

North Carolina

An outline map of North Carolina is centered on the page. The word "Performance" is written in a large, bold, serif font across the upper portion of the map, and the word "Report" is written in the same font across the lower portion. The map outline is a simple black line.

# Performance Report

Program Year 1993-94

Carl D. Perkins Vocational and Applied Technology Education Act of 1990

Vocational and Technical Education





RECEIVED DEC 29 1994

# NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

301 North Wilmington Street, Education Building  
Raleigh, NC 27601-2825

BOB ETHERIDGE  
State Superintendent

December 21, 1994

TO: Sandra Babb, Executive Director  
Commission on Workforce Preparedness  
✓h  
FROM: June Atkinson, Director  
Vocational and Technical Education

## FY 1993-94 PERFORMANCE REPORT

Enclosed is a copy of the 1993-94 Performance Report. The report was approved by the State Board of Education on December 1, 1994.

The Performance Report presents the services and activities provided the youth and adults in secondary and postsecondary vocational and technical education in North Carolina from July 1, 1993 to June 30, 1994. It represents the continuous efforts at all levels to improve the quality of education and training for participants in vocational and technical education.

Multiple copies of this report will be available in January 1995. Please contact Sarah Hawes for the number of additional copies you will need or for further information.

fm

Enclosure

c: Henry Johnson  
Donald R. Brannon  
J. W. Eades  
Allen McNeely





RECEIVED DEC 21 1994

# NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

301 North Wilmington Street, Education Building  
Raleigh, NC 27601-2825

BOB ETHERIDGE  
State Superintendent

December 22, 1994

MR RONALD CASTALDI ACTING CHIEF  
OFFICE OF VOCATIONAL AND TECHNICAL EDUCATION  
US DEPARTMENT OF EDUCATION SWITZER BUILDING  
400 MARYLAND AVE SW  
WASHINGTON DC 20202-7100

Dear Mr. Castaldi:

We are submitting three copies of the North Carolina Vocational and Technical Education Performance Report for FY 1993-94 (July 1 to June 30) in compliance with OMB Circular No. 1830-0503.

The Performance Report was received by the North Carolina State Board of Vocational and Technical Education on December 1, 1994, and a copy has been transmitted to the State Board of Community Colleges. Copies are also made available to the Human Resource Investment Council and the State Job Training Coordinating Council for their information. The NC Performance Report is prepared according to the guidelines provided by your office and serves as a progress report pursuant to federal requirements for our FY 1991-94 State Plan. Data is supported by narrative information where appropriate.

All reference to fiscal expenditures includes federal dollars which expanded or totally supported each activity for the stated clientele. Many of our efforts could not have been implemented without the federal incentive/support dollars.

If you desire additional information, please contact Sarah Hawes at (919)715-1649.

Sincerely,

A handwritten signature in cursive script, appearing to read "June S. Atkinson".

June S. Atkinson, Director  
Vocational and Technical Education

fm

Enclosures

c: Henry Johnson  
Donald R. Brannon  
J. W. Eades



**Vocational Education Performance Report  
Program Year 1993-1994**

**Executive Summary**

The recipients of funds under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 are required to report on vocational education programs on an annual basis. The report covering the July 1993 to July 1994 program year was completed and submitted to the U. S. Department of Education in December 1994. The following are highlights of the report:

- \* The Performance Measures and Standards, mandated by the Perkins Act, have been reported and compiled for the 1993-1994 school year. Four standards of performance have been tentatively established. These include the percentage of coursework completed in a student's program of study over a three-year span; the percentage of students passing remedial and general education courses; retention rates by quarter and by credit hour; and the percentage of special population students enrolling and completing coursework. These standards are being analyzed and will be approved by the Committee of Practitioners, monitored to provide trends, amended as needed, and new standards will be similarly developed to measure additional areas.
- \* Funds under the Basic Grant were distributed to 53 eligible community colleges. Funds were used for programs and projects in upgrading curriculum, equipment purchases, inservice staff training, guidance counseling recruitment and training, remedial services for students, Tech Prep program development, supplemental services for special populations students, additional staff to coordinate services for special populations student services, vocational student placement, and program administration improvement. A total of 110,990 students benefited from these funds.
- \* Forty community colleges received funds to provide services to a total of 10,422 single parents, displaced homemakers, and single pregnant women students. These services included child care, student transportation, tuition, and instructional materials required for class participation. Over 300 students at 15 colleges benefited from sex equity grants designed to train men and women in the nontraditional occupations. Not



only were material services supplied, as those listed above, but effective support through individual counseling and personal development seminars, and practical support through personality and aptitude assessments, peer tutoring, job development and placement were also provided.

- \* Eight systemwide Curriculum Improvement Projects (CIP) were funded. These included Business Management, Math and Technology, and Electronics-Based curriculums (second year funding), and Welding, Nursing, Mechanical/Manufacturing, Biology, and Physics (first year funding). The goal of a CIP is to create a process and environment through inservice training and professional peer guidance which leads to an updated instructional program or curriculum area.
- \* Seven Criminal Offenders grants were approved for 1993-1994. A total of 3,796 corrections inmates participated in 40 occupational programs. 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 levels in specific occupation fields.
- \* Fifty-five community colleges received Tech Prep funds from Perkins. Fifteen of these were in the form of planning grants; 40 were implementation grants. The Departments of Public Instruction and Community Colleges provide grants to Tech Prep consortia (63 this year), consisting of city and/or county school systems and the corresponding community college, based upon competitive proposals received from all interested local education agencies. Much of the early emphasis of Tech Prep efforts in North Carolina centered on articulation and marketing with a good start involving business and industry in the partnerships with high schools and community colleges.



1993-1994 • North Carolina



# Performance Report Summary

Vocational and Technical Education  
North Carolina Department of Public Instruction  
Bob Etheridge, State Superintendent



1993-1994 • North Carolina  
Vocational and Technical Education



June S. Atkinson, State Director  
Henry Johnson, Assistant State Superintendent  
Bob Etheridge, State Superintendent  
North Carolina Department of Public Instruction

## ***Vocational and Technical Education***

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

## ***Mission***

The mission of Vocational and Technical Education is to empower students for effective participation in a global economy as world class workers and citizens.

The purposes of Vocational and Technical Education are to:

- Prepare students for further vocational and technical 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 vocational and technical education programs.

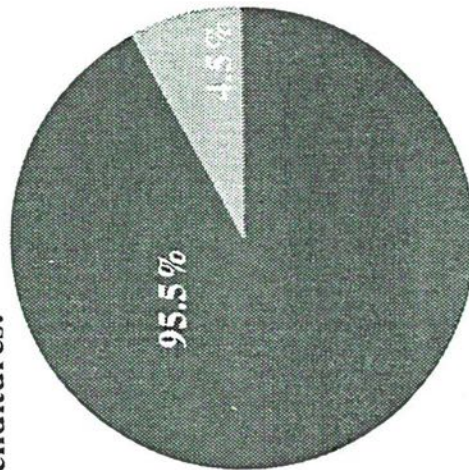
# Vocational and Technical Education Facts 1993-1994 ..... Briefly Told

Served:

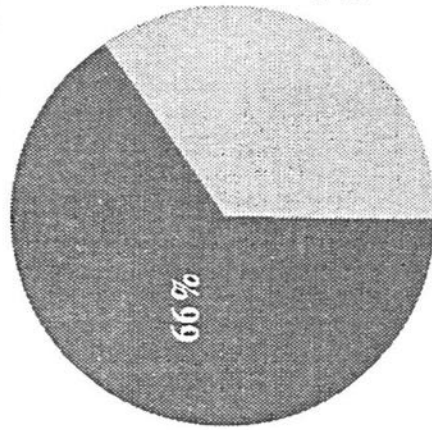


Total Education Expenditures:  
(92-93)

All school programs:  
\$4,940,002,117



Enrollment for Grades 9-12  
 Total Statewide Student Enrollment: 302,629  
 Total Student Enrollment for Vocational Education: 198,520\* (unduplicated)



Enrolled in at least  
 one vocational course

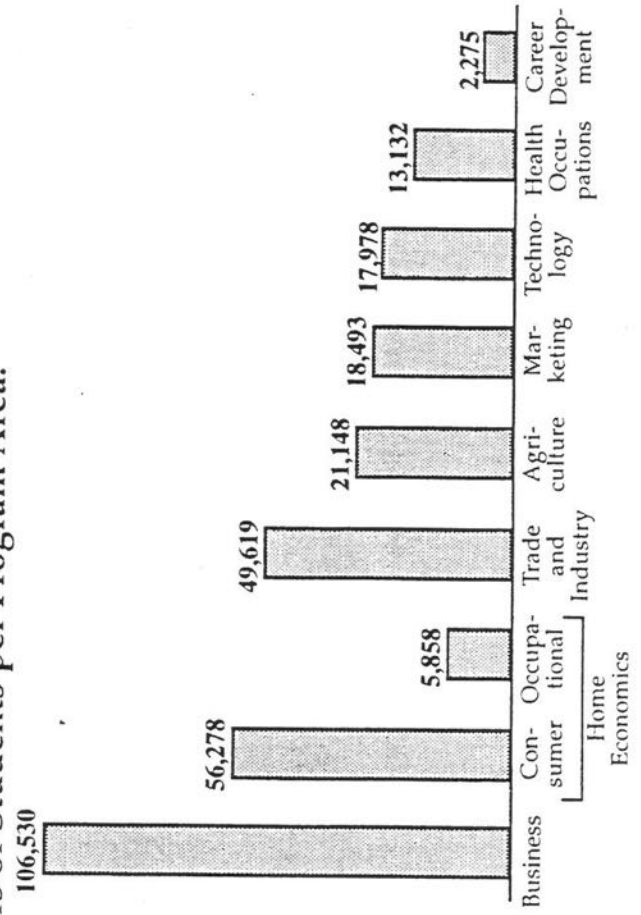
\* Enrollment in Grades 6-8: 208,510  
 (duplicated count)

## Vocational and Technical Education

### Program Areas

- Agriculture
- Business
- Career Development
- Health Occupations
- Home Economics
- Marketing
- Technology
- Trade and Industry

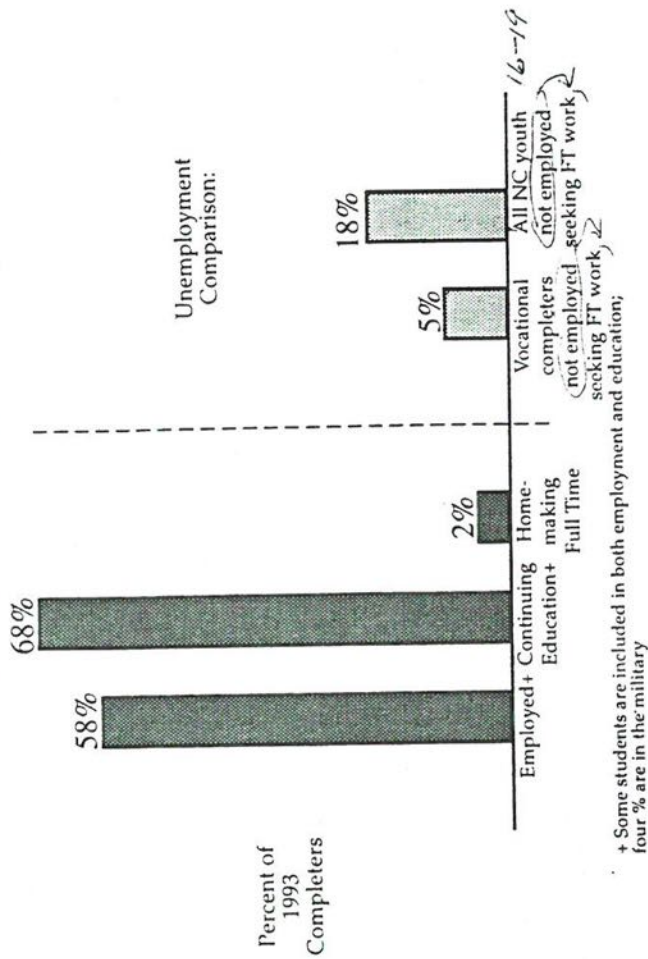
Numbers of Students per Program Area:



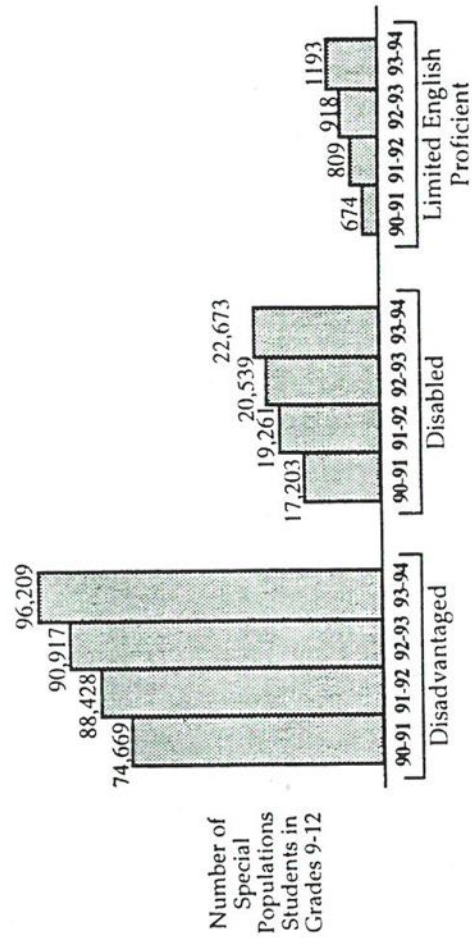
## Completers of Vocational and Technical Education

# Vocational and Technical Education Facts

Of the 33,672 Vocational and Technical Education completers:



## Special Populations Enrollment



The performance measures and standards for vocational and technical education programs were approved by the State Board of Education in January, 1994. The long-range performance standards measure the access, progress, and success levels of all vocational students.

Annually, local education agencies must submit a vocational application. This application must address the extent to which vocational programs are making sufficient progress in meeting the performance measures and standards. Goals and strategies for making continuous improvement and allocating resources are included in this application.

The Vocational Competency Achievement Tracking System (VoCATS) helps LEAs plan, implement, and evaluate vocational and technical instruction. This system provides current status of student performance and provides documentation for course competency mastery and gains.

## *Performance Standards*

## *What Are They?*

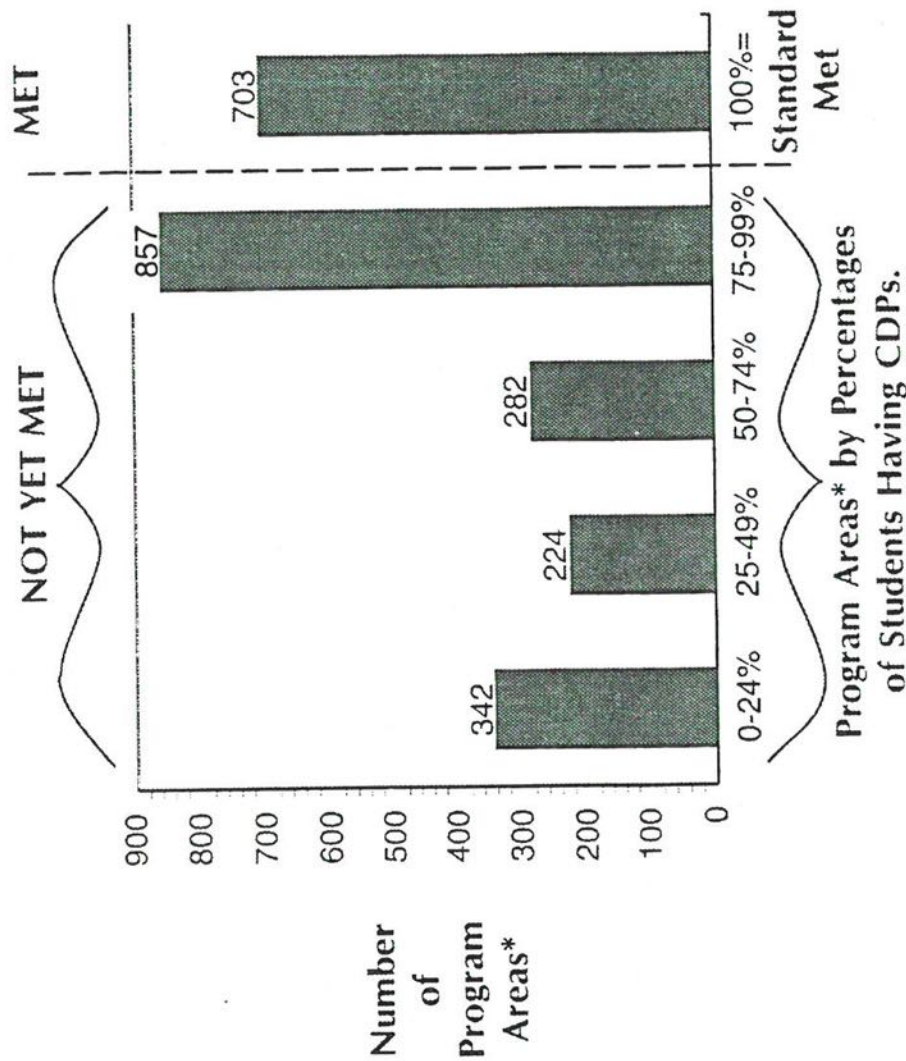
## *How Are We Doing?*

# Vocational and Technical Education

Long-Range Performance  
Standard One:

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

School Year 1993-94  
Statewide Summary  
Status for Meeting Standard One



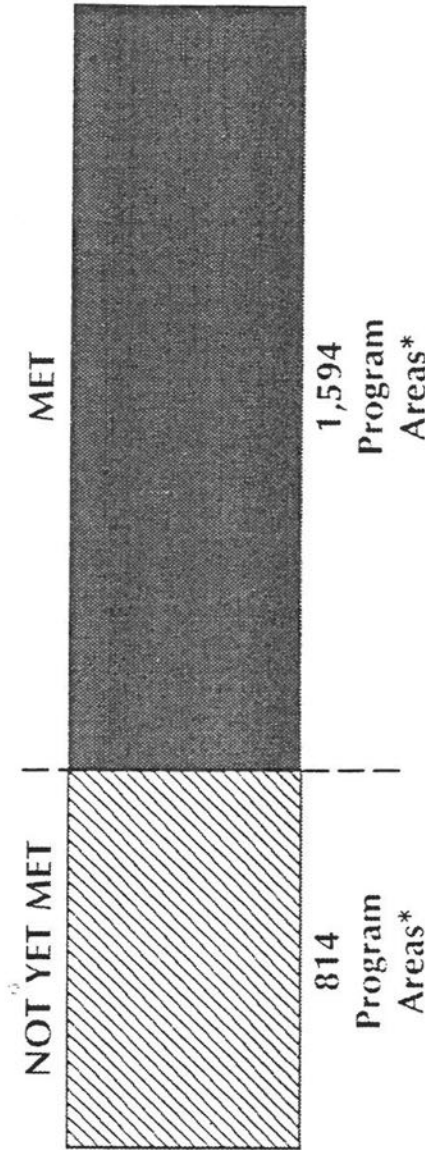
\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 2,408

# Vocational and Technical Education

## Long-Range Performance Standard Two:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard Two



\*Program Areas Were Counted Once Per School;  
Total Number Program Areas Counted = 2,408

# Vocational and Technical Education

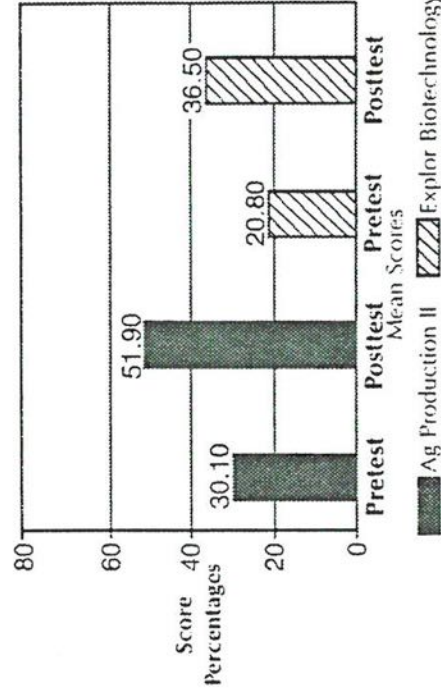
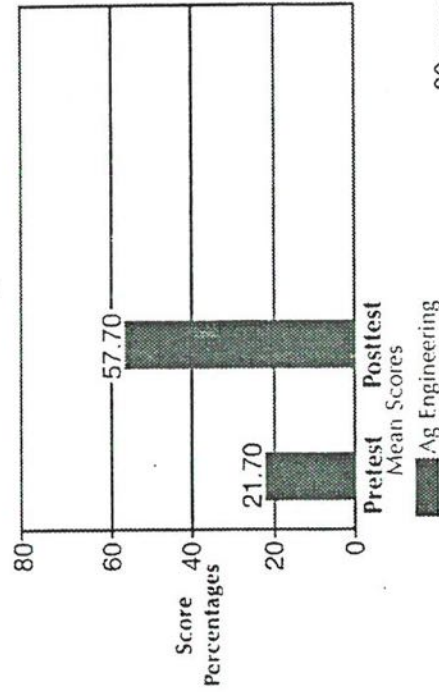
## Long-Range Performance Standard Four:

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.

## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Agricultural Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

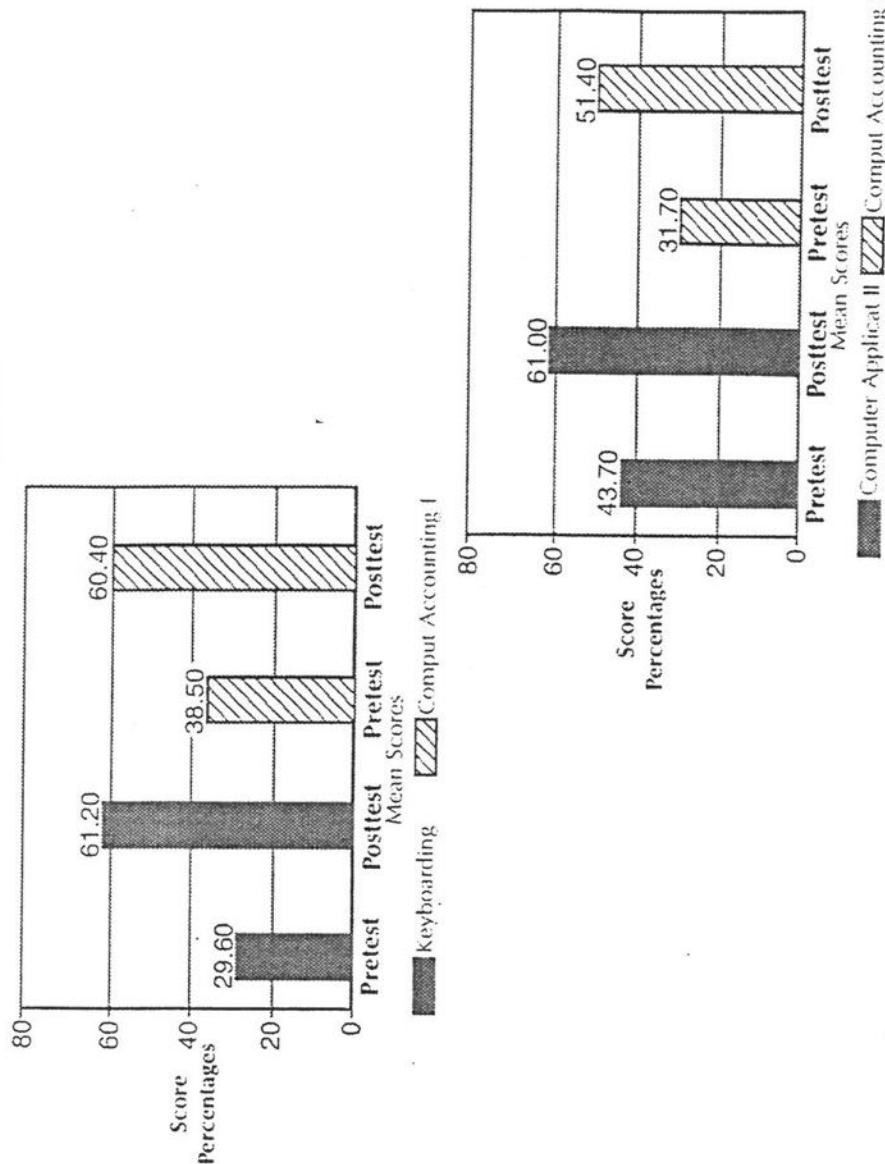
## Long-Range Performance Standard Four:

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.

## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Business Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance Standard Four:

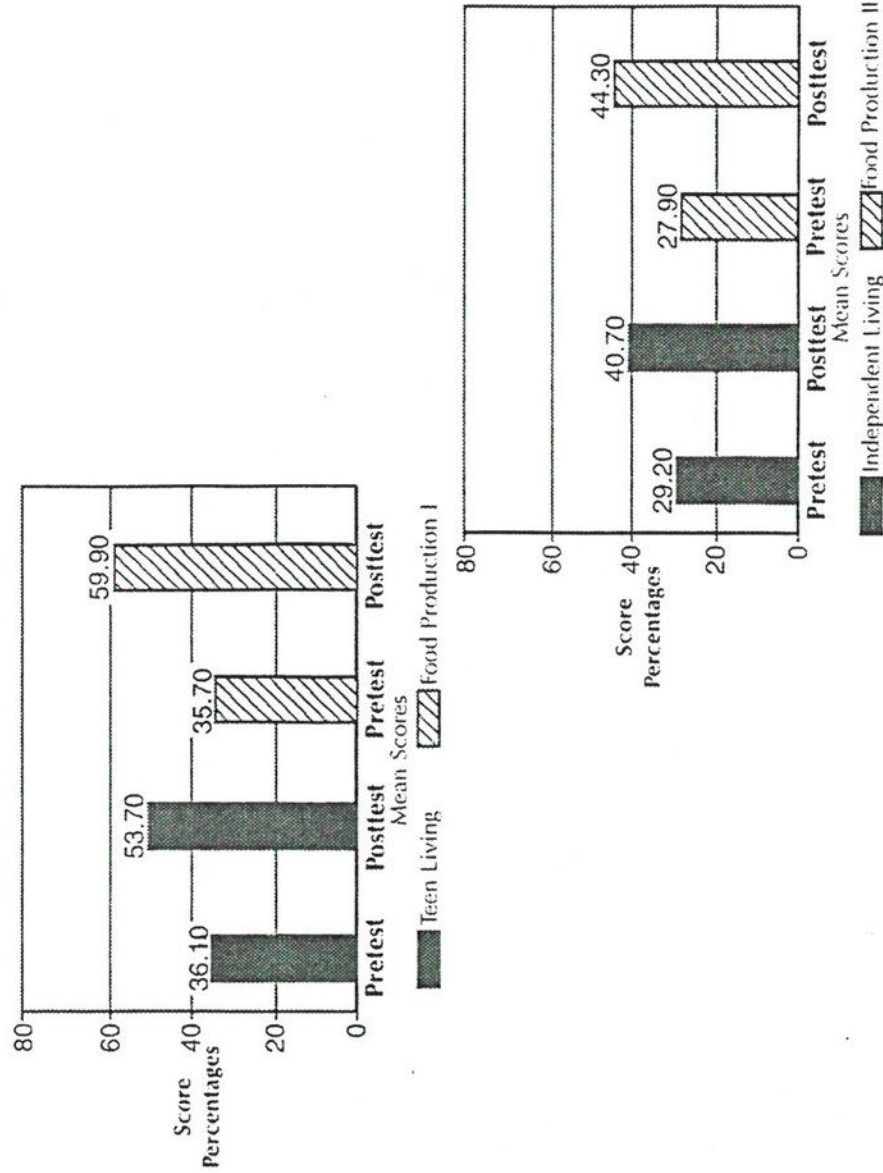
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

## 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.



## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Home Economics Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance Standard Four:

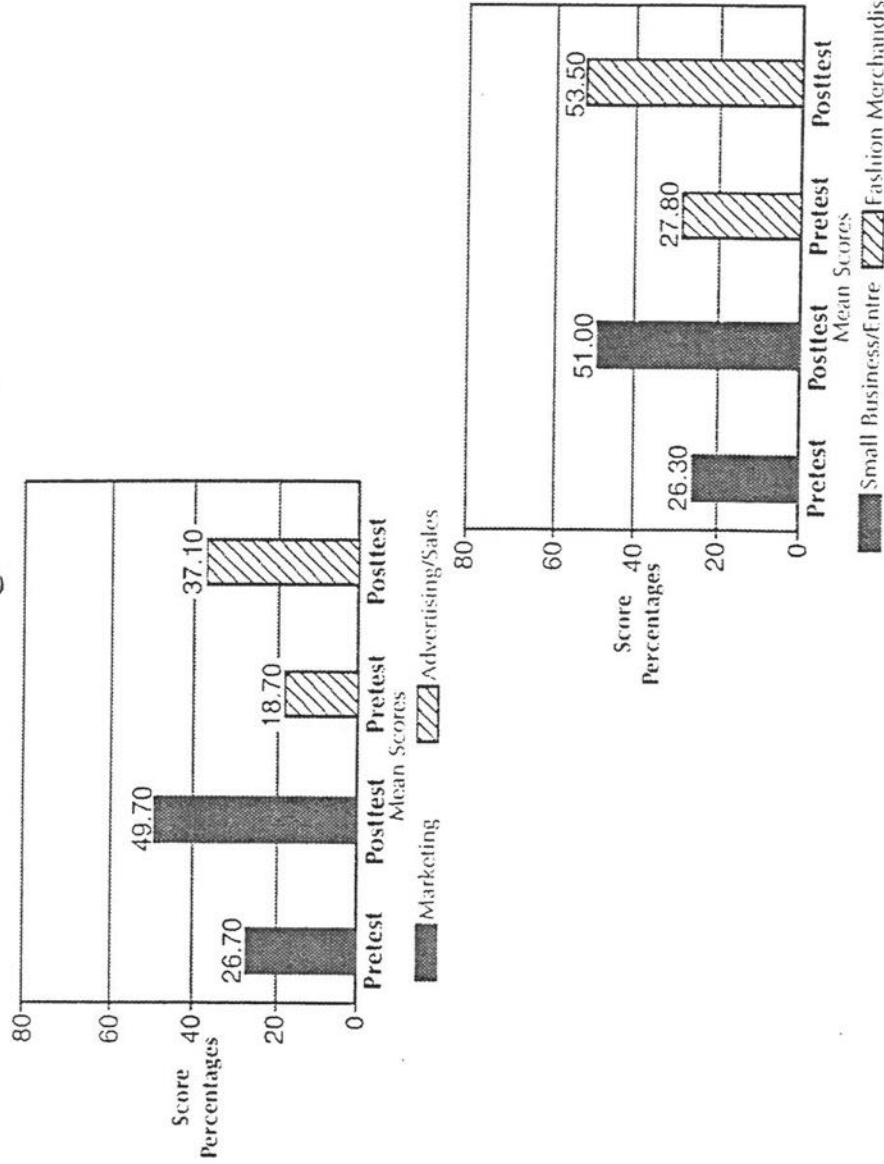
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

## 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.



## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Marketing Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance Standard Four:

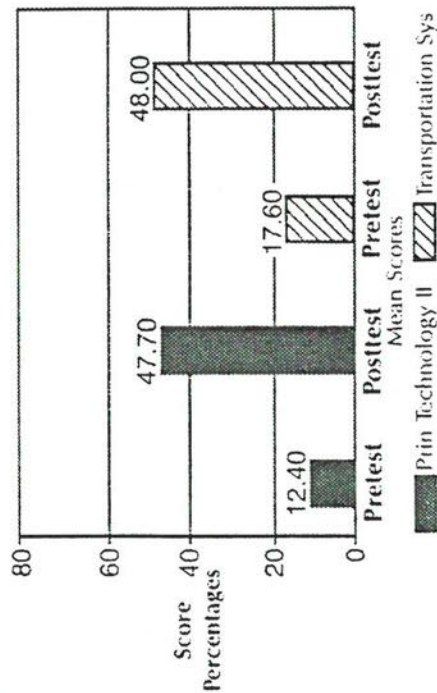
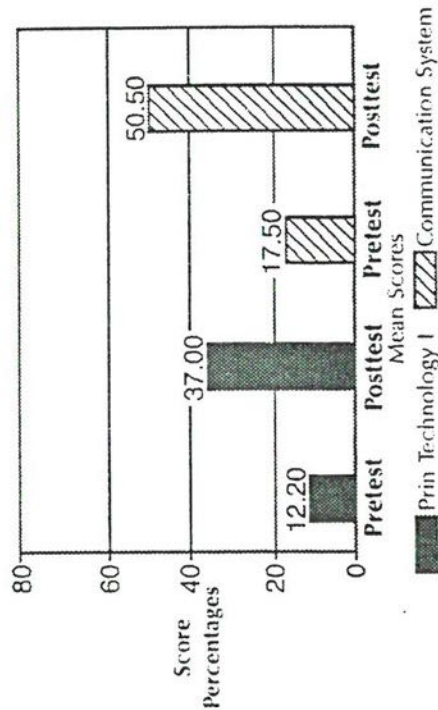
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

## 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.



## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Technology Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## 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.



## School Year 1993-94 Statewide Summary Status for Meeting Standards Four and Five Sampling of Student Gains for Trade and Industrial Education



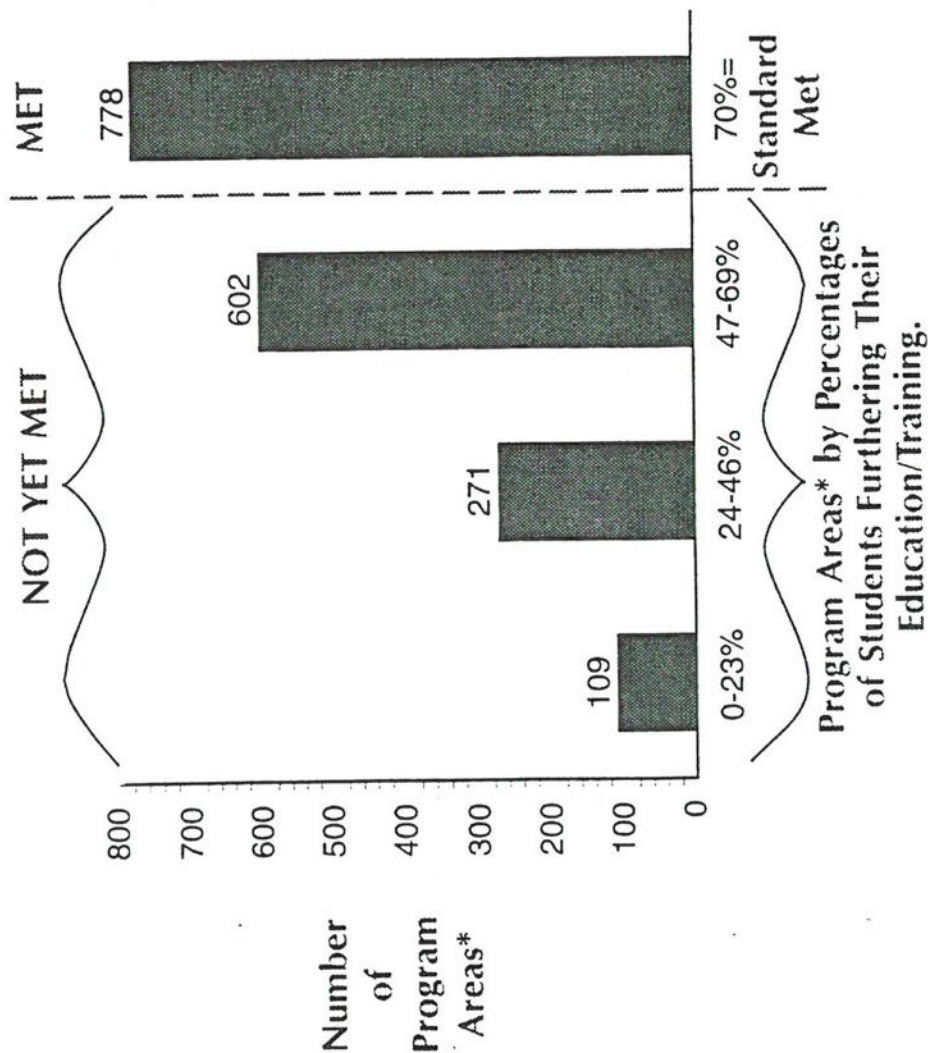
Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

Long-Range Performance  
Standard Six:

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

School Year 1993-94  
Statewide Summary  
Status for Meeting Standard Six



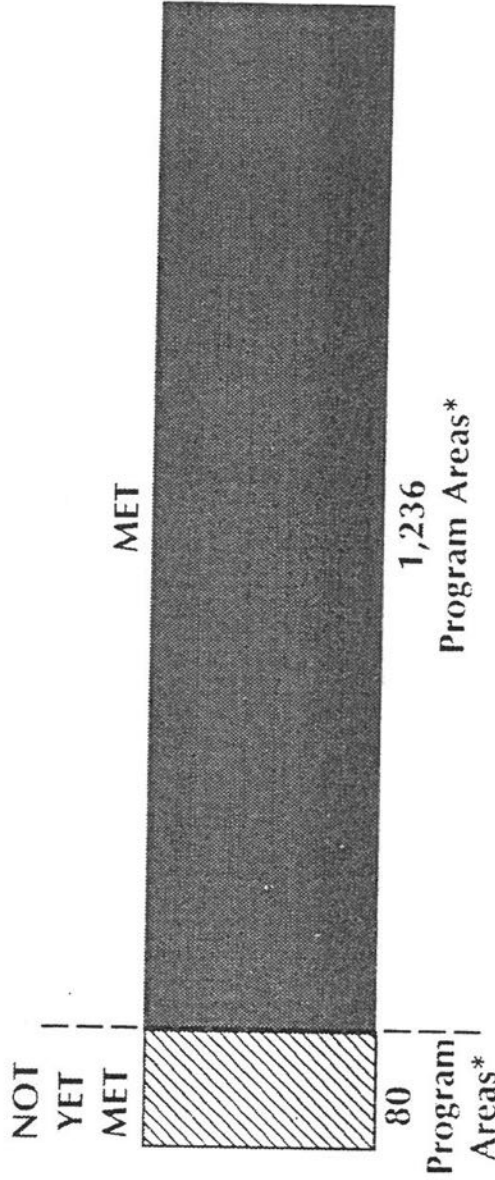
\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 1,760

# Vocational and Technical Education

## Long-Range Performance Standard Seven:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard Seven



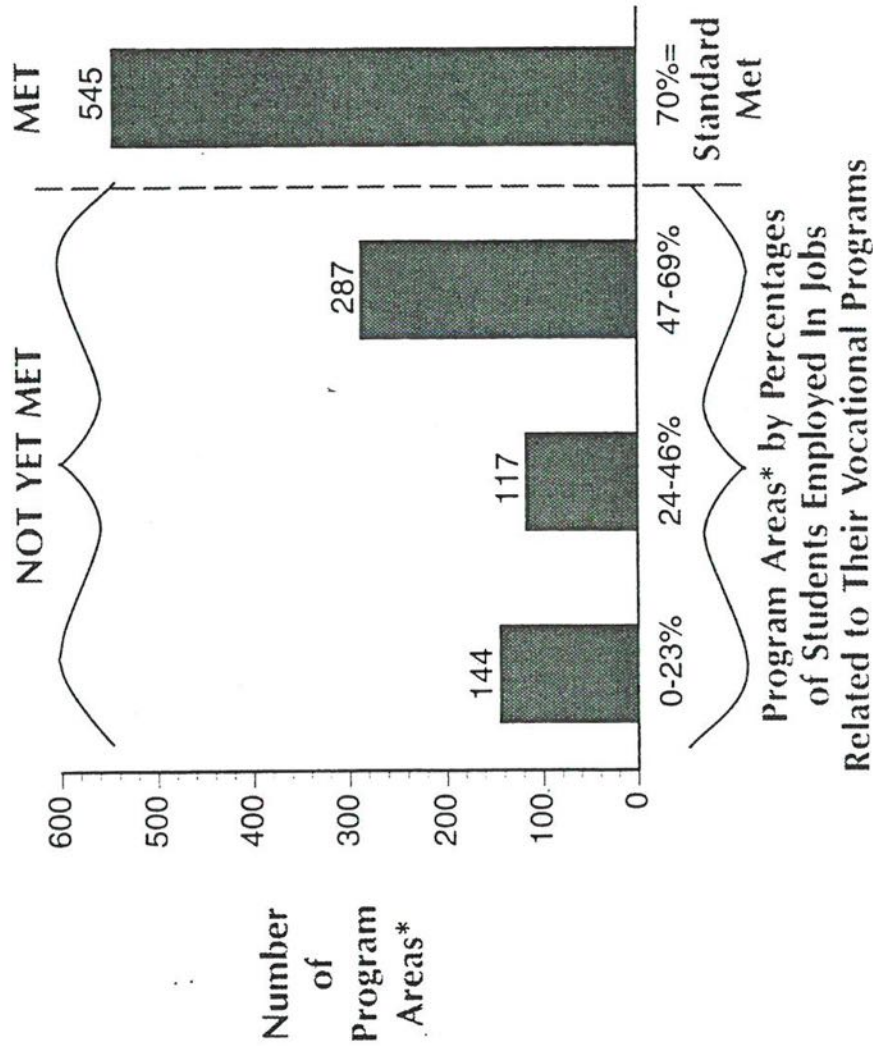
\*Program Areas Were Counted Once Per School;  
Total Number Program Areas Counted = 1,316

# Vocational and Technical Education

Long-Range Performance  
Standard Eight:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard Eight



\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 1,093

# Vocational and Technical Education

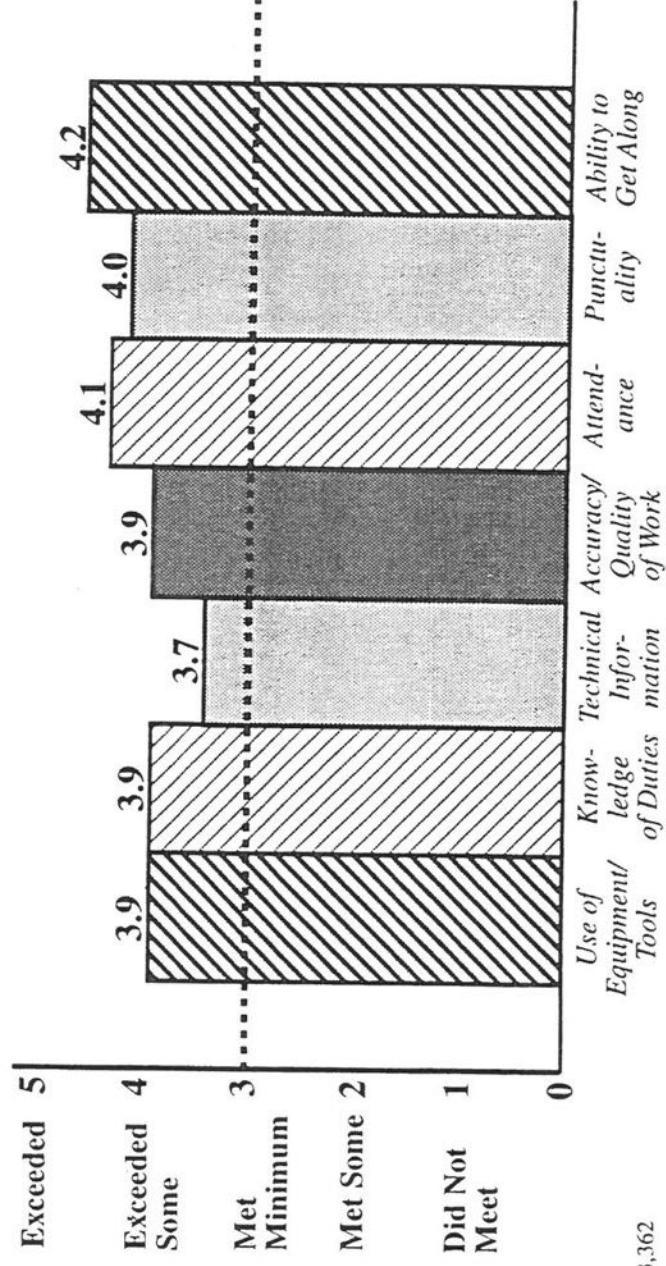
## Involvement With Business and Industry...

A total of 3,450 Business/Industry representatives were involved with:

- Curriculum development
- Staff development
- Vocational student organizations

### Employer\* ratings of Vocational and Technical Education Completers

#### RATINGS

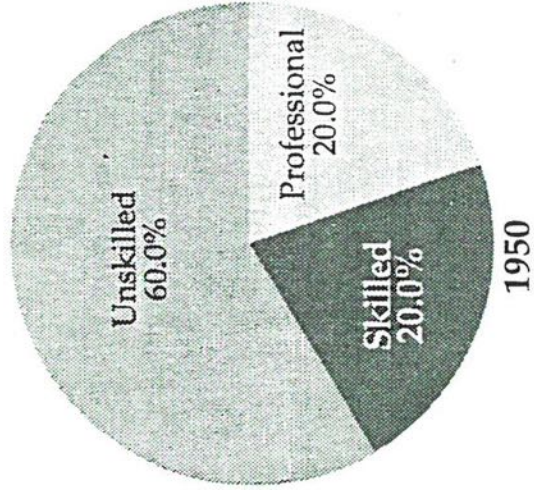
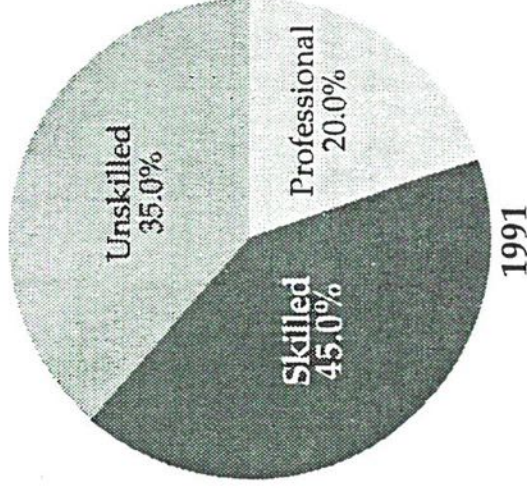
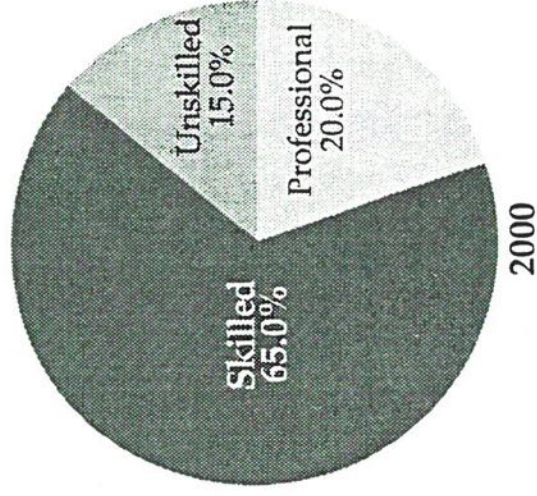


\* Total surveyed 7,533/Total reported 3,362

# Vocational and Technical Education

## The Future .....

Job skill level changes(1950-2000)\*

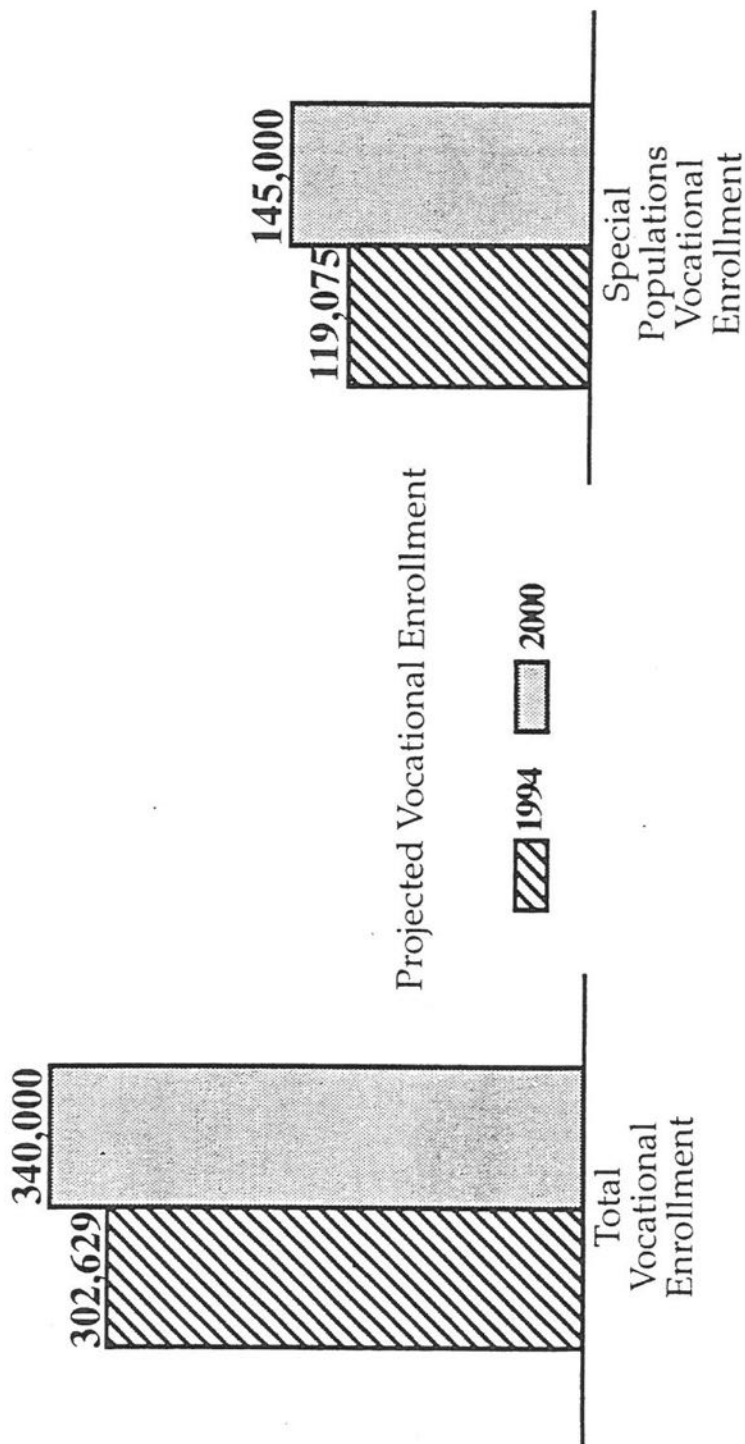


\*Source of Data: Bureau of Labor Statistics

# Vocational and Technical Education

## The Future .....

Growth in Vocational and Technical Education Enrollment:



# Vocational and Technical Education

Vocational and technical education represents an opportunity to improve the quality of education and training for students. Vocational and technical education demonstrates coordinated efforts for providing school to work opportunities for students. Vocational programs must:

- Integrate work-based learning and school-based learning, integrate academic and vocational learning, and build effective linkages between secondary and postsecondary education;
- Provide all students opportunities to complete a career major;
- Incorporate program components;
- Provide students with strong experience in and understanding of all aspects of the industry they are preparing to enter; and
- Provide all students with equal access to the full range of program components.\*

*Notes:*

November, 1994  
Vocational and Technical Education conducts all activities and procedures  
without regard to race, color, national origin, sex or disability.

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

**Program Year  
1993-1994**



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## Introduction

This Performance Report presents the programs, services and activities provided to the youth in secondary vocational and technical education in North Carolina from July 1, 1993-June 30, 1994. 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 vocational and technical education.

As directed by the North Carolina State Board of Education, the FY 1994 Federal grant and the contents of this report reflects the two-thirds/one-third split by secondary and postsecondary education and the appropriate clientele they served at each level. Data are provided to reflect: services to special populations; business/industries participation; professional development activities; and performance standard summaries.

All parts of this report display coordinated efforts to provide maximum results for the clients served by vocational and technical education in North Carolina.



June S. Atkinson, Director  
Vocational and Technical Education



## Certification

The State Board of Education, sole state agency, has the authority under Public School Law 115-153, to approve and submit the FY 94 Performance Report for Vocational and Technical Education. This report has been prepared as authorized by 34 CFR 400. The report covers the twelve month program year July 1 to June 30.

North Carolina State Board of Education  
(Official Name of State Board)

12/16/94  
Date

12/16/94  
Date

Jay M. Robinson  
Chairman, N.C. State Board of Education  
B. H. Abbott  
State Superintendent of Public Instruction

## Executive Summary

### Secondary Services & Activities

#### *Vocational and Technical Education*

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

#### *Mission*

The mission of Vocational and Technical Education is to empower students for effective participation in a global economy as world class workers and citizens.

#### *Purpose*

The purposes of Vocational and Technical Education are to:

- Prepare students for further vocational and technical 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 vocational and technical education programs.

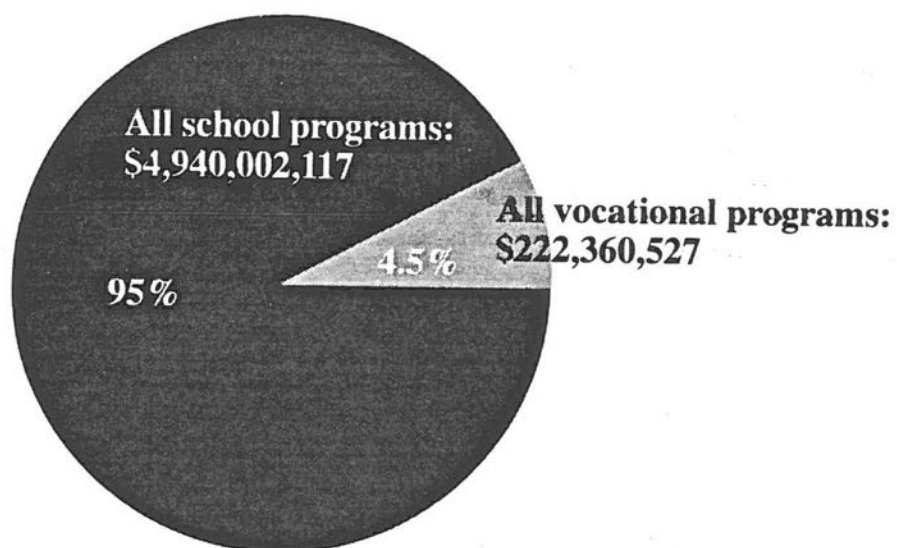
Served:

**120** LEAs

**303** Secondary Schools

**6** Career Centers

Expenditures:  
(92-93)

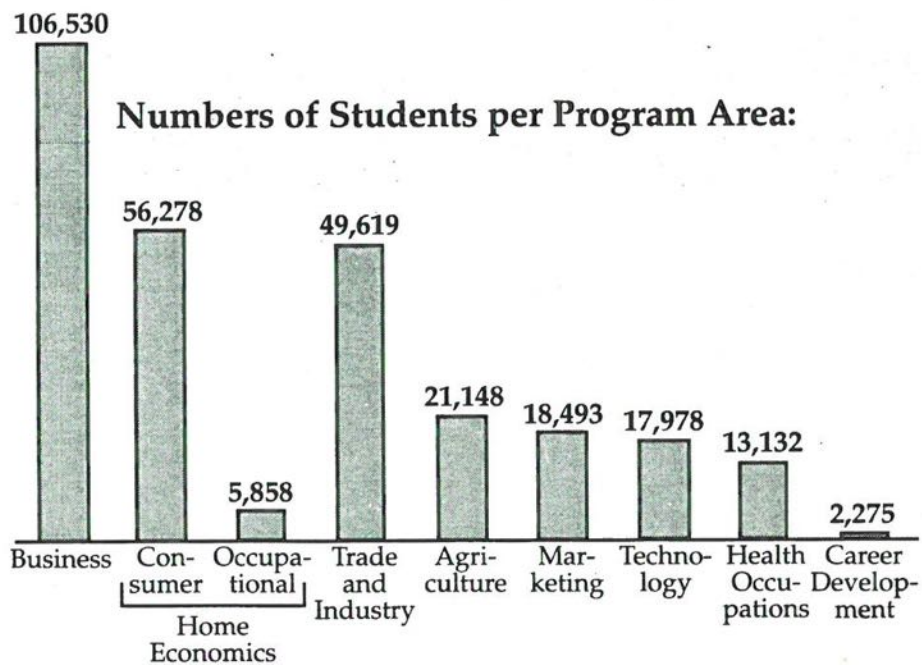
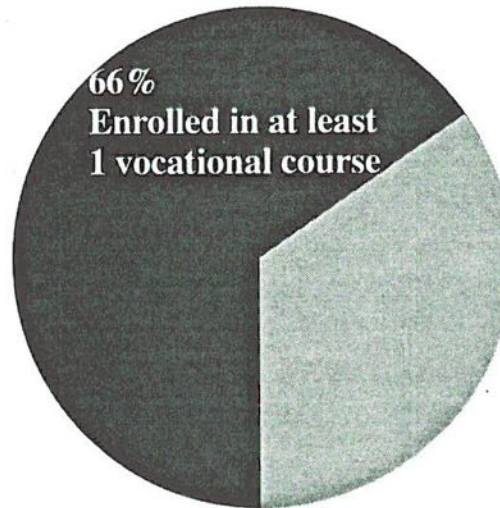


**Vocational  
and  
Technical  
Education**

**Enrollment in Grades 9-12**

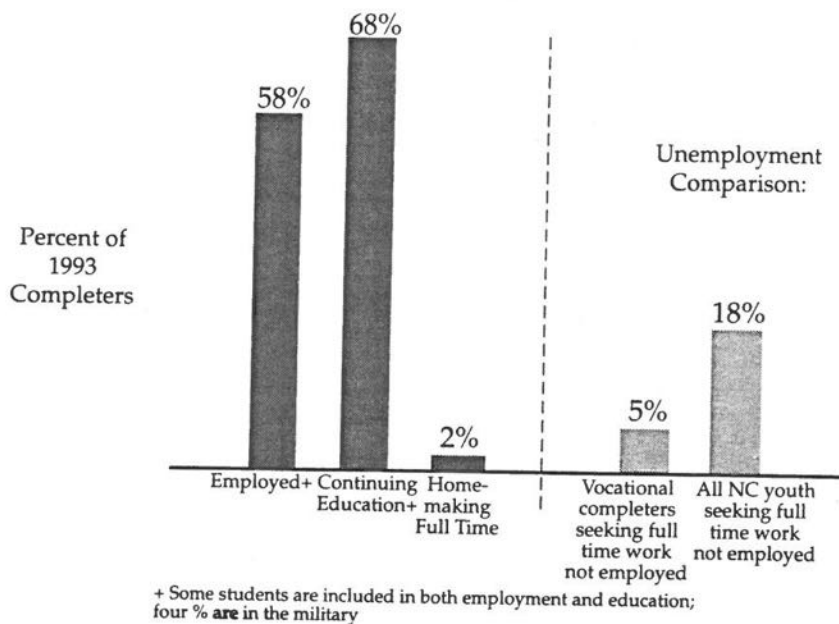
Total statewide enrollment: 302,629

Total student enrollment for Vocational Education: 198,520\*  
(unduplicated count)

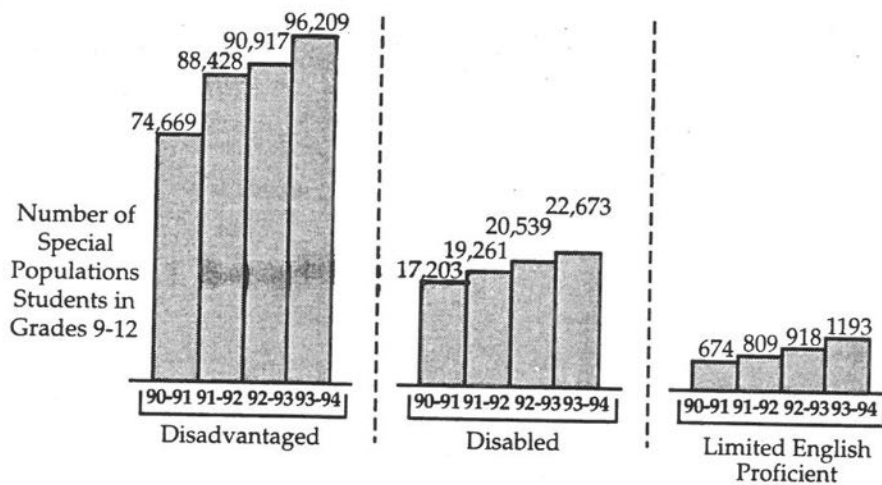


\*Total student enrollment for Vocational and Technical Education Grades 6-8:  
208,510 (duplicated count)

Of the 33,672 Vocational and Technical Education completers:



*Completers  
of Vocational  
and Technical  
Education*



*Special  
Populations  
Enrollment*

## *Accomplishments*

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, and activities were provided:

- Development and distribution of 20 curriculum guides, 60 test-item banks, and 90 course blueprints;
- Professional development for 9,600 teachers and administrators (duplicated count);
- Implementation of Tech Prep programs in 63 consortia. Approximately 60,000 students are now pursuing a tech prep course of study;
- Continued implementation of and use of evaluation data for the established vocational performance system;
- Development of an electronic system for preparation and transfer of LEA annual local plans/applications; and
- Involvement of 3,450 business/industry personnel in curriculum development, professional development, and vocational student organization activities.

During the 1993-1994 school year, 29 sex equity grants were awarded to address sex equity issues. Approximately \$636,122 was used to provide programs and activities for more than 6,154 youth in grades 6-12.

Five single parent, displaced homemakers and single pregnant women grants were awarded to provide programs and services to 618 students at the secondary level. These students were assisted in continuing their education, developing marketable skills, and accessing vocational training.

Community based organization grants (CBOs) enabled 259 special needs youths the opportunity to receive pre-employment and/or job training preparation. The number of youth served from these funds continued to increase.

Consumer and homemaking resources were used for grants to local school systems. Of the \$833,546 available for grants, 38 percent (15 grants) was spent in economically depressed areas. These grants focused on services to at-risk students and addressed specific local, state, and national priorities. Fourteen grants were made available to non-depressed areas.

Tech prep grants were awarded to 79 LEAs and served approximately 59,801 secondary students. Articulation agreements, integration of academic and vocational courses, and guidance activities were completed.

Career guidance and counseling provided support services for students in program planning, career guidance and counseling, job placement, and postsecondary education. Emphasis was placed on counseling students for Tech Prep programs, apprenticeship programs, getting parents involved in the career-decision making process, and assisting students in developing four-year personalized career plans.

Appendix 1 contains secondary vocational and technical education enrollment data for the 1993-1994 school year.

Collaboration was extensive with the Governor's Commission on Workforce Preparedness, Department of Labor, Department of Community Colleges, and Department of Commerce in developing workforce preparedness policy, and expanding school-to-work initiatives, including tech prep.

*Collaboration*

## Performance Measures and Standards

The performance standards were finalized after statewide field testing. They were reviewed by the Committee of Practitioners in July and approved in final form by the State Board of Education in January, 1994. They were then disseminated throughout the state.

A Vocational and Technical Education Performance Standards Team was constituted to develop a plan of work to serve customers. Some of the results of that team's work follow.

The state revised all relevant computer programs related to the performance standards of vocational and technical education programs.

*Coordination*

*Statewide  
Implementation*

In the state-developed performance standards reports (PSRs), numerical data were provided to show the degree to which each standard was attained by program area, by school. Each (100%) of the local education agencies (LEAs) used these reports to plan and allocate resources depending on deficient areas related to each performance standard. Each LEA's local plan/application was then prepared and transferred to the state office electronically.

## State Assistance

Staff development initiatives regarding the performance standards included a statewide workshop for vocational directors. Also, an operational handbook was developed. At the statewide summer workshop, training sessions were conducted for two groups of about 1,000 teachers each and one group of directors and coordinators, totaling about 500. During these sessions, feedback was gained through an interactive mode called the Optionfinder. With this information, the state determined the knowledge and status for teachers' and coordinators' perspectives on performance standards. Materials were developed to show the relationships between all the data and each of the performance standards. These materials were distributed to all vocational directors and appropriate LEA administrators in the fall of 1994. Additionally, the Governor's Commission on Workforce Preparedness submitted a proposal to the National Governor's Association to be one of six states to develop a national prototype of a workforce development performance management system. This proposal was based on the design for the secondary education performance-based system. North Carolina was selected as one of the six states for developing this national system.

See Appendix 2 for the performance standards in effect during the 1993-1994 school year. See Appendix 2-A for information regarding the performance standards and measures used for assessing vocational and technical education students' progress.

## Single Parents, Displaced Homemakers and Single Pregnant Women

### Accomplish- ments

LEAs and community based organizations were provided the opportunity to apply for grant funds through the request-for-proposal process to address the needs of single parents, displaced homemakers, and single pregnant women to continue their education, develop marketable skills, and make vocational training more accessible and successful. Nine LEAs and community based organizations were funded to address the needs of single parents, displaced homemakers, and single pregnant women. These nine programs served a total of 618 students at the secondary level. The following services were provided to participants involved with these grants.

*Description  
of Services*

**Assessment.** An assessment of abilities, interests, and special needs of participants provided coordinators an opportunity to plan and implement special activities and services to meet the participants' needs.

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

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

**Outreach/Referral Services.** Referral services to, and contacts with, other community agencies were regular and ongoing. Most of the programs were funded with direct collaboration for implementation between the LEA and a specific community based organization. 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 keeping up with their school work.

**Employability Skills.** In addition to regular vocational 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 programs in its school system.

- 1) Some LEAs used the single parent 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 the individual needs.
- 3) Some programs incorporated a special incentive component for extra motivation and student accomplishment. Participants earned extra opportunities through compliance with an agreed upon goal such as reduction of absenteeism.
- 4) Some programs included a male support group for the fathers of the participants' children.

**Services Most Needed.** The services most needed were:

- 1) Counseling and guidance support
- 2) Financial resources for child care, transportation, and materials
- 3) Outreach and referral services
- 4) Life skills training.

## Sex Equity

### *Achievements and Services*

The goals of the sex equity programs were to provide programs, services, and activities to eliminate sex bias and stereotyping in vocational and technical 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 1993-1994 school year, 29 sex equity grants were awarded to LEAs to address equity issues. More than 6,154 students were served in grades six through twelve.

Twenty-six 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 hands-on technology exploratory activities in such areas as electronics, drafting, lasers, hydraulics, and auto technology. Computerized software programs were used extensively. The activities were diverse and included non-traditional speakers, tours to aerospace sites, aircraft fight control centers, and shadowing.

ROPES, a course providing personal challenges, cooperation, and building of self-esteem and self-confidence, was used to help meet the goals of individual programs.

During the regular school year, services provided included workshops, seminars, guidance and counseling, decision-making skills, time and money management, educational and career planning, employability skills, assertive training, and tutorial assistance. Career day activities planned for all students included presenters representing non-traditional occupations.

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

Local follow-up surveys of program participants revealed an increase in non-traditional training and employment, a decrease in dropout statistics, and a significant attitudinal change in gender role stereotyping by students and adults.

A special research project was conducted to determine the effects of participation in gender equity programs on sex stereotypical attitudes and enrollment trends of vocational and technical students in North Carolina. This study involved 1,232 students. The study revealed non-traditional enrollment rates have not significantly changed statewide; however, participation in federally funded sex equity programs have consistently and positively affected students' attitudes toward reducing sex stereotypes. The students' level of awareness and acceptability of non-traditional choices had increased.

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

*Preparatory  
and Support-  
ive Services*

Program products were developed and included brochures, curriculum guides, career and educational plans, career packets, marketing designs, posters, 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.

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 teams from approximately 32 local educational agencies participated in a statewide three-day Equity Update Conference held for vocational and academic teachers, counselors and administrators.

Technical assistance included local contacts, telephone calls, on-site monitoring visits, correspondences, review of progress and final reports, and presentations at conferences and workshops. Equity materials were distributed to all vocational administrators.

These activities and services have contributed to improving programs through increased awareness of equity issues in vocational education and employing strategies to eliminate barriers that prevent equity.

## Criminal Offenders in Correctional Institutions

### *Institutions Participating*

The North Carolina Division of Youth Services, in the Department of Human Resources, operate five training schools for delinquent and at-risk youth with special needs. Annually, approximately 1,000 adjudicated youth ranging in age from 10 to 17 receive services. The five training schools are: Dillon School, located in Butner; Dobbs School, located in Kinston; Juvenile Evaluation Center, located in Swannanoa; Samarkand Manor School, located in Eagle Springs; and Stonewall Jackson School, located in Concord.

The ultimate goal of the training school experience through vocational education is to direct youth toward responsible living as productive, self-reliant and desirable citizens upon their return to their respective communities. Many of the students attempting to acquire vocational skills are in need of a better foundation in basic work and study skills.

### *Students served*

The Division of Youth Services received \$50,000 from the Carl D. Perkins Act through the Department of Public Instruction. The money was used to provide in-service training for both vocational and academic instructors in order to effectively integrate basic skills and vocational education, and to purchase equipment and supplies to improve educational opportunities for disadvantaged youth.

The yearly school population committed and receiving services were as follows:

	Dillon	Dobbs	Jackson	JEC	Samarkand	Total	Percent
Males	37	149	212	219	139	756	87
Females	3	0	0	58	48	109	13
Total	40	149	212	277	187	865	100

#### Age at Time of Commitment: (Gender)

Age	Males	Females	Total
12 & Under	25	0	25
13	88	13	101
14	183	32	215
15	311	49	260
16	136	12	148
17	13	3	16
Total	756	109	865

#### Commitments for Each Facility: (Race)

Facility	Whites	Minorities	Total
Dillon	11	29	40
Dobbs	36	113	149
Jackson	66	146	212
JEC	110	167	277
Samarkand	49	138	187
Total	272	593	865

At least 75 percent of students attended classes regularly and successfully completed courses in which they were enrolled. This was accomplished through teachers using techniques and methodology learned during inservice training. Workshops and work sessions were held for teachers, principals, and educational consultants to provide assistance in improving instruction by integrating basic skills and vocational education. Although more training is needed, some teachers have acquired basic skills and understanding of how to use Vocational Competency Achievement Tracking System (VoCATS) and the value of using the VoCATS system.

Vocational program plans were revised during work sessions to ensure that student learning experiences enabled them to acquire marketable skills in course offering. Courses offered were: horticulture, business education, automotive technology, cabinet/furniture making, home economics, graphics/communication, workplace readiness, entrepreneurship, small engine repair, upholstery, and welding. Competencies and learning objectives for each course have been aligned with VoCATS blueprints.

A pilot program was initiated at Dobbs School using additional funding from a Charles Stewart Mott Grant. Preparations were begun for use of a multi-level curriculum that emphasizes life skills, personal development and responsibilities, and work force preparation.

As a result of having Carl D. Perkins Funds, the teaching-learning experiences of the teachers and students have been greatly enhanced.

#### *Achievements and Services*

# Special Populations-Disabled

## *Achievements*

### **Achievement in providing equal access for disabled**

The number of disabled students enrolled in vocational and technical education programs increased for the fourth consecutive year. During the 1993-1994 school year the enrollment of disabled students increased by ten percent. These students were enrolled in the full range of vocational offerings and the majority of them participated in the regular vocational programs.

### **Achievement in providing equal access in recruitment**

Recruitment activities were presented in the middle grades and at the high school level for disabled students. In the eighth grade, special populations coordinators, industry-education coordinators, vocational teachers, vocational student organization members, and guidance counselors provided orientation sessions about the vocational programs available in the high schools. Brochures, open house events and parent nights were used frequently to provide the required information to parents and students. Curriculum assistance guides were developed by the local education agencies and distributed to all students. In some cases, the support personnel visited the special education classes to ensure the students were aware of the vocational program offerings.

### **Achievement in coordination between special education and vocational-technical education**

Coordination improved between vocational and technical education and the exceptional childrens' programs at the state and local levels. At the state level, consultants from both programs met periodically to improve coordination. Exceptional Children's Consultants presented sessions during statewide workshops for local vocational support personnel on coordinating services at the local level and on the mandates from the Individuals with Disabilities Education Act. Vocational and technical education consultants made presentations to exceptional children's program administrators and teachers to explain the Perkins legislation. At the local level, vocational personnel participated in vocational planning meetings and assisted in the development of the vocational component to the IEP. As a result, more disabled students have individualized vocational plans.

### **Achievement in assessment**

Special populations coordinators and technical assistants were employed to provide vocational assessment to members of special populations. Appropriate levels of assessments were administered to students who were unable to take successfully the paper-and-pencil inventories. The vocational assessments included an aptitude test and interest and learning styles inventories. Information from the special education teachers,

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

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

#### **Achievement in career development**

After the vocational assessment, a career counseling session was held with each disabled student. A career development plan was developed for each student planning to enter high school. The plan included a career goal, the most appropriate sequential course of study, assessment data, and support services needed to ensure the success of the student while enrolled in the vocational program.

#### **Achievement in providing equal access for transition from school to work**

All disabled students participating in the exceptional childrens' programs who were at least 16 years of age had a transition component to the IEP. Vocational and technical personnel coordinated the transition services required of them in the IEP. In addition to those services, disabled students received instructional services related to transition through the competency based system. Those enrolled in co-op courses were employed part-time in jobs related to their course of study. Some were exposed to shadowing, internships, apprenticeship experiences, and actual job placement coordinated with various businesses and agencies.

#### **Description of the impact of supplemental services provided to the disabled**

The provision of supplemental services and the training of vocational teachers proved instrumental in increasing the enrollment of disabled students in the regular vocational classrooms. The statewide assessment indicated a need for improving the skills of vocational teachers for teaching disabled students. Consultants from the program areas planned sessions to improve teaching strategies. As a result, more disabled students were able to move from Level I, to Levels II and III than in the previous years.

*Impact*

## Special Populations-Limited English Proficient

### *Achievements*

The percentage of limited english proficient (LEP) students increased by 14 percent in the 1993-1994 school year. 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 they had a solid foundation in English. However, special populations coordinators worked very closely with the LEP students to ensure they understood their course work. Tutors, peer helpers, community persons and the coordinators were available to provide the support services needed by these students enrolled in vocational and technical education.

## Special Populations-Disadvantaged

### *Impact*

The percentage of disadvantaged student served in vocational education programs increased by six percent in the 1993-1994 school year. For the past two years, thirty-three percent of the total vocational and technical education enrollment has been disadvantaged. Disadvantaged students were enrolled in the full range of vocational offerings in the state. Special populations coordinators and others provided supplemental services needed for the success of disadvantaged students in vocational and technical education.

More of the disadvantaged students were able to advance from Level I, to Levels II and III courses than in previous years.

## State Leadership and Professional Development

### *Programs*

#### **New, Expanded, and Discontinued Programs**

The chart on the next page reflects the state's secondary new & discontinued vocational programs. The report shows the number of new (and potentially expanded) classes (subjects that were taught in 1993-94 but not in 1992-93) and the number of discontinued classes (subjects that were taught in 1992-93 but not in 1993-94) for all vocational education courses taught in North Carolina. If a subject was taught in both school years and had the same class count in both years, there were no counts shown on the report for that subject code. The report was generated using the 1992-93 and 1993-94 data files and was sequenced by program area and subject code.

Program Area	New Courses/Classes	Discontinued Courses/Classes
Agriculture	346	245
Business	898	313
Health Occupations	83	0
Home Economics		
Consumer	1,597	524
Occupational	3	0
Marketing	58	61
Technology	655	1,011
Trade & Industrial	29	25
Employability Skills	155	0

## Professional Development

The Vocational and Technical Education Management Plan included specific goals and objectives for the training of vocational personnel including teachers, counselors, teacher educators, and state and local administrators. Priority was given to curriculum integration of academic and vocational education, technical updates including all aspects of the industry, Vocational Competency Achievement Tracking System (VoCATS), Tech Prep, applied curriculum, and special populations.

Workshop title and attendance at personnel development workshops sponsored by Vocational and Technical Education were categorized by state organization and included the following information:

*Accomplishments*

### REPRESENTATIVE PERSONNEL DEVELOPMENT ACTIVITIES

Activity Title	Attendance	Total
1994 Vocational & Technical Education Summer Workshop (school-to-work, curriculum intergration, tech prep, and all aspects of the industry)		3,110
Agriculture	248	
Business	464	
Career Development	340	
Health Occupations	121	
Industry-Education Coordinators	136	

	Activity Title	Attendance	Total
<i>Planning &amp; Performance Management Personnel Development</i>	L.I.V.E. - Leadership Institute for Vocational Educators	30	
	Home Economics	543	
	Marketing	200	
	Special Populations	141	
	Technology	109	
	Trade and Industrial	475	
	VoCATS Coordinators	46	
	Directors/Teacher Educators	164	
	Staff/Guest	93	
			3,110
	V&TE Directors' Roles in Performance-Based V&TE using TQM	160	
	Special Populations Coordinators' Roles in a Performance System	140	
	The NC Workforce Development Performance System	120	
	The Interagency Coordinating Committee's Roles in the Workforce Development Paradigm	60	
	The Workforce Development System in NC	60	
	Vocational Education Information System and V&TE Performance	160	
	New Special Populations Coordinators' (SPC) Workshop	123	
	Regional Special Populations Coordinators' Workshops	65	
	Planning, Implementing and Evaluating SPC Services	145	
<i>Program Support Management</i>	Civil Rights and Special Populations Coordination	145	
	V&TE Performance Data and Industry-Education Coordination	111	
	JTPA Project Managers Workshop	72	1,361
	Reading for Learning	300	
	Teacher Education Strategies for Implementing VoCATS		
	– An Instructional Management System	40	
	Fall Teacher Educator/Local Director/ State Staff Meeting – Changing Vocational Education Curriculum for the 21st Century	225	

Activity Title	Attendance	Total
Establishing A High School Youth Apprenticeship Program	300	
Performance Standards and Measures	150	
VoCATS Train-the-Trainer for Instructional Management	60	
VoCATS User Conference – Successful Implementation Techniques	275	
Tech Prep Conference (co-sponsored with Tech Prep Leadership Center & Dept. of Community Colleges)	900	
Equity Leadership Conference	100	
Equity Impact Workshops	60	
Single Parent Grant Implementation Workshop	22	
Minority Leadership Development Workshop	60	
VoCATS User Group Regional Workshops	360	
Leadership Institute for Vocational Educators	120	
		2,972

Aquaculture	48
Horticulture Curriculum Alignment	11
Pesticides Licensing	16
Small Engine Technology	32
Swine Management	50
DLS Broadcasts for Banking/Finance, Technical Updates	247
NC Academy for Critical Thinking	25
Business Consumer Education Workshop-American Express	60
Business Consumer Education Workshop-VISA	40
Keyboarding Methodology	30
Internet	130
Marketing Education Series Director Training	12
DECA District Officer Training	150
Marketing Education Curriculum Development Conference	10

**Biotechnol-  
ogy, Busi-  
ness &  
Marketing  
Careers**

861

	Activity Title	Attendance	Total
<i>Industrial Technol- ogy, Fam- ily &amp; Career Develop- ment</i>	DLS Broadcast – School-to-Work	100	
	Vocational Education Equipment Standards	50	
	VSO...A 20/20 Vision for the Year 2000	35	
	Special Populations sessions for Directors	100	
	Consumer Home Economics		
	Grant Workshop for 1993-94 recipients	58	
	TQM Workshop	25	
	VICA State Leadership	145	
	Fall & Spring Cosmetology	42	
	General Motors/ Automotive Technology	31	
	Special Populations Services for Teachers	45	
	Youth Club Organization Course (ECU)	25	
	TSA State Conference	500	
	Principles of Technology	70	
	Principles of Technology – Electronics	20	
	Manufacturing Technology	8	
			1,254
		Grand Total*	9,558
	*Represents a Duplicated count		

## Curriculum Development

An additional 20,000 test items were developed as work continued on the Vocational Competency Achievement Tracking System (VoCATS) - a system for planning, implementing and evaluating instruction. The information provided by VoCATS about the current level of student performance in vocational and technical education programs is required as a "baseline" for documenting student competency mastery/gains, and setting performance goals.

Throughout the year, course blueprints were completed and/or refined (total 90). Blueprints outline the scope of the curriculum outcomes for a given course, as well as list the units of instruction, core competencies in each unit, specific objectives for each competency, number of hours or class periods to be devoted to each, type of outcome behavior and related skill area. Blueprints are intended to be used by teachers in planning the course of work, for preparing daily lesson plans, and in developing instructionally-valid, pre-interim-post tests.

During the 1993-94 school year, approximately 20 curriculum packages (total 82) were developed and disseminated. The VoCATS curriculum package for each vocational and technical education course/program included the following materials:

A course blueprint lists the competencies and objectives and indicates the relative importance of each. Blueprints were developed by teams of teachers with input from business and industry representatives.

A computer-managed competency/test-item bank was developed in North Carolina and tied specifically to the competencies and objectives in the blueprint.

Curriculum guides were also developed and were keyed to the blueprint. This provides detailed information on units of instruction, including resources and instructional and evaluation strategies. Guides included suggestions on integrating related basic skills and higher order thinking skills and for working with special populations.

The computerized instructional management software was upgraded and made available to personnel in each school system. In addition, user conferences and training workshops were made available to the local vocational directors and VoCATS coordinators in each LEA. The software was used to generate approximately 60 statewide pre/post tests and these were administered to students across all classrooms.

*Benefits*

Data from these tests have been analyzed. (See Appendix 2-A).

VoCATS products were made available for the courses and programs in the Vocational and Technical Education Programs of Study and Support Services Guide. Efforts continued to develop new materials to update existing materials to keep them relevant as vocational and technical education empowers young people in North Carolina for effective participation in a global economy as world class workers and citizens. Additional work took place to further refine the system itself, making it more usable and useful for local educators.

## **Accomplish- ments**

## **Research**

Research in Vocational and Technical Education during the 1993-94 school year was focused on professional needs, students, and equipment use. The attitudes, inservice priorities and preparation of vocational and technical educators and other professionals were studied. Attitudes about students in non-traditional vocational courses were researched. Equipment used in business education programs was also studied. The seven research projects by title, researchers, and postsecondary institution were:

<b>Research Title</b>	<b>Researcher(s) &amp; Institution</b>
The Attitudes of <b>School Counselors</b> Toward <b>Students Enrolled in</b> <b>Non-traditional Vocational Courses</b>	<b>Mark Estep</b> <b>Ming Land</b> Application State University
The Professional Needs and Inservice Priorities for Professional Personnel in Tech Prep	<b>Bob Wrisley</b> <b>John Swope</b> East Carolina University
The Preparation and Perseverance of Traditionally and Alternatively Prepared Teachers in Vocational Education	<b>Gary Moore</b> North Carolina State
Types of Equipment and Software being Used in Business Education Programs	<b>Ivan Wallace</b> East Carolina University

Research Title	Researcher(s) & Institution
Attitudes of School Counselors toward Students Enrolled in Non-traditional Vocational Courses: Perceptions Toward Male Students Enrolled in Home Economics Courses	Harriet Enzor Karen Nery Campbell University
Factors Influencing the Decline in Students Taking Cooperative Vocational Courses	Tom Allen Appalachian State University
Professional Needs and In-service Priorities for Vocational and Technical Education Teachers	Dewey Adams Jim Flowers Dan Sullivan North Carolina State University

## Youth Apprenticeships

The high school youth apprenticeship programs have continued to expand statewide. At the end of the 1993-94 school year 115 high school students were participating in apprenticeship programs registered with the North Carolina Department of Labor. Apprenticeship programs in Catawba County, Beaufort County (Washington High School), and in the recently consolidated Nash/Rocky Mount systems, have gained statewide recognition for the programs they have developed. Each program represents a collaborative effort on the part of the **North Carolina Department of Labor**, the local school system, and business and industry. **In May of 1994**, the annual Andrew Johnson Memorial Apprenticeship Forum was held and over 300 representatives from business, industry and education attended. For the first time in the history of the forum, high school youth apprenticeship programs were given special recognition. In an effort to expand apprenticeship in rural counties, the North Carolina Rural Economic Development Council provided funding for the **development and expansion** of programs in Beaufort, Granville, and Richmond Counties.

### *Achievements*

High school youth apprenticeship programs were a major focus in the overall mission of developing a comprehensive and coordinated workforce preparedness system for North Carolina. Plans were **finalized** to create a position funded jointly by the North Carolina **Departments of Labor** and Public Instruction to coordinate the work of these **two agencies** in their joint high school youth apprenticeship efforts.

# Community Based Organizations

## Overview

### Number Served

During the 1993-1994 school year, 259 economically and academically disadvantaged students, ages 16-21, were provided services from community based organization grant funds.

### Urban and Rural Areas Served

Contracts were awarded to the following LEAs: Northampton County, Wilson County, Guilford County, Nash County, Union County and Wake County. Four of the projects were located in rural areas and two were located in urban areas. Northampton County was classified as disadvantaged by several criteria: 1) severe rural isolation, 2) economic depression, and 3) low educational attainment. Wilson County's median income was \$15,000 with an economic blend of agriculture, business and industry. Guilford County, one of the urban areas, had the largest Asian population in the Southeast. Employability in this urban area made it attractive for relocating immigrants. Many of the Asian students were economically and academically disadvantaged and classified as having limited English proficiency. Nash County, one of the rural areas, had a growing number of working poor. Union County was a rural area which had a vast array of socioeconomic levels. Seventy-eight percent of the students attending this school system were recipients of the AFDC program. Wake County, the state capital and urban area, was the location for a funded project for families whose income fell between the poor and lower-middle income range, sometimes classified as the "working poor".

## Programs, Services, and Activities

Northampton County Schools and Choanoke Area Development Association cooperatively presented Project TEEN (Transition Employment Experience Network). This program provided transition skills to severely economically and academically disadvantaged students. The students received preparation for entering the world of work after completing the vocational education program. This was the second year of funding for the project.

The participants received comprehensive assessment services designed to determine their: vocational aptitudes, interests, and abilities; need for service coordination, work history and expectations; and barriers to employment such as transportation, day care, health problems, etc. This information was used to develop individual educational and employment goals. Vocational Rehabilitation was responsible for assessing the students enrolled in the 11th and 12th grades.

Educational and vocational needs were addressed on the vocational and transition components of each student's IEP. Teachers and students were given copies of the plans. All of the students received training in job

interviewing, completing job applications, using printed audiovisual materials, role playing, and job searching. They received information about job duties, wage rates, grievance procedures, time sheets, other reporting requirements, and jobs available in the area. Therefore, jobs had to be developed and supported by the project as incentives for employers to hire the participants. Job sites included the LEA, and city and county offices.

Of the 47 participants, 9 entered sheltered workshops, 1 became employed and 3 furthered their education. The remaining 34 students, remained in school, 14 were interested in sheltered workshops, 7 planned to enter the workforce after high school and 13 planned to further their education.

Wilson County Schools and Wilson Opportunities Industrialization Center presented the Vocational Education Support Training (VEST). This was designed for academically and economically disadvantaged dropouts and potential dropouts. The purpose of the project was to prevent "at-risk" youth from dropping out of school and to promote the re-entry of students with a 26-week individualized learning program of vocational training and vocational support activities such as data entry operators, clerks and/or related service occupations.

VEST combined courses aimed at behavior modification with special support service activities. These services were designed to help at-risk students achieve success in the selected vocational **training program**. A laboratory course provided hands-on training with equipment necessary to obtain competencies in selected vocational areas and on-the-job vocational training. Of the 25 students enrolled in the program 11 graduated, 12 planned to return to school and 2 were undecided.

Guilford County Schools and Lutheran Family Services provided a program for limited English proficiency students. The purpose of the Language/Cultural Networking for LEP Students in vocational education was to reduce the effects of language and culture as barriers for successful performance in the vocational classroom and successful entry into the job market. This project has been funded since 1990. During the summer the students participated in Any Town, a special prevocational multicultural camp and the Greensboro Human Relations' Youth Leadership Program designed to provide participants with a working knowledge of Greensboro's administrative and political processes. This specific program was coordinated with the assistance of the project coordinator but was funded by other agencies.

The P.A.L.S. program, a special prevocational program for LEP students focused on sociocultural counseling and literacy training including, integrating basic math skills, basic scientific, historical, and geographical knowledge with listening to, reading, speaking, and writing English. Support was provided in vocational classrooms to assist students in taking notes, reading texts, taking tests, and completing projects. Teachers received advice on instruction and materials' modification for LEP students. The project also included homework management for students, and financial management for parents and students. This approach encouraged parents to become more involved in each student's education, created more confidence and self-sufficiency in parents and their children, and provided a support network for the new arrivals. The reading and writing improved for participants as indicated by post test scores. Five students received recognition on "Senior Day" and three students had perfect attendance.

Nash-Rocky Mount County Schools and Rocky Mount Opportunities Industrialization Center also presented a VEST (Vocational Education Support Training) Program. This was a 36-week program for disadvantaged dropouts. VEST combined courses aimed at youth behavior modification with special support service activities designed to help "at-risk" students achieve success. Also, a laboratory course provided hands-on training (up to 20 hours per week) depending on class performance and employer preferences. The participants in this activity were limited to those youth who had successfully completed a minimum of 25 hours of VEST training. By the end of the program 120 youth had been reached, 28 were enrolled in VEST training, 28 placed in the Try-Out Employment and 27 were placed in unsubsidized employment.

Union County Schools and Community Action coordinated the Champions for Education Program. The primary goal of the program was to assist interested disadvantaged seniors in making a successful transition from high school to a local community college or four-year institution, thereby enabling them to continue their education and skill development. A Career Development Plan was developed for each of the participants. These plans were based on career counseling. Work sites were identified by Community Action, school-based coordinators, project coordinator and assistant, cooperative education teachers and JTPA staff. All working participants were encouraged to save money toward their own education during the school year. Workshop and seminars were offered through the school year and focused on building self esteem, SAT preparation, financial aid, goal setting, and employability skills. Additional information about this program can be found in Appendix 6.

### **Exemplary CBO Program.**

Wake County Communities In Schools, in cooperation with Wake County Public School System, offered a Vocational Support Program to eligible students. The purpose of the program was to prepare economically and academically disadvantaged students ages 16 through 21 to enter the job market upon exit from high school. This was accomplished through attainment of Private Industry Council-recognized youth employment competencies in the areas of pre-employment/work maturity and basic education skills.

The structured course of instruction offered one unit of academic credit to the student. In addition, the teacher made contacts with business and industry to arrange for guest speakers and field visits. The students were taught competencies and basic education skills which were recognized by the Capital Area Private Industry Council. The program included, but was not limited to: individual/group counseling, personalized study, career-related discussions presented by business persons/guest speakers, industry tours, and instruction in basic education skills. Classroom and job placement activities continued through the regular school year, with placement and job preparedness training continuing until June, 1994.

## **Consumer and Homemaking Education**

### **Programs and support services in depressed areas**

The Vocational Education Information System data showed the 1993-1994 enrollment for Consumer Home Economics increased 10.5 percent to 56,278 students. This was largely due to combining the service lab students into Exploring Life Skills and concentrated scheduling. This enrollment represented 19.3 percent of students taking vocational and technical education in North Carolina.

Consumer and Homemaking set-aside resources were used for grants competitively awarded to local schools systems. Of the \$833,546 applied to grants, 38% was spent in economically depressed areas. This represented 15 of the 29 grants awarded or 52 percent of grants awarded.

Consumer Home Economics continues to serve special population students in North Carolina. Of the total of all students served, 41 percent were disadvantaged and 9 percent were disabled. The total enrollment of special population students comprised 38 percent of all vocational enrollees statewide. The percentage of special population students enrolled in consumer home economics continues to increase.

### *Achievements*

The grant recipients focused on the purposes found in Perkins legislation. Twelve of the grants encouraged participation of traditionally underserved populations. These included coordination of services for families of at risk students, development of resources for at risk students, and teaching of nutrition and parenting skills to teen parents. Four grants addressed specific local, state and national priorities and emerging concerns such as addressing SCANS in living skills, integrating communication skills, improving the use of technology, and emphasizing food science.

All of the instructional areas listed in the legislation were utilized by the grants. Instructional areas most frequently identified were managing individual and family resources, understanding consumer choices, applying skills in the work of the family to job and career skills, acquiring new technology in work and life, and utilizing individual, child and/or family nutrition and wellness.

Implementation strategies selected most often were application of academic skills, development of instructional materials, and focus on community outreach projects.

A final summary report of all grants is available in the State Home Economics Education office. The three exemplary programs/projects summarized in Appendix 7 are:

Hoke - Parenting and Technology Skills

Martin - SCANS: Content, Curricula, Context

Warren - BASICS in Home Economics, Part 2

### *Achievements*

#### **Programs and support services in non-depressed areas**

Fourteen of the 29 grants for 1993-1994 were awarded to non-depressed areas. Of the 14, nine directly related to serving disadvantaged and underserved populations. These included specialized services for teen parents, strategies for teachers serving special populations, technological **integration** and resource development.

Implementation strategies most frequently used were application of academic skills, community outreach projects and curriculum development.

A final summary report of all grants is available in the State Home Economics Education office. The three exemplary projects summarized in Appendix 7 are:

Burlington City - North Carolina Home Economics Curriculum Project  
Carteret - Hi-Tech Home Economics for Down East Youth  
Wake - Developing a Food Science Experiment and Activity Guide

### **Achievement in State Leadership and State Administration**

The state directed the development and completion of two course blueprints and five test item banks, 15 workshops, and 29 grants to school systems for \$833,546. Modifications to the program of study were reviewed and approved for 23 school systems and FHA/HERO membership data and funds were monitored.

Coordination was achieved with sex equity issues and programs. State home economics staff assisted the state sex equity coordinator in the review of sex equity grant applications. The equity coordinator assisted in the review of the consumer home economics grant applications. The state sex equity coordinator assisted in judging state competitive events for FHA/HERO.

The most comprehensive teacher inservice training offered was the Home Economics Education Summer Workshop for 543 teachers and teacher educators. The most comprehensive student inservice training for secondary student was the FHA/HERO State Leadership Conference for 1,556 students and teacher-advisers.

At the Home Economics Education Summer Workshop, workshops and presentations were offered in curriculum development, skills necessary in jobs and careers, technology, nutrition and food science, and parenting education. The grant programs were showcased by the grant directors and administrators. The evaluation completed by teachers indicated an overall conference rating of excellent.

The FHA/HERO State Leadership Conference had students participate in competitive events, leadership workshops, informational and project workshops, and recognition programs. In North Carolina FHA/HERO is the third largest vocational student organization with 9,696 members. Through the 299 North Carolina FHA/HERO chapters, scholarships were awarded amounting to \$33,750. This is the seventh largest FHA/HERO student organization in the nation.

*Accomplish-  
ments*

## *Benefits*

The Home Economics Education priorities comprehensively contained all aspects of curriculum and instruction. These priorities were identified as: 1) exploring life skills; 2) food science; 3) consumer home economics grants; 4) special populations; 5) tech prep; and 6) VoCATS. All of the grants had objectives and strategies which encompassed the priorities. Grants most frequently included the priorities of special populations, VoCATS and Tech Prep.

Course blueprints and test item banks were written and completed for two Consumer Home Economics courses. Currently all courses have blueprints and test item banks. Schools incorporated Vocational Competency Achievement Tracking System (VoCATS) for course instructional management.

Two new Consumer Home Economics Education curriculum guides were developed by grant recipients. These were Parenting and Child Development and Clothing Design which also had blueprints and test item banks developed. The three new Consumer Home Economics Education resource guides developed by grants included integration of communication skills, integration of science skills in Food Science, integration of SCANS and All Aspects of the Industry into two courses. Classroom and facility design, instructional units, and an annotated resource directory were some of the features in these resources. All resources incorporated extensive networking of teachers, teacher educators, and resource assistance to achieve the final products.

Two new North Carolina FHA/HERO resources were completed. These included the **Competitive Events Guide** and the **North Carolina FHA/HERO Handbook**.

State Home Economics Education staff made 17 on-site visits to LEAs and made two presentations to university programs. Staff participated in regional FHA/HERO Leadership workshops for 1,556 students and competitive events for 1,763 students. State staff also participated in one **DLS Broadcast on School-to-Work**.

Inservice activities were held statewide to support the Food Science, SCANS and All Aspects of the Industry and Exploring Life Skills. On the regional and local levels, grants assisted at-risk students, and focused on use of **technology**, science and math integration, and family wellness.

### Exemplary programs developed

The six exemplary programs previously noted are described in Appendix 7. They are as follows:

Area	County	Purpose/Criteria
Non-depressed	Burlington City	NC Home Economics Curriculum Project
Non-depressed	Carteret	Hi-Tech Home Economics for Down East Youth
Depressed	Hoke	Parenting and Technology Skills
Depressed	Martin	SCANS: Content, Curricula, and Context
Non-depressed	Wake	Developing a Food Science Experiment and Activity Guide
Depressed	Warren	BASICS in Home Economics, Part 2

# Tech Prep

## *Secondary and Post-secondary Planning*

The Joint Policy Statement for North Carolina Board of Education and North Carolina Department of Community Colleges defines the Tech Prep concept in North Carolina.

Tech-Prep education program means a combined secondary and postsecondary program that:

- (1) leads to an associate degree or two-year certificate or completion of a registered apprenticeship program of at least two years in length;
- (2) provides technical preparation in at least one field of engineering technology, applied science, mechanical, industrial, or practical art or trade, or agriculture, health, or business;
- (3) builds student competence in mathematics, science, and communications (including applied academics) through a sequential course of study; and
- (4) leads to placement in employment.

The 1993/94 Tech Prep project evaluations were conducted for the purposes of collecting and reporting data on the progress of projects funded under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. This report provides information for program improvement to Tech Prep consortia and documents the effective use of the funding resource to interested local, state, and federal entities. The secondary section of the Tech Prep report consists of a description of the evaluation design, process, and the results in narrative and tabular format. The conclusions and a compilation of source documents can be found in the postsecondary Tech Prep report.

## Evaluation Process

### Methodology

Local Tech Prep consortia representatives were notified in advance of project review meetings scheduled during the last two weeks of June and the first week of July, 1994. Each consortium was asked to prepare a project budget summary and a structured executive summary of their project's progress in meeting the objectives outlined in their funded proposal. During each review meeting, each consortium was asked to make a 30-minute oral presentation of project activities within previously identified categories of Tech Prep activities. The categories were:

Articulation Efforts,  
Collaboration Efforts,  
Curriculum Integration Efforts,  
Curriculum Improvement Efforts,  
Guidance Services,  
Staff Development Efforts,  
Marketing Efforts,  
Services to Special Populations Students, and  
Achievement Results.

Reviewers from the Department of Public Instruction and the Department of Community Colleges compared information gathered from the executive summaries and oral presentations to the objectives in the funded proposals. Executive summaries are included in the postsecondary appendices. Additional information was elicited by the reviewers during a 15-minute question and answer period following the oral presentation. The reviewers obtained consensus on the rating for each categorical heading using a scale including the following choices: "Met, Partially Met, Not Met, or Not Applicable." Activities in the categories of Services to Special Populations Students are mandated under the federal legislation that funds consortia, so the rating "Not Applicable" was not used in evaluating planning or implementation grants. Documentation of the achievement results category was required in the request for proposals for implementation grants, and ratings of "Not Applicable" were not used in evaluating them.

### Evaluation Instrument

The instrument was jointly developed and used by the reviewers throughout the review process. A copy is included in the postsecondary appendices.

## **Analysis**

After data were collected through the review meetings, staff at the Department of Community Colleges compiled and analyzed information from the executive summaries and reviewers' comments. Ratings on the various headings for all consortia were assembled in a matrix. All evaluation is qualitative and is not intended for use in comparing or ranking consortia. The rating matrix is presented in Appendix 8. For informational purposes, staff categorized, as objectively as possible, the activities carried out by each consortium under the various activity categories. This information is presented in a separate matrix for each activity in the post-secondary appendices.

## **Evaluation Results**

### *Benefits*

### **Articulation Efforts**

Most consortia have made significant progress in implementing or updating articulation agreements. Most agreements center on granting college credit for certain vocational or technical courses completed as a part of the high school curriculum. To date, most efforts have resulted in time-shortened curriculum models rather than skill-enhanced models. In the most general terms, initial articulation efforts rely on a formal examination to verify competency for purposes of granting credit. As the articulation relationship between consortium partners and faculty matures, credit is more frequently granted on the basis of course completion with a specified minimum final grade.

### **Collaboration**

Most consortia have successfully developed a tripartite relationship among secondary education, postsecondary education, and employers. Most have established a local advisory board. Many are working toward creation of work-based learning experiences for students. These relationships have resulted in greater community awareness of Tech Prep and more effective marketing. Some consortia have actively involved employers in curriculum improvement activities, but this crucial activity is in need of expansion.

### **Curriculum Integration**

Two approaches to curriculum integration are often employed by the consortia. The first is establishment of curriculum integration teams to design learning experiences to link academic and technical content. These experiences may be at the course, project, or lesson level. Much of this activity has been undertaken at the secondary level; community colleges have done far less in the way of organized curriculum integration. The second approach to curriculum integration is the adoption of courses with applied approaches to mathematics, science, and communications skills. Many consortia have made these courses widely available.

### **Curriculum Improvement**

High schools most often made curriculum improvements by adding applied academic courses and equipping appropriate laboratories. Commu-

nity college curriculum improvements centered on adding new curriculums, deleting or upgrading outdated curriculums, or upgrading equipment.

### **Guidance Services**

The most common improvement in the area of guidance services is implementation of 4-year Career Development Plans for high school students. In the best cases, these are characterized by assessment of career interests and aptitudes, one-on-one counseling, parental involvement, and annual review. Many consortia are using Tech Prep funds to purchase and deploy computerized career guidance systems. Many colleges are working with high schools to offer college placement examinations to students prior to high school graduation. This provides students an indication of their readiness to enter college programs, and if done early enough, can be prescriptive of corrective actions needed prior to entering college.

### **Staff Development**

Much professional development activity for faculty, counselors, and staff has taken the form of conference and workshop attendance. Many consortia have provided curriculum integration training and on-site tours of business and industry. A significant amount of activity has been organized jointly for academic and technical faculty and for secondary and postsecondary faculty and staff.

### **Marketing Efforts**

Specific marketing strategies included publication of brochures, civic presentations, and advertising through billboards, newspapers, and electronic media. Most consortia are targeting internal and external markets. Many do not have a comprehensive long-term marketing plan. Those consortia that have tried to assess the effectiveness and penetration of marketing activities learned of a need for a continuous maintenance of effort to keep their Tech Prep program visible.

### **Special Populations**

Some of the services consortia provided to special populations students included Career Development Plans, Individual Education Plans, special support teams, tutorial services, and services during the transition from high school to community college. A general lack of consistency in services to special populations students was evident in the reviews.

### **Achievement Results**

Some consortia have designed systems for collecting baseline student achievement data and monitoring progress on key indicators; others have done very little. Data elements most frequently collected include change in Tech Prep enrollment, gains in student grades, gains in postsecondary enrollment, and decreases in drop-out rates. Often missing are indicators from standardized assessment instruments and changes in the percentage of students needing remediation at the colleges.

## Integrating Applied Academics into Vocational-Technical Education Programs

### Activities

Efforts to promote curriculum integration of academic and vocational-technical education have focused on extensive staff development for academic and vocational-technical education teachers, as well as including integration activities in the development of curriculum guides.

Many statewide workshops for vocational and technical teachers and administrators have focused on integrating academics. They included the following:

Activity	Participants
Reading for Learning	300
VoCATS Implementation	275
Tech Prep Conference	900
Academy for Critical Thinking	25
School-to-Work Workshops	100
Food Science Institute	70
Using TQM for Attaining Performance Standards	120
Internet	130
General Motors – Auto Technology	31

Through the Southern Regional Education Board pilot sites, efforts were made to combine **challenging academic** courses and modern vocational and technical 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 effort to succeed**. (Note forthcoming section entitled Southern Regional Education Board).

A North Carolina Academy for Critical Thinking continued with its commitment to target classroom teachers, administrators, teacher educators, and students. The academy, supported by a faculty of experienced and nationally recognized educators, graduated 25 fellows. A rigorous curriculum resulted in fellows submitting the products that also qualified for three units of teacher license renewal credit.

### Providing Assistance to Special Populations

An integration session for all vocational technical teachers and special populations coordinators was sponsored at the 1994 Summer Workshop. This workshop was presented to **approximately 100 participants**. The participants were presented **with an overview** of enhancing students learning. Through **direct instruction, discussion** and consultant modeling, participants examined practical strategies for integrating vocational and academic activities. 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 discussion and utilization of computer assisted instruction.

LEAs have reported numerous positive results from integration efforts. The impact on programs, teachers, and students included: improved student attendance and retention; lower drop-out 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 encourages students to succeed.

### *Impact*

#### **Southern Region Education Board (SREB)-High Schools that Work (HSTW)**

North Carolina is 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 they prepare students in general and vocational programs of study.
- 3) All students in general and vocational programs of study can complete a challenging planned four-year program of study with a blending of high-level academic and modern vocational courses.
- 4) The program of study for career-bound students can be organized to prepare students for both work and further study.
- 5) Teachers should use functional and applied learning strategies related to real world situations to help career-bound students.

Two schools continued in the state directed SREB/HSTW project during 1993-1994 and 11 schools were added. The two continuing schools were Hoke County High Schools and Greene Central High School. The 11 new schools were Wallace-Rose Hill High, Union High School, Union Pines High School, Triton High School, South View High School, Alleghany High School, West Iredell High School, White Oak High School, Lumberton Senior High School, East Carteret High School, and Mt. Airy High School.

All of the sites developed a plan of action which focused on the 1993-1994 key practices and signed a memo of agreement in support of SREB/HSTW beliefs and key practices. The 11 new sites participated in the NAEP assessment which had vocational completers tested in reading, math and science.

### *Accomplishments*

Hoke County High was selected by SREB as **an advanced site for HSTW** during the year and they were cited at the 1993 Fall Forum for significant improvement around the key practices. Also, Hoke County High and

Swain County High were selected for other HSTW sites to visit for demonstration. Union High and Mt. Airy High were awarded grants to provide a staff development activity to involve all the staff at their school around the HSTW key practices. South View High was selected as one of SREB Youth Apprenticeship sites. Greene Central High School was one of the first sites to participate in the new SREB/HSTW technical assistance visits. During the visits, outsiders familiar with the process of SREB/HSTW made a three-day visit to the site and provided the site with strengths found and recommended steps for improvement.

One of the major efforts in North Carolina for the HSTW sites was the participation in the SREB Reading For Learning Staff Development Activity. The purpose of this activity was to provide strategies to teachers that would assist students in improved reading. Two hundred-ninety teachers and 17 teacher educators participated.

During the year, three meetings were held with the NC SREB/HSTW sites. These meetings focused on site action plan development, the reading for learning workshops, what to expect with technical assistance visits and what to learn from the NAEP assessments.

## **Career Guidance and Counseling**

### ***Achievements***

In 1993-1994, four statewide inservice activities were held for approximately 325 Industry-education coordinators (IECs), both new and experienced. Individual programs of work were developed. Priorities of vocational and technical education were provided as a guide for program emphasis. IECs advised, counseled, and provided support services for students in the areas of program planning, career guidance and counseling, job placement, and postsecondary education.

### **Methods and Procedures**

A four-day session of the annual Vocational & Technical Education Summer Workshop was devoted to industry-education coordination. Participants were given information on workforce preparedness, career assessment, career development plans, performance standards, career development activities, regular classroom instruction, and techniques of apprenticeship.

### ***Activities and Services***

### **Descriptions of Program/Services**

Industry-education coordinators coordinated the development of four-year personalized education plans for students enrolled in vocational and

technical education. The process included a high school orientation, interest survey, aptitude test and counseling. The plans listed by grade the courses needed by students to prepare them for expressed career majors. Students' progress was monitored and revisions made to the plans as needed.

Some school systems provide an internship/shadowing programs for students to experience a job setting and acquire relative information to career interests and educational plans.

Seniors in vocational and technical education courses were provided informational packets about career/job and postsecondary training information.

Career Days and Job Opportunities Conventions provided students with career information opportunities to interview employers for job placement. Computerized career information systems were used extensively in career guidance and counseling programs.

IECs were involved in developing and facilitating the use of labor market information, curriculum guides for parents and students, and program brochures for public information. IECs became involved in establishing business/educational partnerships. These partnerships involved businesses in education efforts by providing services, support, equipment, and money for various projects.

IEC programs and services were evaluated at the LEA level. A state-approved performance appraisal instrument was used for evaluative purposes.

#### **National Career Development Guidelines**

Industry education coordination worked cooperatively with the State Occupational Information Coordinating Committee (SOICC) to facilitate the use of occupational information materials and promote career development activities. Vocational and Technical Education provided leadership for promoting the National Career Development Guidelines in all LEAs. These guidelines were endorsed by the State Board of Education.

Work was completed on the development, production, and distribution of a statewide model career development portfolio. A packet was distributed to all IECs, counselors, and SPCs in the state. The packet included a sample career development portfolio, implementation guide and resource manual.



## Appendices

Appendix 1	Enrollment Table
Appendix 2	Performance Standards
Appendix 2-A	Performance Standards Statewide Summary
Appendix 3	Exemplary Program for Disabled Students
Appendix 4	Exemplary Program for LEP Students
Appendix 5	Exemplary Program for Disadvantaged Youth
Appendix 6	Exemplary Community Based Organization Program
Appendix 7	Exemplary Programs for Consumer Home Economics
Appendix 8	Tech Prep Rating Matrix



SECONDARY ENROLLMENT; PERIOD COVERS July 1993 - June 1994

STATE: North Carolina NAME: Sarah Hawes PH. 715-1649

UNDUPLICATED				UNDUPLICATED AND DUPLICATED (PUT DUPLICATED IN PARENTHESES)								
OCC PROGRAM AREA	TOT ENR	TOTAL		REG VO-TE-ED	DIS- ADV	LEP	DIS- ABLED	CORR	SP/DH /SPW	SEX EQ (NON- TRAD)	ADULT	COM - LETER 1993
		MALE	FEM.									
AGRICULTURE	13033	11274	1759	7042	4220	27	1744			37		(2292)
MARKETING	13081	5588	7493	7868	4597	36	580			23		(1778)
CONS/ H'MAKING ED	32971	8651	24320	16195	13389	120	3267			73		(10542)
OCC HOME EC	4300	773	3527	1795	2101	30	374			13		(1146)
TRADE & INDUSTRY	37723	32499	5224	20245	13038	125	4315			49		(8463)
HEALTH	10398	1532	8866	7360	2734	34	270			37		(1965)
BUSINESS	74705	29161	45544	52711	19147	459	2388			119		(6091)
TECHNOLOGY ED	10727	9303	1424	6407	13038	125	4315			59		(1396)
GRAND TOTAL	196938	98781	98157	119623	72264	956	17253	1000	618	410		(33673)



SECONDARY ENROLLMENT; PERIOD COVERS July 1993 - June 1994

STATE: North Carolina NAME: Sarah Hawes PH. 715-1649

UNDUPLICATED AND DUPLICATED (PUT DUPLICATED IN PARENTHESES)										
OCC PROGRAM AREA	LINKAGE				PLACEMENT					
	TECH-PREP	CO-OP	APPR	WK-STDY	CONT ED	EMPLOYED		MIL	OTHER	CURRENT TEACHERS
						R'LTD	OTHER			
AGRICULTURE	5106	243		101	(1261)	(1604)	(699)	(115)	0	(352)
MARKETING	4357	4357		0	(1102)	(1227)	(422)	(53)	(18)	(347)
CONS/H'MAKING ED	10363	122		0	(6325)	(6114)	(4748)	(422)	(316)	(1124)
OCC HOME EC	1673	511		96	(584)	(722)	(433)	(23)	(57)	(300)
TRADE & INDUSTRY	14470	2225		143	(4909)	(5755)	(3657)	(592)	(85)	(1180)
HEALTH	3209	1900		5	(1592)	(1100)	(1589)	(39)	(39)	(213)
BUSINESS	16984	1134		107	(4568)	(3716)	(3067)	(183)	(61)	(1687)
TECHNOLOGY ED	3639	37		0	(1047)	(796)	(1013)	(112)	(14)	(617)
GRAND TOTAL	59801	10286	115	452	(23751)	(21034)	(15628)	(1539)	(590)	(5820)



## Secondary Vocational and Technical Education Long-Range Performance Standards

## Appendix 2

Approved on 6 January 1994 by the N.C. State Board of Education

1. Each student enrolled in vocational and technical education, grades 9-12, will have a career development plan (CDP)<sup>1</sup> on file which includes academic and vocational and technical education courses appropriate for his or her designated career goal.
2. If the enrollment of members of special populations in any vocational and technical education program area differs more than a third from the overall special populations percentage enrolled in all vocational and technical education programs in that school, the enrollment must be justified by documentation of student choices as evidenced by the career development plan (CDP).
- \*3. Eighty percent of all students completing each vocational and technical education course will have mastered 80% of the core competencies designated on the statewide course blueprints.<sup>2</sup>
- \*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**.

- 
1. For each special populations student, a section (called "plus" or "+") will be included as part of the CDP, listing incentives and adjustments necessary for that student to carry out his/her CDP, resulting in a "CDP+" for each.
  2. \* Standards three through five reflect targets based on **data collected** through January 1995.

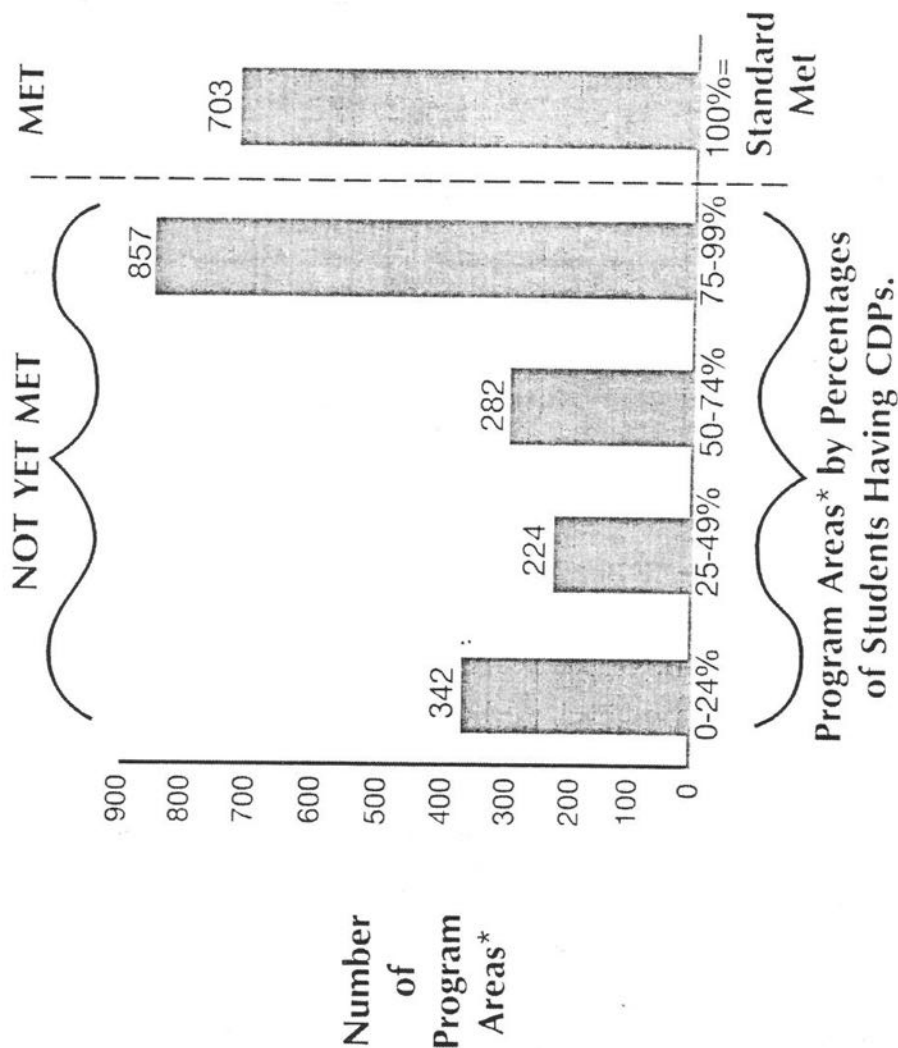


# Vocational and Technical Education

## Long-Range Performance Standard One:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard One



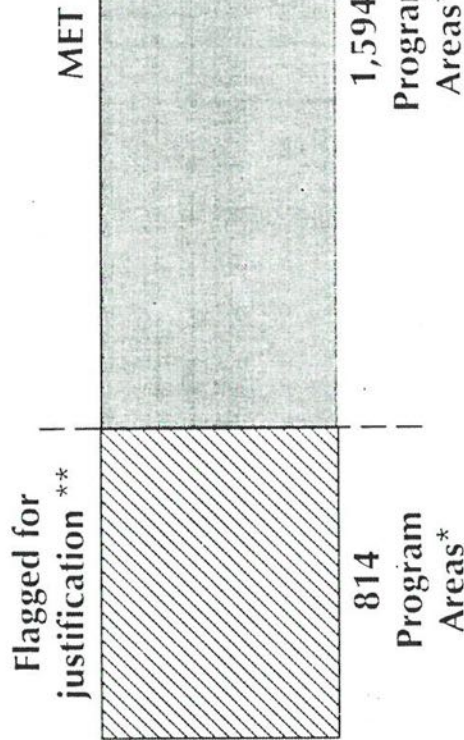
\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 2,408

# Vocational and Technical Education

## Long-Range Performance Standard Two:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard Two



# Vocational and Technical Education

## Long-Range Performance Standard Three:\*

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

## Long-Range Performance Standard Four:\*

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

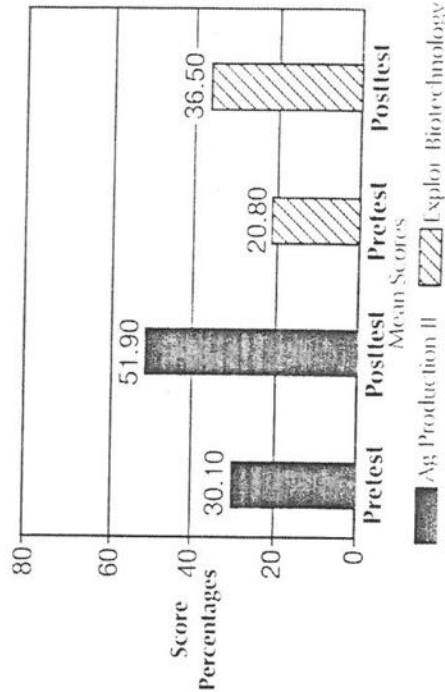
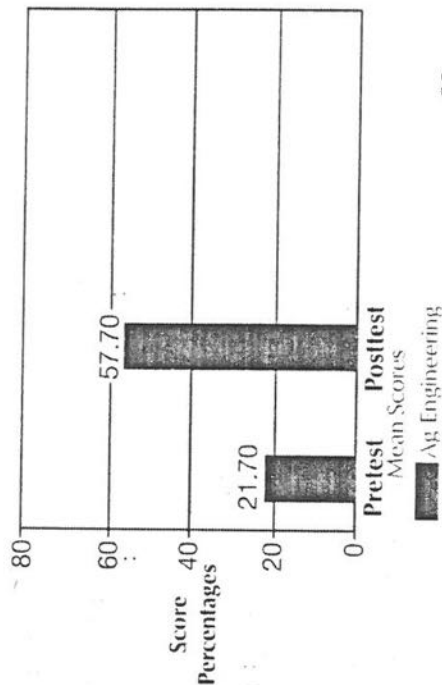
## Long-Range Performance Standard Five:\*

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



\*These standards represent targets until trend data can be collected and analyzed.

## School Year 1993-94 Statewide Summary Sampling of Student Gains for Agricultural Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance

### Standard Three:\*

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

## Long-Range Performance

### Standard Four:\*

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

## Long-Range Performance

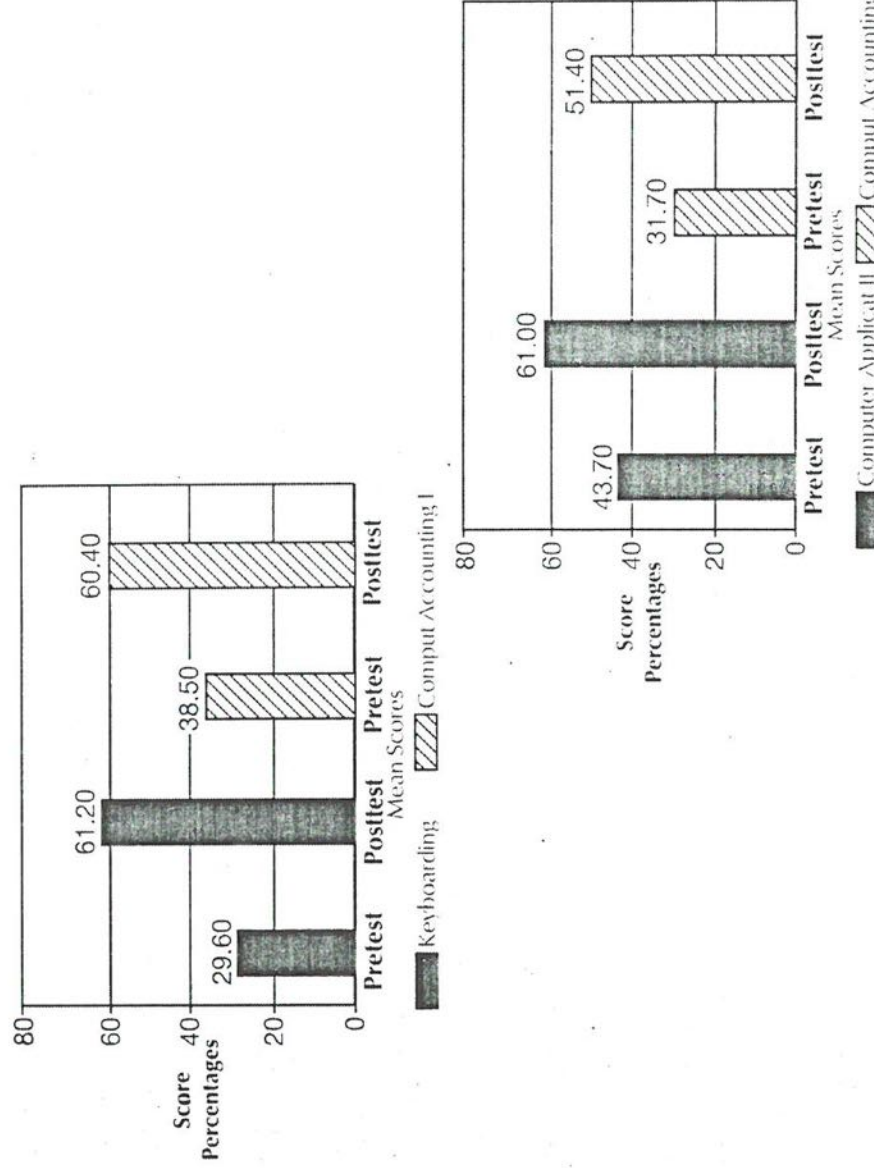
### Standard Five:\*

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

\*These standards represent targets until trend data can be collected and analyzed.



## School Year 1993-94 Statewide Summary Sampling of Student Gains for Business Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance Standard Three:\*

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

## Long-Range Performance Standard Four:\*

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

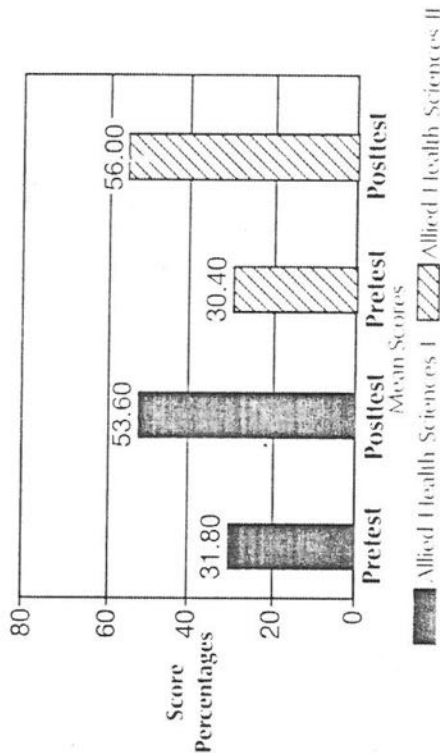
## Long-Range Performance Standard Five:\*

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



\*These standards represent targets until trend data can be collected and analyzed.

## School Year 1993-94 Statewide Summary Sampling of Student Gains for Health Occupations



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

## Long-Range Performance Standard Three:\*

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

## Long-Range Performance Standard Four:\*

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

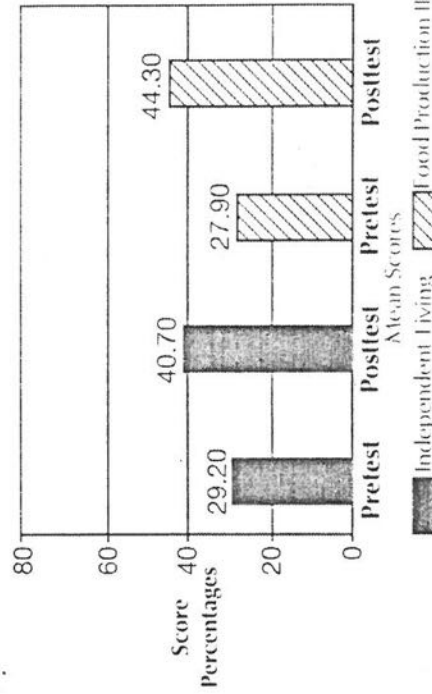
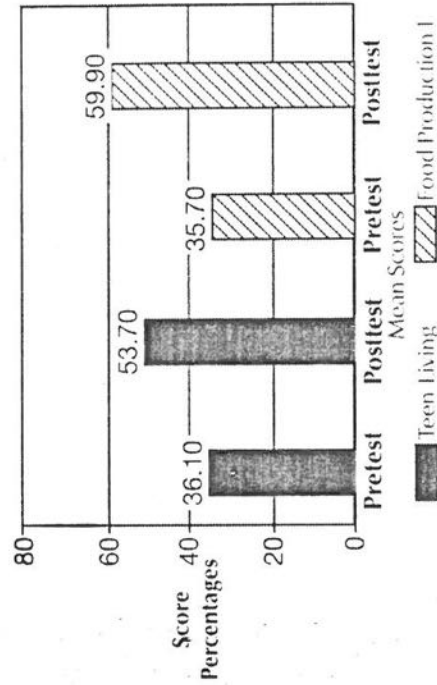
## Long-Range Performance Standard Five:\*

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

\*These standards represent targets until trend data can be collected and analyzed.



## School Year 1993-94 Statewide Summary Sampling of Student Gains for Home Economics Education



**Source of Data:** Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

**Long-Range Performance Standard Three:\***  
Eighty percent of all students completing each vocational course will have mastered 80% of the course competencies.

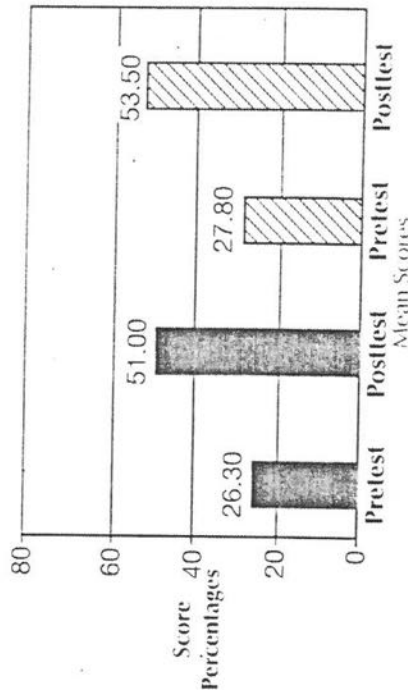
**Long-Range Performance Standard Four:\***  
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

**Long-Range Performance Standard Five:\***  
Eighty percent of all students completing Level II vocational courses will have gained 40% from a pretest to a posttest.

\*These standards represent targets until trend data can be collected and analyzed.



## School Year 1993-94 Statewide Summary Sampling of Student Gains for Marketing Education



**Source of Data: Student achievement on a 100-item paper-and-pencil test.**  
Next phase will incorporate performance testing.

# Vocational and Technical Education

Long-Range Performance  
**Standard Three:\***  
Eighty percent of all students completing each vocational course will have mastered 80% of the course competencies.

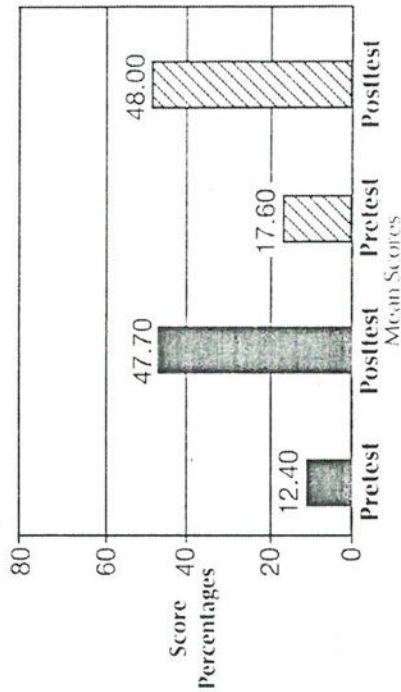
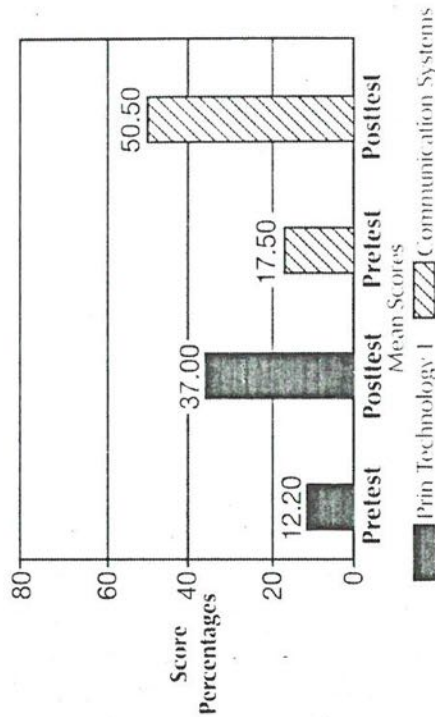
Long-Range Performance  
**Standard Four:\***  
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

Long-Range Performance  
**Standard Five:\***  
Eighty percent of all students completing Level II vocational courses will have gained 40% from a pretest to a posttest.

\*These standards represent targets until trend data can be collected and analyzed.



## School Year 1993-94 Statewide Summary Sampling of Student Gains for Technology Education



Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

**Long-Range Performance Standard Three:\***  
Eighty percent of all students completing each vocational course will have mastered 80% of the course competencies.

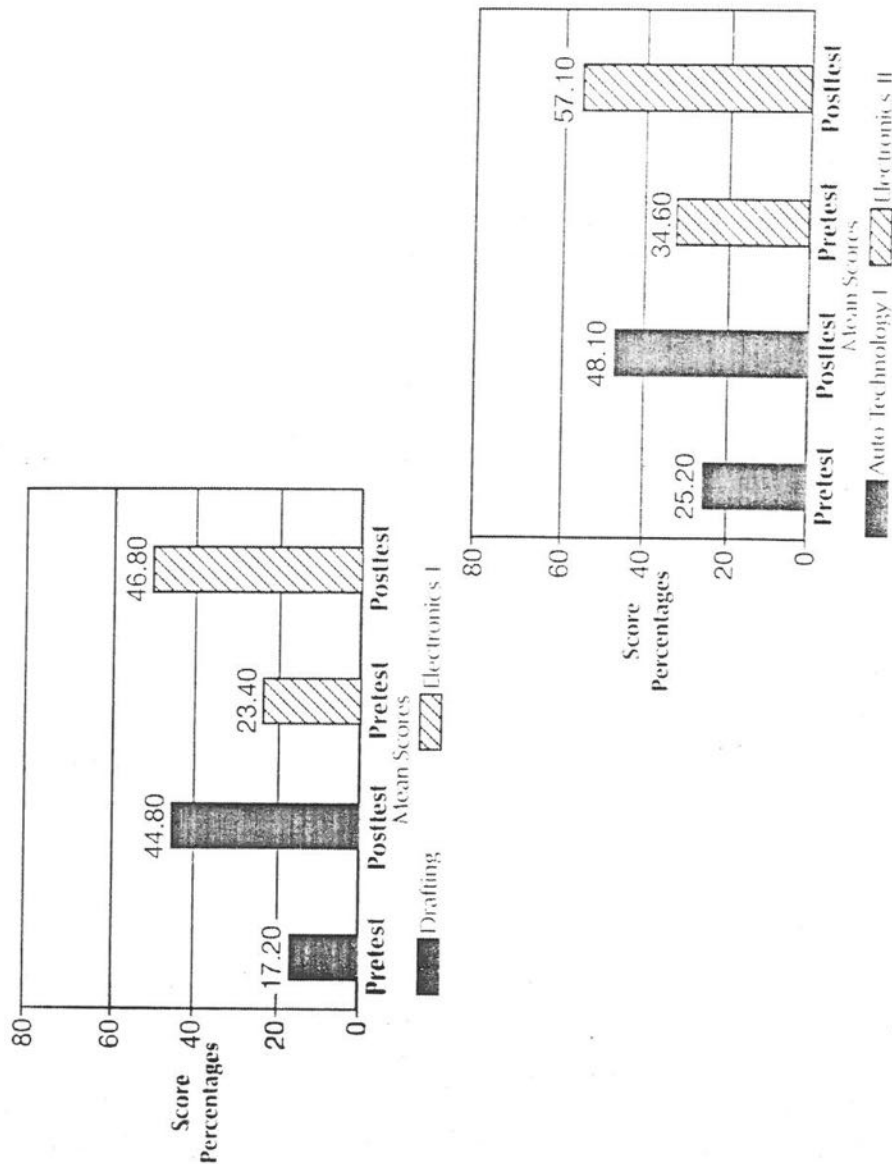
**Long-Range Performance Standard Four:\***  
Eighty percent of all students completing Level I vocational courses will have gained 60% from a pretest to a posttest.

**Long-Range Performance Standard Five:\***  
Eighty percent of all students completing Level II vocational courses will have gained 40% from a pretest to a posttest.

\*These standards represent targets until trend data can be collected and analyzed.



## School Year 1993-94 Statewide Summary Sampling of Student Gains for Trade and Industrial Education



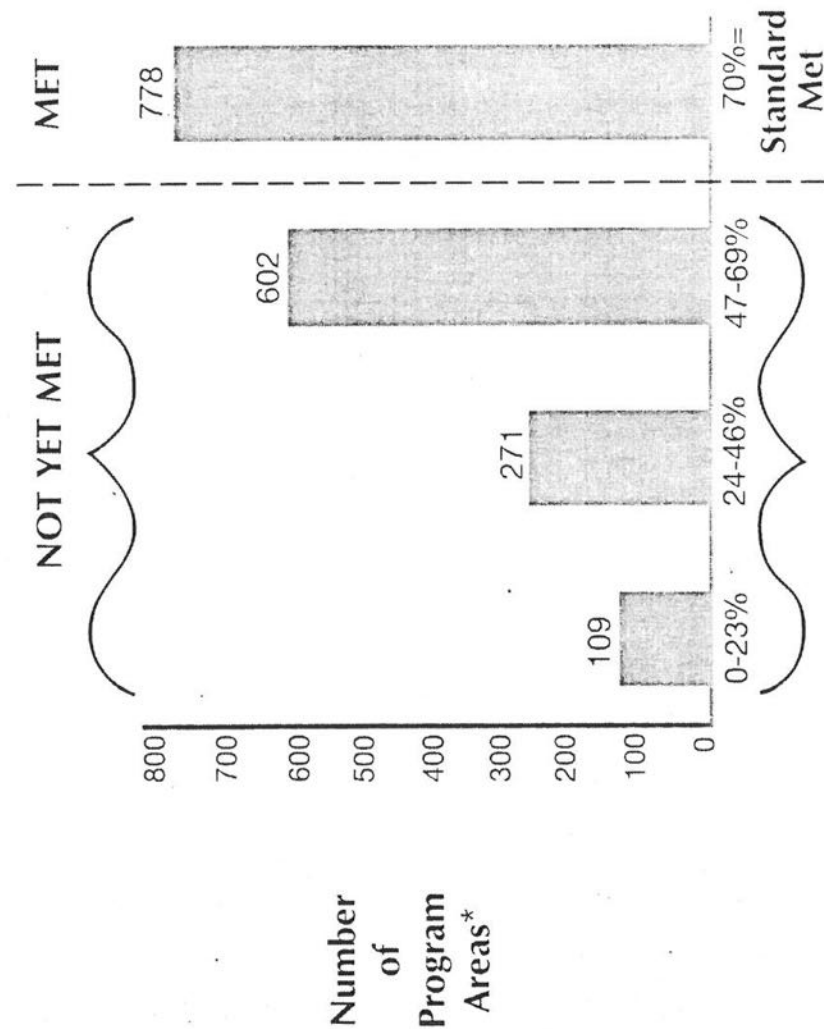
Source of Data: Student achievement on a 100-item paper-and-pencil test.  
Next phase will incorporate performance testing.

# Vocational and Technical Education

Long-Range Performance  
Standard Six:

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

School Year 1993-94  
Statewide Summary  
Status for Meeting Standard Six



Program Areas\* by Percentages  
of Students Furthering Their  
Education/Training.

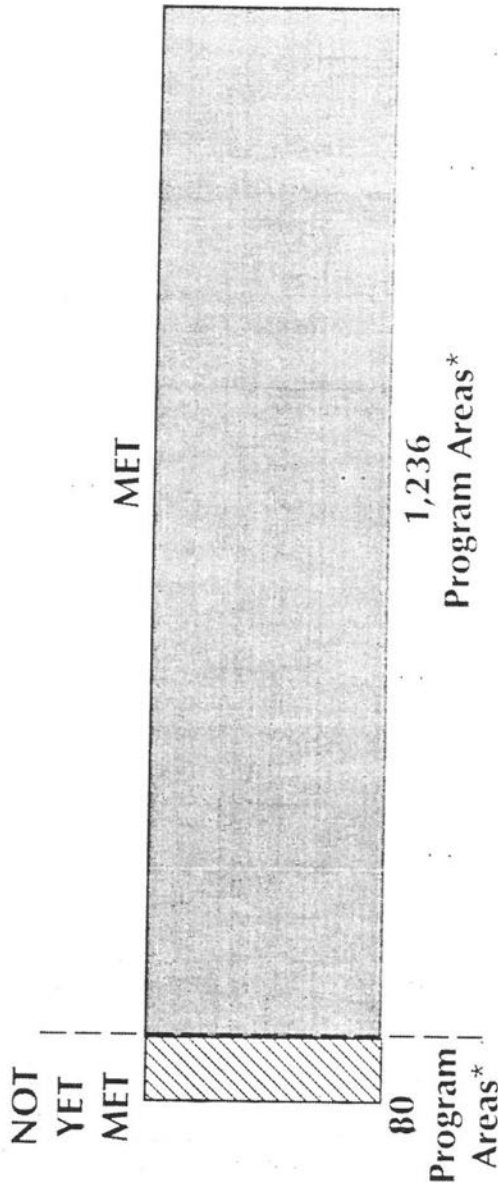
\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 1,760

# Vocational and Technical Education

## Long-Range Performance Standard Seven:

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

## School Year 1993-94 Statewide Summary Status for Meeting Standard Seven



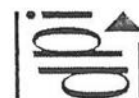
\*Program Areas Were Counted Once Per School;  
Total Number Program Areas Counted = 1,316

# Vocational and Technical Education

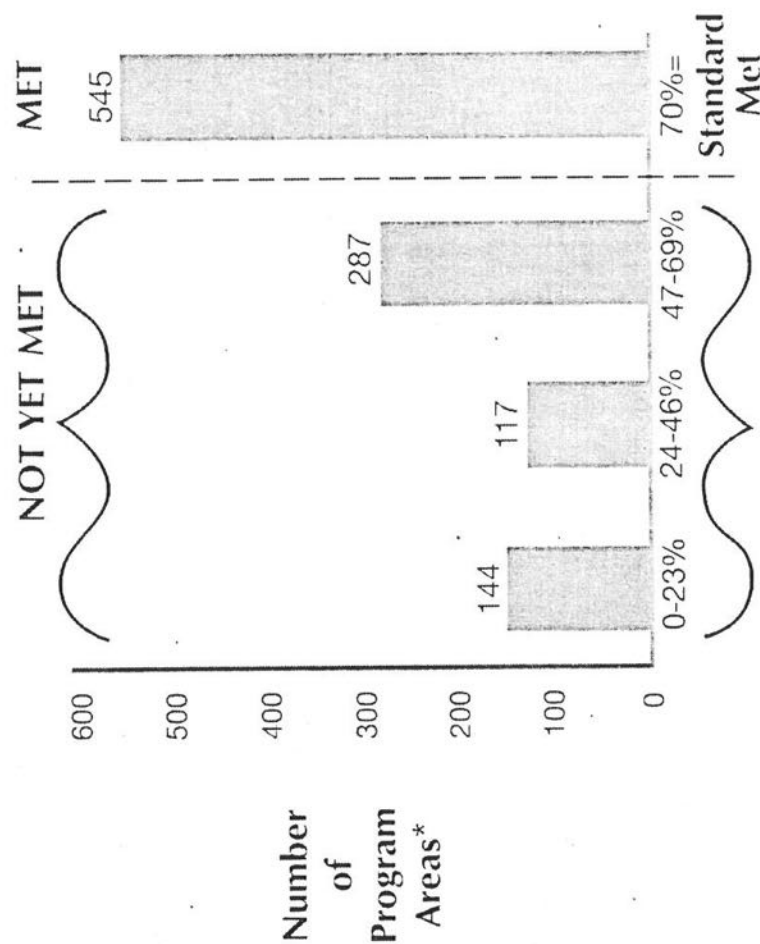
Long-Range Performance  
Standard Eight:

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

\*Completers finishing a technical  
sequence and finding full time employ-  
ment as reported by job skill program  
areas by schools.



School Year 1993-94  
Statewide Summary  
Status for Meeting Standard Eight



Program Areas\* by Percentages  
of Students Employed In Jobs  
Related to Their Vocational Programs

\*Program Areas Were Counted Per School;  
Total Number Program Areas Counted = 1,093

### Exemplary Program For Disabled Students

A growing trend across the state is to use funds from both the vocational and technical education and exceptional children programs to employ special populations/transition coordinators. These coordinators are a positive reflection of coordination between the two programs. These persons are able to interpret the legislation of both programs and implement the initiatives.

Asheville City Schools employed a split-funded coordinator and a technical assistant. The technical assistant was employed with exceptional children program funds to provide assistance in the Graphics, Technology and Industry, Cabinetmaking and Commercial Foods Programs. Together the coordinator and technical assistant provided support services in the classrooms.

Another component of the program is the Student-at-Work Activity. Students were assigned to work with a vocational teacher two days a week. The students were able to develop positive work ethics and skills. Some of their duties included such activities as grading papers, organizing materials, and assisting in the cosmetology lab. A checklist was used to rate the work performance of the students.

The second phase of the program was to place the students in competitive or subsidized employment. The special populations coordinator was locating positions with businesses and the sheltered workshop. She was also in the process of planning a factory to be housed on the school campus where businesses may provide work for students.

### Exemplary LEP Program

The LEP population in McDowell County includes Germans, Hispanics, Laotians, and Native Americans. The special populations coordinator provided support services and taught the students how to use a reading machine. They were able to tape their textbooks, novels and other materials needed to be successful in their classes. Often the listening vocabulary was more developed than the reading vocabulary. With access to the taped and written materials, the students were able to hear the words and follow along in the book. The machine also displayed Spanish and German.

Some of these students participated in a nontraditional job group. Guest speakers such as a highway patrol officer, an electrical engineer, a biological engineer, a transportation engineer and a lawyer made presentations to the group. The students visited nontraditional programs at the community college including forestry, wildlife and lumber. The group designed coloring books for the elementary school students. The pictures described the vocational and technical education programs offered at the secondary level. Non-traditional pictures were included in the books.

### Exemplary Program for Disadvantaged Youth

Swain County Schools employed a part-time special populations coordinator and a full-time technical assistant to coordinate and provide support services for special populations students. The technical assistant met with teachers each Monday to assess their needs for assistance in the classrooms.

A special keyboarding class was developed for disadvantaged youth. The teacher received inservice, training supplies and equipment necessary to provide a quality program. Integrating vocational and academic skills was an important component of the program. Their academic teachers team-taught with the business education teacher. The students were able to use the computers to compose their papers and complete other work assigned by their teachers.

### Exemplary Community Based Organization Program

The "Champions For Education" project was primarily a transitional activity which facilitated the opportunity for disadvantaged youth to be able to enroll in an institution of higher learning. Work sites were identified. Family responsibilities, transportation needs, as well as the need for flexible scheduling were addressed. The procurement of individual savings accounts for all employed Champions began immediately with their first paycheck. Budget planning and saving practices were encouraged to save a minimum of \$600 toward their own education during the school year. United Carolina Bank opened each interest earning savings account with any amount.

A crucial component for the success of this project was continual follow-up and counseling with each participant on an individual and/or group basis. The counseling sessions were provided by the CBO, Community Action, community college representatives, local high school counselors, and school-based coordinators.

Workshops and seminars were offered to the participants throughout the school year. They focused on building self esteem, SAT preparation, financial aid, goal setting, and employability skills. These training sessions were provided by a variety of qualified personnel, some of which volunteered their time and resources.

Tours of community colleges and four-year institutions were offered to all participants. Community Action arranged all transportation while the coordinators facilitated scheduling efforts to incorporate all three participating high schools.

Monitoring of grades, **attendance, discipline** referrals, savings records and employer evaluations were included. **This follow-up enabled** the project coordinators to identify **obstacles which interfered with established goals.**

Assistance with **pre-admission procedures included the provision** for contracted testing, admission/scholarship interviews, transportation, placement tests, and individual financial assessments.

For disadvantaged students who have traditionally felt little in the way of accomplishment, it was crucial for them to participate in a county-wide "send-off" celebration, involving parents, employers, and community supporters who recognized each participant for his/her **successes.**

Of the first group of 20 participants, all graduated, 15 enrolled in a four-year college/university, two enrolled in community colleges, two joined the Navy and one entered the workforce immediately. All of them had savings accounts.

**The project was well received and had** generated enormous enthusiasm in the community.

## Exemplary Consumer Home Economics Programs

### Burlington City

#### North Carolina Home Economics Curriculum Project

##### Description

The North Carolina Home Economics Curriculum Project addressed all aspects of the industry and the Secretary's Commission on Achieving Necessary Skills (SCANS) work-place know-how by correlating curriculum guides, blueprints, and test-items for Clothing Design, and Parenting and Child Development. These curriculum materials were presented and used statewide to meet the variety of learning needs of the diverse student population.

##### Achievements and Services

Both curricula now have revised blueprints, course outlines, and test-items banks. These materials were supported by curriculum guides which provide 222 Clothing Design, and 272 Parenting and Child Development teachers with a variety of learning strategies and suggested resources. Workshops were conducted at the 1994 Vocational and Technical Education Summer Workshop.

##### Individuals Benefiting from Grant

Statewide the curriculum materials were developed for use with 4,405 Clothing Design and 7,922 Parenting and Child Development students. During 1994-1996, other school systems utilized the Parenting and Child Development curriculum in grant projects related to evaluation and technology.

##### Features

In one year the project provided better resources for meeting vocational performance standards related to VoCATS mastery by accomplishing the correlation of the blueprints, course outlines, curriculum guides, and the test-item banks. Learning opportunities have been improved for Consumer Home Economics students in these two courses throughout the state.

##### Collaboration

Advisory teams facilitated the accomplishment of the project. These advisory teams were comprised of both home economics teachers and business and community representatives from across the state. The Clothing Design advisory team included representatives from NCSU College of Textiles, NC Cooperative Extension Service, and UNCG Department of Clothing and Textiles, as well as image and sewing industry consultants. The Parenting and Child Development **advisory team** included representatives from the Coalition on Adolescent Pregnancy, the Child Advocacy Institute, Department of Maternal-Child Health, and clinical psychology.

##### Products

The project produced two newly developed curriculum guides. These guides included revised blueprints, course outlines, and suggested learning activities and resources. Special emphasis was given to **activities** which develop SCANS skills and integrate **FHA/HERO**. Test-item banks **matching** the course content and the cognitive levels of the **objectives** were also produced. The project directors reviewed the resulting pre-tests which will be administered in the fall of 1994.

### **Evaluation/Recommendations/Improvements**

Overall, the project was a success. The objectives and the budget were met. The time line was followed as closely as possible. The curriculum guides were delivered to the state staff for distribution at the 1994 Vocational and Technical Education Summer Workshop.

Recommendations for additional uses include the development of supplemental objectives, greater emphasis on integration of academics, and the alignment of educational technology to the curriculum. In Clothing Design, additional performance items or skill exhibits could be developed. Parenting and Child Development could be enhanced for particular audiences such as teen parents or special populations.

### **Carteret County**

#### **Hi-Tech Home Economics for Down East Youth**

### **Description**

Through an AT&T Telecommunications Link-up, students in Independent Living, Interior Design and Housing, Foods and Nutrition, and Parenting and Child Development were able to communicate with other students in similar stages of life in 6-8 regions of the United States and other nations through two different projects during the year. Students chose topics relating to global issues or social perspectives correlated with the curriculum to exchange information regarding various lifestyles. Costs of living, traditional and cultural behavior, regional recipes, consumer information, health issues, and other relevant topics were selected for exchange. The program acted as a bridge for communication vital information necessary when making life long decisions. Students benefited through practice in written and verbal communication (sharing video-tapes and documents). They also learned research techniques and became more proficient in using the latest technological equipment in the telecommunications field. Friendships developed with students around the world which fostered self-esteem and piqued students' curiosity for exploring other cultures and gathering information regarding other geographical locations.

### **Achievements and Services**

#### **The Project:**

- Enhanced communication skills;
- Increased knowledge of computer skills useful in the classroom, home and workplace;
- Became familiar with other cultures and traditions outside the United States;
- Encouraged independent study skills as students developed their own games, books for children, evaluated diets, explored career opportunities, designed floor plans, and prepared projects;
- Equalized academic levels within the classroom;
- Increased awareness of similarities and differences among families around the world;
- Provided teacher workshops in the use of computer technology.

### **Individuals Benefiting from Grant**

At West Carteret High School approximately 250 students participated in the project where 55% of these students live in economically depressed areas. Both males and females took part in the leadership roles of the project.

At East Carteret High School approximately 200 students participated in the project with 75% of these students from economically depressed areas. Both males and females took part in the leadership roles of the project.

### **Features**

- Upgraded technology in home economics classrooms
- Stressed the value/importance of computers in today's homes
- Established a computer work area in the classrooms
- Bridged the gap between general and vocational subject areas when questions were being answered during the AT&T Link-up. The AT&T Link-up questions addressed in the program included application of technology as it relates to health and wellness, human development, resource management, and personal and family environment
- Provided the equipment needed to present pertinent computer programs in a variety of home economics related topics
- Elevated the value of enrolling in a high school home economics class
- Provided new avenues for teaching home economics concepts

### **Collaboration**

- AT&T Learning Link
- FHA/HERO Chapters
- Science Club and World Peace Club (surveys & responses to inquiries)
- Science Department (participated in AT&T Bell Labs largest science outreach program ever)
  1. For nine hours AT&T Bell Labs broadcasted to schools across America. This program objective was to galvanize the interest of a generation of students in science-related education and careers.
  2. During the broadcast, students previewed tomorrow's communications; examined machines that "hear, see, and think" ; learned what cantaloupes were doing for the ozone layer; asked questions of Nobel laureate Arno Penzias, vice president of Research at Bell Labs, and a panel of Bell Labs scientists; and discovered math topics from "sphere packing" to "wavelets".

### **Products**

- Video tapes and welcome packets from schools involved in Learning Link.
- Students generated bulletin boards displaying correspondence with other school systems in school hallways and at the County Education Fair.
- Computer labs in each of the home economics classrooms making our department exemplary in computer technology.

### **Hoke County**

#### **Parenting and Technology Skills**

#### **Description**

It was the intent of this project to equip today's teenage parents with the tools necessary to become good parents. Activities centered around reading strategies, bonding activities, health concerns, and preparation for school. The project also included activities that exposed all consumer students to today's technology. Students were exposed to a more

rigorous curriculum in each of their consumer classes. This rigor was in the form of writing and researching, application of academic skills, and incorporation of workplace skills.

### **Achievements and Services**

A teen parenting group was formed to help talk through common problems, services available, and career plans. Students were exposed to parenting skills, both at the school level and in local day cares. Students were able to take books home to read to their children as well as bring their children to school for activities.

Academics were incorporated into the existing home economics curriculum. Students prepared research papers, wrote up activities, and participated in lab based activities. Students were exposed to various forms of instructional strategies such as: technology in the form of computer assisted instruction, video based, and integrated learning activities.

### **Individuals Benefiting from Grant**

All consumer students were benefactors of this project. The specialized groups such as: teen parents, handicapped and disadvantaged, and nontraditional students participated in activities that would strengthen their academic careers or enable them to become more successful when they exited high school. The total number of students in these categories was approximately 325. The total number of students benefiting from the grant was approximately 550.

### **Features**

The two most outstanding features were the teen parenting program and the integration of academic and vocational education. Both of these features have proved to provide students with skills that will improve our community and schools in future years.

### **Collaboration**

Teachers involved their advisory committee in the **planning phase of the project**. The **committee was updated** periodically on the progress of the program. All local day care **providers were utilized** to provide support and shadow students during the morning hours.

### **Products**

A booklet was developed with our integration activities listed by the teacher. This booklet served to help move into longer-term projects throughout the school year. The research papers produced by the students were graded and returned. The teen parenting materials were taken home by each student.

### **Evaluation/Recommendations/Improvements**

Evaluation of the program was two fold. On the one hand, it was a very successful experience for the students instructionally. The only limiting factor was that the technology did not arrive until late fall. This did not give students a great deal of time to fully utilize these systems. Next year students will start at the beginning of school.

Our only recommendation was to have a smaller class size for the teenage parenting component. Discussions were good, but at times a smaller group with similar conflicts was needed.

Recommendations from both the evaluation and recommendation were made. Students exited our high school with the necessary skills to further advance themselves in post-secondary education or the workplace.

## **Martin County**

### **SCANS: Content, Curricula, Context**

#### **Description**

The purpose of the grant was to facilitate integration of the SCANS competencies and All Aspects of the Industry (AAI) skills into North Carolina Home Economics curriculum through statewide workshops for home economics teachers and curriculum publications. Emphasis was also placed on integration of SCANS and AAI into Future Homemakers of America.

#### **Achievements and Services**

Resource guide for the integration of SCANS and AAI for Teen Living and Independent Living was distributed to home economics teachers at the 1994 Vocational and Technical Education Summer Workshop.

Project Director served on advisory committee for the Parenting and Child Development, and Clothing Design curriculum projects and submitted inserts for those curriculum guides on the integration of SCANS competencies and AAI skills.

Six, three-day workshops were implemented in the state educational regions for home economics teachers on SCANS and AAI integration for 2.0 units of credit - 1.5 units for workshop participation and .5 for classroom integration activities. Over 100 teachers attended the workshops in which SCANS strategies were field tested and all evaluations were very favorable. The Leadership and Citizenship unit test item bank for all home economics courses was revised to correlate with SCANS competencies.

The NC-FHA/HERO Competitive Events Manual was revised for 1994-1996 and SCANS all AAI matrices were developed to reflect their correlation with competitive events.

The project was showcased at the Table Topics session of the American Home Economics Association meeting in San Diego, California in June, 1994, at the expense of Martin County Schools.

#### **Individuals Benefiting from Grant**

Over 100 home economics teachers benefited directly from the workshop experience and their students benefited indirectly. Many reported sharing the information with co-workers. The Resource Guide, Parenting and Child Development, and Clothing Design curriculum guides benefited the 500 teachers attending Summer Workshop and their students and all other home economics teachers who received it. The competitive events manual benefited all home economics teachers statewide. Identifying individuals in economically depressed areas and high rates of employment is impossible, but numbers correlate directly with state census figures because benefits are statewide.

## **Features**

An innovative feature of the project was its emphasis on how to integrate the SCANS competencies and All Aspects of the Industry skills into existing curriculum. All resources identified involved teaching separate courses or units of instruction. No resources were found on how to integrate into existing curriculum. It was the belief of the project director that lasting results come only through integration in all subject areas and at all grade levels by changing how we teach instead of what we teach. The Resource Guide presented a new approach to curriculum design by focusing on how to integrate SCANS along with examples as opposed to developing curriculum activities/strategies. Because the concepts shared in the workshops were generic, application for all teachers and all program areas were limited only by access to instruction and practice.

## **Collaboration**

Organizations or companies involved with project were:

- Martin County Schools
- Tech Prep and SCANS Advisory Committee
- Parenting and Child Development Advisory Committee
- Clothing Design Advisory Committee
- Exploring Life Skills Advisory Committee
- Technical Assistance Centers in North Carolina

## **Products**

- Teen Living and Independent Living - A Resource Guide for the Integration of SCANS Competencies and All Aspects of the Industry Skills
- 1994-1996 NC-FHA/HERO Competitive Events Manual
- SCANS and All Aspects of the Industry mini-posters for classroom use
- Revised Leadership and Citizenship unit test item bank
- SCANS and All Aspects of the Industry Accountability Matrices for FHA/HERO competitive events (incorporated into Resource Guide and sent to **national Future Homemakers of America** office)

## **Evaluation/Recommendations/Improvements**

This was an exciting and challenging year working on the project. There was identification of resources on how to integrate SCANS and All Aspects of the Industry into existing curriculum where none had previously existed. The only resource on All Aspects of the Industry were the definitions found in the Carl Perkins Act itself. Although it was a challenge to assimilate concepts on integration for practical application, the efforts to do so were very well received in the workshops. There seems to be a great deal of interest in this topic and the concepts seem to be here to stay for making progress in educational reform. More advisory committee participation and more collaborative effort in integrating SCANS with other current educational initiatives, such as Tech Prep and High Schools That Work, were identified as future expectations.

## **Wake County**

### **Developing a Food Science Experiment and Activity Guide**

#### **Description**

This grant focused on the development of instructional tools that would provide consumer home economics teachers with a broader foundation of resources to use when teaching Food Science. Inservice training provided participants with knowledge, skills, and confidence to teach Food Science.

#### **Achievements and Services**

The following achievements and services were provided through the implementation of this grant project:

Development of a 360-page document titled Food Science Experiment and Activity Guide. This guide contains over 100 experiments, activities, and visuals. A "For Teacher Use" page provides practical suggestions and answers to questions included with each experiment and activity.

Development of performance measures for VoCATS.  
Edited/made corrections to the existing Food Science VoCATS performance measures.  
Provided food science inservice training for 60 Consumer Home Economics teachers throughout North Carolina and ten teachers from West Virginia.

#### **Individuals Benefiting from Grant**

About 133 teachers received Food Science inservice training; 35 teachers attended the Food Science Workshop held in December, 1993; 63 teachers attended the Food Science Institute held in June, 1994. Grant monies covered partial and/or total expenses for the inservice allowing attendance by participants from economically depressed areas and areas with a high rate of unemployment.

#### **Features**

This project was **innovative, exemplary, and had statewide implications**. The Food Science Experiment and Activity Guide was structured to provide food science teachers with fundamental, ready-to-use resources. Visuals and graphics designed by the project director and used throughout this guide, illustrated innovative and creative features. The Food Science Institute was the collaborative effort of four food science grants awarded to Catawba, Guilford, Orange, and Wake counties. This institute, a first for North Carolina with statewide implications, was extremely successful. Words by institute participants illustrate the effectiveness and success of Wake County's grant project. Experiments used at the Food Science Institute were from the guide developed by this grant. This guide will also be used by West Virginia food science teachers.

#### **Collaboration**

The following organizations and businesses were involved with the success of this project:

**Business/Industry**  
Fisher-Scientific  
Flinn Scientific Inc.

**Colleges/Universities**  
A & T University  
NCSU University &  
Dr. Lynn Turner

**High Schools and LEAs**  
Athens Drive (Wake)  
Broughton (Wake)

**Business/Industry**

Frey Scientific Inc.  
 NC Dept. of Public  
 Instruction  
 Paramount Publishing  
 Education Group  
 Scholastic Inc.  
 WCPSS Print Shop

**College/Universities**

Meredith College &  
 Dr. Bettina Taylor

**High Schools and LEAs**

Ben Smith (Guilford)  
 Enloe (Wake)  
 Fuquay Varina (Wake)  
 Independence  
 (Charlotte/Mecklenburg)  
 Leesville (Wake)  
 Millbrook (Wake)  
 Wake Forest-Rolesville (Wake)  
 St. Stephens (Catawba)

**Products**

Products developed from this grant were:

- Food Science Experiment and Activity Guide
- VoCATS Performance test-items were designed for each food science performance objective
- Food Science inservice training statewide to 133 participants.

**Evaluation/Recommendations/Improvements**

All goals, objectives, and deadlines set by this grant were successfully completed. The advisory committee, composed of dedicated educators and experts in the field of food science, guided the project director throughout this grant year, making recommendations that resulted in instructional tools friendly and user-ready. Careful, effective planning and ongoing evaluations were an integral component throughout this grant.

It is recommended that food science inservice be ongoing. The Food Science Institute was an effective and successful approach for teacher inservice. Four grants collaborated to present this inservice.

**Warren County****BASICS in Home Economics—Part 2**

The BASICS in Home Economics Project of Warren County Schools addressed the priority of applied academic skills and the concern for student deficiencies in basic necessary skills. The focus of Phase 2 was application of communication skills. The goal was to provide teaching materials, strategies, and a model departmental system for integration of communication skills into home economics instruction. The project philosophy "Let's Get REAL" expressed the message that integrated learning experiences are relevant to students' real lives. They demonstrated that learning is important for living as they motivate students to be "Ready, Eager, and Able to Learn."

**Achievements and Services**

A departmental system for integration of basic communication skills was developed within the Home Economics Department of Warren County High School. Four classes were targeted to receive the applied communications focus, one class for each Consumer Home Economics teacher. Staff development sessions were held. Appropriate resource materials were purchased. Original instructional materials were created throughout the year as needs arose with classes. Innovative teaching strategies were used. Co-curricular FHA/HERO activities were incorporated into each class. Data were collected to assess student performance.

Part 2 of the BASICS Guide for Integration of Communication Skills into Consumer Home Economics Curricula was published. The 250-page guide was the result of intensive research and creative writing efforts. It contains a detailed review of 50 innovative teaching strategies and a collection of reproducible teaching activities for all secondary Consumer Home Economics classes. These skills sheets were organized with matrices coding relevant applications for each sheet. Applications to specific skills in communications, home economics courses competencies, FHA/HERO purposes, and levels of thinking were shown.

The BASICS program of curriculum integration serves as a model for other systems. The program was shared in workshops at Vocational Education Summer Conference, at a regional vocational directors' meeting, and in local school systems. A brochure was designed and distributed statewide. A display was prepared for visual reinforcement at workshops and showcases. A logo and slogan were designed and used for promotional purposes.

### **Individuals Benefiting from Grant**

The department system for integration brought benefits to students in Consumer Home Economics classes at Warren County High. Among the 19 targeted students who had standardized academic end-of-course test in both 1993 and 1994, 17 students showed a significant increase in converted test score averages from one year to the next. Approximately 2/3 of the 59 students showed a pattern of improved performance through the year in Home Economics quarter grades. Warren County students earned a total of 35 medals in 17 events in Regional FHA/HERO Competitive Events as they applied their improved communication skills in event competition.

The BASICS Guide was distributed to and is being used by approximately 700 North Carolina teachers. Integrated activities have reached approximately 50,000 students in home economics classrooms across the state. Students are applying and improving skills in reading, writing, speaking, listening, and viewing. They have learned to use communication skills more effectively to solve problems in practical situations.

The departmental system serves as an exemplary model and has helped to advance the process of curriculum integration. It demonstrates the imperative for teaching basic skills in an applied setting. Insights as to strategies, activities, and materials have been shared with teachers and vocational directors from all regions of the state and have improved teacher effectiveness. The success of BASICS integration initiatives paves the way for other integrations of academic and vocational concepts.

### **Features**

Features of the BASICS 2 Project were innovative, exemplary, and had statewide implications. The departmental system of integration represented an innovation. It offered a practical approach to integration which is feasible in any school system. The BASICS program of curriculum integration was exemplary and could serve as a model for implementation at other sites. The BASICS Guide, Part 2 and BASICS workshops have helped teachers integrate communication skills into home economics instruction on the state level.

## **Collaboration**

Organizations and companies which were involved with this project include:

- The Warren County FHA/HERO Chapter, which sponsored student activities in applied communications;
- North Carolina Central University, which provided the services of a project consultant and a communication skills specialist; and
- Glen Raven Mills, whose manager served on the Project Advisory Committee.

## **Products**

Guide: The BASICS Guide for Integration of Communication Skills into Consumer Home Economics Curricula, Part 2

Brochure: Home Economics Get REAL with BASICS

Visual Display: BASICS in Home Economics

## **Evaluation/Recommendations/Improvements**

Strategies used in the BASICS 2 Project were quite effective. Collaboration, research, planning, and inservice training facilitated development of the departmental system for integration. Evaluation data showed gains in student achievement. It is recommended that efforts be continued to refine the system and expand the focus. Collaboration, research, creative writing, field testing, and review produced an integration guide which benefits students all over North Carolina. Planning, promotion, and inservice training facilitated sharing of the BASICS program of curriculum integration as a model for other systems.

June 1994

**1993/94 TECH PREP PROJECT EVALUATIONS**  
Rating Matrix

Local School District	College(s)	Type of Agreement	Articulation Efforts	Collaborative Efforts	Curriculum Integration	Curriculum Improvement	Guidance Services	Staff Development	Marketing Efforts	Special Populations	Achievement Results
Alamance County	Alamance CC	Plan	M	M	PM	PM	M	PM	PM	M	M
Alleghany County	Wilkes CC	Imple	M	M	M	M	M	M	N/A	M	PM
Ashe County	Wilkes CC	Imple	M	M	PM	M	M	M	PM	PM	PM
Asheville-Bunc CC	Asheville-Bunc CC	Plan	M	M	PM	PM	M	PM	PM	NM	PM
Avery/Yancey Coun	Mayland CC	Imple	M	M	M	M	M	M	M	M	M
Bertie County	Martin/Roan-Chow	Plan	M	PM	N/A	M	PM	M	PM	PM	N/A
Bladen County	Bladen CC	Imple	PM	NM	NM	PM	PM	NM	NM	NM	NM
Brunswick County	Brunswick CC	Imple	M	PM	PM	M	M	PM	M	M	NM
Burke County	West. Piedmont CC	Plan	PM	M	PM	M	M	M	M	M	M
Burlington City	Alamance CC	Plan	M	M	PM+	M	M	M	M	M	M
Cabarrus County	Rowan-Cabarrus	Imple	M	M	M	M	M	M	M	M	M
Carteret County	Carteret CC	Imple	M	M	M	M	M	PM	M	PM	M
Caswell County	Piedmont CC	Imple	PM	PM	PM	M	PM	PM	PM	PM	PM
Catawba County	Catawba Valley CC	Imple	M	M	M	M	M	M	N/A	M	M
Chapel Hill/Carrboro	Durham/Alamance	Plan	NM	PM	NM	NM	NM	PM	PM	NM	NM
Charlotte-Mecklen	Central Piedmont	Imple	M	M	M	PM	M	M	M	M	M
Chatham County	Central Carolina	Plan	M	M	M	PM	PM	PM	PM	M	PM
Cherokee/Clay/Graha	Tri-County CC	Imple	M	M	M	M	M	M	M	M	M
Clinton/Sampson	Sampson County	Imple	PM	M	PM	M	M	M	M	M	M
Columbus/Whiteville	Southeastern CC	Imple	M	M	M	M	M	M	M	M	M
Craven County	Craven CC	Imple	M	M	M	M	M	M	M	M	M
Cumberland County	Fayetteville CC	Imple	M	M	M	M	M	M	M	M	M
Duplin County	James Sprunt CC	Imple	M	PM	PM	M	M	PM	NM	PM	PM
Franklin County	Vance-Granville	Plan	M	M	PM	PM	PM	PM	M	M	M
Granville County	Vance-Granville	Plan	M	M	PM	M	PM	PM	PM	PM	PM
Guilford County	Guilford Tech CC	Plan	M	M	M	M	M	M	M	M	M



Local School District	College(s)	Type of Agreement	Articulation Efforts	Collaborative Efforts	Curriculum Integration	Curriculum Improvement	Guidance Services	Staff Development	Marketing Efforts	Special Populations	Achievement Results
Haywood County	Haywood CC	Imple	PM	M	PM	M	M	PM	M	PM	PM
Harnett County	Central Carolina	Imple	M	M	PM	M	M	PM	M	M	M
Henderson/Transylv	Blue Ridge CC	Imple	M	M	PM	M	M	M	M	PM	PM
Hickory City	Catawba Valley	Plan	PM	PM	N/A	PM	PM	PM	NM	PM	N/A
Hoke County	Sandhills CC	Imple	M	M	M	M	M	M	M	M	M
Iredell-Statesville	Mitchell CC	Imple	M	PM	M	PM	M	M	PM	M	M
Jackson County	Southwestern CC	Imple	M	M	M	M	M	M	M	PM	M
Johnston County	Johnston CC	Imple	PM	PM	PM	M	M	PM	PM	PM	PM
Kannapolis City	Rowan-Cabarrus	Plan	M	M	M	M	M	M	M	M	N/A
Lincoln County	Gaston College	Plan	PM	M	PM	PM	M	M	M	PM	N/A
Lee County	Central Carolina	Imple	M	M	PM	PM	M	M	PM	M	M
Lenoir/Jones/Greene	Lenoir CC	Imple	M	M	M	M	M	M	M	PM	PM
Martin County	Martin CC	Plan	M	M	M	M	M	M	M	PM	N/A
Mitchell County	Mayland CC	Imple	M	M	M	M	PM	PM	M	PM	M
McDowell County	McDowell Tech CC	Imple	M	M	PM	M	M	M	PM	PM	M
Montgomery County	Montgomery CC	Imple	M	M	PM	M	M	M	M	M	M
Moore County	Sandhills CC	Imple	PM	PM	M	M	PM	M	PM	PM	M
Mooreville Graded	Mitchell CC	Imple	PM	M	NM	PM	PM	PM	PM	PM	PM
Nash/Rocky Mount	Nash CC	Imple	M	M	M	M	M	M	M	M	M
Onslow County	Coastal Carolina	Imple	M	M	M	M	M	M	M	M	M
Pamlico County	Pamlico CC	Plan	M	M	M	M	M	M	M	PM	N/A
Pitt County	Pitt CC	Imple	M	M	M	M	M	M	M	M	M
Richmond County	Richmond CC	Imple	M	M	M	M	M	M	M	M	M
Robeson County	Robeson CC	Imple	NM	M	PM	NM	PM	M	M	NM	NM
Rockingham County	Rockingham CC	Imple	M	M	M	M	M	M	M	M	M
Rowan-Salisbury	Rowan-Cabarrus	Imple	PM	PM	PM	M	M	N/A	N/A	PM	NM

1993/94 TECH PREP PROJECT EVALUATIONS  
Rating Matrix

June 1994







North Carolina Department of Community Colleges

Vocational Education Performance Report

Program Year 1993-1994

"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.

Postsecondary Vocational Education  
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Introduction

The North Carolina Community College System was founded by the North Carolina General Assembly in 1963. Presently there are 58 community colleges in the system which offer a host of programs to meet the needs of individuals, businesses and industries. These programs range from one quarter to two years in length. In addition, single courses are offered to update job skills and for personal enrichment.

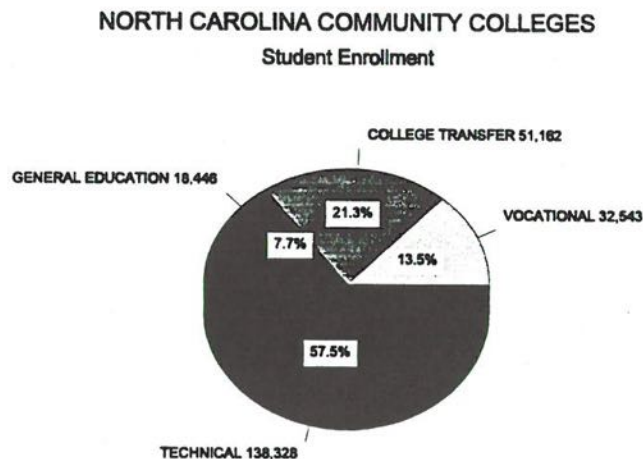
The primary emphasis of every college is on-the-job training, and most programs are in vocational and technical areas which prepare students for entry-level positions in skilled and technical occupations. Diplomas are awarded to graduates of vocational programs one year or more in length, and certificates are awarded to graduates of shorter programs. Two-year technical programs lead to an associate degree in applied science.

Programs are also available to help adults learn to read, write, or do basic mathematics, earn a high school diploma or its equivalent, strengthen academic abilities, and complete most of the courses needed for the first two years of a baccalaureate degree. Some courses and services are free, while for others the tuition is low. Financial aid officers assist students with loans, scholarships, and work/study programs. Since colleges are within commuting distance of most of the state's population, there are no dormitories on any campus.

More than 739,000 individuals are taught each year in the North Carolina Community College System. This is nearly ten percent of the total population of the state. In addition to instruction delivered at the 58 community college campuses, many programs are offered at hundreds of off-campus sites. The students are mainly adults, but some are out-of-school youth beyond the age (16) of public school compulsory attendance. The diversification of its students is mirrored in the breadth of life experiences from which they come. Some students enter the

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college directly after high school graduation, while others may enter after having worked for a period after graduation. Many of its students enter the community college to pursue additional specialized training after having already attained baccalaureate or even graduate degrees. Many of its students enter later in life after successful careers by taking advantage of the wide array of personal development programs offered on many of the campuses and outreach centers. Figure 1 presents the total program year 1993-1994 enrollment in technical, vocational, general education, and college transfer programs. This report presents information on the 110,990 students who were enrolled in technical and vocational education programs in accordance with the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 for that period.



**Figure 1 - Current Enrollment 1993-1994  
Program Year**

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Vocational Education Performance Report

Program Year 1993-1994

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

The performance measures for all 58 community colleges of the North Carolina Community College System were implemented and collected for the 1993-1994 school year. A database, the Curriculum Student Progress Information System, or CSPIS, was created as a blueprint for community college reporting of Perkins grant programs. Four performance measures were identified:

- 1 - Percentage of required credit hours completed for the curriculum, i.e., the number of students who completed 25%, 50%, 75%, or 100% of the courses needed for curriculum completion/graduation.
- 2 - (a) Rates at which vocational education students are required to take and pass remedial basic academic courses (such as English and math), and (b) the rates at which vocational education students take and pass general education and related courses.
- 3 - Retention rates of students enrolled in Fall quarter, students not completing/graduating in the quarter, and those enrolled in at least one additional course during the subsequent Winter or Spring quarters. (Omitting special credit, dual enrollment/Huskies, and V-099 and T-099 curriculums.)
- 4 - Special population by (a) the ratio of percent of special population students enrolled in vocational/technical curricula to the percent of

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special population students enrolled in all curriculum programs in the school population; or (b) the ratio of percent of special population students completing vocational/technical curricula to the percent of special population students completing all curriculum programs in the school population.

The first systemwide reporting of the 1992-1993 data was aggregated in July 1994, but eight of the community colleges had polluted data that corrupted the entire report on measures. In November 1994, the 1993-1994 data was collected with sound information. This data was analyzed to establish baseline state averages. These standards have been tentatively established by the Federal Vocational Education staff, with the assistance of the Planning and Research division of the Department of Community Colleges:

- 1 - Fifteen percent (15%) below the mean percentage for students completing 0-25% of their coursework, 26-50%, 51-75%, and 76-100% of their coursework. This standard will be determined after cohorts of students are identified and followed over a period of time, not to exceed three years.
- 2 - Fifteen percent below the mean percentage of students passing remedial courses, and 15% below the mean of students passing general education. For 1993-1994, this would be 68% for remedial and 77% for general education. A preliminary look has five community colleges out of compliance with this standard for remedial courses and three out of compliance for general education.
- 3 - Retention rates by percentage who re-enroll are reported in the Critical Success Factors as Student Success Measure A: Number of Students Returning from Previous Quarters, and by credit hour in the Annual

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Statistical Report in Appendix B. This standard will be determined after aggregated data are divided by community college and by cohort and studied.

- 4 - Five percent (5%) below the mean percentage of special populations students in technical/vocational programs compared to the percent of the total special populations students enrolled (nine community colleges fell below the standard for 1993-1994), and

Ten percent (10%) below the mean percentage of special populations students completing vocational/technical programs compared to the percent of total special populations students completing all programs (ten community colleges fell below the standard for 1993-1994).

These performance standards will be analyzed and approved by the Committee of Practitioners. These standards will be monitored subsequently to provide trends in later reporting periods. As additional data is collected and reviewed, the standards will be similarly developed and amended. Appendix A contains the approved and adopted performance measures for the Department of Community Colleges.

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

The 1993-1994 postsecondary enrollment for the North Carolina Community College system are found in Appendix B. The following appendix (C) lists the special curriculum student enrollment report for 1993-1994. Appendix E lists all of the community colleges in the system. All member institutions are two-year postsecondary community colleges offering 276 total technical and vocational curricula, general education programs, as well as college transfer programs offered by

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most of the member colleges. 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 department provides curriculum standards to assure that each program meets systemwide regulations.

During the 1993-1994 program year, funds under Title III, Part C, Section 235, were distributed to 53 eligible community colleges in North Carolina. These funds are grouped into service or program areas. These are represented in Figure 2 below. The percentages shown represent the approximate level of funding used in each category. These categories do not represent a total list of all services and programs provided; they were compiled to facilitate reporting. Brief examples of programs or services are offered for each category. Figure 3 presents the number of community colleges spending Perkins funds in each category.

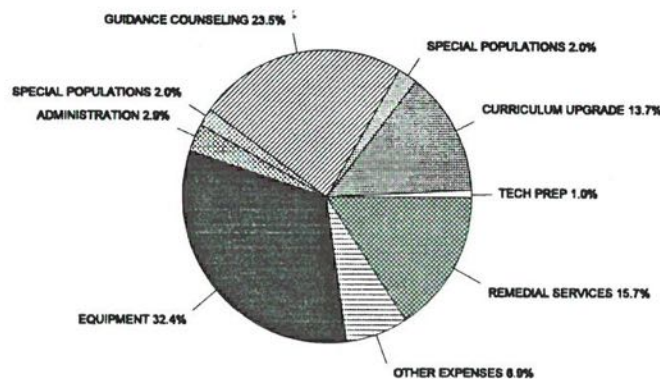


Figure 2 - Perkins Basic Allocation  
(Postsecondary)

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**Upgrading Curriculum.** To assure continued economic development and to be consistent with the intent of Perkins provisions, improved curriculums are an important pursuit in the community colleges. Twenty-three community colleges used Perkins funding to upgrade their programs. Several exemplary approaches to upgrading curriculum follow.

One community college used Perkins funds to support a satellite campus by hiring full-time instructors to teach Business Administration and Business Computer programs and serve as faculty advisors to off-campus students and, in effect, provide greater educational opportunities for the citizens of two adjoining counties. Another community college purchased software and audiovisual materials for Nursing, Business, Human Services, Agricultural Science, and Fish and Wildlife programs, and for CAD software in the Drafting and Design Engineering Technology program.

**Equipment.** The North Carolina Community College System is fully aware of the need for the most up-to-date training on the latest state-of-the-art equipment available. Therefore, much of the Perkins grant money was used to purchase equipment. Thirty-nine community colleges took advantage of this area.

One community college used its equipment budget to assist its Microcomputer Systems Technology program. Fifty-two personal computers were bought along with 12 printers. The equipment was installed in the computer instructional laboratories on both the main and satellite campuses. By doing this the school achieved its goals of improving instruction, extending educational opportunities, and offering a curriculum major in technical fields that provide employment opportunities. Another community college diversified its equipment by covering many of its eligible areas. Twenty-seven

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personal computers and 8 printers were purchased to create a new lab for Secretarial and Accounting courses, specifically for word processing and advanced accounting. A receiver/transmitter, digi-tram, and digital tester were bought to use in the electronics department in conjunction with the school's Tech Prep programs. Twenty dryer chairs were acquired for the Cosmetology program to replace 15-year-old equipment. Ten dictating machines assisted the Secretarial department in its machine transcription courses. The Automotive Body Repair program received a paint-gun washer and spray gun to upgrade the paint booth capabilities and to help create a new course in automotive detailing. Early Childhood Education purchased a laminator and camcorder for creative activities and as an observation tool for students in a practicum setting, respectively. For students with disabilities, Student Services bought a video monitor, two speech synthesizers, two screen readers, and two ear exam units.

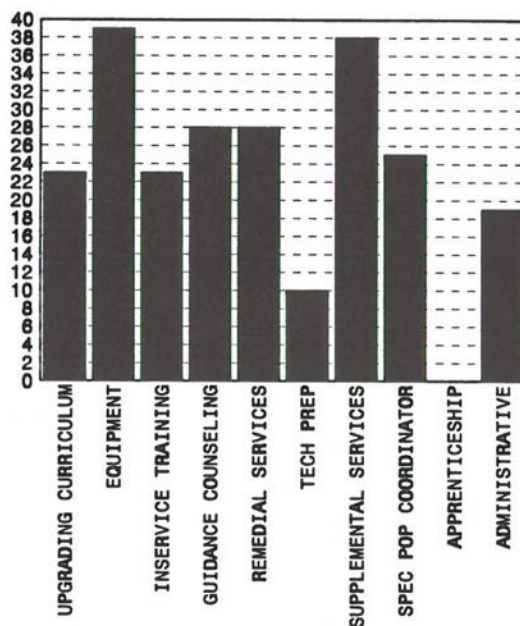


Figure 3 - Number of Community Colleges  
 Expending Perkins Funds in Each Category (53  
 of 53 reporting)

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**Inservice Training.** Faculty members in the community college system are encouraged to enroll in aggressive professional development programs to assure their students receive the best education and training possible. Twenty-three colleges offered their faculty and staff opportunities for inservice training to help meet this need.

One community college had 18 eligible program instructors who participated in 14 faculty development activities. Eight nursing instructors participated in inservice training and have included new material in the course, Nursing Issues and Concepts of Management, and included a Humanities/Fine Arts course in the program; updated course content in Adult-Child Nursing and critical care instructional units; received training that will enhance student success when taking state nursing board examinations on computers; and received training on utilizing interactive videodisc and multimedia technology in the classroom. One Business Computer Programming participant received training that upgraded his knowledge and instructional effectiveness in the use of local area networks in business and industry applications. Seven Accounting and Office Technology instructors attended conferences that provided new technology in their respective areas of instruction. Two Human Service program participants attended workshops at the Center for Disease Control and the Alderian Psychologists Conference and have undertaken measures to upgrade the appropriate programs with new content.

**Guidance Counseling.** Perkins funds used for guidance counseling were mostly spent to hire additional staff, either full- or part-time, to assist in their counseling programs. One community college listed strategies used to overcome barriers of access and/or success. Financial aid application workshops included six workshops designed

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and given to students in target programs. Three hundred and twenty-three (323) students were given one-to-one assistance in explanation of financial aid available and completion of forms. The progress of members of special populations assisted in this manner were tracked and 80% of those receiving financial aid earned a cumulative grade point average of 2.0 or higher. The progress of vocational education programs in providing strong experience in industry was studied and, out of the College Work Study Program, 75 students received work study funding and 50% were in the areas of occupational education.

Students desiring to enter the college's highly competitive nursing programs were offered an innovative array of services designed to enable them to make alternate career choices, improve study skills and test-taking skills, and improve self-confidence through special workshops and mentoring with students already admitted. Job Search seminars were offered students in targeted areas, and they included sessions on the job search itself, the application process, and the interview process, including a taped session and critique. This area of funding enhances the students' transition into college and improves their chances of academic success in their chosen field of study.

**Remedial Services.** Twenty-eight community colleges used Perkins funds to provide remedial services to students in eligible technical and vocational programs.

One community college provided remediation for 213 eligible students in math and reading. In addition, students received tutoring through skills labs. Some colleges used this money to prorate portions of the instructors' salaries concomitant with time spent teaching eligible students in developmental courses, specifically math, reading, and English. In some cases,

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additional tutorial staff were hired for learning labs. Satisfactory completion of the remedial courses permits admission to vocational/technical programs, at which time students are oriented into the career field of their choice.

**Tech Prep.** Ten community colleges used Title II funds for Tech Prep activities. One school expressed that the development and maintenance of Tech Prep programs worked best if faculty-generated. A community college faculty member was released from 20% of his teaching duties to coordinate his college's Tech Prep efforts with all area public schools. One half of this release time was provided through vocational education funds. During the year, his community college participated in a grant-funded effort with the school system in its county of origin, the city school system, and an adjoining county school system. Besides cooperative agreements with secondary systems, funds were used for faculty release time to travel and visit successful Tech Prep efforts and for articulation exploration. A further description of systemwide Tech Prep activities may be found in this report under Section X.

**Supplemental Services.** Thirty-eight community colleges used Perkins funds to accommodate students, especially special population students, with increased supplemental services. Examples of this type of service include full- and part-time interpreters, tutors, readers, notetakers, and classroom aides. One college identified a prorated share of the salary for a person to provide resume preparation, typing and support for qualified individuals to increase their marketability in employment. At another college, vocational education funds were used to provide instruction in Foodservice Management to students in a correctional unit. Sixty-four students were served in 21 classes offered during the year.

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**Special Populations Coordinator.** Twenty-five community colleges chose to fund a staff position called Special Populations Coordinator to assist in providing opportunities for equal participation of students with special needs. The person in this position assures that the needs of special population students are met and ensures that the college where they are enrolled remains sensitive to future needs. These are often part-time jobs performed in conjunction with other duties. The coordinator may be in the counseling department or a dean or other administrator.

One community college hired a Special Needs Coordinator/Counselor to meet individually with the majority of all students attending the college who had disabilities. When a student presented a need for accommodations related to a disabling condition, this coordinator procured whatever was necessary. Another college hired a counselor to serve special populations with career counseling and job placement. A computerized career interest inventory gave these students access to information regarding all aspects of vocational and technical career fields.

**Apprenticeship.** While apprenticeship is clearly a useful component of Perkins in regard to Tech Prep, as well as the mandate to educate in all aspects of a chosen industry, none of the community colleges used funds in this specific category.

**Administrative.** A portion of Perkins funds was used by nineteen community colleges for administrative purposes. These services were provided on a prorated basis by existing college personnel. Less than 3% 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

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personnel within their job descriptions or they are absorbed without additional pay into existing duties.

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

Single parents/displaced homemakers/single pregnant women number 10,422 at the 40 colleges that received Perkins grants, especially for this target population 1993-94.

**Description of Services.** All of the participating 40 colleges used all the single parent funds for direct, material support of students. Services included child care, student transportation, tuition, and instructional materials required for class participation. In addition, most colleges provided personnel from 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.

Since very little of the grant goes for salaries, many services connected with the program are above and beyond those financed by the Perkins single parent fund. The grant coordinator at one college in the Triangle region estimates that she spends at least half her time on single parent activities, although the grant paid less than that portion of her salary. Much of the time was spent in one-on-one counseling with students. A further enhancement was a series of parenting workshops for the group presented by a professional child care worker and supported with college funds.

This college values its single parent program to such an extent that the college foundation contributes dollars to help finance single parents' cost of attendance. The college's faculty and staff, moreover, donated \$1,000 of its own in 1993-94 to help the target population. The

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pooled resources enabled the college to serve about 65 more single parents than the grant alone could have served.

The attention given to single parent needs paid off in a 1993-94 retention rate of 82% for those receiving child care assistance, and 78% for those receiving other direct assistance. This is higher than the statewide average of 77% and 74% respectively.

**Special Delivery Methods.** Local coordinators contribute much of the special counseling support from resources other than the single parent fund. At one mountain college the coordinator first makes sure that every student has the financial resources necessary to attend college. Once students are enrolled, the entire student personnel office keeps close contact with the student to make sure all academic personal and financial aspects of a student's life are proceeding well.

This program asks for only \$12,000 (for student transportation) of single parent grant money per year, although it is entitled to more than twice that amount based on its size. The school can afford such modesty because it refers students to other financial resources first. Students' child care needs, for example, are provided entirely by the local Department of Social Services, which takes pride in working with the college.

The college is rewarded for its careful coordination and surveillance of student needs with a retention rate for single parents of 91%, compared to a statewide average of 74% for students receiving assistance for transportation and tuition.

Services most needed by the target population are tuition, books, transportation, and instructional

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materials required for class participation. Fifty-four percent of these students report these items as necessities in order for them to attend school. Next on the list comes child care, reported by 41% of the target population as a necessary support for class attendance.

Thirty of 31 participating colleges reported serving over 1300 students at a total cost of \$485,470.53 with tuition, instructional materials, and transportation. Average expenditures were \$16,182 per college. Colleges served only 24% of the target population from the single parent grant, but in many cases were able to tap other resources to fill the gap.

Retention from Fall 1993 to Fall 1994 was 74% of those who received assistance of this kind, compared to 44% for those who requested but were unable to receive help with these services.

Of particular note for the 1993-94 fiscal year are the number of local coordinators who delivered services to many students for only a little money. For example, several colleges were able to serve between 80 and 120 students for the year with tuition, books, student transportation, and instructional materials for less than \$30,000. One college served 77 students with these direct services with only \$12,248. Colleges accomplish this in a variety of ways; some serve students with single parent funds only long enough to permit a search for other sources of support. Coordinators are careful not to duplicate services from different resources.

Grants which supported child care reported 986 students served at 36 colleges. Average expenditures were \$37,036 per college for child care. The figure includes the costs of coordination. The service had an apparent impact on retention, which was 77% for those

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students who were able to receive child care assistance from the grant. By comparison those who requested but did not receive child care from any source had a retention rate of only 50%.

**Exemplary Programs.** The single parent program of one large college in the coastal plains continues to show exemplary performance as a result of its commitment to the target population.

The college believes that students need to know immediately what they can expect their education to ultimately do for them. Thus, all applicants must begin the program by attending a group assessment to become more aware of their vocational interests, individual aptitudes, personal strengths, and academic strengths or weaknesses. At that time the students also receive labor market information related to the various curriculums they are exploring. Nontraditional training is discussed at length. Moreover, the group assessment allows for active participation of the students and socialization among themselves (a serendipitous result are the many carpooling and child care arrangements resulting from these sessions).

Once enrolled, the students attend an orientation especially for the single parent group. They hear the details of the program and learn the college's and their own responsibilities toward each other. At that session each student is scheduled for individual monthly counseling, which gives the counselor an opportunity to review class schedules and monitor progress toward graduation. Monthly attendance and performance sheets completed by each instructor let the counselor know immediately if the student is having problems with academics and/or attendance. If problems warrant, the counselor will meet more often than monthly with the student.

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Additional workshops are held for the students several times per quarter. Topics include professional image-making, stress management, study skills, test-taking strategies, and job-seeking skills.

As students near the completion of training, the counselor begins socializing them away from the comfortable atmosphere of school to the world of work. Job-seeking skills and tactics are discussed. Workshops are held on resume writing, interviewing skills, and salary negotiation.

The college does not use grant funds but rather college resources to provide the rich array of services above. It should be noted that this same college is committed not only to enhancing students' educational prospects, but also to maximizing grant resources by coordinating with other local agencies. They require all applicants for single parent grant assistance to apply first to the Department of Social Services, and they encourage them to apply to various other programs, such as JTPA, or vocational rehabilitation as well. As a result the college in 1993-94 expanded its single parent enrollment to 90 students (more than the year before) over and above what the grant alone could have served.

The single parent coordinator keeps the program highly visible on campus at all times. She makes an annual report to the local board of trustees on graduation and employment rates for this and other programs. She addresses student and faculty organizations to update them on scope and achievement of the program. In the community, she has succeeded in getting significant child care scholarships for students.

Finally, it is worth noting that this program retains 92% of its students who receive grant assistance with child care and 73% for those receiving other direct assistance (Fall 1993 - Fall 1994 retention measured).

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

During the 1993-94 school year, over 300 students were served at 15 colleges with sex equity grants designed to train men and women in the nontraditional occupations. The total cost was \$260,517, which includes the local salaries for coordination as well as direct financial support of students. The money invested by the sex equity program has broken barriers, especially in women's training, by providing them with material support (such as child care, transportation, books, etc.); effective 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 students, in particular, employable at a reasonable wage for the first time in their lives.

Retention rates of nontraditional students in the program average 84% from fall to spring (this figure includes those who complete a curriculum at some point during the year). Students uniformly turn in a B average. For the fall and spring quarters of 1993-94, the average GPA was 3.09 for full-time students and 2.96 for part-time students.

**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

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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. Although the programs are broadly similar, each offers something unique. One college offers an especially rich variety of activities for its sex equity students. They begin with a comprehensive assessment by personal interview of a student's goals and interests. The project counselor tours the campus and introduces each student to the program directors. Once accepted into the program the new enrollee receives an assignment to research his/her chosen field, the kinds of jobs available, the daily activities likely to be encountered, opportunities for growth, and salaries. Thus the student prepares for a career both practically and academically and is aware of the job market from the very beginning. The student will also encounter, before the end of the year, presentations from local business people on work place readiness. She or he will visit worksites in various fields; she or he will have an opportunity to choose a mentor from a mentoring pool created by the project counselor.

As a means of support, the group meets monthly, during which time they hear guest speakers talk of work place issues. On one weekend a quarter the students meet for such sessions as time management, career planning, panel discussions of role models, and even a family day, during which spouses and children are invited to share insights connected with the sex equity student's academic life. Finally, the project counselor has located her office in the midst of activity in the Industrial Technology Building so she can meet students in halls, visit them in labs, and, generally speaking, be as accessible as possible.

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

Six community colleges participated in programs for criminal offenders during the 1993-1994 program year. A total of 3,796 corrections inmates participated in 40 occupational programs (including non-1993/94 funded). (See enrollment table in Appendix B.) The following colleges and corrections facilities participated:

Table 1

Criminal Offender Program Participants

<u>College</u>	<u>Correctional Facility</u>
Anson Community College	Brown Creek Correctional Institution
Anson Community College	Anson Correctional Center
Cape Fear Community College	Pender County Correctional Unit
Johnston Community College	Johnston Correctional Center
Nash Community College	Nash Correction Institute
Southeastern Community College	Brunswick Correctional Facility
Wake Technical Community College	North Carolina Correctional Institution for Women

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**Achievements, services, or programs.**

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

A Microcomputer Systems Technology class, emphasizing microcomputer applications, hardware, and software troubleshooting, languages most used in the industrial setting of the service area, networking of computers and the related and general education courses appropriate to support the curriculum, was chosen by one community college to use in its correctional facility. Thirty-three students were tested using the same test utilized for all technical curriculum applicants. Test scores and student interest level were assessed and 14 students were selected given documentation that they had demonstrated the ability to benefit from the program. All selected students possessed a high school diploma or equivalency. Correction administrators considered the individuals, length of sentence, and expected release date to ensure that there would be sufficient time for inmates to complete the program. Eleven of the 14 students or 79% of the students have successfully progressed through the four quarters offered to date. If progress continues at the same rate, two of the eleven graduates

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will receive "honor graduate" status with a 4.0 GPA. The 78% retention rate exceeds the 67% rate which was the objective of the project.

Another community college upgraded its Residential Carpentry course of study and enrolled 20 students. Funding was requested to buy equipment and materials to enhance the program. There was a need to provide the same quality equipment and tools as the men would encounter in the work force. Upon completion of the program, each student would be able to know the correct carpentry terminology and be able to define them with 90% accuracy; to demonstrate with 90% accuracy the techniques of construction of residential housing from the blueprint to finished product; to explain and erect each individual component of construction from a blueprint; and to demonstrate and use safety practices with each type of construction tool 100% of the time.

A third college chose to instruct incarcerated women by implementing a travel agency operation program at the correctional unit and by improving and modernizing equipment used in the Secretarial Science program. Inmates entering the job market following release who lack computer skills would find it very difficult to secure secretarial/travel-related employment. Inmates hoping to enter the job market as clerks, general office workers, administrative assistants, data entry operators, and secretaries must possess current computer skills. Inmates entering travel agencies, cruise and air lines, tour companies, car rental companies, and corporate travel departments at entry-level positions need to be computer literate. Evaluative tests were focused on computer performance skills. Students were required to show proficiency in the areas of word processing, database management, spreadsheets and travel-related exercises.

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

The 58 community and technical colleges in North Carolina are committed to serving the vocational education needs of the adult special population of the state. It is the policy of the North Carolina Community College System not to discriminate on the basis of race, sex, age, national origin, religion or disability with regard to its students, employees, or applicants for admission or employment. The primary emphasis of every college is on job training. Every opportunity is taken by the 58 community colleges to increase special population participation and success in these programs.

The commitment to assuring the full and successful participation of special populations is strongly placed at the state level. A permanent, full-time staff member serves as the Coordinator of Methods of Administration. This staff member serves on numerous committees which review system-wide policies and programs which target special population members. A minimum of 20% of campuses are visited each year and their staff and procedures are rigorously screened to assure equitable special population treatment.

**Disabled.** During the 1993-1994 program year, 4,173 disabled students were enrolled in the vocational and technical curriculum programs eligible for Perkins funds. (See enrollment table in Appendix B.) To meet the needs of these students, particular attention is paid 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.

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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.

Assessment is accomplished by several methods which are used singly or in combination. One method often used is the administration of standardized assessment instruments such as the Myers-Briggs Type Indicator. 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 colleges. These include such things as supplemental standardized counseling, placement tests available in Braille, referral services available in the local community, specialized instructional equipment such as large print typewriters, "phonic ears," hearing impaired telephone adapters, and individual tape recorders. Additional classroom support is provided through tutorial services, interpreters, notetakers, signers, readers,

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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. Physical access is assured through special parking and elevator access in multi-floor buildings. These, and the many other supplemental services, are provided on an "as needed" basis. These services allow most disabled students to attend regular classes.

**Limited English Speaking (LEP).** Eight hundred and ninety-one (891) students with limited English proficiency were served in curriculum programs during the 1993-1994 program year (See enrollment table in Appendix B).

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 the western and eastern regions 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 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.

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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. However, a large number also attend vocational and technical curriculum programs as indicated by the large number served. 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 an enrollment of 37,458 economically disadvantaged students. (See Appendix C) 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.

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Likewise, many educationally disadvantaged students are enrolled in North Carolina's community colleges. In 1993-1994, 67,939 students were enrolled as academically disadvantaged. (See Appendix C) 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. As previously described, computerized diagnostic programs are available at several 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

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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 NCDCC 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 are encouraged to 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).**

**Curriculum Improvement Projects.** During the 1993-1994 program year, a major focus of funds from Perkins for state leadership and professional development was the undertaking of eight curriculum improvement projects. The goal of a curriculum improvement project (CIP) is to create a process and environment through inservice training and professional peer guidance which leads to an updated instructional program or curriculum area.

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Programs or areas targeted for improvement are those that are strongly affected by episodic socio-technical or economic forces in the state. Programs which meet this criteria are identified via a system-wide request for proposal process in which all colleges participate. These requests highlight what the circumstances are which require curriculum update, how the college will provide system-wide leadership to benefit all colleges offering the curriculum, and how the updated curriculum will be disseminated and implemented across the system. Strategies used by participating colleges include updating instructors' technical and professional knowledge, skills, and abilities, and updating the content of the associated curriculum and continuing education courses.

Eight colleges received funds to implement curriculum improvement projects during the 1993-1994 program year. Three projects completed their second year and concluded; five were beginning their first year. The three concluding were:

Table 2

Curriculum Improvement Projects (Second Year)  
1993-1994

<u>College</u>	<u>Curriculum Program</u>
Craven Community College	Business Management
Rowan-Cabarrus Community College	Math and Technology
Wake Technical Community College	Electronics-Based

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Business Management  
Craven Community College

The Business Management curriculum improvement project has been a cooperative effort of 77 community college management instructors, departmental staff, and key business leaders in the state. All 58 community colleges were served by working with the following curriculums: Business Administration, Industrial Management Technology, Public Administration, and Personnel Management Technology. All professional development activities and the majority of the model courses developed were applicable to all four target curriculums. Each CIP participant had the opportunity to receive a minimum of 31 hours of professional development through three two-day statewide conferences and five two-hour regional workshops. One hundred and ten instructors and administrators attended at least one CIP-sponsored workshop or conference.

The majority of the equipment purchased was to establish the electronic communication system for management instructors. This system will continue in operation through the Business Computer Technologies CIP that the school will host for the next two years. The major research project of the CIP was the design and administration of a Needs Analysis Survey to 534 business and industry leaders throughout the state which identified essential skills and abilities expected of two-year management graduates. The results of the surveys were used in planning faculty conferences, incorporated into the curriculum descriptions and model courses developed, and distributed to each college president, chief academic officer, and CIP participant. A survey of basic economic concepts was administered to all CIP participants and selected business leaders. Results were compared with results of the same survey administered to U.S. business leaders 40 years ago and distributed to each CIP participant.

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Math and Technology

Rowan-Cabarrus Community College

Math instructors from all 58 of the state community colleges participated in one or more of the six workshops (for a total of 48 hours of professional development training) sponsored by the CIP. A team of eight was selected from applications and involved extensively in Critical Thinking training and materials production. At the beginning of the project, four schools reported that technology was used in the math classes at their school. In the final evaluation, only four schools reported they were not using technology to teach math.

Not only was a Critical Thinking manual produced, but Link packages were distributed to thirty-one of the community colleges to share programs developed by math instructors across the state. This allows communication of new classroom developments among the instructors.

Electronics-Based Curriculum

Wake Technical Community College

Forty-three community colleges offer at least one of the eight electronics-based curriculums. All have been involved in the project. Instructors from all institutions have attended workshops and conferences, attended committee meetings, provided survey information on curriculum changes, or met with industry personnel to consider their needs for technicians in the future. The Electronics-Based Curriculum Manual was published to dispense task analysis information, to contain updated curriculum standards, suggested models of curriculums, detailed course descriptions and outlines, and course competencies.

Some of the workshops had to do with computer integrated manufacturing, programmable logic controllers, critical thinking, fiber optics, solid state motor controls,

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computer-aided instruction, telecommunications, and high power industrial electronic systems.

Five additional curriculum improvement projects were funded for 1993-1994 and reported on their first year's achievements. These were:

**Table 3**

Curriculum Improvement Projects (First Year)  
1993-1994

<u>College</u>	<u>Curriculum Program</u>
Bladen Community College	Welding
Davidson County Community College	Nursing
Haywood Community College	Mechanical/Manufacturing
Pitt Community College	Biology
Sandhills Community College	Physics

Welding

Bladen Community College

Forty-nine of the community colleges were involved in the Welding CIP the first year. Three statewide activities were held to promote this project. The first was Thermoplastic Welding, presented by Quality Thermoplastics Services, Inc., that had 30 community college project participants attending. A DACUM, or Developing a Curriculum, was hosted by a community college in Maintenance and Construction, and there were 31 colleges in attendance. Lastly there was a two-day Welding Manufacturing Job's Task Analysis that included 12 leaders from community colleges. All three of these

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seminars/workshops were professional development activities. The curriculum or instructional materials developed included task statements of welding processes, standardized welder qualification procedure forms, and standardized welding procedure specifications. Equipment purchased for this project were five thermoplastic welding devices with accessories, two pocket welders, a weld tester watts W-50, and a watts W-60-10-SM pipe beveling machine.

Nursing

Davidson County Community College

Eighty-one appointed grant participants representing Associate Degree Nursing, Practical Nursing Education, and Nursing Education Options participated in professional development and curriculum development activities. An initial statewide orientation and workshop, specifically designed to introduce the CIP concept, outline grant activities, and provide an overview of curriculum development, computer technology, and assessment/evaluation of critical thinking, was attended by 95% of the appointed grant participants. Four specialty workshops, providing instruction in critical thinking, computer technology integration, and curriculum development targeted members of the Nursing CIP's respective development committees. Average attendance was 85%. Instructional materials being developed would focus on two objectives: To develop model nursing curriculums that allow reduction in the total credit hours of the programs while providing sound education for nursing in the next century, and to review competencies in the three nursing curriculums to ensure they are responsive to the technological needs of the health care environment. Equipment purchased included an interactive computer system and video disc player, a desktop computer, a COMPU-ADD laptop computer, and a laser printer. This was used in multimedia presentations and demonstrations at the CIP workshops, during

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curriculum development committee work sessions, and in developing and printing instructional materials for participants.

Mechanical/Manufacturing  
Haywood Community College

Twenty-three community colleges are participating in this curriculum improvement project. In professional development three statewide inservice training conferences were held. The first was a plant tour of an automotive factory that gave faculty a chance to directly question the engineering staff operating a complex modern automated plant producing anti-lock brake systems. The second was a conference held at a community college where CADKEY, Industrial Robotics, ISO-9000, and Critical Thinking Skills were discussed. The third was a conference held jointly with the Electronics CIP where similar topics and ideas in critical thinking, team teaching, fuzzy logic control of industrial processes, and multimedia in the classroom were pursued. In the areas of curriculum or instructional materials development, an industrial survey and DACUM was issued to participants to highlight research findings, sample industrial training programs were shared, there was development of multimedia applications for this CIP, and there were videotapes showing sample lessons involving critical thinking skills, team teaching techniques, and multimedia methods in the classroom. Equipment purchased included scientific calculators, modelling software packages, multimedia development kits, and sourcebook binders for CIP information.

Biology  
Pitt Community College

The Biology CIP has focused on providing faculty inservice education and development of instructional materials and methods in the area of multimedia

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instructional technology. Two regional meetings, one statewide meeting, and eleven workshops have been held to introduce instructors to the new instructional technologies and provide hands-on training. The project has distributed templates and demonstration diskettes to get everyone started and has developed and tested eleven instructional modules. In addition, the project has developed a core curriculum in Human Anatomy and Physiology, published four quarterly newsletters, biology bulletin board directions, laser disk directory, and a directory of biologists and biology courses in the community college system. All 58 community colleges are involved in this project. While there is no biology curriculum, biology courses are integral to nursing, allied health, biotechnology, environmental science, forestry, agriculture, and natural resources. Approximately 40 health curriculums and 20 agricultural and natural resources curriculums in addition to business, mechanical/manufacturing, construction, electrical/electronics, public service, and service curriculums use biology courses. The following equipment was purchased and used in the workshops and in the development of multimedia modules. A total of 78 hours of workshops attended by 86 participants. In addition, 111 individuals attended regional and statewide meetings where this equipment was demonstrated: four 486 computers, one IBM development station, one scanner, one laser disk player, and a laser jet printer.

Physics  
Sandhills Community College

The Physics CIP has the goal to improve physics teaching and its three primary objectives are to improve the integration of academic and applied technology education; to update instructors' expertise in the technology fields; and to improve the learning environment by implementing proven strategies, including the use of educational technologies.

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Two regional meetings provided workshops on teaching techniques, tutorials on the use of technology in the classroom, and demonstrations of technology applications. In league with the Math CIP, the physics CIP co-sponsored a Technology Forum, which was a joint meeting with teachers from middle schools, high schools, and universities. The forum provided seminars on the use of technology to enhance education and developed a statewide position on technology needs. The Physics team combined with representatives of W. W. Norton Publishing and presented a conference on Innovative Physics Teaching. Three Physics working groups are concentrating on these objectives: curriculum support of technology programs, improving instructor knowledge of the physics of new technologies, and improving instructor teaching techniques. Money was budgeted for travel and equipment: two powerful computers and palmtop computers for student use in an interactive classroom network, and software, laboratory interfaces, and hardware to support the development of the instructor workstation and interactive classroom.

Outcomes Assessment Project

Pitt Community College/Coastal Carolina Community College

In 1993-1994, a special project was initiated using State Leadership funding to build a systematic and valid model by which the North Carolina Community Colleges could assess the attainment of specified learning outcomes in technical and vocational curriculums. The project would develop learning outcomes that are more closely aligned with the secondary VoCats, using Tech Prep as a vehicle for staff, faculty, and business interactions. This effort was not intended to complete such a massive undertaking; however, it would represent the first step toward the attainment of this goal. The proposed activity would involve a computer-based test bank of curriculum competencies that would permit instructors to generate criterion-referenced assessment instruments which are validated for verification of student

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mastery of explicitly defined tasks/competencies in their curriculums. Three program areas were selected as test cases, and these were Radiologic Technology, Business Computer Programming, and Automotive Technology. The first year of funding allowed the project leaders from two community colleges to explore new methods of measuring outcomes learning at the postsecondary level of instruction. The goals for this year were to establish a steering committee for each pilot curriculum area, hold meetings of the committees, develop a curriculum blueprint for each area, and develop test questions to measure the competencies and objectives in each area. As of the end of this calendar year all three of the program areas have had test banks established on the postsecondary side. During the next year validation of the test banks will occur. Visits to selected community colleges will be made to establish pilot test sites for validation.

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

Two community colleges used Perkins funding for community-based organizations. Catawba Valley Community College began a project called Choices Ahead with the Women's Resource Center. This project featured three 8-week sessions to expose 36 young mothers, who are economically disadvantaged, to information on vocations and preparation for entering the workforce. Each series consisted of 18 hours of participation in classes, tours, and activities. In addition, participants were involved in individual assessment, counseling, and mentoring sessions. Classes consisted of a combination of speakers from business and industry, instruction in prevocational skills and group counseling in motivational, attitudinal, self-esteem issues, and tours of training labs on campus. Evaluation of the project included examination of achievement of the objectives, how measurement criteria established for each objective and listed along with each objective points to

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the success of the project. Project personnel will collect evaluation information including: participant evaluation forms, attendance records to indicate retention, and pre- and post-test comparisons. Data from each of these instruments will be collected and compiled for evaluation by project staff and the advisory committee.

The other community college CBO recipient was Southwestern Community College for the Transition Project for Youth, in collaboration with Webster Enterprises. This program prepared teenage participants for life beyond high school through real work experience, job training, and assistance in re-entering high school or in obtaining further vocational or technical training at the college level. Using an 'earn as you learn' concept, the program gave youth a chance to practice work skills and improve work behaviors while they actually earned income. As to outcome, there were 112 total participants (42% female, 58% male), out of which 40 were in the job training component and 72 were in the work ethics/job skills component. As to educational goals, 49% wanted to pursue higher education, 12% vocational education, 11% wanted to get a GED, and 12% were already enrolled in college. As of June 1994, out of these 112 participants, 52 were still in work/training programs (4 working only, 48 in school/work combination). Thirteen had been placed into competitive employment. Eighteen left the facility ready for placement, seven moved out of the service area, and seven more entered or re-entered public school. The remaining 15 either dropped out or left for training elsewhere.

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

No postsecondary programs are presented in North Carolina.

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

Tech Prep in North Carolina is a focused, sequential six-year course of study designed to meet the need for high school and community college graduates to have greater academic rigor and a stronger technical education foundation. Through a blending of higher-level academic and vocational/technical secondary courses, Tech Prep prepares students for advanced courses required by two-year technical and community college programs, which in turn prepares workers for increasingly sophisticated occupations. At present, the North Carolina Department of Public Instruction and the Department of Community Colleges provide grants to Tech Prep consortia based upon competitive proposals received from all interested local education agencies (LEAs) who have developed agreements with community colleges or other postsecondary institutions to provide a 2+2+2 year educational program consisting of two years of secondary preparatory course work (grades 9 and 10), two years of occupation/technical-specific and advanced secondary course work (grades 11 and 12), followed by two years postsecondary course work leading to the associate degree or certificate of completion. Consortia are limited to one planning grant, but the same consortia may receive up to two implementation grants. A reapplication is required for each grant.

In 1993-1994, 63 consortia received grant money. Seventeen of these were planning grants, and 46 were implementation grants. Fifty-five community colleges were involved this year with 15 in the planning stages and 40 implementing Tech Prep into their curriculum.

The evaluation process and methodology for awarding the grants for this year is printed in the secondary section for Tech Prep preceding the postsecondary segment. The evaluation results are also to be found in the secondary section.

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The Tech Prep movement and program in North Carolina integrates academic and occupational subjects, placing heavy emphasis on articulation from secondary to postsecondary education. Articulation between high schools and the community college embodies a competency-based, technical curriculum, designed jointly by business/labor and the participating education institutions. This collaboration is designed to result in instructional sequences offered by the schools which will teach job-essential competencies without duplication or repetition.

The Tech Prep planning process involves many constituent elements in North Carolina. These include employers, labor representatives, parents, community organizations, and, of course, the secondary and postsecondary schools. The business/labor community identifies student outcomes required for future as well as current jobs. It also reviews curriculums and course content for job relevance, and participates with school officials to develop and provide work-based learning experiences such as shadowing, mentoring, cooperative learning, internships, and apprenticeships. These comprehensive and intensive cooperative efforts assure that Tech Prep students receive the right training consistent with the availability of jobs when they complete the course of study.

To summarize the 1993-1994 Tech Prep efforts in relation to the evaluation results, it can be reported that much of the early emphasis of Tech Prep efforts in North Carolina centered on articulation and marketing, and consortia have made considerable progress in both. As Tech Prep and the curriculums it supports evolve, both articulation and marketing efforts must be updated to keep pace with the changes.

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Consortia have made a good start in the involving of business and industry in the partnerships with high schools and community colleges, but that involvement needs to be extended into the areas of curriculum development and program design. A growing interest in School-To-Work and Youth Apprenticeship activities may serve the purpose of increasing collaborative planning of educational programs. Curriculum integration efforts are underway in the high schools, with most school districts supporting staff development and operating pilot projects. These efforts are resulting in models on which expansion and dispersion can build.

Much progress is evident in guidance services. Implementation of Career Development Plans is well underway in the high schools, and several districts are providing excellent assessment and counseling in support of career awareness and planning. Community colleges are rapidly moving to make their placement tests available to high school students to provide them feedback on their readiness to enter community college programs.

Where staff development has been conducted jointly for secondary and postsecondary personnel, the resulting communication between the two groups has facilitated activities beyond the intent of the training. Enhanced efforts in articulation, collaboration, curriculum improvement, and curriculum integration may all result from joint staff development targeted toward any single area. More joint staff development must be encouraged.

Most consortia are attempting to respond to the federal provisions for services to special populations students, but the reviews indicated a strong need for staff development to better inform consortia of their responsibilities and strategies for meeting them. The

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Department of Public Instruction and the Department of Community Colleges must take the lead in providing training and information.

Although some consortia have good plans for collecting data and monitoring the effectiveness of their Tech Prep implementation, many have limited or incomplete plans. The Department of Public Instruction and the Department of Community Colleges must communicate clearly their expectations for data collection and documentation of program accountability.

As pointed out earlier, the evaluation process, including the methodology and instrument, as well as the analysis of this data, can be found in the secondary section of this performance report. In Appendix D are the executive summaries of the individual consortia, the activity matrices, the joint policy statement between public instruction and the community colleges, and the evaluation instrument, along with the completed matrix of evaluations.

**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. As postsecondary institutions, its member colleges provided technical and vocational curriculums to 170,871 students. Each curriculum program is reviewed by the NCDCC 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.

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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).**

No postsecondary funds were used for Title III, 135 Part C, Section 321-323 eligible programs during the 1993-1994 program year. However, as previously described many community colleges apply Perkins 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 (prorated full-time) counselors for such activities. Additionally, many colleges have increased

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their guidance capabilities through the purchase of computer software designed to assess a student's career interests and abilities. Since the mission of a comprehensive community college is to provide complete educational services to all its constituents, programs such as these are indispensable.

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**APPENDIX A**

Performance Measures and Standards

- Postsecondary -

## **Performance Measures and Standards for Compliance with the Carl D. Perkins Vocational and Applied Technology Education Act of 1990**

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (Perkins II) requires that recipients of funds under the Act establish sufficient measures and performance standards to determine the degree of improvement in vocational education programs. The rationale for the establishment of the measures and standards for the North Carolina Department of Community Colleges has been to meet this requirement with the least additional burden to its member institutions. The development of the measures and standards has taken into consideration the additional reporting requirements imposed on the institutions by the General Assembly, the Student Right to Know Act, systemwide Critical Success Factors, and so forth. Therefore, to the extent possible, the measures and standards required by Perkins II have been developed to minimize or eliminate redundant data collection and reporting. Where possible, data collection is coordinated with the Student Progress Monitoring System currently being developed. The following narrative describes the measures and standards adopted to demonstrate compliance with Perkins II.

### **Part I: The Measures**

Perkins II states that the minimum core measures needed for compliance include

- (1) (a) Measures of learning and competency gain, including student progress in (b) the achievement of basic and more advanced academic skills. In response the following guidelines have been reviewed and adopted.
  - (a) Curricula approved during the last seven years have been required to define such competencies. Each college should, therefore, define 5 to 15 measurable competencies for each curriculum. While aggregate competencies are difficult to trace to specific courses, completion of the entire sequence of required courses may be presented as evidence of completion of all competencies in targeted skills.

**Performance Measure:** Record the percentage of the required credit hours completed for the curriculum, i.e., number of students who have completed 25%, 50%, 75%, or 100% of the courses needed for curriculum completion or graduation.

- (b) For compliance purposes, basic academic skills are defined as those necessary for entering a community college curriculum program. Advanced academic skills are those that are attained in General Education or Related courses, as stated in the Curriculum Standards for each curriculum program. Curriculum standards require a minimum number of credits in General Education and Related topics for diploma and degree programs.

**Performance Measure:** Colleges will report the rates at which vocational education students are required to take remedial basic academic courses (such as English and mathematics) and the rates at which they pass these academic courses. Additionally, rates at which

vocational education students take and pass General Education and Related courses shall be reported.

- (2) One or more measures of performance, including only
  - (i) Student competency gain.
  - (ii) Job or work skill attainment or enhancement, including student progress in achieving occupational skills necessary to obtain employment in the field for which the student has been prepared, including occupational skills in the industry the student is preparing to enter.
  - (iii) Retention in school or completion of secondary school or its equivalent.
  - (iv) Placement into additional training or education, military service or employment.

This part of the Perkins II requirements relates to labor market results rather than measurements taken in the educational setting as was required in the previous measure. Since only one measure must be reported (though more than one may be chosen), reporting options are flexible and have been developed to include existing data collection systems wherever possible. Given this rationale, item (iii), which examines retention rates, has been determined to most easily and effectively meet this criteria at this time. Future performance measures and standards will address other criteria as data collection and reporting capabilities are developed.

- (iii) A measure of retention rates has been developed for the Critical Success Factors and has been adopted to comply with this requirement.

**Performance Measure:** Students are considered to be retained if they were enrolled in the fall quarter, did not complete (graduate) in the quarter, and completed at least one additional course during the subsequent winter or spring quarters. Students who are enrolled as special credit, or in dual enrollment or Huskins Bill courses, are to be omitted from the retention cohort group, as are students in the V-099 and T-099 curriculum codes.

Retention rates are to be reported by credit hour categories, as presented in the Annual Statistical Report. Thus, student data will be separated into four groups based upon the following course loads during the fall quarter:

- 1. 12 or more credit hours
- 2. 9 to 11 credit hours
- 3. 6 to 8 credit hours
- 4. 5 or fewer

- (3) Incentives or adjustments that are
  - (i) Designed to encourage service to targeted groups or special population; and
  - (ii) Developed for each student, and, if appropriate, consistent with the student's Individualized Education Program, developed under section 614(a)(5) of the Education of the Handicapped Act.

It is the interpretation of the North Carolina Department of Community Colleges that the requirements of item (i) are substantially met through the nature and specificity of assurances given to the U.S. Department of Education, which state that funds from the Perkins II grants will be used to consistently encourage the participation of special populations in vocational and technical programs.

- (i) Colleges identify special populations vocational education students in several ways (declaration at registration, remedial classes for academic disadvantaged, or requests for financial aid, readers, interpreters, tutors, special counseling, etc.). These methods and the delivery of other supplemental services are designed to meet the needs of special populations as defined in Perkins II and to provide comparability between special and non-special (regular) vocational education students.

**Performance Measure:** Special population participation may be measured by either of two methods:

1. The ratio of percent of special population students enrolled in vocational/technical curricula to the percent of special population students enrolled in all curricula programs in the school population; or
2. The ratio of percent of special population students completing vocational/technical curricula to the percent of special population students completing all curricula programs in the school population.

Additionally, the Department of Community Colleges shall maintain a monitoring instrument which records the college's compliances with all assurances of equal access for members of special populations to meet the assurances contained in Perkins II grant applications.

- (ii) It is the interpretation of the Department of Community Colleges that this section applies to secondary education programs because community colleges do not provide Individualized Education Programs.

## Part II: The Standards

Standards shall be established after first analyzing the state average data on the above measures. Data will be collected for the 1992-93 school year to establish the baseline state averages. These baseline data will be analyzed to determine which, if any, measure of central tendency is most appropriate for each measure. These standards will be monitored subsequently to provide trend analysis in subsequent reporting periods. As additional data collection and analysis capabilities are developed and implemented (such as placement data), standards will be similarly developed and added to this initial base of measures and standards.

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**APPENDIX B**

Curriculum Postsecondary Enrollment

for Carl Perkins Performance Report

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01.0101	AGRICULTURAL BUSINESS	18	13	5	11	7		1		1		
01.0104	AGRICULTURAL TECH.	2		2	12							
01.0201	FARM MACHINERY MECH	8	8		1	7		1				
01.0204	AGRI MACHINERY SERV TEC	13	13		12			1				
01.0301	AGRICULTURAL SCIENCE	6	6		3	2		1				
01.0302	SWINE MGMT TECHNOLOGY	158	108	50	82	69	2	1		12	13	1
01.0304	HORTICULT. & FRUIT PROD	24	16	8	11	12	2	3		5	4	
01.0505	EQUINE TECHNOLOGY	61	13	48	20	35	7	7		1		
01.0599	TAXIDERMY	70	66	4	64	4				2		
01.0601	HORTICULTURE TECH.	570	385	185	269	180	4	19	1	42	56	3
01.0604	GREENHOUSE & GRNDS MGMT	274	218	56	49	54	1	100	122	7	18	
01.0605	LANDSCAPE ARCHITECT TECH	83	65	18	34	47		6	127	4	8	
01.0607	RECREATIONAL GRND. MGT.	143	135	8	72	69		2		3	20	2
03.0401	FOREST MANAGEMENT	192	172	20	72	118	1	5		8	16	
03.0404	WOOD PRODUCTS	12	10	2	1	11		1		2	1	
03.0499	LUMBER SPECIALIST	25	24	1	21	4		2		6	4	
05.0601	FISH AND WILDLIFE MGT.	131	115	16	51	79		3		15	11	
07.0699	DESKTOP PUBLISHING (T.S)	26	4	22	11	15		3		5	11	
08.0102	FASHION MERCHANDIS & MKT	121	5	116	61	55	1	8		72	1	
08.0503	FLORAL DES & COMM. HORT.	85	11	74	60	22	7	37		1	1	
08.0705	MARKETING & RETAILING	649	222	427	327	296				1	1	
08.0901	HOSPITALITY/TOURISM SPE	5	1	4	5					1	1	
08.1001	INSURANCE	43	20	23	38	4	1	1		17	10	
08.1104	TRAVEL AND TOURISM TECH	176	17	159	110	54	1	3		23	3	
08.9999	CUSTOMER SERVICE TECH	111	10	101	66	36	4	10		3	1	
10.0101	COMMUNICATIONS TECH.	27	15	12	19	6				1	1	
10.0103	PHOTOFINISHING SPEC.	20	12	8	5	15		2		12	1	
10.0104	BROADCASTING TECH	234	161	73	107	122	1	8		9	13	
11.9999	SCIENTIFIC VIS COMP GRAP	32	20	12	19	10	2	3		25	5	
12.0301	FUNERAL SERVICE ED.	275	172	103	176	94	2	6		44	2	
12.0403	COSMETOLOGY	3,742	195	3,547	1,472	2,013	29	90	41	24	71	
13.1501	TEACHER ASSOCIATE	431	25	406	124	286	2	19		195	13	
13.9999	AD FOR VOC INSTRUCTORS	29	24	5	20	9				25	3	
14.3001	MANUFACTURING ENG.	313	269	44	210	89	3	7		101	1	
15.0101	ARCHITECTURAL	873	659	214	436	401	18	44		20	4	
15.0303	CIVIL ENGINEERING	618	547	71	340	258	9	28		40	2	
15.0304	ELECTRICAL ENGINEERING	3,596	3,219	377	1,867	1,615	50	150	2	37	8	
15.0399	LASER/ELECTRO-OPTICS TEC	51	39	12	23	28	4	28		32	4	
15.0401	IND ELECT/ELECTRO TECH	429	395	34	207	213	3	12		34	1	
15.0402	BIOMEDICAL EQUIPMENT	202	179	23	91	101	14	42		18	1	
15.0403	COMPUTER ENGINEERING TEC	871	685	186	477	355	3	29		54	7	
15.0404	IND MAINTENANCE TECH.	553	474	79	265	268	3	1		79	2	
15.0405	INSTRUMENTATION	119	106	13	74	45	3	8		13	8	
15.0501	AUTOMATION/ROBOTICS	102	94	8	52	42	2	10		1	6	
15.0501	A/C, HEAT, & REFRIG TEC	281	275	6	176	93				16		

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15.0506	ENVIRONMENTAL SCIENCE	113	80	33	47	60	1	10		6		
15.0603	INDUSTRIAL ENGINEERING	165	113	52	76	81	1	9		15		3
15.0699	CHEMICAL	149	105	44	72	69	1	2	6	17		1
15.0701	IND SFTY SCRTY & HLTH MG	48	29	19	36	7		1		5		2
15.0702	QUAL ASSUR TECHNI (ITS)	64	48	16	54	8	1			1		1
15.0805	MECHANICAL ENGINEERING	1,783	1,492	291	939	747	29	72	32	84	291	18
15.1102	SURVEYING TECHNOLOGY	186	172	14	119	63		3		2	14	3
15.9999	GENERAL OCCUPATIONAL	494	127	367	241	221	5	20		78		3
20.0202	CHILD CARE WORKER	369	22	347	159	185	2	13		65	22	3
20.0203	EARLY CHILDHOOD ASSOC.	3,265	73	3,192	1,735	1,735	16	143	2	611	73	20
20.0401	CULINARY TECHNOLOGY	740	434	306	356	304	4	44	83	62	45	7
20.0409	FOODSERVICE SPECIALIST	629	584	45	112	104			502	14		4
22.0103	PARALEGAL TECHNOLOGY	3,030	319	2,711	1,475	1,368	19	88		551	319	22
25.0301	LIBRARY ASSISTANT	25	9	16	21	4				2		
31.0101	PARK & OUTDOOR REC RES	18	14	4	6	12	1	14		11		2
31.0301	RECREATION ASSOCIATE	111	65	46	42	63	1					3
40.0702	MARINE	168	123	45	111	57	2	4		18		
41.0101	BIO TECHNOLOGY	81	77	54	25	53				50		1
43.0102	CORRECTIONAL SERVICES	249	71	178	120	123	28	8	1	89		47
43.0107	CRIM JUSTICE-PROTECT SER	8,223	5,370	2,853	4,164	3,821	18	246			39	5
43.0201	FIRE SCIENCE	618	579	39	478	114		7		9		
43.0203	FIRE PROTECTION DIPLOMA	12	12		8	3						
44.0401	PUBLIC ADMINISTRATION	60	29	31	24	35		1		11		2
44.0701	SOCIAL SERVICE ASSOC.	916	77	839	364	489		37	393	218	77	2
46.0101	MASONRY	492	488	4	69	96		10	290	12	4	4
46.0201	RESIDENTIAL CARPENTRY	647	626	21	243	120	3	22	217	26	21	6
46.0302	ELECTRICAL INSTALLATION	1,562	1,490	72	872	499	7	51	52	80	72	13
46.0401	FACILITY SERVICE TECHNICIAN	52	52	16	197	16	1	11		12	16	2
46.0499	LIGHT CONSTRUCTION	707	691	16	60	297	2	10	231	21	5	2
46.0501	PLUMBING & PIPEFITTING	281	276	5	9	73		3	183	6	3	2
46.9999	INDUSTRIAL CONSTR TECH	27	24	3	88	15		5	52	3	18	
47.0104	DIGITAL ELECTRON REPAIR	174	156	18	63	36		3		6	11	
47.0105	INDUSTRIAL ELECTRONICS	106	95	11	43	40	2	21	19	14	43	2
47.0199	ELECTRONIC SERVICING	655	612	43	484	143	5	48	199	51	19	11
47.0201	PRACTICAL AIR CONDITIONI	1,429	1,410	19	858	348		5	100	2	2	7
47.0302	DIESEL & EQUIPMENT	55	53	2	27	24	3	28		39	53	
47.0303	INDUSTRIAL PLANT MAINT	966	913	53	581	291		10		1		
47.0402	GUNSMITHING	100	100		82	7						
47.0404	PIANO TUNING & REPAIR	2	2		1	1						
47.0408	JEWELRY PRODUCTION CRAFT	29	15	14	16	11	1	6		3		1
47.0603	AUTO BODY REPAIR	748	728	20	486	211	5	50	1	48	20	7
47.0604	AUTOMOTIVE TECHNOLOGY	1,980	1,883	97	1,027	791	22	98	154	94	97	17
47.0605	DIESEL VEHICLE MAINT.	198	196	2	146	47	3	7		7	2	3
47.0606	OUTBOARD MOTOR REPAIR	217	214	3	82	42	1	3	113	8	3	
47.0607	AVIATION MAINTENANCE	272	253	19	195	67	2	7		14	19	2

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48.0102	DRAFTING-BUILDING	99	61	38	55	40	6	1		6		
48.0105	DRAFTING-MECHANICAL	180	149	31	99	59	12	11	22	12	31	
48.0199	FURNITURE DFT & PROD DEV	23	15	8	10	13	5					
48.0201	GRAPHIC ARTS--PRNT MGMT	439	239	200	281	144	1	11		35		
48.0303	UPHOLSTERING	162	92	70	144	14	16	65	1	6	181	1
48.0503	MACHINIST	1,796	1,615	181	1,209	513	1	1		98	2	18
48.0507	TOOL & DIE	96	94	2	64	30	9	7	378	71	64	5
48.0508	WELDING	1,688	1,624	64	875	460	1	52		1	3	2
48.0701	FINE & CREATIVE WOODWKG	26	23	3	18	5	2	5		1	2	
48.0702	FURNITURE MACH OPERATION	187	185	2	134	49	2	7		1	2	
48.0703	CABINETMAKING	36	36		16	18		3				
48.0799	WOOD PRODUCTION CRAFTS	18	12	6	76	9	2	3		2		
48.9999	POTTERY PRODUCTION	99	22	77	13	13	2	4		13		
49.0102	AVIATION MGT & C.PILOT	176	154	22	138	30	1	1		7		1
49.0202	HEAVY EQUIP. OPERATOR	45	44	1	33	11						
49.0205	TRUCK DRIVER TRAINING	593	508	85	593	23		1				
49.0306	MARINE MECHANICS	82	82		21	23			44		85	2
49.9999	TRAFFIC AND TRANS.	31	18	13	25	4				2		
50.0402	COM. ART & ADV. DES.	1,345	694	651	855	408	10	1		75		5
50.0406	PHOTOGRAPHY	251	138	113	113	118	3	74	28	52		4
50.0408	INTERIOR DESIGN	392	33	359	243	113	2	17		65		1
51.0205	INTERPRETER TRAINING	96	10	86	63	29	3	14		11	33	4
51.0601	DENTAL ASSISTING	466	4	462	221	237	3	3		50	10	3
51.0602	DENTAL HYGIENE	353	4	349	251	89	2	19		22	4	8
51.0603	DENTAL LABORATORY	35	22	13	20	15		2		1		
51.0703	HOSPITAL MARD SECRETARY	153	1	152	53	81	1	9	1	55	1	
51.0707	MED. RECORDS TECHNOLOGY	382	16	366	152	207	3	12		91	16	3
51.0801	MEDICAL ASSISTING	1,280	21	1,259	447	781	8	37	1	340	21	7
51.0803	OCCUP. THERAPY ASST.	192	16	176	101	82	2	14		31	16	1
51.0805	PHARMACY TECHNOLOGY	257	71	186	94	155	4	15		32		6
51.0806	PHYSICAL THERAPIST ASST.	597	141	456	383	183	6	9		69	141	
51.0808	VETERINARY MEDICAL	123	17	106	54	66	1	8		7	17	
51.0904	EMERGENCY MEDICAL	505	304	201	308	171	3	27		38		
51.0905	NUCLEAR MEDICINE TECH	36	18	18	19	13	1	1		3		1
51.0907	RADIOLOGIC TECH / RADPHY	846	187	659	439	341	14	34		133	187	8
51.0908	RESPIRATORY CARE TECH	551	165	386	274	248	8	11		99	25	5
51.0909	SURGICAL TECH.	235	25	210	106	117	2	6		36	5	2
51.0910	MEDICAL SONOGRAPHY	63	5	58	30	17		2		12	14	4
51.0999	IMAGING TECH (TEC SPEC)	80	14	66	60	17				5		
51.1002	CYTOTECHNOLOGY	11	1	10	8	1				2		
51.1004	MEDICAL LABORATORY TECH	402	63	339	174	206	5	15		68	63	5
51.1099	PHLEBOTOMY	252	32	220	107	140	1	8		50	32	1
51.1501	DRUG & ALCOHOL TECH	132	19	113	42	79	1	12		39	19	1
51.1502	HUMAN SERVICES TECH.	663	94	569	140	508	5	31		185	94	3
51.1601	ASSOC. DEGREE NURSING	6,321	581	5,740	2,883	2,971	46	138		1,140	581	74

11/17/94

NORTH CAROLINA DEPARTMENT OF COMMUNITY COLLEGES  
CURRICULUM POSTSECONDARY ENROLLMENT  
FOR CARL PERKINS PERFORMANCE REPORT--7/1/93 TO 6/30/94  
(TECHNICAL AND VOCATIONAL ONLY)

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## REPORT # CC815CPP

CIP CODE	CIP NAME	TOT ENR	MALE	FEMALE	REG. VO-TE-ED	DIS-ADV	LEP	DIS-ABLED	CORR	SP/DH SPH	SEX EQ (NON-TRAD)	COMP-LETER
51.1613	PRACTICAL NURSING	1,796	116	1,680	789	871	13	41		400	116	11
51.1614	NURSING ASSISTANT	1,205	74	1,131	559	543	4	33	27	319	74	2
51.1615	HOMEMAKER/HOME HEALTH AI	167	5	162	69	87	1	6		52	5	
51.1802	OPTICIANRY	66	29	37	40	26				3		1
51.2399	DEVELOPMENT DISABILITIES	32		32	4	25		2		16		
51.2601	THERAPEUTIC RECREATION	260	35	225	84	157		10		96	35	2
52.0201	BUSINESS ADMINISTRATION	10,435	3,616	6,819	4,969	4,770	96	393	309	1,313		58
52.0205	INDUSTRIAL MANAGEMENT	1,056	647	409	646	372	7	25		71		9
52.0302	ACCOUNTING	5,449	920	4,529	2,728	2,416	56	205	1	803	920	16
52.0402	SECRETARIAL-EXECUTIVE	3,143	30	3,113	1,065	1,916	21	128	1	745	30	14
52.0403	SECRETARIAL-LEGAL	436	3	433	164	248	1	18		101	3	2
52.0404	SECRETARIAL-MEDICAL	2,416	24	2,392	768	1,525	11	103		600	24	12
52.0405	COURT REPORTING	28		28	12	12		1		9		1
52.0407	DATA ENTRY OPERATIONS	98	8	90	61	29	1	1		17	8	1
52.0408	GENERAL OFFICE TECH	1,595	36	1,559	446	1,081	14	83	1	433	36	8
52.0499	POSTAL SERVICE TECH.	50	38	12	29	18		2		5	12	1
52.0701	SMALL BUS MGMT. ENTR DEV	2	1	1	2							1
52.0803	BANKING AND FINANCE	269	46	223	123	139	3	9		28	46	1
52.0805	INSURANCE (TECHNI SPEC)	62	23	39	58	4						
52.0902	HOTEL & RESTAURANT MGMT	331	164	167	154	164	9	16	1	26		1
52.1101	INTERNATIONAL BUSINESS	101	51	50	70	25	3	1		10		
52.1201	MICROCOMPUTER SYSTE TECH	4,001	1,167	2,834	1,783	1,948	44	231	11	758		32
52.1202	BUSINESS COMPUTER PROG	6,033	2,258	3,775	2,917	2,799	64	277	8	857		38
52.1204	NETWORKING TECHNOLOGIES	29	21	8	18	10		2				1
52.1205	COMPUTER OPERATIONS	523	140	383	184	276	5	41	39	125		5
52.1501	REAL ESTATE (TEC SPEC)	1,593	854	739	1,391	118	9	25		77		6
		110,990	47,448	63,542	54,203	48,563	891	4,173	3,796	14,670	5,776	729

Vocational Education Performance Report  
NC Department of Community Colleges  
1993-1994 Program Year

**APPENDIX C**

Special Curriculum Student Enrollment

Report for 1993-1994

10/20/94

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM  
SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT  
BASED ON ANNUAL ENROLLMENT FOR THE YEAR 1993-94  
NOTE: ENROLLMENT COUNTS ARE DUPLICATED

PAGE

PROGRAM CCA1208B

COLLEGE	NUMBER HANDI- CAPED	ACADEMIC DISAD- VANTAGED	ECONOMIC DISAD- VANTAGED	LIMITED ENGLISH PROFI- CIENCY	TOTAL * UNDUPLICATED DISADVANTAGED	SINGLE PARENT	SINGLE HOME MAKER	TOTAL UNDUPLI- CATED SINGLE PARENT OR HOMEMAKER	TOTAL NUMBER UNDUPLI- CATED SPECIAL POPUL
ALAMANCE CC	143	1,143	1,407	30	2,063	300	238	482	2,237
ANSON CC	18	164	81		225	101	12	106	300
ASHEVILLE-BUNCOMBE	365	1,706	660	97	2,229	562	238	659	2,587
BEAUFORT COUNTY CC	21	360	179	4	448	79	74	133	2,488
BLADEN CC	27	352	237	6	469	123	73	182	527
BLUE RIDGE CC	154	988	369	19	1,161	348	236	439	1,404
BRUNSWICK CC	48	438	196	6	1,530	139	368	249	613
CALDWELL CC & TI	199	1,129	868	230	1,817	58	19	60	2,128
CAPE FEAR CC	14	1,595	451	4	1,805	306	135	1,098	1,899
CARTERET CC	94	477	842	56	1,262	172	135	262	1,605
CATAWBA VALLEY CC	134	1,528	587	70	1,990	214	57	270	2,121
CENTRAL CAROLINA C	88	1,272	842	17	1,757	995	844	1,548	1,822
CENTRAL PIEDMONT C	231	3,595	1,576	185	4,987	322	100	653	5,908
CLEVELAND CC	23	309	476	46	646	519	57	367	3,535
COASTAL CAROLINA C	145	2,536	1,481	3	1,620	487	1,051	1,246	2,148
COLLEGE OF ALBEMAR	96	1,236	968	50	2,586	317	314	496	2,718
CRAVEN CC	233	1,998	1,480	17	1,569	418	408	421	1,705
DAVIDSON COUNTY CC	161	1,434	768	21	2,477	351	91	390	2,625
DURHAM TCC	44	2,191	424	21	2,477	351	91	390	2,625
EDGEcombe CC	53	890	973	3	1,425	418	408	421	1,496
FAYETTEVILLE TCC	321	4,040	2,501	149	4,726	606	291	802	4,876
FORSYTH TCC	314	1,757	645	21	2,132	322	305	569	2,536
GASTON COLLEGE	167	2,348	530	28	2,569	478	279	656	2,842
GUILFORD TCC	319	1,768	795	204	1,684	417	570	987	2,273
HALIFAX CC	98	1,290	664	3	1,465	396	168	493	1,542
HAYWOOD CC	109	597	488	14	931	219	210	343	1,041
ISOTHERMAL CC	48	1,158	151	6	1,197	44	61	91	1,232
JAMES SPRUNT CC	99	1,627	702	6	1,042	212	42	228	1,104
JOHNSTON CC	115	1,270	686	3	1,561	103	69	148	1,628
LENOIR CC	115	1,137	422	5	1,345	343	94	420	1,491
MARTIN CC	44	540	458	4	692	208	103	292	753
MAYLAND CC	71	596	352	2	716	85	114	167	741
MCDOWELL TCC	49	291	282	11	488	152	91	219	569
MITCHELL CC	131	1,034	406	20	1,198	300	85	342	1,292
MONTGOMERY CC	34	80	122	2	176	62	61	101	221
NASH CC	81	755	99	5	819	146	140	255	986
PAMLICO CC	13	101	39	1	112	36	15	51	129
PIEDMONT CC	21	70	77		141	162	27	165	279
PITT CC	516	2,913	1,099	61	3,398	732	105	780	3,790
RANDOLPH CC	67	926	171	2	987	82	43	112	1,027
RICHLAND CC	27	607	478	1	865	163	163	299	1,890
ROANOKE-CHOWAN CC	40	745	845	5	1,031	228	131		1,058

\*TOTAL DISADVANTAGED INCLUDES ACADEMIC, ECONOMIC, AND LIMITED ENGLISH SPEAKING

10/20/94

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM  
SPECIAL CURRICULUM STUDENT ENROLLMENT REPORT  
BASED ON ANNUAL ENROLLMENT FOR THE YEAR 1993-94  
NOTE: ENROLLMENT COUNTS ARE DUPLICATED

PAGE

PROGRAM CCA120BB

COLLEGE	NUMBER HANDI- CAPPED	ACADEMIC DISAD- VANTAGED	ECONOMIC DISAD- VANTAGED	LIMITED ENGLISH PROFI- CIENCY	TOTAL * UNDOPLICATED DISADVANTAGED	SINGLE PARENT	SINGLE HOME MAKER	TOTAL UNDOPLI- CATED SINGLE PARENT OR HOMEMAKER	TOTAL NUMBER UNDOPLI- CATED SPECIAL POPLN
ROBESON CC	70	388	441	8	801	222	258	403	924
ROCKINGHAM CC	48	809	13		821	154	134	232	992
ROWAN-CABARRUS CC	128	2,111	1,022	51	2,654	492	519	872	2,953
SAMPSON CC	68	919	808	1	1,181	250	63	309	1,204
SANDHILLS CC	66	1,807	1,040	14	2,190	196	177	300	2,250
SOUTHEASTERN CC	31	1,188	776	16	1,414	231	84	274	1,466
SOUTHWESTERN CC	69	321	138	1	1,407	110	132	206	531
STANLY CC	132	748	539	23	1,057	269	187	343	1,192
SURRY CC	117	924	451	7	1,154	194	154	311	1,362
TRI-COUNTY CC	168	605	256	23	1,724	152	153	271	864
VANCE-GRANVILLE CC	116	896	736	9	1,466	308	168	426	1,619
WAKE TCC	813	3,242	1,262	244	3,995	387	300	628	4,616
WAYNE CC	156	1,841	1,204	9	2,302	435	323	674	2,464
WESTERN PIEDMONT, C	93	1,270	682	23	1,718	385	312	595	1,928
WILKES CC	39	852	635		1,178	274	6	279	1,296
WILSON TCC	46	1,077	578	1	1,212	136	77	175	1,233
	7,250	67,989	37,458	1,841	88,169	16,518	11,670	24,338	98,168

\*TOTAL DISADVANTAGED INCLUDES ACADEMIC, ECONOMIC, AND LIMITED ENGLISH SPEAKING



Vocational Education Performance Report  
NC Department of Community Colleges  
1993-1994 Program Year

**APPENDIX D**

Tech Prep Evaluations

1993-1994

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For the Executive Summaries of the Individual Consortia  
please refer to  
Appendix A in the  
1993-94 Tech Prep Final Report\*

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\*Appendix A in this booklet contains approximately 85 pages.  
To obtain, please contact: Ken Smith, DPI (919-715-1661) or  
Gerald Pumphrey, DCC (919-733-7015)

## **Activity Matrices**

The information presented in these matrices may not correspond directly with the evaluation or the executive summary of an individual project. The presence of one or more activities in one of the categorical matrices is not necessarily an indication that the consortia met the objectives it addressed in its grant proposal. Some activities in the matrices were included if they were presented in the oral presentation and omitted in the executive summary. This portion of the document cannot be accurately used for the purposes of comparing projects, but is meant to provide the interested reader a view of the scope of activities and strategies employed in the implementation of Tech Prep. Activities listed under the heading "Other" may be found in the executive summaries of the individual consortia.

Local School District	College(s)	Updated Articulation Agree	Updated Reviewed Curriculum	Advanced Placement Offerings	Math Courses	Apprenticeships	English Courses	Other*
Alamance County	Alamance CC	X		X	X			X
Alleghany County	Wilkes CC	X						X
Ashe County	Wilkes CC	X	X					X
Asheville/Bunc/Madison	Asheville-Bunc CC				X			
Avery/Yancey County	Mayland CC							X
Bertie County	Martin/Roan-Chow	X			X			X
Bladen County	Bladen CC	X			X			X
Brunswick County	Brunswick CC			X				X
Burke County	West.Piedmont CC	X	X					X
Burlington City	Alamance CC							X
Cabarrus County	Rowan-Cabarrus	X						
Carteret County	Carteret CC	X	X					
Caswell County	Piedmont CC	X						
Catawba County	Catawba Valley CC							
Charlotte-Mecklenburg	Central Piedmont		X					
Cherokee/Clay/Graham	Tri-County CC							X
Clinton/Sampson	Sampson County	X						X
Columbus/Whiteville	Southeastern CC	X						X
Craven County	Craven CC	X		X				X
Cumberland County	Fayetteville CC	X						X
Duplin County	James Sprunt CC			X				X
Franklin County	Vance-Granville	X	X	X				X
Granville County	Vance-Granville	X			X			X
Guilford County	Guilford Tech CC	X						X

# ARTICULATION ACTIVITIES

June 1994

Local School District	College(s)	Updated Articulation Agreement	Updated Reviewed Curriculum	Redesigned Adv. Placement Forms	Math Courses	Apprenticeships	English Courses	Other*
Haywood County	Haywood CC	X			X			X
Harnett County	Central Carolina			X				X
Henderson/Transylvan	Blue Ridge CC	X	X	X				X
Hickory City	Catawba Valley	X	X				X	X
Hoke County	Sandhills CC							X
Iredell-Statesville	Mitchell CC				X		X	X
Jackson County	Southwestern CC	X	X					X
Johnston County	Johnston CC							X
Kannapolis City	Rowan-Cabarrus	X		X				X
Lincoln County	Gaston College							
Lee County	Central Carolina	X	X		X			X
Lenoir/Jones/Greene	Lenoir CC	X	X					X
Martin County	Martin CC							X
Mitchell County	Mayland CC							X
McDowell County	McDowell Tech CC		X					X
Montgomery County	Montgomery CC		X	X				X
Moore County	Sandhills CC							X
Mooresville Graded	Mitchell CC	X						X
Nash/Rocky Mount	Nash CC	X						X
Onslow County	Coastal Carolina		X	X				X
Pamlico County	Pamlico CC	X	X	X				X
Pitt County	Pitt CC			X				X
Richmond County	Richmond CC		X			X		X
Robeson County	Robeson CC	X						X

# ARTICULATION ACTIVITIES

June 1994

Local School District	College(s)	Updated Articulation Agreement	Updated Reviewed Curriculum	Advanced Placement	Math Courses	Apprenticeships	English Courses	Other*
Rockingham County	Rockingham CC							X
Rowan-Salisbury	Rowan-Cabarrus							X
Rutherford County	Isothermal CC							X
Scotland County	Richmond CC		X			X		X
Surry/Yadkin/Stokes	Surry CC					X		X
Tyrrell County	Beaufort County							X
Union County	AnsonStanly/UTECH			X				X
Vance County	Vance-Granville			X				X
Wake County	Wake Tech CC							
Wayne County	Wayne CC	X						X
Weldon City	Halifax CC	X						X
Wilson County	Wilson Tech CC							
Winston-Salem/Forsyth	Forsyth Tech CC		X				X	X

Local School District	College(s)	Meetings w/ Consortium	Local Advisory Board	Shadowing/Apprenticeships	School-To-Work Transition	Staff Develop/Stipends	Job Fair/Conference	Business/Industry Partnerships	Reviewed/Aligned Curriculum	Shared Equipment	Teacher Visits/Student Tours	Needs Assessment/Survey	Other*
Alamance County	Alamance CC	X		X				X				X	
Alleghany County	Wilkes CC	X	X							X			
Ashe County	Wilkes CC	X	X				X						
Asheville-Buncombe County	Asheville-Buncombe CC	X											
Avery/Yancey County	Mayland CC	X	X		X							X	
Bertie County	Martin/Roan-Chow	X											
Bladen County	Bladen CC		X										
Brunswick County	Brunswick CC	X											
Burke County	West Piedmont CC		X										
Burlington City	Alamance CC		X										
Cabarrus County	Rowan-Cabarrus									X			
Carteret County	Carteret CC	X		X	X								X
Caswell County	Piedmont CC	X											
Catawba County	Catawba Valley CC		X			X							X
Chapel Hill/Carrboro	Durham/Alamance												
Charlotte-Mecklenburg	Central Piedmont			X	X						X		X
Chatham County	Central Carolina			X									
Cherokee/Clay/Graham	Tri-County CC												
Clinton/Sampson	Sampson County	X											
Columbus/Whiteville	Southeastern CC	X	X	X									
Craven County	Craven CC	X	X	X	X	X					X		
Cumberland County	Fayetteville CC												
Duplin County	James Sprunt CC	X	X				X			X			
Franklin County	Vance-Granville	X	X										

COLLABORATIVE ACTIVITIES

Local School District	College(s)	Meetings w/ Consortium	Local Advisory Board	Shadowing/Apprenticeships	School-To-Work Transition	Staff Develop/Stipends	Job Fair/Conference	Business/Industry Partner	Review/Align Curriculum	Shared Equipment	Teach Visits/Stud Tours	Needs Assess/Survey	Other*
Granville County	Vance-Granville	X	X	X									
Guilford County	Guilford Tech CC	X	X		X								X
Haywood County	Haywood CC	X	X										
Harnett County	Central Carolina	X						X					X
Henderson/Transylv	Blue Ridge CC												
Hickory City	Catawba Vall CC	X	X							X			
Hoke County	Sandhills CC											X	
Iredell-Statesville	Mitchell CC	X	X	X									X
Jackson County	Southwestern CC	X	X							X			X
Johnston County	Johnston CC									X			X
Kannapolis City	Rowan-Cabarrus												X
Lincoln County	Gaston College	X	X	X									
Lee County	Central Carolina	X	X										
Lenoir/Jones/Greene	Lenoir CC	X	X										X
Martin County	Martin CC	X	X			X							X
Mitchell County	Mayland CC			X									X
McDowell County	McDowell Tech CC				X								X
Montgomery County	Montgomery CC	X	X			X				X	X		X
Moore County	Sandhills CC	X	X							X			X
Mooreville Graded	Mitchell CC			X									X
Nash/Rocky Mount	Nash CC	X	X	X		X	X	X			X		X
Onslow County	Coastal Carolina								X				
Pamlico County	Pamlico CC	X	X		X			X					
Pitt County	Pitt CC	X	X										
Richmond County	Richmond CC	X											X
Robeson County	Robeson CC	X	X					X					X

Local School District	College(s)	Meetings w/ Consortium	Local Advisory Board	Shadowing/Apprenticeships	School-To-Work Transition	Staff Develop/Stipends	Job Fair/Conference	Business/Industry Partner	Review/Align Curriculum	Shared Equipment	Teach Visits/Stud Tours	Needs Assess/Survey	Other *
Rockingham County	Rockingham CC	X	X	X	X							X	
Rowan-Salisbury	Rowan-Cabarrus					X							
Rutherford County	Isothermal CC	X	X	X		X			X				
Scotland County	Richmond CC	X	X						X				X
Surry/Yadkin/Stokes	Surry CC			X				X					X
Tyrell County	Beaufort County							X					
Union County	AnsonStanlyUTEC	X						X			X		
Vance County	Vance-Granville	X											
Wake County	Wake Tech CC		X					X					
Wayne County	Wayne CC		X	X	X						X		X
Weldon City	Halifax CC						X				X		X
Wilson County	Wilson Tech CC												X
Win-Sal/Forsyth Co.	Forsyth Tech CC					X				X	X		

Local School District	College(s)	Technical Math I/II	Principles of Technology I/II	PT Equipment Upgrades	Computers/Computer Lab	Purchased Software/Upgrades	Computers for Business Courses	Applied Communications	Health Occupations/Allied Health	Applied Biology/Chemistry/Materials	Other *
Alamance County	Alamance CC	X		X			X				X
Alleghany County	Wilkes CC			X						X	X
Ashe County	Wilkes CC		X			X					X
Asheville/Buncombe/Madison	Asheville-Bunc CC	X	X	X				X		X	X
Avery/Yancey County	Mayland CC	X	X	X				X			X
Bertie County	Martin/Roan-Chow	X	X							X	X
Bladen County	Bladen CC					X	X		X		
Brunswick County	Brunswick CC	X			X			X			X
Burke County	West Piedmont CC	X	X		X		X	X	X		X
Burlington City	Alamance CC	X	X				X				X
Cabarrus County	Rowan-Cabarrus										X
Carteret County	Carteret CC				X	X					X
Caswell County	Piedmont CC								X		X
Catawba County	Catawba Valley CC		X	X							X
Charlotte-Mecklenburg	Central Piedmont	X			X	X					X
Cherokee/Clay/Graham	Tri-County CC	X	X		X					X	X
Clinton/Sampson	Sampson County			X	X						X
Columbus/Whiteville	Southeastern CC	X		X	X				X		X
Craven County	Craven CC			X					X		
Cumberland County	Fayetteville CC	X			X						X
Duplin County	James Sprunt CC	X			X	X			X	X	X
Franklin County	Vance-Granville		X								
Granville County	Vance-Granville	X			X						
Guilford County	Guilford Tech CC		X								

Local School District	College(s)	Technical Math I/II	Principles of Technology I/II	PT Equipment Upgrades	Computers/Computer Lab	Purchased Software/Upgrades	Computers for Business Courses	Applied Communications	Health Occupations/Allied Heal	Applied Biology/Chemistry/Material	Other*
Haywood County	Haywood CC		X			X					
Harnett County	Central Carolina	X			X						X
Henderson/Transylvania	Blue Ridge CC	X	X				X				X
Hickory City	Catawba Valley										
Hoke County	Sandhills CC		X		X	X					X
Iredell-Statesville	Mitchell CC		X	X		X					X
Jackson County	Southwestern CC				X	X	X				X
Johnston County	Johnston CC				X	X					X
Kannapolis City	Rowan-Cabarrus CC	X		X		X					X
Lee County	Central Carolina		X		X	X					X
Lenoir/Jones/Greene	Lenoir CC					X		X			X
Lincoln County	Gaston College			X							X
Martin County	Martin CC	X	X				X		X	X	X
Mitchell County	Mayland CC		X		X	X		X			X
McDowell County	McDowell Tech CC										X
Montgomery County	Montgomery CC				X	X					X
Moore County	Sandhills CC					X					X
Mooresville Graded	Mitchell CC	X	X			X					X
Nash/Rocky Mount	Nash CC									X	X
Onslow County	Coastal Carolina									X	X
Pamlico County	Pamlico CC								X		X
Pitt County	Pitt CC				X	X					X
Richmond County	Richmond CC				X	X			X		X
Robeson County	Robeson CC										X

Local School District	College(s)	Technical Math I/II	Principles of Technology I/II	PT Equipment Upgrades	Computers/Computer Lab	Purchased Software/Upgrades	Computers for Business Courses	Applied Communications	Health Occupations/Allied Heal	Applied Biology/Chemistry/Material	Other*
Rockingham County	Rockingham CC							X			X
Rowan-Salisbury	Rowan-Cabarrus	X			X	X		X		X	X
Rutherford County	Isothermal CC										X
Scotland County	Richmond CC								X		X
Surry/Yadkin/Stokes	Surry CC	X	X					X			X
Tyrrell County	Beaufort County		X		X	X			X		X
Union County	AnsonStanly/UTEC		X			X					X
Vance County	Vance-Granville			X	X	X					X
Wake County	Wake Tech CC	X	X								X
Wayne County	Wayne CC							X		X	X
Weldon City	Halifax CC		X		X						X
Wilson County	Wilson Tech CC				X	X					X
Winston-Salem/Forsyth	Forsyth Tech CC										X

Local School District	College(s)	Acad/Voc Curriculum Integration	Applied Communications	Applied/Tech Math/Math CORD	Sciences	SREB Staff Development Training	Business and English	Automotive Technology	Applied Biology/Chemistry	Principles of Technology	Agriculture	Lesson Plans Across Disciplines	Other*
Alamance County	Alamance CC												X
Alleghany County	Wilkes CC					X							X
Ashe County	Wilkes CC												X
Asheville/Buncombe/Madison	Asheville-Bun CC	X		X								X	X
Avery/Yancey County	Mayland CC	X											
Bertie County	Martin/Roan-Chow						X						
Bladen County	Bladen CC												
Brunswick County	Brunswick CC												
Burke County	West Piedmont CC		X	X	X	X		X		X	X		X
Burlington City	Alamance CC	X											X
Cabarrus County	Rowan-Cabarrus							X		X			
Carteret County	Carteret CC	X	X		X	X		X					X
Caswell County	Piedmont CC												
Catawba County	Catawba Valley CC												
Chapel Hill/Carrboro City	Durham/Alamance						X						X
Charlotte-Mecklenburg	Central Piedmont			X									X
Chatham County	Central Carolina CC												X
Cherokee/Clay/Graham	Tri-County CC	X	X	X	X		X	X		X	X		X
Clinton/Sampson	Sampson County	X									X		
Columbus/Whiteville	Southeastern CC												
Craven County	Craven CC						X						X
Cumberland County	Fayetteville CC											X	
Duplin County	James Sprunt CC	X											
Franklin County	Vance-Granville												

Local School District	College(s)	Acad/Voc Curriculum Integration	Applied Communications	Applied/Tech Math/Math CORD	Sciences	SREB Staff Development Trai	Business and English	Automotive Technology	Applied Biology/Chemistry	Principles of Technology	Agriculture	Lesson Plans Across Disciplin	Other *
Granville County	Vance-Granville												
Guilford County	Guilford Tech CC	X										X	
Harnett County	Central Carolina	X	X	X	X								
Haywood County	Haywood CC		X	X	X								
Henderson/Transylvania	Blue Ridge CC												
Hickory City	Catawba Valley	X											X
Hoke County	Sandhills CC	X											
Iredell-Statesville	Mitchell CC	X	X										
Jackson County	Southwestern CC		X	X		X	X						X
Johnston County	Johnston CC		X										X
Kannapolis City	Rowan-Cabarrus CC	X	X										X
Lincoln County	Gaston College												
Lee County	Central Carolina			X	X		X			X			X
Lenoir/Jones/Greene	Lenoir CC												
Martin County	Martin CC	X	X	X									X
Mitchell County	Mayland CC				X		X			X			X
McDowell County	McDowell Tech CC	X	X										X
Montgomery County	Montgomery CC												
Moore County	Sandhills CC				X	X							X
Mooresville Graded	Mitchell CC												X
Nash/Rocky Mount	Nash CC	X											X
Onslow County	Coastal Carolina				X								X
Pamlico County	Pamlico CC				X		X						X
Pitt County	Pitt CC												
Richmond County	Richmond CC												X

Local School District	College(s)	Acad/Voc Curriculum Integration	Applied Communications	Applied/Tech Math/Math CORD	Sciences	SREB Staff Development Training	Business and English	Automotive Technology	Applied Biology/Chemistry	Principles of Technology	Agriculture	Lesson Plans Across Disciplines	Other*
Robeson County	Robeson CC		X	X									X
Rockingham County	Rockingham CC												
Rowan-Salisbury	Rowan-Cabarrus												
Rutherford County	Isothermal CC												X
Scotland County	Richmond CC												
Surry/Yadkin/Stokes	Surry CC	X											
Tyrrell County	Beaufort County			X									X
Union County	Anson/Stanly/UTECH			X	X				X				X
Vance County	Vance-Granville	X		X	X								X
Wake County	Wake Tech CC												X
Wayne County	Wayne CC												X
Weldon City	Halifax CC												X
Wilson County	Wilson Tech CC	X			X								X
Winston-Salem/Forsyth	Forsyth Tech CC												X

Local School District	College(s)	CDP's (Career Development Plans)	Faculty Advisement	Career Counseling	Career Portfolios	Tech Prep Handbook	Software Career Program Purchased	SREB-Related effort /career focus	Interest and/or Aptitude Survey	CAPS/COPS	ASSET	SOICC/NOICC Model	IEC's	Vocational Assessment/ASVAB	Career Center	Database/Tracking System	Career Day/Showcase	Shadowing Experience	Other *
Alamance County	Alamance CC	X	X	X															X
Alleghany County	Wilkes CC		X					X											
Ashe County	Wilkes CC	X								X			X						
Asheville/Buncombe/Madison	Asheville-Bunc CC	X	X																
Avery/Yancey County	Mayland CC	X	X																
Bertie County	Martin/Roan-Chow	X											X						
Bladen County	Bladen CC	X												X					
Brunswick County	Brunswick CC	X												X					
Burke County	West Piedmont CC	X					X								X	X			
Burlington City	Alamance CC						X		X										X
Cabarrus County	Rowan-Cabarrus											X							X
Carteret County	Carteret CC		X									X							X
Caswell County	Piedmont CC																		X
Catawba County	Catawba Valley CC										X						X		
Chapel Hill/Carrboro City	Durham/Alamance																		
Chatham County	Central Carolina CC	X					X			X									
Charlotte-Mecklenburg	Central Piedmont		X				X					X						X	
Cherokee/Clay/Graham	Tri-County CC	X					X												
Clinton/Sampson	Sampson County	X																	X
Columbus/Whiteville	Southeastern CC	X																	X
Craven County	Craven CC	X																	X
Cumberland County	Fayetteville CC	X			X				X										X
Duplin County	James Sprunt CC	X					X												X
Franklin County	Vance-Granville				X														X

Local School District	College(s)	CDP's (Career Development Plan	Faculty Advisement	Career Counseling	Career Portfolios	Tech Prep Handbook	Software Career Program Purchased	SREB-Related effort /career focus	Interest and/or Aptitude Survey	CAPS/COPS	ASSET	SOICC/NOICC Model	IEC's	Vocational Assessment/ASVAB	Career Info Center	Database/Tracking System	Career Day/Showcase	Shadowing/Apprenticeship Experien	Other*
Granville County	Vance-Granville																		
Guilford County	Guilford Tech CC					X													
Haywood County	Haywood CC					X													
Hamett County	Central Carolina	X																	
Henrierson/Transylvania	Blue Ridge CC	X							X										
Hickory City	Catawba Valley	X							X										
Hoke County	Sandhills CC		X	X															
Iredell-Statesville	Mitchell CC	X					X		X				X						
Jackson County	Southwestern CC						X								X				
Johnston County	Johnston CC			X						X									
Kannapolis City	Rowan-Cabarrus CC	X					X					X							
Lincoln County	Gaston College																		
Lee County	Central Carolina	X																	
Lenoir/Jones/Greene	Lenoir CC	X																	X
Martin County	Martin CC	X																	
Mitchell County	Mayland CC		X																
McDowell County	McDowell Tech CC																		
Montgomery County	Montgomery CC																		
Moore County	Sandhills CC																		
Mooresville Graded	Mitchell CC																		
Nash/Rocky Mount	Nash CC	X	X	X	X				X				X					X	
Onslow County	Coastal Carolina	X																	
Pamlico County	Pamlico CC	X	X	X			X												
Pitt County	Pitt CC	X					X		X										

Local School District	College(s)	CDP's (Career Development Pla	Faculty Advisement	Career Counseling	Career Portfolios	Tech Prep Handbook	Software Career Program Purchased	SREB-Related effort /career focus	Interest and/or Aptitude Survey	CAPS/COPS	ASSET	SOICC/NOICC Model	IEC's	Vocational Assessment/ASVAB	Career Info Center	Database/Tracking System	Career Day/Showcase	Shadowing/Apprenticeship Experien	Other*
Richmond County	Richmond CC	X																	
Robeson County	Robeson CC	X																	X
Rockingham County	Rockingham CC						X												
Rowan-Salisbury	Rowan-Cabarrus	X		X									X						
Rutherford County	Isothermal CC			X															
Scotland County	Richmond CC														X				
Surry/Yadkin/Stokes	Surry CC						X												X
Tyrrell County	Beaufort County	X																	
Union County	Anson/Stanly/UTECH						X												
Vance County	Vance-Granville	X																	
Wake County	Wake Tech CC	X			X														
Wayne County	Wayne CC	X																	
Weldon City	Halifax CC	X			X		X										X		X
Wilson County	Wilson Tech CC	X																	X
Winston-Salem/Forsyth	Forsyth Tech CC	X				X	X												

Local School District	College(s)	General Workshops	Attended Tech Prep Conference	Tech Prep Workshops	Integration Workshops	Attended National Conference	Math/Applied Math	Business/Industry Involvement/Tour	Tech Prep Awareness	SREB/HSTW	NCOICC/SOICC Training	Cooperative Learning	Train the Trainer Workshops	VOCATS Training	4-MAT SYSTEM	Other*
Alamance County	Alamance CC															
Alleghany County	Wilkes CC											X			X	
Ashe County	Wilkes CC			X												
Asheville/Buncombe/Madison	Asheville-Bunc CC	X	X													
Avery/Yancey County	Mayland CC				X											
Bertie County	Martin/Roan-Chow				X											
Bladen County	Bladen CC													X		
Brunswick County	Brunswick CC		X													
Burke County	West Piedmont CC					X			X							
Burlington City	Alamance CC		X			X					X					
Cabarrus County	Rowan-Cabarrus		X													
Carteret County	Carteret CC															
Caswell County	Piedmont CC															
Catawba County	Catawba Valley CC											X			X	
Chapel Hill/Carrboro City	Durham/Alamance													X		
Charlotte-Mecklenburg	Central Piedmont	X									X					
Chatham County	Central Carolina CC	X														
Cherokee/Clay/Graham	Tri-County CC	X					X							X		
Clinton/Sampson	Sampson County		X		X											
Columbus/Whiteville	Southeastern CC		X		X		X	X								
Craven County	Craven CC	X									X					
Cumberland County	Fayetteville CC	X	X													
Duplin County	James Sprunt CC	X								X						

STAFF DEVELOPMENT ACTIVITIES

June 1994

Local School District	College(s)	General Workshops	Attended Tech Prep Conference	Tech Prep Workshops	Integration Workshops	Attended National Conference	Math/Applied Math	Business/Industry Involvement/T	Tech Prep Awareness	SREB/HSTW	NCOICC/SOICC Training	Cooperative Learning	Train the Trainer Workshops	VOCATS Training	4-MAT SYSTEM	Other*
Franklin County	Vance-Granville				X				X							X
Granville County	Vance-Granville															X
Guilford County	Guilford Tech CC	X			X											
Haywood County	Haywood CC			X												
Harnett County	Central Carolina									X						
Henderson/Transylvania	Blue Ridge CC															
Hickory City	Catawba Valley						X									X
Hoke County	Sandhills CC	X														
Iredell-Statesville	Mitchell CC									X						X
Jackson County	Southwestern CC															X
Johnston County	Johnston CC				X											X
Kannapolis City	Rowan-Cabarrus CC											X				X
Lincoln County	Gaston College					X										X
Lee County	Central Carolina	X														X
Lenoir/Jones/Greene	Lenoir CC		X					X					X			X
Martin County	Martin CC		X				X						X			X
Mitchell County	Mayland CC	X														X
McDowell County	McDowell Tech CC	X	X	X			X	X								X
Montgomery County	Montgomery CC															X
Moore County	Sandhills CC		X	X	X					X		X			X	
Mooresville Graded	Mitchell CC	X														
Nash/Rocky Mount	Nash CC	X	X	X		X		X								X
Onslow County	Coastal Carolina								X							X
Pamlico County	Pamlico CC			X	X					X						X

Local School District	College(s)	General Workshops	Attended Tech Prep Conference	Tech Prep Workshops	Integration Workshops	Attended National Conference	Math/Applied Math	Business/Industry Involvement/T	Tech Prep Awareness	SREB/HSTW	NCOICC/SOICC Training	Cooperative Learning	Train the Trainer Workshops	VOCATS Training	4-MAT SYSTEM	Other *
Pitt County	Pitt CC			X	X		X	X					X			X
Richmond County	Richmond CC							X								X
Robeson County	Robeson CC		X	X						X						X
Rockingham County	Rockingham CC	X				X										X
Rowan-Salisbury	Rowan-Cabarrus															X
Rutherford County	Isothermal CC	X	X	X	X	X	X	X	X							
Scotland County	Richmond CC	X		X	X											X
Surry/Yadkin/Stokes	Surry CC			X												X
Tyrrell County	Beaufort County		X	X												X
Union County	Anson/Stanly/UTEC															X
Vance County	Vance-Granville															X
Wake County	Wake Tech CC	X			X			X					X			X
Wayne County	Wayne CC															
Weldon City	Halifax CC		X	X	X	X			X		X					X
Wilson County	Wilson Tech CC		X													
Winston-Salem/Forsyth	Forsyth Tech CC	X	X		X	X			X							X

Local School District	College(s)	BROCHURES	CIVIC PRESENTATIONS	DISPLAY/BILLBOARDS	RADIO T.V. ADS	VIDEO/PRESENTATION	NEWSPAPER/MAGAZINES	GUIDEBOOK	T.P CAREER DAY	TECHNOLOGY FAIR	B&I FORUM	MEMORABILIA	ASSEMBLIES	CAREER DEV. PLANS	OTHER*
Alamance County	Alamance CC	X					X	X							
Alleghany County	Wilkes CC	X													
Ashe County	Wilkes CC	X													
Ashev'le/Bunc/Mad	Asheville-Bunc CC	X						X							X
Avery/Yancey Coun	Mayland CC		X		X										
Bertie County	Martin/Roan-Chow	X					X								
Bladen County	Bladen CC							X							
Brunswick	Brunswick CC	X		X			X								
Burke County	West.Piedmont CC	X	X		X		X	X	X	X	X				
Burlington City	Alamance CC														
Cabarrus County	Rowan-Cabarrus														
Carteret County	Carteret CC	X		X						X					
Caswell County	Piedmont CC	X													
Catawba County	Catawba Valley CC								X		X				
Chapel Hill	Durham Tech	X													
Charlotte-Mecklen	Central Piedmont	X			X	X									X
Chatham County	Central Carolina	X	X					X				X			
Cherok/Clay/Graham	Tri-County CC	X		X								X			
Clinton/Sampson	Sampson County	X		X											
Columbus/Whiteville	Southeastern CC			X			X					X			
Craven County	Craven CC	X		X								X	X		
Cumberland County	Fayetteville CC	X			X		X	X							
Duplin County	James Sprunt CC	N/A											X		

# MARKETING ACTIVITIES

June 1994

Local School District	College(s)	BROCHURES	CIVIC PRESENTATIONS	DISPLAY/BILLBOARDS	RADIO T.V. ADS	VIDEO/PRESENTATION	NEWSPAPER/MAGAZINES	GUIDEBOOK	T.P CAREER DAY	TECHNOLOGY FAIR	B&I FORUM	MEMORABILIA	ASSEMBLIES	CAREER DEV. PLANS	OTHER*
Granville County	Vance-Granville	X													
Guilford County	Guilford Tech CC	X						X							
Haywood County	Haywood CC	X	X		X		X						X		
Harnett County	Central Carolina	X		X			X	X	X			X	X		X
Henderson/Transylv	Blue Ridge CC	X		X			X		X			X	X		X
Hickory City	Catawba Valley														
Hoke County	Sandhills CC	X	X				X		X				X		X
Iredell-Statesville	Mitchell CC	X						X							
Jackson County	Southwestern CC	X					X		X						X
Johnston County	Johnston CC	X													
Kannapolis City	Rowan-Cabarrus	X				X		X				X			X
Lee County	Central Carolina	X													X
Lenoir/Jones/Greene	Lenoir CC		X			X	X					X			X
Lincoln County	Gaston College	X		X			X					X		X	
Martin County	Martin CC		X				X								
Mitchell County	Mayland CC	X	X	X	X		X						X		
McDowell County	McDowell Tech CC	X					X								
Montgomery County	Montgomery CC			X								X	X		
Moore County	Sandhills CC												X		
Mooresville Graded	Mitchell CC		X							X			X		X
Nash/Rocky Mount	Nash CC	X						X							
Onslow County	Coastal Carolina	X													
Pamlico County	Pamlico CC	X	X	X		X									X

# MARKETING ACTIVITIES

June 1994

Local School District	College(s)	BROCHURES	CIVIC PRESENTATIONS	DISPLAY/BILLBOARDS	RADIO T.V. ADS	VIDEO/PRESENTATION	NEWSPAPER/MAGAZINES	GUIDEBOOK	T.P CAREER DAY	TECHNOLOGY FAIR	B&I FORUM	MEMORABILIA	ASSEMBLIES	CAREER DEV. PROGRAM	OTHER*
Pitt County	Pitt CC	X	X	X	X	X	X			X	X		X		X
Richmond County	Richmond CC	X		X	X	X	X				X				
Robeson County	Robeson CC	X	X		X		X				X				X
Rockingham County	Rockingham CC	X													
Rutherford County	Isothermal CC	X													
Rowan-Salisbury	Rowan-Cabarrus				X									X	
Scotland County	Richmond CC	X			X			X	X			X		X	
Surry/Yadkin/Stokes	Surry CC	X													
Tyrrell County	Beaufort County	X					X				X				
Union County	AnsonStanly/UTEC	X		X			X					X			
Vance County	Vance-Granville														
Wake County	Wake Tech CC	X	X			X	X	X						X	X
Wayne County	Wayne CC	X													
Weldon City	Halifax CC				X		X			X	X				
Wilson County	Wilson Tech CC	X			X	X	X		X				X		
Win-Sal/Forsyth Co.	Forsyth Tech CC	X	X	X		X	X						X		X

Local School District	College(s)	Named/Hired Spec Pop Coordinator	Career Development	Special Committee/Team	Tutorial Program	Support Services	IEP's (Individ. Educ Plans)	Placement/Assessment	Shadowing	Mainstreaming	ITP's (Indiv Transition Plans)	Studying/Initiating Tech Prep	Learn Styles/Interest Inventor	JTPA	Vocational Spec Studies	Vocational Aptitude Test	Individualized Instruction	Other
Alamance County	Alamance CC		X					X					X					X
Alleghany County	Wilkes CC	X			X													
Ashe County	Wilkes CC														X			
Asheville/Buncombe/Madison	Asheville-Bunc CC									X		X						
Avery/Yancey County	Mayland CC	X	X					X										X
Bertie County	Martin/Roan-Chow																	
Bladen County	Bladen CC	X													X			
Brunswick County	Brunswick CC						X				X		X					
Burke County	West Piedmont CC		X		X	X							X					X
Burlington City	Alamance CC																	
Cabarrus County	Rowan-Cabarrus			X								X						
Carteret County	Carteret CC								X				X	X				
Caswell County	Piedmont CC										X							
Catawba County	Catawba Valley CC			X														
Chapel Hill/Carrboro	Durham/Alamance																	
Charlotte-Mecklenburg	Central Piedmont														X			X
Chatham County	Central Carolina																	
Cherokee/Clay/Graham	Tri-County CC		X		X													
Clinton/Sampson	Sampson County		X	X														
Columbus/Whiteville	Southeastern CC		X		X												X	
Craven County	Craven CC		X						X					X				
Cumberland County	Fayetteville CC	X																X
Duplin County	James Sprunt CC	X				X		X										X
Franklin County	Vance-Granville			X				X										X

Local School District	College(s)	Named/Hired Spec Pop Coordinator	Career Development	Special Committee/Team	Tutorial Program	Support Services	IEP's (Individ Educ Plans)	Placement/Assessment	Shadowing	Mainstreaming	ITP's (Indiv Transition Plans)	Studying/Initiating Tech Prep	Learn Styles/Interest Inventor	JTPA	Vocational Spec Studies	Vocational Aptitude Test	Individualized Instruction	Other
Granville County	Vance-Granville					X	X											
Guilford County	Guilford Tech CC	X	X															
Haywood County	Haywood CC	X																
Harnett County	Central Carolina	X	X			X												
Henderson/Transylvania	Blue Ridge CC						X											
Hickory City	Catawba Valley	X						X			X							
Hoke County	Sandhills CC				X	X	X						X					
Iredell-Statesville	Mitchell CC	X	X	X								X						
Jackson County	Southwestern CC		X															
Johnston County	Johnston CC	X																
Kannapolis City	Rowan-Cabarrus CC	X	X	X														
Lincoln County	Gaston College	X		X														
Lee County	Central Carolina																	
Lenoir/Jones/Greene	Lenoir CC	X							X									
Martin County	Martin CC																	
Mitchell County	Mayland CC	X				X												
McDowell County	McDowell Tech CC																	
Montgomery County	Montgomery CC					X								X				
Moore County	Sandhills CC				X													X
Mooresville Graded	Mitchell CC		X					X	X									
Nash/Rocky Mount	Nash CC	X																X
Onslow County	Coastal Carolina		X	X			X											
Pamlico County	Pamlico CC																	
Pitt County	Pitt CC	X	X	X	X			X			X							

Local School District	College(s)	Named/Hired Spec Pop Coordinator	Career Development	Special Committee/Team	Tutorial Program	Support Services	IEP's (Individ. Educ Plans)	Placement/Assessment	Shadowing	Mainstreaming	ITP's (Indiv Transition Plans)	Studying/Initiating Tech Prep	Learn Styles/Interest Inventor	JTPA	Vocational Spec Studies	Vocational Aptitude Test	Individualized Instruction	Other
Richmond County	Richmond CC					X												
Robeson County	Robeson CC							X										
Rockingham County	Rockingham CC									X								
Rowan-Salisbury	Rowan-Cabarrus																	
Rutherford County	Isothermal CC									X								
Scotland County	Richmond CC										X							
Surry/Yadkin/Stokes	Surry CC																	
Tyrrell County	Beaufort County	X																
Union County	AnsonStanly/UTECH	X	X		X		X		X							X		
Vance County	Vance-Granville		X													X		
Wake County	Wake Tech CC						X											
Wayne County	Wayne CC																	
Weldon City	Halifax CC								X									
Wilson County	Wilson Tech CC		X	X			X						X		X			X
Winston-Salem/Forsyth	Forsyth Tech CC																	

Local School District	College(s)	Increased Enrollment	Student Achievement/Grades Improved	Decreased Drop-out rates	Created Database/Track System	Changed Teacher Attitudes	Increased number entering college/military	Other*
Alamance County	Alamance CC							X
Alleghany County	Wilkes CC					X		
Ashe County	Wilkes CC							
Asheville/Buncombe/Madison	Asheville-Bunc CC			X				
Avery/Yancey County	Mayland CC	X	X	X		X		X
Bertie County	Martin/Roan-Chow							X
Bladen County	Bladen CC							
Brunswick County	Brunswick CC	X						X
Burke County	West Piedmont CC							
Burlington City	Alamance CC							X
Cabarrus County	Rowan-Cabarrus							X
Carteret County	Carteret CC				X			X
Caswell County	Piedmont CC							
Catawba County	Catawba Valley CC			X			X	X
Chapel Hill/Carrboro City	Durham/Alamance							X
Charlotte-Mecklenburg	Central Piedmont				X			X
Chatham County	Central Carolina CC							
Cherokee/Clay/Graham	Tri-County CC	X						X
Clinton/Sampson	Sampson County	X	X					
Columbus/Whiteville	Southeastern CC							X
Craven County	Craven CC		X					X
Cumberland County	Fayetteville CC							X

Local School District	College(s)	Increased Enrollment	Student Achievement/Grades Improved	Decreased Drop-out rates	Created Database/Track System	Changed Teacher Attitudes	Increased number entering college/militar	Other *
Duplin County	James Sprunt CC							X
Franklin County	Vance-Granville							X
Granville County	Vance-Granville							X
Guilford County	Guilford Tech CC							X
Haywood County	Haywood CC							
Harnett County	Central Carolina	X	X					
Henderson/Transylvania	Blue Ridge CC							
Hickory City	Catawba Valley							
Hoke County	Sandhills CC		X					
Iredell-Statesville	Mitchell CC		X					
Jackson County	Southwestern CC				X			X
Johnston County	Johnston CC				X			X
Kannapolis City	Rowan-Cabarrus CC							X
Lee County	Central Carolina							
Lenoir/Jones/Greene	Lenoir CC							X
Lincoln County	Gaston College							
Martin County	Martin CC							
Mitchell County	Mayland CC							
McDowell County	McDowell Tech CC	X	X					
Montgomery County	Montgomery CC	X						X
Moore County	Sandhills CC							
Mooresville Graded	Mitchell CC	X						
Nash/Rocky Mount	Nash CC	X						

DOCUMENTATION OF STUDENT ACHIEVEMENT

June 1994

Local School District	College(s)	Increased Enrollment	Student Achievement/Grades Improved	Decreased Drop-out rates	Created Database/Track System	Changed Teacher Attitudes	Increased number entering college/militar	Other*
Onslow County	Coastal Carolina	X	X					
Pamlico County	Pamlico CC	X						
Pitt County	Pitt CC	X		X				X
Richmond County	Richmond CC	X		X				
Robeson County	Robeson CC	X						
Rockingham County	Rockingham CC							
Rutherford County	Isothermal CC							
Rowan-Salisbury	Rowan-Cabarrus	X						
Scotland County	Richmond CC							
Surry/Yadkin/Stokes	Surry CC							
Tyrrell County	Beaufort County	X						
Union County	Anson/Stanly/UTEC			X				
Vance County	Vance-Granville		X				X	X
Wake County	Wake Tech CC							
Wayne County	Wayne CC							X
Weldon City	Halifax CC	X	X					
Wilson County	Wilson Tech CC	X						
Winston-Salem/Forsyth	Forsyth Tech CC							

**Tech Prep/Associate Degree Joint Policy Statement for North Carolina  
Board of Education and North Carolina Department of Community Colleges.**

TECH PREP/ASSOCIATE DEGREE  
JOINT POLICY STATEMENT  
For  
N.C. STATE BOARD OF EDUCATION  
And  
N.C. STATE BOARD OF COMMUNITY COLLEGES

The N. C. State Board of Education and N. C. State Board of Community Colleges have jointly supported the creation of the Tech Prep/Associate Degree program in North Carolina and now commit to the expansion of the program to all public school districts and community college service areas in the state.

The Tech Prep/Associate Degree program was developed to guide students into a course of study leading from high school preparation to the Associate in Applied Science Degree at community colleges. The Tech Prep/Associate Degree course of study will form a firm academic and technological foundation for high school students who heretofore did not prepare for collegiate-level education after high school.

Tech-Prep education program means a combined secondary and postsecondary program that:

- (1) leads to an associate degree or two-year certificate; or completion of a registered apprenticeship program of at least two years length;
- (2) provides technical preparation in at least one field of engineering technology, applied science, mechanical, industrial, or practical art or trade, or agriculture, health, or business;
- (3) builds student competence in mathematics, science and communications (including through applied academics) through a sequential course of study; and,
- (4) leads to placement in employment.

The goal of the Tech Prep/Associate Degree program in North Carolina is to prepare at least 85 percent of all high school students through a Tech Prep or College Prep course of study. These students, thus prepared, will be equipped to enter, without remediation, post-secondary education and to enter the work force with technological skills appropriate to the majority of new and existing jobs.

The two state boards jointly agree to establish an inter-agency Tech Prep/Associate Degree Committee to guide the continuing development and implementation of the program. This committee will report annually to the State Superintendent, President of the Community College System and the two boards.

The two state boards also jointly agree that the framework for the Tech Prep/Associate Degree course of study includes the following in all public high school programs:

## **Evaluation Instrument**

Project Title: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Articulation Efforts:

Rating: Not Met \_\_\_\_ Partially Met \_\_\_\_ Met \_\_\_\_ N/A \_\_\_\_

Specific Examples:

Notes:

Collaborative Efforts:

Rating: Not Met \_\_\_\_ Partially Met \_\_\_\_ Met \_\_\_\_ N/A \_\_\_\_

Specific Examples:

Notes:

Curriculum Integration Efforts:

Rating: Not Met \_\_\_\_ Partially Met \_\_\_\_ Met \_\_\_\_ N/A \_\_\_\_

Specific Examples:

Notes:

Curriculum Improvements Efforts:

Rating: Not Met \_\_\_\_ Partially Met \_\_\_\_ Met \_\_\_\_ N/A \_\_\_\_

Specific Examples:

Notes:

**Guidance Services:**

Rating: Not Met \_\_\_\_\_ Partially Met \_\_\_\_\_ Met \_\_\_\_\_ N/A \_\_\_\_\_

Specific Examples:

Notes:

**Staff Development Efforts:**

Rating: Not Met \_\_\_\_\_ Partially Met \_\_\_\_\_ Met \_\_\_\_\_ N/A \_\_\_\_\_

Specific Examples:

Notes:

**Marketing Efforts:**

Rating: Not Met \_\_\_\_\_ Partially Met \_\_\_\_\_ Met \_\_\_\_\_ N/A \_\_\_\_\_

Specific Examples:

Notes:

**Services to Special Population Students:**

Rating: Not Met \_\_\_\_\_ Partially Met \_\_\_\_\_ Met \_\_\_\_\_ N/A \_\_\_\_\_

Specific Examples:

Notes:

**Achievement Results:**

Rating: Not Met \_\_\_\_\_ Partially Met \_\_\_\_\_ Met \_\_\_\_\_ N/A \_\_\_\_\_

Specific Examples:

Notes:

Local School District	College(s)	Type of Agreement	Articulation Efforts	Collaborative Efforts	Curriculum Integration	Curriculum Improvement	Guidance Services	Staff Development	Marketing Efforts	Special Populations	Achievement Results
Alamance County	Alamance CC	Plan	M	M	PM	PM	M	PM	PM	M	M
Alleghany County	Wilkes CC	Imple	M	M	M	M	M	M	N/A	M	PM
Ashe County	Wilkes CC	Imple	M	M	PM	M	M	M	PM	PM	PM
Asheville-Bunc CC	Asheville-Bunc CC	Plan	M	M	PM	PM	M	PM	PM	NM	PM
Avery/Yancey Coun	Mayland CC	Imple	M	M	M	M	M	M	M	M	M
Bertie County	Martin/Roan-Chow	Plan	M	PM	N/A	M	PM	M	PM	PM	N/A
Bladen County	Bladen CC	Imple	PM	NM	NM	PM	PM	NM	NM	NM	NM
Brunswick County	Brunswick CC	Imple	M	PM	PM	M	M	PM	M	M	NM
Burke County	West Piedmont CC	Plan	PM	M	PM	M	M	M	M	M	M
Burlington City	Alamance CC	Plan	M	M	PM +	M	M	M	M	M	M
Cabarrus County	Rowan-Cabarrus	Imple	M	M	M	M	M	M	M	M	M
Carteret County	Carteret CC	Imple	M	M	M	M	M	PM	M	PM	M
Caswell County	Piedmont CC	Imple	PM	PM	PM	M	PM	PM	PM	PM	PM
Catawba County	Catawba Valley CC	Imple	M	M	M	M	M	M	N/A	M	M
Chapel Hill/Carrboro	Durham/Alamance	Plan	NM	PM	NM	NM	NM	PM	PM	NM	NM
Charlotte-Mecklen	Central Piedmont	Imple	M	M	M	PM	M	M	M	M	M
Chatham County	Central Carolina	Plan	M	M	M	PM	PM	PM	PM	M	PM
Cherokee/Clay/Graha	Tri-County CC	Imple	M	M	M	M	M	M	M	M	M
Clinton/Sampson	Sampson County	Imple	PM	M	PM	M	M	M	M	M	M
Columbus/Whiteville	Southeastern CC	Imple	M	M	M	M	M	M	M	M	M
Craven County	Craven CC	Imple	M	M	M	M	M	M	M	M	M
Cumberland County	Fayetteville CC	Imple	M	M	M	M	M	M	M	M	M
Duplin County	James Sprunt CC	Imple	M	PM	PM	M	M	PM	NM	PM	PM
Franklin County	Vance-Granville	Plan	M	M	PM	PM	PM	PM	M	M	M
Granville County	Vance-Granville	Plan	M	M	PM	M	PM	PM	PM	PM	PM
Guilford County	Guilford Tech CC	Plan	M	M	M	M	M	M	M	M	M

Local School District	College(s)	Type of Agreement	Articulation Efforts	Collaborative Efforts	Curriculum Integration	Curriculum Improvement	Guidance Services	Staff Development	Marketing Efforts	Special Populations	Achievement Results
Haywood County	Haywood CC	Imple	PM	M	PM	M	M	PM	M	PM	PM
Harnett County	Central Carolina	Imple	M	M	PM	M	M	PM	M	M	M
Henderson/Transylv	Blue Ridge CC	Imple	M	M	PM	M	M	M	M	PM	PM
Hickory City	Catawba Valley	Plan	PM	PM	N/A	PM	PM	PM	NM	PM	N/A
Hoke County	Sandhills CC	Imple	M	M	M	M	M	M	M	M	M
Iredell-Statesville	Mitchell CC	Imple	M	PM	M	PM	M	M	PM	M	M
Jackson County	Southwestern CC	Imple	M	M	M	M	M	M	M	PM	M
Johnston County	Johnston CC	Imple	PM	PM	PM	M	M	PM	PM	PM	PM
Kannapolis City	Rowan-Cabarrus	Plan	M	M	M	M	M	M	M	M	N/A
Lincoln County	Gaston College	Plan	PM	M	PM	PM	M	M	M	PM	N/A
Lee County	Central Carolina	Imple	M	M	PM	PM	M	M	PM	M	M
Lenoir/Jones/Greene	Lenoir CC	Imple	M	M	M	M	M	M	M	PM	PM
Martin County	Martin CC	Plan	M	M	M	M	M	M	M	PM	N/A
Mitchell County	Mayland CC	Imple	M	M	M	M	PM	PM	M	PM	M
McDowell County	McDowell Tech CC	Imple	M	M	PM	M	M	M	PM	PM	M
Montgomery County	Montgomery CC	Imple	M	M	PM	M	M	M	PM	PM	M
Moore County	Sandhills CC	Imple	PM	PM	M	M	PM	M	PM	PM	M
Mooresville Graded	Mitchell CC	Imple	PM	M	NM	PM	PM	PM	PM	PM	PM
Nash/Rocky Mount	Nash CC	Imple	M	M	M	M	M	M	M	M	M
Onslow County	Coastal Carolina	Imple	M	M	M	M	M	M	M	M	M
Pamlico County	Pamlico CC	Plan	M	M	M	M	M	M	M	PM	N/A
Pitt County	Pitt CC	Imple	M	M	M	M	M	M	M	M	M
Richmond County	Richmond CC	Imple	M	M	M	M	M	M	M	M	M
Robeson County	Robeson CC	Imple	NM	M	PM	NM	PM	M	M	NM	NM
Rockingham County	Rockingham CC	Imple	M	M	M	M	M	M	M	M	M
Rowan-Salisbury	Rowan-Cabarrus	Imple	PM	PM	PM	M	M	N/A	N/A	PM	NM



Vocational Education Performance Report  
NC Department of Community Colleges  
1993-1994 Program Year

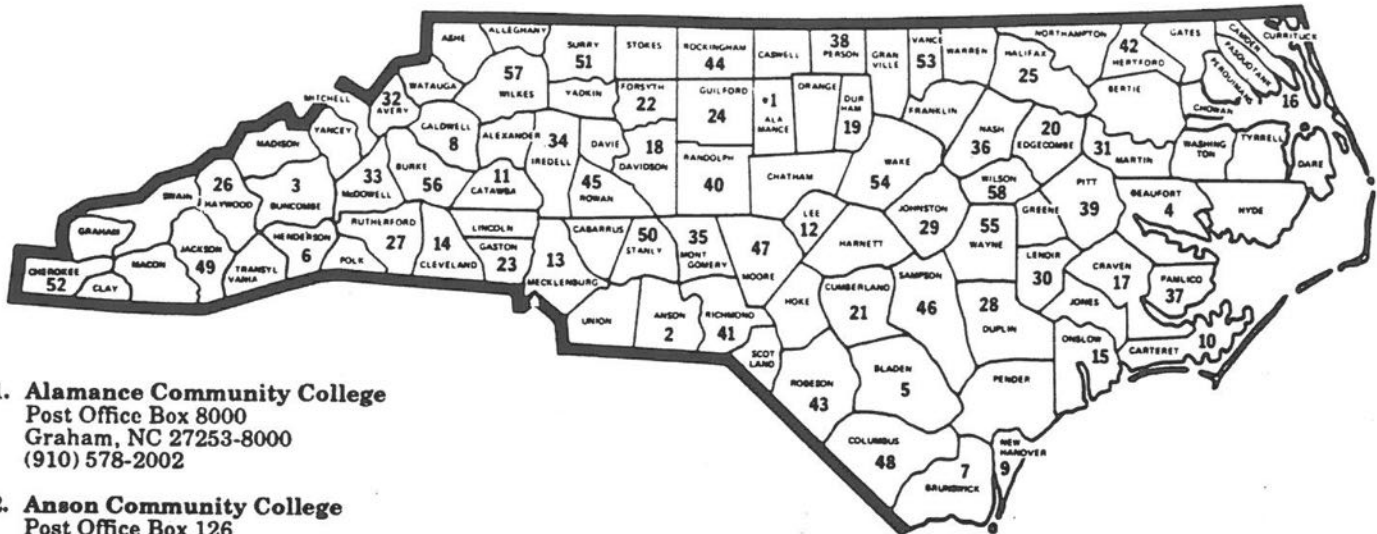
**APPENDIX E**

Member Community Colleges

North Carolina Community College System



# The North Carolina Community College System



1. **Alamance Community College**  
Post Office Box 8000  
Graham, NC 27253-8000  
(910) 578-2002
2. **Anson Community College**  
Post Office Box 126  
Polkton, NC 28135  
(704) 272-7635
3. **Asheville-Buncombe Technical Community College\***  
340 Victoria Road  
Asheville, NC 28801  
(704) 254-1921
4. **Beaufort County Community College\***  
Post Office Box 1069  
Washington, NC 27889  
(919) 946-6194
5. **Bladen Community College**  
Post Office Box 266  
Dublin, NC 28332  
(910) 862-2164
6. **Blue Ridge Community College\***  
College Drive  
Flat Rock, NC 28731  
(704) 692-3572
7. **Brunswick Community College**  
Post Office Box 30  
Supply, NC 28462  
(910) 754-6900
8. **Caldwell Community College and Technical Institute\***  
1000 Hickory Boulevard  
Hudson, NC 28638  
(704) 726-2200
9. **Cape Fear Community College\***  
411 N. Front Street  
Wilmington, NC 28401  
(910) 251-5100
10. **Carteret Community College\***  
3505 Arendell Street  
Morehead City, NC 28557  
(919) 247-6000
11. **Catawba Valley Community College\***  
2550 Highway 70 S.E.  
Hickory, NC 28602  
(704) 327-7000
12. **Central Carolina Community College**  
1105 Kelly Drive  
Sanford, NC 27330  
(919) 775-5401
13. **Central Piedmont Community College\***  
Post Office Box 35009  
Charlotte, NC 28235  
(704) 342-6719
14. **Cleveland Community College\***  
137 S. Post Road  
Shelby, NC 28150  
(704) 484-4000
15. **Coastal Carolina Community College\***  
444 Western Boulevard  
Jacksonville, NC 28546  
(910) 455-1221
16. **College of The Albemarle\***  
Post Office Box 2327  
Elizabeth City, NC 27909-2327  
(919) 335-0821
17. **Craven Community College\***  
800 College Court  
New Bern, NC 28562  
(919) 638-4131
18. **Davidson County Community College\***  
Post Office Box 1287  
Lexington, NC 27292  
(704) 249-8186
19. **Durham Technical Community College\***  
1637 Lawson Street  
Durham, NC 27703  
(919) 598-9222
20. **Edgecombe Community College\***  
2009 W. Wilson Street  
Tarboro, NC 27886  
(919) 823-5166
21. **Fayetteville Technical Community College\***  
Post Office Box 35236  
Fayetteville, NC 28303-0236  
(910) 678-8400
22. **Forsyth Technical Community College\***  
2100 Silas Creek Parkway  
Winston-Salem, NC 27103-5150  
(910) 723-0371
23. **Gaston College\***  
201 Highway 321 South  
Dallas, NC 28034-1499  
(704) 922-6200
24. **Guilford Technical Community College\***  
Post Office Box 309  
Jamestown, NC 27282  
(910) 334-4822
25. **Halifax Community College\***  
Post Office Drawer 809  
Weldon, NC 27890  
(919) 536-2551
26. **Haywood Community College\***  
1 Freedlander Drive  
Clyde, NC 28721  
(704) 627-2821
27. **Isothermal Community College\***  
Post Office Box 804  
Spindale, NC 28160  
(704) 286-3636
28. **James Sprunt Community College\***  
Post Office Box 398  
Kenansville, NC 28349-0398  
(910) 296-2400
29. **Johnston Community College\***  
Post Office Box 2350  
Smithfield, NC 27577  
(919) 934-3051

Offers College Transfer Curriculum Program

N.C. Department of Community Colleges  
Robert W. Scott, System President  
(919) 733-7051



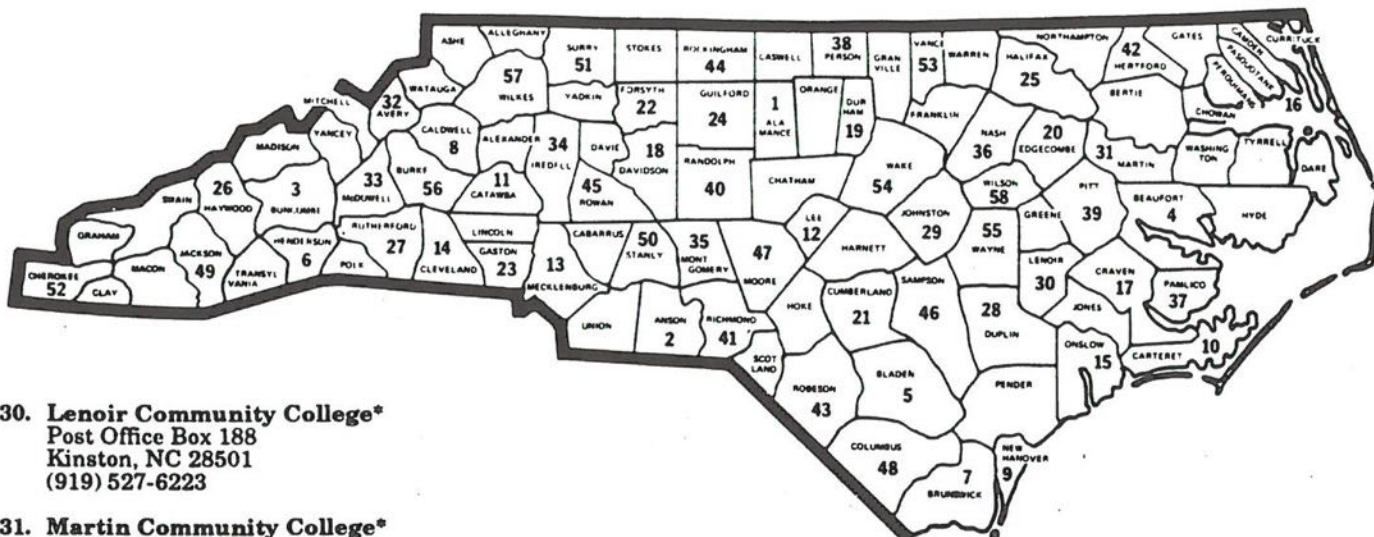
Caswell Building, 200 W. Jones Street  
Raleigh, NC 27603-1337  
FAX (919) 733-0680

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# The North Carolina Community College System



**30. Lenoir Community College\***  
Post Office Box 188  
Kinston, NC 28501  
(919) 527-6223

**31. Martin Community College\***  
Kehukee Park Road  
Williamston, NC 27892  
(919) 792-1521

**32. Mayland Community College**  
Post Office Box 547  
Spruce Pine, NC 28777  
(704) 765-7351

**33. McDowell Technical Community College**  
Route 1, Box 170  
Marion, NC 28752  
(704) 652-6021

**34. Mitchell Community College\***  
West Broad Street  
Statesville, NC 28677  
(704) 878-3200

**35. Montgomery Community College\***  
Post Office Box 787  
Troy, NC 27371  
(910) 576-6222

**36. Nash Community College\***  
Post Office Box 7488  
Rocky Mount, NC 27804-7488  
(919) 443-4011

**37. Pamlico Community College**  
Post Office Box 185  
Grantsboro, NC 28529  
(919) 249-1851

**38. Piedmont Community College**  
Post Office Box 1197  
Roxboro, NC 27573  
(910) 599-1181

**39. Pitt Community College\***  
Post Office Drawer 7007  
Greenville, NC 27834  
(919) 321-4200

**40. Randolph Community College**  
Post Office Box 1009  
Asheboro, NC 27204-1009  
(910) 629-1471

**41. Richmond Community College\***  
Post Office Box 1189  
Hamlet, NC 28345  
(910) 582-7000

**42. Roanoke-Chowan Community College**  
Route 2, Box 46-A  
Ahoskie, NC 27910  
(919) 332-5921

**43. Robeson Community College\***  
Post Office Box 1420  
Lumberton, NC 28359  
(910) 738-7101

**44. Rockingham Community College\***  
Wentworth, NC 27375  
(910) 342-4261

**45. Rowan-Cabarrus Community College\***  
Post Office Box 1595  
Salisbury, NC 28145-1595  
(704) 637-0760

**46. Sampson Community College\***  
Post Office Box 318  
Clinton, NC 28328  
(910) 592-8081

**47. Sandhills Community College\***  
2200 Airport Road  
Pinehurst, NC 28374  
(910) 692-6185

**48. Southeastern Community College\***  
Post Office Box 151  
Whiteville, NC 28472  
(910) 642-7141

**49. Southwestern Community College\***  
275 Webster Road  
Sylva, NC 28779  
(704) 586-4091

**50. Stanly Community College\***  
Route 4, Box 55  
Albemarle, NC 28001  
(704) 982-0121

**51. Surry Community College\***  
Box 304  
Dobson, NC 27017  
(910) 386-8121

**52. Tri-County Community College\***  
2300 Highway 64 East  
Murphy, NC 28906  
(704) 837-6810

**53. Vance-Granville Community College\***  
Box 917  
Henderson, NC 27536  
(919) 492-2061

**54. Wake Technical Community College\***  
9101 Fayetteville Road  
Raleigh, NC 27603  
(919) 662-3400

**55. Wayne Community College\***  
Caller Box 8002  
Goldsboro, NC 27533-8002  
(919) 735-5151

**56. Western Piedmont Community College\***  
1001 Burkemont Avenue  
Morganton, NC 28655  
(704) 438-6000

**57. Wilkes Community College\***  
Post Office Box 120  
Wilkesboro, NC 28697  
(910) 651-8600

**58. Wilson Technical Community College\***  
Post Office Box 4305-Woodard Station  
Wilson, NC 27893  
(919) 291-1195

\* Offers College Transfer Curriculum Program

N.C. Department of Community Colleges  
Robert W. Scott, System President  
(919) 733-7051



Caswell Building, 200 W. Jones Street  
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