		OCC HOME EC	TRADE & INDUSTRY	НЕАГТН	BUSINESS	TECHNOLOGY ED	GRAND TOTAL

*total number served by funded grants

Appendix

SECONDARY ENROLLMENT; PERIOD COVERS July 1997 - June 1998

STATE: North Carolina

NAME: Sarah Hawes

PH. 715-1649

		LINKAGE				A Id	PLACEMENT		
OCC PROGRAM	TECH-PREP	CO-OP	APPR	CONT	EMPL	EMPLOYED	MIL	OTHER	CURRENT
AREA					R'LTD	OTHER			TEACHERS
CAREER DEVELOPMENT	917	129							
AGRICULTURE	4548	252	29	1085	740	446	56	7	376
MARKETING	2497	6372	.16	2275	1284	815	73	29	359
CONS/ H'MAKING ED	7114	11	0	5891	2232	2778	263	147	1206
OCC HOME EC	845	348	09	1246	640	644	39	38	252
TRADE & INDUSTRY	6299	1748	370	5415	3150	2515	401	32	1168
НЕАГТН	1011	2	63	2454	625	883	31	23	259
BUSINESS	17818	492	86	5103	1409	1742	180	09	2109
TECHNOLOGY ED	1201	0	47	1189	340	464	74	4	695
GRAND TOTAL	42250	9354	683	24658	10420	10289	1117	340	6424
)	17.0

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

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

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

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

course blueprints.

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

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

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

received in the military or on-the-job.

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

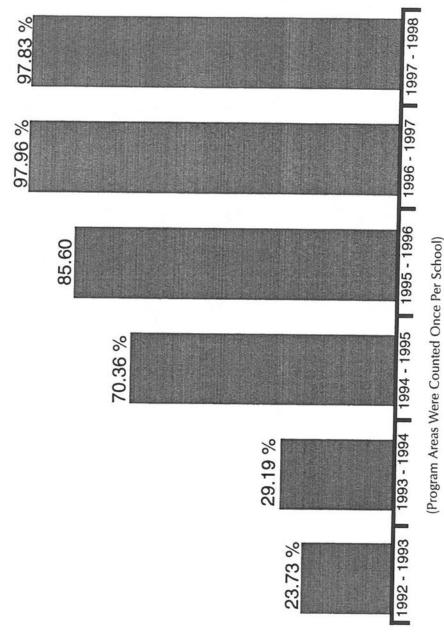
8. Of completers finding full-time employment, 70% as reported by job skills program areas by school will be employed in jobs related to their vocational programs.

Long-Range Performance Standard One:

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

Statewide Summary of Performance Standard One Trend Data for School Years 1993-98



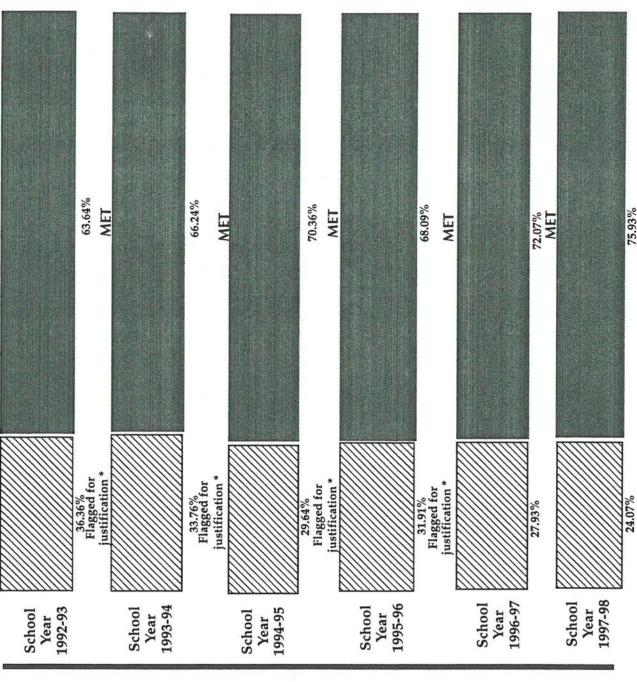


Trend Data for School Years 1993-98

MET

Statewide Summary of Performance Standard Two Flagged for Justification*

Long-Range Performance than a third in that school, it must If the enrollment of members of special populations differs more be justified by documentation in Standard Two: the CDP.



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

Long-Range Performance Standard Three:

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

Long-Range Performance Standard Four:

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

Long-Range Performance Standard Five:

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

Trend Data for School Years 1993-95 Statewide Summary

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

School Years 1995-96, 1996-97, and 1997-98

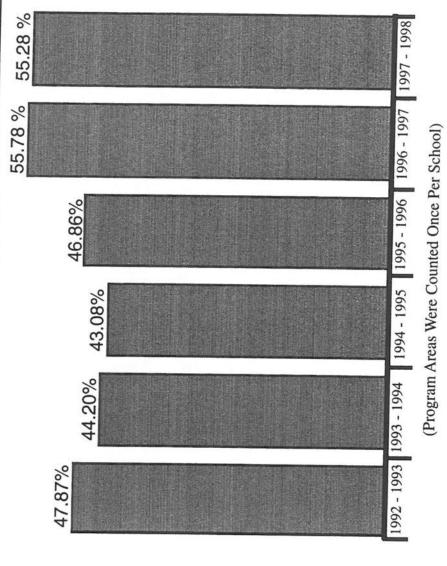
data were not compiled during 1995-96, 1996-97, and 1997-98. data were compiled only at the school system level. Statewide During school years 1995-96 through 1997-98 VoCATS

Long-Range Performance Standard Six:

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

Trend Data for School Years 1993-98 Statewide Summary Performance Standard Six





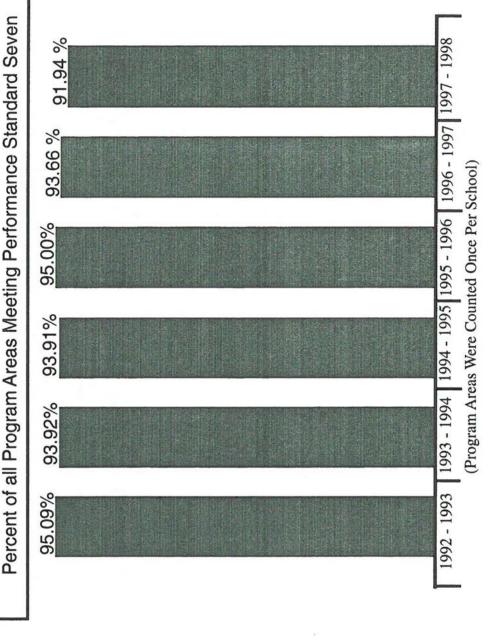
59

Long-Range Performance Standard Seven:

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

Trend Data for School Years 1993-98 Statewide Summary Performance Standard Seven



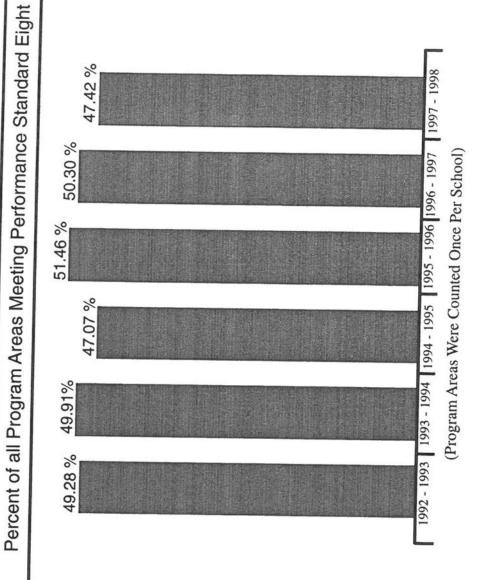


Long-Range Performance Standard Eight:

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

Trend Data for School Years 1993-98 Statewide Summary Performance Standard Eight

0



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

North Carolina Community College System

Vocational Education Performance Report

Program Year 1997-1998

"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.

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Introduction

The mission of the North Carolina Community College System is to open the door to opportunity for individuals seeking to improve their lives and well-being by providing:

- Education, training, and retraining for the workforce, including basic skills and literacy education, occupational and pre-baccalaureate programs.
- Support for economic development through services to business and industry.
- Services to communities and individuals which improve the quality of life.

The 58 individual colleges offer a comprehensive range of educational programs to meet the needs of their local communities for higher academic education, employment skills, basic education skills, job retraining, personal growth and development, and community and economic development.

1997-98 was a year of change and reform for the Community College System in North Carolina. A re-engineering effort included not only the conversion from the quarter system to the semester system, but also the development of standard courses of study. Instead of the former curriculum classifications of college transfer, vocational, technical, and general there are now three classifications - Associate Degree programs, Diploma programs, and Certificate programs. There are eleven curriculum program areas (one Arts and Sciences and ten vocational/technical), all with specific curriculum standards. It should be noted that because of these changes, enrollment did decrease, programs were deleted and combined; therefore data for 1997-98 will in some cases appear skewed.

With the Perkins dollars allocated to the Community College System for 1997-98: 55 of the 58 colleges qualified for Basic Grant dollars; 49 Single Parent, Displaced Homemakers and Single Pregnant Women grants were awarded; 11 Sex Equity Grants were awarded; one Sex Equity Community Model grant was funded for a second year; four Criminal Offender grants were awarded; 48 Tech Prep grants received second-year funding; five Curriculum Improvement Projects were funded; one Integrated Construction Industry Training Model project was funded; one Tech Prep Longitudinal Student Tracking Project was funded; and a training session was held for faculty participating in a developmental mathematics pilot project.

These programs and projects benefitted thousands of North Carolina citizens, either directly or indirectly, through concentrating resources on improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society.

During the 1997-98 program year more than 710,000 individuals took advantage of the various curriculum and extension program offerings at the community colleges. Of these individuals, approximately 211,000 were enrolled in curriculum programs with over half of those enrolled in vocational and technical education programs. Figure 1 illustrates total curriculum enrollment by program and Figure 2 compares enrollment of vocational/technical students to total curriculum enrollment by program.

Figure 1: Total Curriculum Enrollment

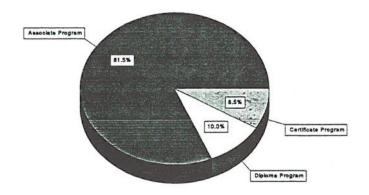
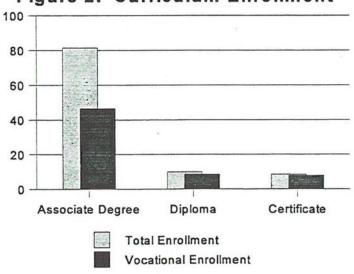


Figure 2: Curriculum Enrollment



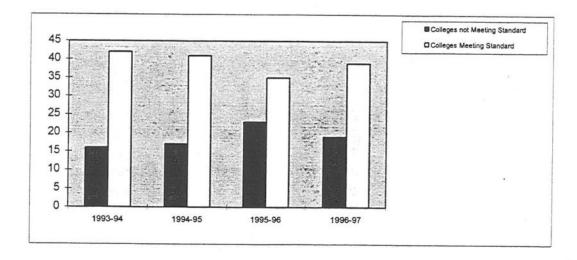
Performance Standards and Core Measures (Title I, Part B, Section 115 and 116; Title 5, Part B, Section 512)

North Carolina has continued to maintain an active Committee of Practitioners for the purpose of continuous review of the measures, standards, and the supporting data. During the year, the Committee examined the cohort student data for measures one and three and determined the standard for those measures. Since a student cohort is no longer being tracked, the definition for retention in Measure 3 was changed. The Committee agreed that "students are considered to be retained if they enrolled in the fall semester, did not complete or graduate in that semester, and completed at least one additional course during the following spring semester." The data for all measures were reviewed and minor changes made in the appearance of the data.

Measure 1 - Completion

The percentage of vocational/technical students who have completed 76 to 100 percent of the required credit hours for the curriculum. The standard is 15% below the mean percentage of the System average.

	1993-94	1994-95	1995-96	1996-97
Colleges not Meeting Standard	16	17	23	19
Colleges Meeting Standard	42	41	35	39
Standard Percentage (%)	20	32	22	26

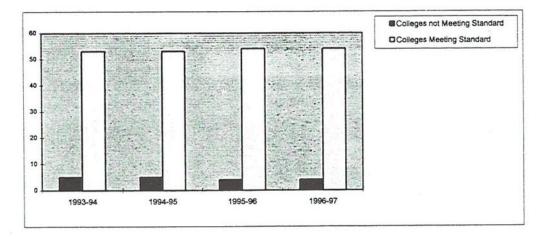


Measure 2 - Passing Rates

The percentage of vocational/technical students passing remedial courses and the percentage of those passing general education and related courses. The standard is 15% below the mean percentage of the System average.

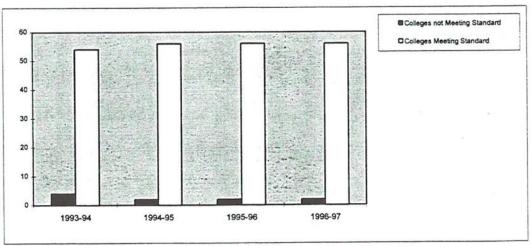
Remedial





General Education



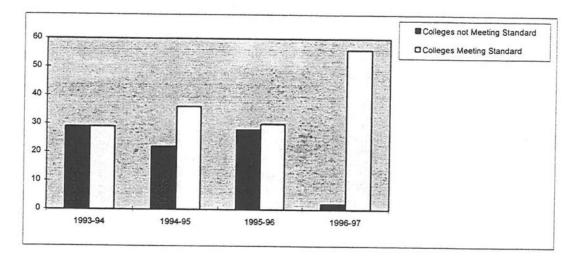


Measure 3 - Retention Rates

The percentage of vocational/technical students returning for at least one additional course. The standard is 15% below the mean percentage of the System average.

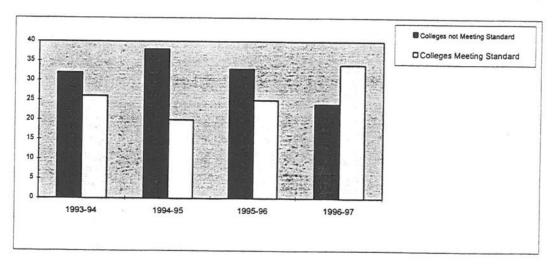
12 Hours or More

	1993-94	1994-95	1995-96	1996-97
Colleges not Meeting Standard	29	22	28	2
Colleges Meeting Standard	29	36	30	56
Standard Percentage (%)	76	83	80	70



5 Hours or Less

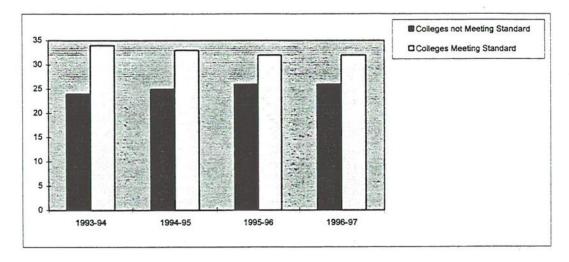
	1993-94	1994-95	1995-96	1996-97
Colleges not Meeting Standard	32	38	33	24
Colleges Meeting Standard	26	20	25	34
Standard Percentage (%)	16	10	9	7



Measure 4a - Special Population Enrollment

The number of special population students enrolled in vocational/technical programs compared to the number of special population students enrolled in all curriculum programs.

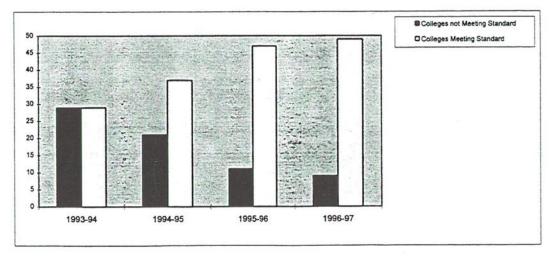
	1993-94	1994-95	1995-96	1996-97
Colleges not Meeting Standard	24	25	26	26
Colleges Meeting Standard	34	33	32	32
Standard Percentage (%)	0	0	0	0



Measure 4b - Special Population Completers

The percentage of special population vocational/technical completers compared to the percentage of all completers in technical/vocational programs. The standard is 15% below the mean percentage of the System average.

	1993-94	1994-95	1995-96	1996-97
Colleges not Meeting Standard	29	21	11	9
Colleges Meeting Standard	29	. 37	47	49
Standard Percentage (%)	85	85	60	79



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

The 1997-1998 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 1997-1998, and includes vocational, technical, college transfer, and general education. Appendix C lists all of the community colleges in the system. All member institutions are two-year postsecondary community colleges offering technical and vocational curricula, general education programs, as well as college transfer programs. Each community college is committed to providing a comprehensive educational program to the citizens of North Carolina. Each college is uniquely chartered to best meet the educational and economic development needs of its local community or service area. The System office provides curriculum standards to assure that each program meets systemwide regulations.

During the 1997-1998 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 activities provided; they were compiled to facilitate reporting. Brief examples of activities and services provided are given for each category.

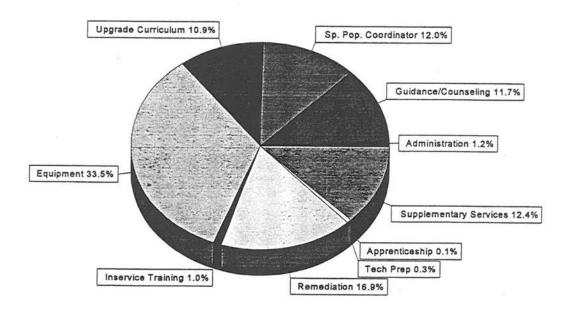


Figure 2 - Postsecondary Basic Allocation

Administration. Seventeen community colleges used Perkins funds for administrative purposes. These services were provided on a prorated basis by existing college personnel. Only 1.2% 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 twenty-eight 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. 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. Thirteen 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 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. Thirty-nine 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, and software. 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. Twelve 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. 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-eight community colleges used funds to accommodate and assist disadvantaged and disabled students. Special services included the hiring of interpreters, tutors, signers, note takers, and translators. Special devices such as tape recorders, talking calculators, magnifying glasses, videos, large print texts, and workstation modifications were purchased. Various types of diagnostic and assessment materials and supplies were acquired, along with software for curriculum remediation.

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

In 1997-98 single parents/displaced homemakers/single pregnant women numbered a little over 11,000 at the 49 colleges that received Perkins grants especially for this target population.

Description of Services. The program used 88% of single parent funds for direct, material support of students. Services included child care, student transportation, tuition, and instructional materials required for class participation. Twelve percent of the funds were used statewide to provide counseling, support, and information to the single parent population. In addition, most colleges contributed other college 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 coordinator's salary rather than use Perkins money. Further, some colleges have established small scholarship programs from their private foundations 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 1997-98 the North Carolina Community College System used grant funds to serve 1,015 students with child care and 773 students with transportation, instructional materials, and tuition. The grant is administered by the System office as two components:

1) Child Care.

Forty-eight colleges offered child care to the target population at a yearly cost to the grant between \$1353 and \$1398 per student per year, depending on whether the college offered this help for two or three semesters. The service helped student retention climb to 80% this year (as measured from fall, 1997 to fall, 1998). This is five percentage points above the prior year's retention, and significantly higher than the average statewide retention rate for all applied science students. System office staff hypothesize that the Perkins' greater success comes from the personal and frequent contact that students enjoy with grant staff.

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

This support was made available by 32 colleges, costing the single parent grant an average of approximately \$348 per student for the year. Retention for these recipients was 75%, three percentage points higher than the previous year.

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 grant coordinators 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 child forms a palpable bond between student and coordinator that no other counselor can enjoy. Even if such contact is only ten minutes per session twice a month, 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 System office now has a history of retention rates for all programs. 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 indicate 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. Of six colleges that historically underperformed, five of them have improved their retention rate by at least five percentage points for the 1997-98 school year.

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 a hundred students with tuition and books. Similarly, average costs of child care are low at less than \$50 per week. 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.

Five colleges offering child care assistance and four colleges offering other direct support (transportation, tuition, etc.) have consistently retained their students at a rate of 80% or better for at least three consecutive years. They have been an inspiration to other colleges and have shared their strategies in a system wide document, *The Best Practices Manual.* Strategies among colleges differ; some of the more effective ones include the following:

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

- Some colleges require that students undergo a variety of testing, including the Myers Briggs test and the Self Directed Search. These are used in a series of workshops in life management skills. An important part of the strategy is to help students view their career goals realistically; once students understand what kind of life they are training for, they are more likely to stay in school. Often included are sessions on time management and goal setting, as well as individual counseling sessions. Many programs require that their single parents attend at least one workshop a week or month on life management skills. Some-times topics are chosen by the students themselves and include sessions on parenting, nutrition, communication, or study skills.
- ♦ All successful programs require a one-on-one counseling session with their students at least once a month.

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

During the 1997-98 school year, twelve colleges had sex equity grants designed to train men and women in the nontraditional occupations. The total cost was \$320,578, 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.

For eleven of the twelve colleges reporting, retention rates of nontraditional students in the program averaged 62.5% from fall, 1997 to fall, 1998 (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 59% of completers. These numbers suggest that performance has fallen for the past year following a startling surge in program effectiveness the year before. The reasons are still under investigation.

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 1997-98 the System office expanded programs of preparatory services by circulating RFPs to colleges to go into the community at large with career exploration and information on nontraditional work. Eight colleges responded. Their subsequent programs helped communities become more aware of expanded career opportunities as well as their own potential career strengths. Women of all ages from 12 to middle age were involved in the programs.

Exemplary Programs. A community model program mandated to make "sex equity" a household word in the community has begun attracting statewide attention. Its drama and puppet shows for public schools have charmed educators and children alike. Its career exploration for adults has become widely known. The college has excelled at placing its nontraditional students in the workplace. The program is now being implemented at three other sites.

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 occupational fields.

During 1997-1998 four colleges received funds to assist them in providing vocational education programs in correctional institutions. Of the four, one was for the second year of a two-year funding cycle, and three were first-year funding. All funding was limited to colleges which submitted a successful proposal to serve a new correctional institution. 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 eleven programs, serving a total of 220 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. As many of the inmate students were incarcerated in minimum security institutions, over 30% were released, paroled or transferred before they were able to complete their entire program. Many, however, completed segments of coursework which gave them significant vocational skills.

The following provides a brief description of the funded projects.

Beaufort County Community College supported four programs at the Hyde Correctional Center, a new, medium/minimum security facility.

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

Piedmont Community College supported one program at the Dan River Work Farm, a minimum security facility and one program at the Caswell Correctional Center, an expanded, medium security facility.

Vance-Granville Community College supported two programs at the Warren Correctional Institution, a medium/minimum security facility.

	# Enrolled	# Completed
Beaufort County Community College - total (Hyde Correctional Center)	54	38
Drafting	12	9
Electrical/Electronic Technology	17	9
Horticulture	13	10
Welding	12	10
College of the Albemarle - total (Pasquotank Correctional Institution)	48	29
Air Conditioning, Heating, Refrigeration	16	11
Electrical Installation	16	9
Light Construction	16	9
Piedmont Community College - total	82	32
Office Systems Technology (Dan River Work Farm)	49	13
Industrial Maintenance Technology (Caswell Correctional Center)	33	19
Vance-Granville Community College - total (Warren Correctional Institute)	36	24
Air Conditioning, Heating, Refrigeration	21	13
Information Systems	15	11
TOTAL	220	123

Figure 3 - Criminal Offenders Enrollment

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

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

Disabled. During the 1997-1998 program year, 3,813 disabled students were enrolled in the vocational and technical curriculum programs eligible for Perkins funds. (See enrollment table in Appendix A.) To meet the needs of these students, particular attention was given to coordinating other, compatible vocational services. Where possible, vocational rehabilitation programs are provided on community college campuses or are located nearby. This emphasis on coordination is accomplished in two steps -- identification and assessment.

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

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

Once a disabled student has been identified and properly assessed, a wide array of supplemental services are provided by each college. These include such things as supplemental counseling, placement tests available in Braille, referral services available in the local community, specialized instructional equipment, such as large print typewriters, hearing impaired telephone adapters, individual tape recorders, and equipment/lab modifications. Additional classroom support is provided through tutorial

services, interpreters, note takers, signers, readers, and typists. Special texts and other curriculum- related material are also available when needed. Other services include special programs such as sheltered workshops or programs for the blind or hearing impaired. These, and the many other supplemental services, are provided on an individual basis.

Limited English Speaking (LEP). A total of 982 students with limited English proficiency were served in vocational and technical curriculum programs during the 1997-1998 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 31,948 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 1997-1998, 75,990 students were enrolled as academically disadvantaged in all the program areas. (See Appendix B.) One method used to identify students who may be educationally disadvantaged and, thus, at risk of academic failure is the administration of standardized instruments such as the Assessment and Placement Services for Community College (APS), ASSET and COMPASS (published by the American College Testing Program), Computerized Placement Tests (CPT), and the Multiple Assessment Programs and Services tests which include the Descriptive Tests of Mathematics Skills and the Descriptive Tests of Language Skills. Also, full use is made of personal interviews, observations by staff, and information passed from referring agencies. Computerized diagnostic programs are available at many colleges to diagnose students' learning problems and enable staff and faculty to more effectively meet the student's needs.

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

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

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

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

State leadership funds were used to support a number of initiatives throughout the Community College System. Six projects which will upgrade ten curricula were initiated or completed and field testing of an experimental developmental mathematics course was begun. All colleges within the system will benefit in some way from these projects.

Curriculum Improvement Projects. The goals of the curriculum improvement projects (CIPs) are to create a process and environment through inservice training and professional peer guidance that leads to an updated instructional program or curriculum area. Programs which meet these criteria are identified through a system wide request for proposals process open to all colleges. These requests highlight the circumstances requiring curriculum updates, how the college will provide system wide leadership to benefit all colleges offering the curriculum, and how the updated curriculum program 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 two years.

Beginning with the CIPs funded for July 1, 1995 - June 30, 1997, post-CIP evaluations have been conducted approximately one year after the completion of projects to measure their effectiveness and the CIP process as a whole. The Chief Academic Officer (CAO) and designated CIP director at each college involved in a project were surveyed in April 1998 for the projects that ended June 30, 1997. A summary of the data collected through these post CIP evaluations revealed:

- 99% of CAO's rated the professional development opportunities provided by the CIPs as excellent or good,
- 99% of CAO's rated the CIP process as an excellent (80%) or good (19%) means of system-wide curriculum and faculty development,
- 93% of CAO's would encourage their faculty to apply for a CIP, and
- 95% of CIP participants surveyed would recommend CIP participation by other faculty on their campus.

Following are the outcomes of the five CIPs funded for FY 1997-1998. The first two concluded this year; the last three are reporting first year results.

Architectural Technology - Wake Technical Community College

Colleges Served: 15

Curricula involved in the Architectural Technology CIP are the two-year AAS degree, the CAD certificate, and the building inspectors certificate.

Faculty development and training provided six workshops to curriculum instructors. The workshops reviewed new and emerging architectural technology, using more than 40 presenters from industry and academia to provide insight to the instructors. New and advanced classroom techniques and technical knowledge for the classroom instruction were promoted. Quality workshops were offered at a much-reduced cost and of a much wider variety than typical industrial workshops could provide. Instructional materials developed included an instructor guide for problem-based learning, a curriculum manual for Architectural Technology, a curriculum development manual of the core and library syllabi, a CIP homepage on the Internet along with online CAD interaction instructional material. Works in progress include instructors' guides for digital architecture and CAD 2D and 3D. A CD-ROM for Architectural Technology interaction and a promotional video are near completion. As for interaction with business/ industry and education agencies, a state-level articulation committee composed of university department chairs and Department of Public Instruction personnel provides continuing guidance in articulation areas; a state-level advisory committee, composed of industry personnel works closely with the local community colleges reviewing the project in light of industry concerns. An Architectural Technology Skills List has been developed to send to industry for input.

Emergency Medical Science - Asheville-Buncombe Technical Community College

Colleges Served - 10

The major accomplishments of the EMS CIP are:

 Integration of revised National Standard Curricula for Emergency Medical Technician - Basic and Paramedic into EMS courses by developing outlines for each semester course identified by the system's reengineering writing team. The outlines were approved by the North Carolina Office of EMS and are available for use by each curriculum EMS program in the system.

 Faculty development workshops aimed at both emerging technology and instructional methodology, with topics such as problem-based learning, methods for effective evaluation of students in clinical areas and during practical skill demonstrations, and alternative teaching methods including multimedia instructional methods and computer-assisted learning.

 Production of a videotape which will be used for recruitment and as both an introduction to the EMS profession and to the individual EMS programs at each of the ten colleges.

Established a statewide advisory committee for the project.

- Developed an articulation agreement with Western Carolina University's EM Care B.S. program.
- Purchased educational software to share with participating colleges.
- Opened a dialogue with state EMS, nursing and community college leaders regarding educational bridging and arenas of practice for EMS and nursing personnel.
- Surveyed EMS administrators and recent graduates of paramedic programs to determine strengths and weaknesses of education programs for paramedics.

Outcomes of the first-year projects:

Heavy Equipment and Transport Technology - Beaufort County Community College

Colleges Served - 14

Instructor training began with Power Trains Workshops. Fuel economy and emissions standards are forcing manufacturers to produce increasingly efficient products, mandating that instructors be up-to-date on this facet of equipment operation. Eaton Corporation, which builds drive train components that are the predominate units in trucks and heavy duty vehicles, has been selected as the training provider. The first workshop had 12 HEATT instructors, five industry technicians, and eight community college students who participated. A script for a presentation CD has been written to develop instructional materials. Three DACUMs (Developing a Curriculum) are being developed to make sure all competencies are met. This will be the basis of the curriculum manual.

Office Systems Technology - Guilford Technical Community College

Colleges Served - 58

Three initial regional meetings were held to evaluate office curricula throughout the system. More than 550 businesses statewide were surveyed to determine skills necessary for employment in various types of offices and to determine what computer software is currently being used. The results were summarized and sent to participating businesses, CIP representatives, presidents and chief academic officers of the colleges, and CIP advisory committee members. The advisory committee met and prepared a statewide DACUM chart for the Office Technology Specialist. The project has provided more than 1,100 hours of faculty development, including both teaching methods and hands-on computer training. Workshops included problembased learning, quality classroom techniques, and cooperative learning. Teams are currently at work developing model course syllabi for all OST courses in the common course catalog. A recommendation was made to remove the keyboarding class as a core class and as a prerequisite for OST classes in the catalog. The State Board of Community Colleges is prepared to make final approval.

Psychology/Sociology - Sandhills Community College

Colleges Served - 50

Two statewide meetings were held to provide participants with information about the project goals, how instruction could be enhanced, and the art of teaching psychology and sociology as applied to a vocational/technical curriculum. Five committees were formed: Teaching PSY/SOC, Social Diversity, Workplace Applications, Technology, and PSY/SOC Lab. Workshops already held include the NC Association of Psychology Teachers, NC Sociological Association, a national Internet conference, and Problem-

Based Learning. A course syllabi notebook has been developed with input from psychology and sociology instructors.

Construction Occupation Program Articulation Project. The North Carolina Construction Industry Training Alliance has requested that the Community College System address specifically the shortage of qualified skilled workers entering the construction trades. State leadership funds were utilized to establish a two-year program which will assemble a package consisting of articulation, seamless transition, recognized accreditation and a reliable delivery system to be installed in all colleges. A network of community college and high school faculty and industry representatives has been established to put together a curriculum which will meet the needs of all partners.

The core instrument for this task is the "Wheels of Learning" curriculum developed by The National Center for Construction Education and Research. It will be adjusted as recommended by project participants and utilized statewide to eliminate training inconsistencies which have existed in the past. In 1997-1998 the electrical and HVAC curricula were established. Carpentry, masonry and plumbing will be developed in 1998-1999.

Developmental Mathematics. State leadership funds were also utilized in a collaboration with the Center for Occupational Research and Development (CORD). In 1996 CORD developed a two-part curriculum, math fundamentals and algebra, designed to address the needs of postsecondary developmental math students. It is a contextually-based, hands-on curriculum primarily for students in vocational/technical programs. Mathematical concepts are presented in the context of real-life situations, helping students gain a better understanding of the relevance of mathematics to their everyday lives.

The curriculum is being field tested in the fall of 1998 in 31 technical and community colleges in 11 states. North Carolina is participating in this test with eight colleges and 25 faculty members being involved. Pilot sites offer a minimum of two sections of either or both CORD courses, select comparative traditional lecture and text-based developmental math sections, and administer pre- and post-course attitudinal surveys and performance assessments to both the CORD and traditional groups.

Perkins funds supported a two-day training session led by a CORD instructor for System faculty participating in the program. Funds were also used to buy equipment and supplies for the classes. Students purchased their own texts.

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 funds were distributed for a two-year cycle (1996-98) through a Request for Proposal process. The 1997-98 grants were the second year of that two-year funding cycle. 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, 1998. 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.

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 for Associate in Applied Science degrees on a collegeby-college basis

Collaboration

- There continues to be an 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
- The community college system's adoption of the common course catalog, and the a semester system calendar has prompted the North Carolina Department of Public Instruction to revise and realign their curriculum to more closely mirror the community college curriculum
- Approximately 75% of the high schools are on a block schedule which mirrors the community college semester system which provides better coordination of concurrent enrollment and Huskins classes
- Work-based learning opportunities for Tech Prep students have risen dramatically with opportunities which include job shadowing, internships, and youth apprenticeships

Curriculum Integration and Curriculum Improvement

- · Numerous local workshops held
- Best practices reveal that much effort is being expended across the state to educate and provide staff development for community college staff on curriculum integration. Significant efforts are being made at Guilford Technical Community College and at Fayetteville Technical Community College.
- 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 allowed return-to-industry opportunities to help faculty (especially academic) know better how to relate their teaching to real world applications

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.

 Best practices from across the state reveal that most consortia have purchased or anticipate purchasing software (primarily InfoTrac or Tranquility) to help insure Tech Prep students follow approved coursesof-study and insure administrators and staff can successfully track students from the secondary system to the postsecondary system

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
- Much effort has been expended to provide staff training for faculty on curriculum integration

Marketing

- A tech prep web page providing programmatic information was established by Forsyth Technical Community College and Pitt Community College. Potential students are able to apply on-line
- 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
- As a result of the "re-engineering" of the college has been refocused on Tech Prep

Special Populations

 A career counseling handbook was published in Spanish at James Sprunt Community College Specific strategies developed for ensuring success for at-risk tech prep students at Fayetteville Technical Community College

 Tech Prep information in Spanish is provided at growing number of institutions to reflect the growing Hispanic population in their communities (James Sprunt, Wilson Technical Community College, and Sampson Community College)

Student Outcomes

The following data was 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.

- Average GPA for 1997-98 Tech Prep students after 30 hours of curriculum enrollment (non-developmental courses) was 2.68 at 30 reporting colleges (2.65 at the 32 community colleges reporting in 1997)
- 203 was the average 1997-98 Tech Prep population at the 27 reporting colleges
- 78.2 was the average number of 1997-98 Tech Prep students enrolling at the 30 reporting colleges
- 34 (43.5%) was the average number of 1997-98 Tech Prep students requiring at least one developmental course for the 30 reporting colleges

Initiatives

During the 1998-99 program year, bench marking criteria and a longitudinal system to track high school tech prep graduates within the community college system is being developed. A new strategic plan will be created by the Tech Prep Advisory Committee. Statewide articulation agreements are being 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. 154,052 students were enrolled in vocational and technical curricula. Each curriculum program is reviewed by curriculum staff and teams and approved by the State Board of Community Colleges. The standards used to determine approval are consistent with regional accrediting agencies such as the Southern Association of Colleges and Schools. All approved and Perkins-eligible programs include both

technical/job-specific course work as well as academic preparation courses. Therefore, by choosing a specific course of study, the student receives an integrated program of academic and vocational training.

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

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

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

Many community colleges use their basic grant funds to provide a more comprehensive guidance and counseling program at their respective campuses. Several colleges hire full-time counselors for special population students or use part-time counselors for such activities. These additional counselors are able to provide individual attention to those students who need the additional support and encouragement. Approximately 24 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

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NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES
CURRICULUM POSTSECONDARY ENROLLMENT
FOR CARL PERKINS PERFORMANCE REPORT--7/1/97 TO 6/30/98
(TECHNICAL AND VOCATIONAL ONLY)
REPORT # CC815CPP

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NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES
CURRICULUM POSTSECONDARY ENROLLMENT
FOR CARL PERKINS PERFORMANCE REPORT--7/1/97 TO 6/30/98
(TECHNICAL AND VOCATIONAL ONLY)
REPORT # CC815CPP

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		MALE	80	1	98	15	583	1,454	115	132	231	23	76	152	1,371	120	1,317	7	20	53	108	12	28	107	687	57	2	580	74	22	41	11	4	18	4	4	24
	TOT	ENR	88	7	96	39	610	1,533	116	141	259	32	200	186	1,514	123	1,396	e	24	57	110	17	107	128	810	58	9	1,201	192	363	61	23	46	171	451	285	43
		CIP NAME	2 Heavy Equipment Main. an			8 Watch, Clock and Jewelry		4 Auto/Automotive Mechanic	6 Small Engine Mechanic an	470609 Aviation Systems and Avi	470699 Vehicle and Mobile Equip	9 Drafting, Other		3 Upholsterer					11 Woodworkers, General		3 Cabinet Maker and Millwo	9 Woodworkers, Other		2 Aircraft Pilot and Navig	15 Truck, Bus and Other Com		99 Transportation and Mater			8 Interior Design	12 Film-Video Making/Cinema		3 Speech-Language Patholog		510601 Dental Assistant	510602 Dental Hygienist	510603 Dental Laboratory Techni
	CIP	CODE	470302	470303	470402	470408	470603	470604	47060	47060	4706	480199	480201	480303	480503	480507	480508	480599	480701	480702	480703	480799	489999	490102	490205	490306	499999	500402	500406	500408	500602	500702	510203	510205	5106	5106	2106

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES
CURRICULUM POSTSECONDARY ENROLLMENT
FOR CARL PERKINS PERFORMANCE REPORT--7/1/97 TO 6/30/98
(TECHNICAL AND VOCATIONAL ONLY)
REPORT # CC815CPP

	TOT			REG.	DIS-		DIS-		114/45	SEA EQ
CODE CIP NAME	ENR	MALE	FEMALE	VO-TE-ED	ADV	I.RD	ABLED	9900	nu/ac	-NON-
510703 Health Unit Coordinator/	44		44	12	23		2	CORR	SPH 3.5	TKAD)
510705 Medical Office Managemen	165	10	155	69	63	0	200		18	,
	256	17	239	110	136		1.		21	10
	1,283	1.5	1,268	422	807	4	4.7		27.7	17
	73	40	33	53	19		1		7 7	CT
	270	34	236	71	193	2	21		י ער	3.4
	199	33	166	58	134	9	15			
	324	74	250	173	139	2	13		31	55
510808 Veterinarian Assistant/A		17	150	67	93	1	5 [10	4 .
510901 Cardiovascular Tech./Tec		2	14	2	10		-		0 0	17
510904 Emergency Medical Tech./		228	180	220	176	, ,	12		2 0 0	7
510905 Nuclear Medical Tech./Te		21	32	28	22		, ~		, ,	
510907 Medical Radiologic Tech.		87	589	308	346	α	000		- [
510908 Respiratory Therapy Tech		73	268	108	222) (*	o a		10	/ 80 1
510909 Surgical/Operating Room		25	211	96	134	, ~	o ~		2 4	7.3
510910 Diagnostic Medical Sonog		1	49	24	20	, -	0 4		67	25
510999 Health and Medical Diagn		15	69	43	0 6	+ -	,			1
511002 Cytotechnologist		1	0.0	01	1	4	4		2	15
511004 Medical Laboratory Techn	338	49	289	130	199	a	,	,	1	1
511099 Health and Medical Labor	226	6	217	8 8	105	0 -	11	7	41	49
511501 Alcohol/Drug Abuse Couns	234	67	167	139	86.	1	~ 0		44	6
511502 Psychiatric/Mental Healt	1,120	140	980	233	9 20	·	, ,	,	28	
511601 Nursing (R.N. Training)	4,578	373	4,205	1.549	2 821	2 0 4	382	- (254	140
	1,087	26	1,031	308	717	4	30	7	792	373
	1,413	80	1,333	609	713		2 6	u	265	56
	16		16	1	15		1.7	n	306	08
512399 Rehabilitation/Therapeut	45	8	37	2	38		4 4		0 6	c
512601 Health Aide	9	16	49	14	46		. 4		ר כ	0 (
	156	9	150	45	97	2	• 0		43	16
	8,303	2,935	5,368	3,172	4.701	7.1	294	276	0 0 0 0	٥
	1,045	561	484	588	427	12	26	2	000	
	4,297	651	3,646	1,817	2,269	70	175	2	0 0	
	3,920	153	3,767	952	2,768	30	213	7	000	159
	236	2	234	70	155	4	0 0	0	1110	153
	2,200	30	2,170	619	1,483	12	85	c	502	7 0
520405 Court Reporter	28	2	26	15	10		1	1	246	000
							•		0	7

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES CURRICULUM POSTSECONDARY ENROLLMENT FOR CARL PERKINS PERFORMANCE REPORT--7/1/97 TO 6/30/98 (TECHNICAL AND VOCATIONAL ONLY) REPORT # CC815CPP

SEX EQ

		7		29									4.599
SP/DH	SPH	80	1	11		21	3	3	343	1,118	99	74	11,593
	CORR			1					40	187			3,665
DIS-	ABLED		2	2		17		2	167	407	42	17	3,813
	LEP			1		15	8		78	85	17	3	982
DIS-	ADV	13	21	82	1	136	12	15	1,716	4,205	363	136	48.989
REG.	VO-TE-ED	34	25	9	10	120	52	17	1,655	2,818	483	808	40.429
	FEMALE	41	13	124	7	139	36	19	1,799	4,618	307	529	55.369
	MALE	7	33	29	4	143	29	14	1,778	2,865	582	470	40.528
TOT	ENR			153									95,897
CIP	CODE CIP NAME	520407 Information Processing/D	520499 Administrative and Secre	520803 Banking and Financial Su	520805 Insurance and Risk Manag	520902 Hotel/Motel and Restaura	521101 International Business	521201 Management Information S	521202 Business Computer Progra	521203 Business Systems Analysi	521204 Business Systems Network	521501 Real Estate	

APPENDIX B

Special Curriculum Student Enrollment

/05/1998

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT
ANNUAL: 199705
SOME HEADCOUNTS ARE DUPLICATED AS STUDENTS MAY FALL INTO MORE THAN ONE GROUP NOTE:

PROGRAM CC120BB

TOTAL NUMBER UNDUPLI- CATED SPECIAL POPLN	2, 38, 27, 27, 38, 37, 37, 37, 37, 37, 37, 37, 37, 37, 37
TOTAL UNDUPLI- CATED SINGLE PARENT OR HOMEMAKER	1, 15238 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SINGLE HOME MAKER	169 213 1005 1005 1005 1005 1005 1005 1005 10
SINGLE	280 1280 1280 1280 1380 1380 1380 1380 1380 1380 1380 13
TOTAL * UNDUPLICATED DISADVANTAGED	2,144 1,982 1,982 1,282 2,380 2,385 2,789 1,025 1,758 2,273 4,645 2,859 1,484 1,564 1,564 1,564 1,564 1,564 1,564 1,564 1,232 1,211 1,211 1,211 1,097 1,201 1,201 1,201 1,201 1,201 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007 1,007
LIMITED ENGLISH PROFI- CIENCY	36 127 127 228 23 39 47 111 151 183 183 183 183 184 126 127 137 147 151 168 168 168 17 183 183 183 183 183 183 183 183 183 183
ECONOMIC DISAD- VANTAGED	1,028 1,028 1,028 1,026 1,000 1,100 1,
ACADEMIC DISAD- VANTAGED	1,645 218 218 219 219 229 240 250 260 260 261 270 261 270 261 270 261 270 270 270 270 270 270 270 270
HUMBER HANDI- CAPPED	137 137 138 338 21 135 135 135 135 135 141 154 154 154 154 154 154 154 154 15
COLLEGE	ALAMANCE CC ANSON CC ASHEVILLE-BUNCOMBE BLADEN CC BLOERT COUNTY CC BLUE RIDGE CC BRUNSMICK CC CALDMELL CC & TI CAPE FEAR CC CATAMBA VALLEY CC CATAMBA VALLEY CC CATAMBA VALLEY CC CENTRAL CAROLINA C CENTRAL CAROLINA C CENTRAL CAROLINA C COLLEGE OF ALBEMAR CRAVEN CC CANTAL CAROLINA C COLLEGE OF ALBEMAR CRAVEN CC CASTAL CAROLINA C COLLEGE OF ALBEMAR CRAVEN CC DAVIDSON COUNTY CC DAVIDSON COUNTY CC DAVIDSON COUNTY CC DAVIDSON COUNTY CC CATAMBA TCC CANTRAL CAROLINA C COLLEGE OF ALBEMAR CRAVEN CC CANTRAL CAROLINA C COLLEGE OF ALBEMAR CRAVEN CC CANTRAL CAC HAYMOOD CC ISOTHERMAL CC ANTICO CC MANTIN CC MAYLAND CC MAYLAN

ा प्रकार १

1/05/1998

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT
ANNUAL: 199705
SOME HEADCOUNTS ARE DUPLICATED AS STUDENTS MAY FALL INTO MORE THAN ONE GROUP NOTE:

PROGRAM CC120BB

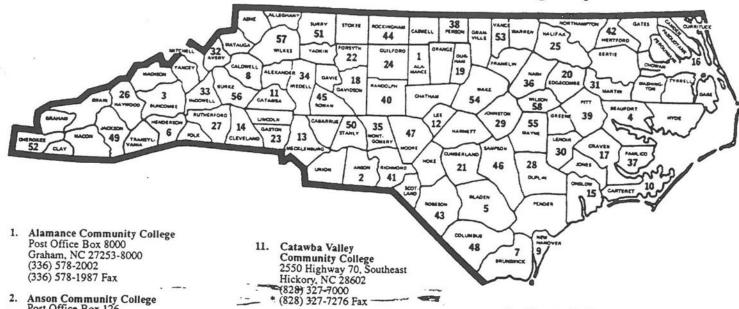
TOTAL HUMBER UNDUPLI- CATED SPECIAL POPLH	1,196	2,761	2,230	1,488	1,868	2,626 1,530 1,107	1,275
TOTAL UNDUPLI- CATED SINGLE PARENT OR HOMFMAKFR	218	614 154	136	301 350	225 245 485	524 340 211	100
SINGLE HOME MAKER	133	326	50 43	161 160	98 79 232	249 147	8,250
SINGLE	139	392 128	120	232	144 195 293	336 223 204	13,680
TOTAL * UNDUPLICATED DISADVANTAGED	1,133	2,626 834 2,231	1,539	1,425	1,802 4,328	2,544 1,393 1,027	90,077
LIMITED ENGLISH PROFI- CIENCY	12 24		13		111	19	2,077
ECONOMIC DISAD- VANTAGED	861 195	547	341	638 556	2,417	225 547 647	31,948
ACADEMIC DISAD- VANTAGED	574	681	1,487	1,262 576	1,591	1,312	75,990
HANDI- CAPPED	41 119 136	61	32	117		443 67 30	6,772
COLLEGE	ROBESON CC ROCKINGHAM CC ROMAN-CABARRUS CC		SOUTHEASTERN CC	SURRY CC TRI-CCUNTY CC	VANCE-GRANVILLE CC MAKE TCC MAYNE CC	MESTERN PIEDMONT C MILKES CC MILSON TCC	

		*

APPENDIX C

Community Colleges

The North Carolina Community College System



- Anson Community College Post Office Box 126 Polkton, NC 28135 (704) 272-7635 (704) 272-8904 Fax
- Asheville-Buncombe Technical Community College 340 Victoria Road Asheville, NC 28801 * (828) 254-1921 * (828) 251-6355 Fax
- Beaufort County Community College Post Office Box 1069 Washington, NC 27889 (252) 946-6194 † (252) 946-0271 Fax
- 5. Bladen Community College Post Office Box 266 Dublin, NC 28332 (910) 862-2164 (910) 862-3484 Fax
- Blue Ridge Community College College Drive Flat Rock, NC 28731 * (828) 692-3572
 - * (828) 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 2855 Hickory Boulevard Hudson, NC 28638 * (828) 726-2200 * (828) 726-2216 Fax
- 9. Cape Fear Community College 411 North Front Street Wilmington, NC 28401 (910) 251-5100 (910) 763-2279 Fax
- 10. Carteret Community College 3505 Arendell Street Morehead City, NC 28557 † (252) 247-6000 † (252) 247-2514 Fax

- Central Carolina Community College 1105 Kelly Drive Sanford, NC 27330 (919) 775-5401 (919) 775-1221 Fax
- Central Pledmont Community College Post Office Box 35009 Charlotte, NC 28235 (704) 330-2722 (704) 330-5045 Fax
- 14. Cleveland Community College 137 South Post Road Shelby, NC 28152 (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
- College of The Albemarle Post Office Box 2327 Elizabeth City, NC 27906-2327 (252) 335-0821 † (252) 335-2011 Fax
- Craven Community College 800 College Court New Bern, NC 28562 † (252) 638-4131 † (252) 638-4232 Fax
- **Davidson County Community College** Post Office Box 1287 Lexington, NC 27293-1287 (336) 249-8186 (336) 249-0088 Fax
- 19. Durham Technical Community College 1637 Lawson Street Durham, NC 27703 (919) 686-3300 (919) 686-3601 Fax
- **Edgecombe Community College** 2009 West Wilson Street Tarboro, NC 27886 † (252) 823-5166 † (252) 823-6817 Fax

- Fayetteville Technical Community College Post Office Box 35236 Fayetteville, NC 28303-0236 (910) 678-8400 (910) 484-6600 Fax
- 22. Forsyth Technical Community College 2100 Silas Creek Parkway Winston-Salem, NC 27103-5197 (336) 723-0371 (336) 761-2399 Fax
- 23. Gaston College 201 Highway 321, South Dallas, NC 28034-1499 (704) 922-6200 (704) 922-6440 Fax
- 24. Guilford Technical Community College Post Office Box 309 Jamestown, NC 27282 (336) 334-4822 (336) 454-2510 Fax
- 25. Halifax Community College Post Office Drawer 809 Weldon, NC 27890 † (252) 536-2551 † (252) 536-4144 Fax
- 26. Haywood Community College 185 Freedlander Drive Clyde, NC 28721 (828) 627-2821 * (828) 627-3606 Fax
- 27. Isothermal Community College Post Office Box 804
- Spindale, NC 28160 * (828) 286-3636 * (828) 286-1120 Fax
- 28. James Sprunt Community College Post Office Box 398 Kenansville, NC 28349-0398 (910) 296-2400 (910) 296-1636 Fax
- Johnston Community College Post Office Box 2350 Smithfield, NC 27577 (919) 934-3051 (919) 934-2823 Fax

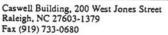
* This area code changes from 704 to 828 on June 1, 1998.



AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

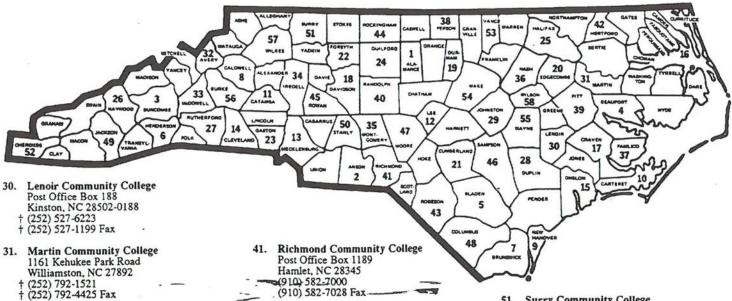
† This area code changes from 919 to 252 on March 22, 1998.





2-98

The North Carolina Community College System



- Mayland Community College Post Office Box 547 Spruce Pine, NC 28777
 - * (828) 765-7351 * (828) 765-0728 Fax
- McDowell Technical Community College Route 1, Box 170 Marion, NC 28752
 - * (828) 652-6021 * (828) 652-1014 Fax
- Mitchell Community College 500 West Broad Street Statesville, NC 28677 (704) 878-3200 (704) 878-0872 Fax
- Montgomery Community College Post Office Box 787 Troy, NC 27371 (910) 576-6222 (910) 576-2176 Fax
- Nash Community College Post Office Box 7488 Rocky Mount, NC 27804-7488
 † (252) 443-4011
 † (252) 443-0828 Fax
- 37. Pamlico Community College Highway 306, South Grantsboro, NC 28529
 † (252) 249-1851
 † (252) 249-2377 Fax
- Piedmont Community College Post Office Box 1197 Roxboro, NC 27573 (336) 599-1181 (336) 597-3817 Fax
- 39. Pitt Community College Post Office Drawer 7007 Greenville, NC 27835-7007 † (252) 321-4200 † (252) 321-4401 Fax
- Randolph Community College Post Office Box 1009 Asheboro, NC 27204-1009 (336) 633-0200 (336) 629-4695 Fax

- Roanoke-Chowan Community College Route 2, Box 46-A Ahoskie, NC 27910
 - † (252) 332-5921 † (252) 332-2210 Fax
- Robeson Community College Post Office Box 1420 Lumberton, NC 28359 (910) 738-7101

(910) 671-4143 Fax

- Rockingham Community College Post Office Box 38 Wentworth, NC 27375-0038 (336) 342-4261 (336) 349-9986 Fax
- Rowan-Cabarrus Community College Post Office Box 1595 Salisbury, NC 28145-1595 (704) 637-0760 (704) 637-3692 Fax
- Sampson Community College Post Office Box 318 Clinton, NC 28329 (910) 592-8081 (910) 592-8048 Fax
- Sandhills Community College 2200 Airport Road Pinehurst, NC 28374 (910) 692-6185 (910) 695-1823 Fax
- Southeastern Community College Post Office Box 151 Whiteville, NC 28472 (910) 642-7141 (910) 642-5658 Fax
- 49. Southwestern Community College 447 College Drive Sylva, NC 28779
 * (828) 586-4091
 * (828) 586-3129 Fax
- Stanly Community College 141 College Drive Albemarle, NC 28001 (704) 982-0121 (704) 982-0819 Fax

- Surry Community College Post Office Box 304 Dobson, NC 27017 (336) 386-8121 (336) 386-8951 Fax
- 52. Tri-County Community College 4600 Highway 64, East Murphy, NC 28906
 * (828) 837-6810
 * (828) 837-3266 Fax
- 53. Vance-Granville Community College Post Office Box 917 Henderson, NC 27536 † (252) 492-2061 † (252) 430-0460 Fax
- 54. Wake Technical Community College 9101 Fayetteville Road Raleigh, NC 27603 (919) 662-3400 (919) 779-3360 Fax
- 55. Wayne Community College Caller Box 8002 Goldsboro, NC 27533-8002 (919) 735-5151 (919) 736-9425 Fax
- Western Piedmont Community College 1001 Burkemont Avenue Morganton, NC 28655
 * (828) 438-6000
 * (828) 438-6015 Fax
- Wilkes Community College Post Office Box 120 Wilkesboro, NC 28697 (336) 838-6100 (336) 838-6277 Fax
- 58. Wilson Technical Community College Post Office Box 4305 Wilson, NC 27893
 † (252) 291-1195
 † (252) 243-7148 Fax

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

* This area code changes from 704 to 828 on June 1, 1998.

North Carolina Community College System

H. Martin Lancaster, President

† This area code changes from 919 to 252 on March 22, 1998.



Caswell Building, 200 West Jones Street Raleigh, NC 27603-1379 Fax (919) 733-0680 2-98