

DOCUMENT RESUME

ED 361 031

JC 930 410

TITLE Critical Success Factors for the North Carolina Community College System, 1993. Fourth Annual Report.

INSTITUTION North Carolina State Dept. of Community Colleges, Raleigh. Div. of Planning and Research Services.

PUB DATE Apr 93

NOTE 117p.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS Access to Education; Accountability; Articulation (Education); *College Role; Community Colleges; Economic Development; *Educational Assessment; *Educational Quality; Labor Force Development; *Organizational Effectiveness; School Community Relationship; *State Standards; State Surveys; *Success; Tables (Data); Two Year Colleges

IDENTIFIERS *North Carolina Community College System

ABSTRACT

The data presented in this report are indicators of the level of success of the North Carolina Community College System as measured by student outcomes and the extent to which the system addresses the needs of the state. Where possible, 5-year data are presented. Seven critical factors are examined: (1) student success, evidenced by the number of students returning from previous quarters, the progress of literacy students, performance of transfers after two semesters, and success rate on licensure exams; (2) resources, measured by average salaries, equipment currentness, and percent of libraries meeting American Library Association standards; (3) access, assessed in terms of the enrollment of high-risk and nontraditional populations, numbers served through literacy programs, percent of students receiving financial aid, and percent of service area population enrolled; (4) education continuum, examined in terms of enrollment of recent high school graduates, enrollment in cooperative agreements with high schools, and University of North Carolina students who attended a community college; (5) workforce development, evidenced by the number of employers and trainees served by new and expanding industry programs, small business centers, and apprenticeship programs and number of workplace literacy sites and students served; (6) community services, measured in terms of courses offered and students enrolled, enrollment of senior citizens, and support of community service activities; and (7) program management and accountability, assessed by an annual program audit, program reviews, and accredited programs. Systemwide data and, where appropriate, data for individual colleges are provided. In addition, background information and recommendations for future data collection are presented. (AC)

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ED 361 031

1993 *CRITICAL SUCCESS FACTORS*

FOR THE

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Fourth Annual Report

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North Carolina Department of Community Colleges
Planning & Research Section

April 1993

JC 930 410

1993 CRITICAL SUCCESS FACTORS
FOR THE
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Fourth Annual Report

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Published by

**North Carolina Department of Community Colleges
Planning & Research Section
Keith Brown, Project Director**

Kathryn Baker Smith
Associate Vice President for Planning & Research

Robert Vanderheyden
Director of Research

Keith Brown
Coordinator of Institutional Planning

Paul Nagy
Coordinator of Special Projects

Brenda Splawn
Statistical Research Assistant

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CRITICAL SUCCESS FACTORS FOR THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

**Fourth Annual Report
April, 1993**

INTRODUCTION

This fourth annual report on the critical success factors for the North Carolina Community College System is one of several system accountability tools. The data presented in this report are indicators of the health of the system, the extent to which the system is addressing the needs of the state, and the success of the system as measured by student outcomes. Where possible, data covering a five year period have been presented in order to indicate trends relative to the measures.

The original intent of the critical success factors report was to present data that would measure the performance of the system. As the years have progressed, however, the report has been modified to include institutional data on certain measures. In presenting institutional data, no attempt has been made to rank colleges relative to performance on measures due to the differences in the nature of the colleges and the quality of the data currently being collected. Instead, in presenting institutional data, the colleges have been grouped according to total full time equivalent students (FTE) and listed within each group in ascending order by FTE.

Over the past four years, experience with the critical success factors and their measures, as well as modifications in the factors and measures, has resulted in improved data collection and reporting. While improvements have been made, there still remain some problem areas. Emphasis will continue to be placed on developing standard definitions for certain measures and for insuring the systematic collection of data by all colleges.

As in previous years, a description of a factor is provided at the beginning of each section of the report. In presenting the data for each of the measures, background information on the measure is provided along with the methodology of data collection. Following the data, recommendations for improvements to the measure or for further analysis are given.

Finally, it should be noted that in revising the critical success factors for 1992-93, the System Planning Committee recommended a significant change to more clearly reflect the intent of this report. As adopted by the State Board of Community Colleges in September, 1992, this is a report on the Critical Success Factors and Measures of Quality for the North Carolina Community College System. By including the phrase, Measures of Quality, the System Planning Committee and the State Board have affirmed that quality should be reflected in all that we do; quality should permeate all measures contained in this report.

CRITICAL SUCCESS FACTORS BACKGROUND AND DEVELOPMENT

Critical success factors have been defined as "the key things that must go right for an enterprise (in this case, the North Carolina Community College System) to flourish and achieve its goals." The concept of critical success factors was developed at the Massachusetts Institute of Technology Sloan School of Business for application in a business setting, but it is applicable to any organization. The effort to identify these "key things" enables the organization to focus its efforts. Thinking through appropriate measures for the factors insures that the organization will examine its performance. Thus, critical success factors are both a planning and an evaluation/accountability tool.

USES FOR CRITICAL SUCCESS FACTORS

- o Accountability**
- o Development of Strategic Goals**
- o Improvement of Programs and Administration**

Measurements of the attainment of critical success factors are an important part of the accountability system in use in the Community College System. A number of tools are in place and in use by the State Board. The colleges are required to conduct a planning process which includes goal-setting and evaluation of progress toward those goals. Other accountability mechanisms include curriculum standards, review of institutional plans and programs, program and financial audits, program monitoring and accreditation. Other tools are being developed, including the student progress monitoring system (which will also support development of better critical success factors).

In its 1989 session, the North Carolina General Assembly adopted a provision (S.L.1989; C. 752; S. 80) which mandated that:

"The State Board of Community Colleges shall develop a 'Critical Success Factors' list to define statewide measures of accountability for all community colleges. Each college shall develop an institutional effectiveness plan, tailored to the specific mission of the college. This plan shall be consistent with the Southern Association of Colleges and Schools criteria and provide for collection of data as required by the 'Critical Success Factors' list."

The colleges, in turn, were granted a greater degree of flexibility in deciding how to use their state funds.

This special provision is neither the first nor the last state initiative linking flexibility in the use of funds with required accountability measures. Its requirements leave in the hands of the State Board and the colleges the identification of the key factors that will be measured and the

specific approach that will be taken to measure them. The measurement of these factors provides a way of showing how well the system is doing its job as assigned by law and how well the system is addressing the goals set by the State Board of Community Colleges.

The critical success factors were developed by the State Board to measure the system, not individual colleges. The state totals and averages do provide a benchmark for the colleges to measure their efforts and institutional data on selected measures is presented in this report. Still, the critical success factors compiled for assessing the performance of the system will not be exactly suitable for measurement of any institution. For example, the percent of students in the University of North Carolina system who attended a community college is a measure that helps system leaders evaluate our system's progress over time and compare our system with others, but it cannot be meaningfully calculated for individual institutions. Especially in these times when budgets are very tight, the performance of individual colleges on measures such as currentness of equipment and meeting Association of College and Research Libraries standards may reflect the results of hard choices made by individual administrators, and not be inherently any better than the choice made by another institution.

Some measures are so important to any real attempt to assess success that their absence compromises the result. Yet, some of these measures are not possible within the present capacity of the system to measure. In the initial year, a commitment was made that since resources for data collection at the campus level are already strained, no measures requiring additional surveys or data collection at the college level would be selected. This year we have surveyed the colleges for a small amount of new data, and we have made some improvements in the collection of data at the state level which enable us to provide new and more in-depth information on some factors.

There remain some measures which are essential to a meaningful report, yet are beyond our capacity. The most essential of these is persistence of students toward goals, which is a key component of the Student Progress Monitoring System currently being developed. The System Planning Committee is continuing to examine the relevance of the measures and the adequacy of the data.

This report includes background information explaining why each measure was chosen, what it is intended to show and the limitations of the data. The data and sources of the data, a brief assessment of the implications of the data and recommendations for future changes in the measures are given. Where appropriate, institutional data are presented on selected measures. Recommendations for program changes indicated by the data are outside the scope of this report.

The critical success factors were originally adopted by the State Board of Community Colleges in July, 1989 and amended in September, 1990, September, 1991, and in September 1992.. North Carolina has adopted the matrix format of the National Alliance of Community and Technical Colleges to graphically display the set of factors chosen. Figure One is a matrix showing the factors and measures.

**North Carolina Community College System
CRITICAL SUCCESS FACTORS AND MEASURES OF QUALITY, 1992-93**

Factor	A. Number of students returning from previous quarters	B. Progress of literacy students	C. Number of GED's and AHS's awarded compared to the number of dropouts statewide	D. Performance of transfers after two semesters	E. Rate of success on licensure exams (where such are required)	F. Program completion rates	G. Passing rates for remedial courses	H. Passing rates for "General Education" and "related" courses
FACTOR I Student Success								
FACTOR II Resources	A. Average salaries as a percent of the Southeastern regional average	B. Student/faculty ratio	C. Participation in staff development programs: Tier A	D. Currentness of equipment	E. Percent of libraries meeting ALA* standards	F. System Funding/FTE		
FACTOR III Access	A. Enrollment of high school dropouts; handicapped; disadvantaged; single parents; nontraditional high school diploma earners; inmates	B. Number served by type through literacy programs and percent of target population served	C. Number & percent of dropouts annually served by literacy programs	D. Percent of students receiving financial aid and amount of aid compared with cost of attendance	E. Percent of population in service area enrolled			
FACTOR IV Education Continuum	A. Number & percent of recent high school graduates enrolled in community college programs	B. Number of & enrollment in cooperative agreements with high school	C. Percent of Tech Prep students enrolling in a community college	D. Number & percent of students in the UNC system who attended a community college				
FACTOR V Workforce Development	A. Number of employers and trainees served by: New & Expanding Industry, FIT, Small Business Centers, Apprenticeship programs	B. Number of workplace literacy sites and number of students being served	C. Employer satisfaction with graduates	D. Employment status of graduates				
FACTOR VI Community Services	A. Number of courses offered & students enrolled through community services (avocational, practical skills, academic, and recreational)	B. Enrollment of senior citizens	C. Support of community service activities (use of facilities by outside groups; support of civic and cultural activities)					
FACTOR VII Program Management/Accountability	A. Annual educational program audit summary-- number audited & percent of system instructional budget cited for exceptions	B. Number and percent of programs reviewed	C. Number and percent of eligible programs accredited or reaffirmed					

*American Library Association

NOTE: Measures in italics are being developed for future reporting.

FUTURE PROSPECTS

The development of the critical success factors will aid the State Board of Community Colleges in setting strategic goals for the system. By indicating how the system has performed and is performing currently in key areas, the factors will provide a foundation for adopting reasonable targets for future efforts.

The critical success factors for the system provide a model for the individual institutions. The National Alliance Model, which includes a process for developing, validating and revising the chart, is recommended for developing critical success factors relevant to each college's own goals and mission.

Progress has been made in identifying measures that indicate educational outcomes for students. The development of the Student Success factor is a clear example of the emphasis being put on the development of performance measures. As our experience with these measures increases, additional performance measures will be developed and analyzed. Future measures will build upon other initiatives such as Student Right to Know and the Carl Perkins Act, as well as recommendations from the legislature's Government Performance Audit Committee report. The focus will be on developing factors and measures that reflect the mission of the community college system in North Carolina.

It is to the interest of the system that the critical success factors provide useful and relevant data to the public, the governing boards and the general assembly. They will reveal ways in which the system can improve and progress, and the leadership of the system can use them for positive change.

CRITICAL SUCCESS FACTOR I: STUDENT SUCCESS

Increasingly, educational institutions are being called upon to support and document educational accomplishments. This call for accountability is coming from the federal government, state legislatures, and accrediting agencies. No longer can education institutions focus solely on the processes of education or on the number of students being served. There is a public demand today for an accounting for public funds spent on education. Put simply, the public, through government bodies and accreditation agencies, is demanding to know what kind of return is being generated by the investment of public dollars in education.

Community colleges are operating under several new mandates relative to measuring student success. The recently reauthorized Carl Perkins Act requires states to establish standards of performance for students being served with Perkins funds. The federal Right to Know legislation requires colleges and universities to inform prospective students of graduation rates at the institution. The Southern Association of Colleges and Schools (SACS), the accrediting agency for colleges in the southeast, has, for several years, required colleges to develop and implement an institutional effectiveness process involving planning and the assessment of expected educational results. The State Board of Community Colleges requires institutions to submit annual institutional effectiveness plans to the Department of Community Colleges that include the identification of expected educational outcomes. The State Board of Community Colleges requires institutions to review all curriculum programs at least once every five years. Finally, a recent report issued by the North Carolina Government Performance Audit Committee has included a recommendation that funding for the system be based, in part, on program performance. Adopting this recommendation would require the establishment of program outcomes and standards.

The call for accountability renews the focus on students and student success. The identification of the appropriate measures of student success for community college students is not an easy task. Unlike traditional university students, the majority of whom are in pursuit of a degree, community college students attend for a wide variety of reasons including pursuit of a degree, transfer to a four-year institution, upgrading job skills, and attainment of basic literacy skills. Though progress has been made in the identification of some key student success measures, continued efforts in this area need to be undertaken.

The measures for "Student Success" adopted by the State Board of Community Colleges are:

- A. Number of Students Returning from Previous Quarters
- E. Progress of Literacy Students
- C. Number of GEDs and AHSDs Awarded Compared to the Number of Dropouts Statewide
- D. Performance of Transfers After Two Semesters
- E. Rate of Success on Licensure Exams (where such are required)
- F. Program Completion Rates
- G. Passing Rates for Remedial Courses
- H. Passing Rates for "General Education" and "related" courses

STUDENT SUCCESS MEASURE A:

Number of Students Returning from Previous Quarters

Background

Although there are many reasons why students cannot attend classes in any one quarter, or why they drop out altogether, the quality of the program is one of those reasons. Students who continue studies from quarter to quarter show commitment to a program and progress toward completion. A report on retention in the community college system was conducted in 1987 (Lincoln and Smith, 1987). That study is a more extensive discussion of retention issues.

Efforts are underway to develop a meaningful definition of retention for community college students. Factors which must be considered in developing such a measure include the level of student preparedness, type of program (certificate, degree, diploma), level of student participation (part-time vs. full-time), program offering, student intent, etc. It is possible that a single measure of retention will not be appropriate, but rather different measures may be necessary for different groups.

The current definition of retention used in this report focuses on the percent of curriculum students who enroll in fall quarter and subsequently enroll in either winter or spring quarter. Specifically, using curriculum enrollment data, the proportion of students who enrolled in fall quarter, did not complete their program in fall quarter, and subsequently enrolled in winter and/or spring quarter of the same year was calculated. Special studies students (non-credit), co-op students, and dual enrollment students were omitted from the analysis.

For 1991-92 an additional measure of retention was developed. For the first time, student intent data were available on the Curriculum Student Progress Information System data tape. Information was collected from students on their intent for enrolling. The reasons for enrolling were coded from 1 to 6, depending on the student's intent. A code of 1 in the intent field indicated that a student's intent was to obtain an Associate Degree, Diploma, or Certificate.

A retention rate was calculated, using the method described above for students with an intent code of "1." The rationale for calculating this retention rate was that retention is necessary to attain a degree or diploma while other student goals may be achieved with shorter or more sporadic attendance.

Implications

The data indicate that retention rates continue to improve for the system. It is interesting to note that the retention rate for all curriculum students for the system is the same as the retention rate for degree seeking curriculum students. The institutional data in general reflect this consistency in the two rates, though some colleges' retention rate does change when the new method of analysis is applied.

The reason for the increasing retention rate over the past four years is not evident. The improved rate may be due to more students entering the college transfer program or may be a commentary on the state of the economy. That is to say, more people may be choosing to remain in school in order to acquire more marketable skills or may choose to stay in school until the job market improves.

Data

**PROPORTION OF FALL CURRICULUM STUDENTS WHO
SUBSEQUENTLY ENROLL IN THE WINTER AND/OR SPRING QUARTER
OF THE SAME ACADEMIC YEAR**

YEAR	% RE-ENROLL ALL STUDENTS	% RE-ENROLL DEGREE SEEKING
1988-89	66.6	NA
1989-90	67.6	NA
1990-91	74.9	NA
1991-92	79.4	79.5

Source: Planning and Research Unit, DCC.

Data: Quarterly Registration.

Contact: J. Keith Brown.

Recommendation

A more comprehensive examination of student enrollment data should be conducted as resources permit. Factors which might affect retention should be examined. Information on retention rates for other community college systems should be collected.

**FALL CURRICULUM STUDENTS WHO SUBSEQUENTLY ENROLL IN THE WINTER
AND/OR SPRING QUARTER OF THE SAME ACADEMIC YEAR, 1991-92**

INSTITUTION	FTE	ALL CURR. STUDENTS	DEGREE SEEKING ONLY
<1,000 FTE			
Pamlico CC	188	76.1	68.3
Tri-County CC	701	74.3	76.1
Montgomery CC	709	78.0	77.3
Anson CC	711	69.8	67.7
Bladen CC	762	78.9	82.1
Martin CC	923	83.9	81.4
McDowell TCC	923	74.2	74.8
Roanoke-Chowan CC	962	79.5	81.8
1,000-1,999 FTE			
Brunswick CC	1,114	75.1	75.9
James Sprunt CC	1,114	75.5	76.1
Mayland CC	1,256	70.1	69.8
Piedmont CC	1,289	67.4	66.1
Sampson CC	1,367	83.2	82.7
Carteret CC	1,369	74.1	73.9
Halifax CC	1,416	82.4	83.1
Nash CC	1,469	83.5	84.0
Southwestern CC	1,485	81.3	82.1
Southeastern CC	1,527	77.6	77.6
Cleveland CC	1,544	74.8	73.6
Wilson TCC	1,550	76.3	77.3
Mitchell CC	1,566	82.8	83.6
College of The Albemarle	1,573	79.5	79.2
Beaufort Co. CC	1,616	78.9	78.9
Blue Ridge CC	1,654	78.2	77.4
Stanly CC	1,698	82.1	81.8
Haywood CC	1,708	81.5	81.8
Randolph CC	1,752	80.4	78.8
Richmond CC	1,754	82.2	84.6
Rockingham CC	1,790	84.4	84.0
Isothermal CC	1,905	80.9	81.7
Edgecombe CC	1,952	80.4	80.4
2,000-2,999 FTE			
Craven CC	2,091	77.7	79.4
Robeson CC	2,112	74.3	73.9
Caldwell CC/TI	2,316	77.6	76.6
Western Piedmont CC	2,330	78.9	79.5
Davidson Co. CC	2,462	82.9	83.9
Vance-Granville CC	2,492	78.5	78.3
Wilkes CC	2,545	79.6	79.0
Surry CC	2,560	80.9	80.4
Lenoir CC	2,605	81.1	79.7
Wayne CC	2,668	83.3	84.5
Cape Fear CC	2,880	79.1	79.7
Rowan-Cabarrus CC	2,901	70.6	71.0
Sandhills CC	2,913	84.2	84.8
Catawba Valley CC	2,985	79.2	79.9
3,000-4,999 FTE			
Johnston CC	3,040	72.4	72.4
Pitt CC	3,098	79.2	79.5
Gaston CC	3,259	79.5	79.7
Asheville-Buncombe TCC	3,365	82.0	80.6
Coastal Carolina CC	3,430	80.3	79.4
Durham TCC	3,440	75.4	76.3
Alamance CC	3,445	82.0	82.1
Central Carolina CC	3,454	70.0	69.8
Forsyth TCC	4,270	77.8	78.4
>4,999 FTE			
Wake TCC	5,639	76.8	77.5
Guilford TCC	5,906	75.2	74.9
Fayetteville TCC	8,661	NA	NA
Central Piedmont CC	10,299	79.2	79.4
System	138,513	79.4	79.5

STUDENT SUCCESS MEASURE B:

Progress of Literacy Students

Background

In literacy programs, as in all community college programs, the number of people who complete a program is not a real indicator of the education being provided. Since it is not a compulsory system, people are free to come and go as their life circumstances or interests motivate them. However, they may benefit greatly from the classes they do attend and complete. Many of the people who most need literacy classes have not experienced success in school and have fears to overcome before they are willing to attend regularly. Moving from illiteracy to a high school level education is a long and arduous process that takes a great deal of commitment.

In literacy programs, students are often pressured by lack of money, other demands on their time, and by other barriers to continuing their educations. In spite of the barriers, many adults do enroll for long enough periods of time to raise grade level abilities in reading, math, and other skills, but still do not complete the entire program. With the testing programs put in place in the last few years and with the student progress monitoring system, these gains will be measurable and will indicate real impacts of the literacy programs.

Two indicators of the progress of literacy students were examined. First, data on the progression of students through the literacy programs were collected and analyzed. Using the Literacy Education Information System data, information was compiled on the percent of students who entered a level of literacy and exited the program during the same year without completing the level entered; who are still persisting in the level of literacy entered; who completed the level of literacy entered and exited the program; and who completed the level entered and advanced to the next level of literacy.

The indicator discussed above measures the progress of literacy students through the literacy program. Literacy, however, is really the beginning rather than the end of a student's training for today's workplace. A second indicator of the progress of literacy students is an analysis of the number of students with an Adult High School Diploma (AHSD) or a GED who enter a curriculum or occupational extension program at the college. This indicator is a measure of success for the student in gaining additional training and for the system and colleges in providing a continuum of programs.

To determine the number of students with an AHSD or GED enrolled in the system, an analysis of the annual curriculum registration and extension registration data tapes was conducted. In previous years, these data files indicated if a student had a GED, but did not distinguish between an AHSD and a regular high school diploma. In 1991-92, however, a separate code was given to students with an AHSD, thus allowing for this analysis.

Implications

The data on the progress of literacy students indicates that the number of students who enter a literacy program and exit without completing the level entered has declined since 1989-90. Data for the other three categories has fluctuated over the three years, but it is evident that more students are persisting in the literacy programs.

The data on the number of students with an AHSD or a GED enrolled in a curriculum program or an occupational extension program demonstrates the large number of non-traditional students the colleges are serving. In 1991-92 a total of 63,153 students with an AHSD or a GED enrolled in a curriculum or occupational extension program. With only one year's data on this indicator, it is not possible to make a judgement on the level of participation by these students; but the numbers do indicate that the system is serving a large number of students who have not been successful in traditional educational programs.

Data

PERCENTAGE OF LITERACY STUDENTS WHO PROGRESS TO ANOTHER LEVEL OF LITERACY

YEAR	EXIT, NON-COMPLETER	PROGRESSING SAME LEVEL	EXIT, COMPLETER	ADVANCED NEXT LEVEL
1989-90	26	48	16	10
1990-91	23	63	10	4
1991-92	23	59	12	6

Source: Annual Literacy Report, DCC.

Frequency: Collected annually.

Scope: System and institution level data.

Contact: Terry Shelwood, Student Development Services, DCC.

NUMBER OF STUDENTS WITH A GED OR AHSD ENROLLED IN A CURRICULUM PROGRAM OR IN OCCUPATIONAL EXTENSION

YEAR	CURRICULUM		OCCUPATIONAL EXTENSION	
	GED	AHSD	GED	AHSD
1991-92	17,260	16,397	8,595	20,901

Source: Planning and Research Unit, DCC.

Data: Annual Curriculum and Extension Registration Tapes.

Contact: J. Keith Brown.

Recommendation

Refinements in the analysis of data provided by the LEIS should continue. Efforts should be made to determine the level of literacy achieved by completers who exited the program.

Data on the enrollment of students with an AHSD or a GED should continue to be examined. Colleges that have not incorporated the new coding scheme for AHSD should incorporate it in the registration process. Efforts should be undertaken to match these data with the data on students who earn an AHSD or a GED in order to develop a measure of the percent of students who move from literacy to some other college program.

PERCENTAGE OF LITERACY STUDENTS WHO PROGRESS TO ANOTHER LEVEL, 1991-92

INSTITUTION	TOTAL FTE	EXIT NON-COMPLETER	PROGRESSING SAME LEVEL	EXIT, COMPLETER	ADVANCED NEXT LEVEL
<1,000 FTE					
Pamlico CC	188	22	67	2	9
Tri-County CC	701	3	85	7	6
Montgomery CC	709	56	30	9	6
Anson CC	711	39	49	9	3
Bladen CC	762	20	78	1	1
Martin CC	923	22	66	5	8
McDowell TCC	923	29	55	9	7
Roanoke-Chowan CC	962	24	69	3	4
1,000-1,999 FTE					
Brunswick CC	1,114	18	71	10	1
James Sprunt CC	1,114	19	65	7	9
Mayland CC	1,256	28	33	18	20
Piedmont CC	1,289	55	26	15	4
Sampson CC	1,367	31	48	10	10
Carteret CC	1,369	36	43	19	2
Halifax CC	1,416	46	38	11	4
Nash CC	1,469	53	32	11	4
Southwestern CC	1,485	34	55	9	1
Southeastern CC	1,527	30	47	16	7
Cleveland CC	1,544	4	92	2	2
Wilson TCC	1,550	22	71	5	2
Mitchell CC	1,566	12	66	18	5
College of The Albemarle	1,573	50	31	9	11
Beaufort Co. CC	1,616	16	67	14	3
Blue Ridge CC	1,654	34	49	11	6
Stanly CC	1,698	35	54	7	4
Haywood CC	1,708	35	51	10	4
Randolph CC	1,752	39	53	3	5
Richmond CC	1,754	17	64	15	4
Rockingham CC	1,790	13	73	10	3
Isothermal CC	1,905	14	68	13	5
Edgecombe CC	1,952	13	74	10	2
2,000-2,999 FTE					
Craven CC	2,091	28	53	13	6
Robeson CC	2,112	28	50	19	3
Caldwell CC & TI	2,316	40	43	9	8
Western Piedmont CC	2,330	28	46	20	6
Davidson Co. CC	2,462	29	48	17	5
Vance-Granville CC	2,492	11	80	8	1
Wilkes CC	2,545	31	58	5	6
Surry CC	2,560	22	74	0	4
Lenoir CC	2,605	22	61	8	9
Wayne CC	2,668	11	74	7	8
Cape Fear CC	2,880	39	49	10	1
Rowan-Cabarrus CC	2,901	1	69	7	23
Sandhills CC	2,913	23	64	8	4
Catawba Valley CC	2,985	23	60	4	13
3,000-4,999 FTE					
Johnston CC	3,040	17	72	10	1
Pitt CC	3,098	17	71	9	4
Gaston College	3,259	16	80	1	3
Asheville-Buncombe TCC	3,365	32	44	10	15
Coastal Carolina CC	3,430	26	38	30	7
Durham TCC	3,440	11	84	2	3
Alamance CC	3,445	16	76	7	1
Central Carolina CC	3,454	31	47	17	5
Forsyth TCC	4,270	29	54	12	6
>4,999 FTE					
Wake TCC	5,639	8	87	2	3
Guilford TCC	5,906	21	48	21	9
Fayetteville TCC	8,661	17	69	6	8
Central Piedmont CC	10,299	24	43	4	30
System	138,513	23	59	12	6

**NUMBER OF STUDENTS WITH A GED OR AHSD ENROLLED
IN A CURRICULUM PROGRAM OR IN OCCUPATIONAL EXTENSION, 1991-92**

INSTITUTION	TOTAL FTE	CURRICULUM		OCCUPATIONAL EXTEN.	
		GED	AHSD	GED	AHSD
<1,000 FTE					
Pamlico CC	188	29	4	48	44
Tri-County CC	701	202	83	115	68
Montgomery CC	709	240	50	0	101
Anson CC	711	155	95	85	154
Bladen CC	762	100	35	35	65
Martin CC	923	139	171	57	76
McDowell TCC	923	231	77	34	162
Roanoke-Chowan CC	962	186	87	2	84
1,000-1,999 FTE					
Brunswick CC	1,114	129	174	41	197
James Sprunt CC	1,114	223	39	35	105
Mayland CC	1,256	0	80	66	153
Piedmont CC	1,289	226	105	0	148
Sampson CC	1,367	175	105	0	131
Carteret CC	1,369	129	177	281	338
Halifax CC	1,416	310	265	346	205
Nash CC	1,469	279	118	153	258
Southwestern CC	1,485	308	174	241	143
Southeastern CC	1,527	90	174	21	186
Cleveland CC	1,544	150	82	99	197
Wilson TCC	1,550	288	183	0	373
Mitchell CC	1,566	278	198	311	248
College of The Albemarle	1,573	82	74	158	26
Beaufort Co. CC	1,616	97	30	166	234
Blue Ridge CC	1,654	8	129	140	240
Stanly CC	1,698	253	175	235	396
Haywood CC	1,708	48	211	101	95
Randolph CC	1,752	266	58	86	404
Richmond CC	1,754	198	106	10	184
Rockingham CC	1,790	212	271	117	312
Isothermal CC	1,905	0	181	0	222
Edgecombe CC	1,952	332	180	0	142
2,000-2,999 FTE					
Craven CC	2,091	460	293	245	445
Robeson CC	2,112	98	85	94	1,846
Caldwell CC & TI	2,316	316	446	409	271
Western Piedmont CC	2,330	468	221	154	156
Davidson Co. CC	2,462	280	147	294	272
Vance-Granville CC	2,492	429	263	21	343
Wilkes CC	2,545	167	124	321	194
Surry CC	2,560	54	247	84	234
Lenoir CC	2,605	560	246	29	272
Wayne CC	2,668	300	345	121	266
Cape Fear CC	2,880	250	524	183	562
Rowan-Cabarrus CC	2,901	553	441	0	640
Sandhills CC	2,913	337	315	0	367
Catawba Valley CC	2,985	386	324	373	485
3,000-4,999 FTE					
Johnston CC	3,040	379	210	0	384
Pitt CC	3,098	635	315	0	221
Gaston College	3,259	503	608	318	503
Asheville-Buncombe TCC	3,365	764	365	267	468
Coastal Carolina CC	3,430	560	502	0	503
Durham TCC	3,440	244	874	176	601
Alamance CC	3,445	648	90	211	265
Central Carolina CC	3,454	349	292	308	456
Forsyth TCC	4,270	505	1,044	16	758
>4,999 FTE					
Wake TCC	5,639	848	952	701	989
Guilford TCC	5,906	0	1,015	0	986
Fayetteville TCC	8,661	286	739	719	1,930
Central Piedmont CC	10,299	1,518	1,479	568	794
System	138,513	17,260	16,397	8,595	20,901

STUDENT SUCCESS MEASURE C:

Number of GEDs and AHSDs Awarded Compared to the Number of Dropouts Statewide

Background

The great majority of people in North Carolina's workforce are people who are well past high school age. Reducing the numbers of dropouts will result in raising the educational levels of the workforce, but only gradually. If the educational levels of the workforce are to be significantly affected in the short run, more mature people will also have to be attracted back into educational programs.

This measure reflects the net impact of GED/AHSD programs on the percent of population without high school credentials. It does not show how many of last year's (or any year's) dropouts came back to get a diploma in a community college. (That is the intent of Access Measure C.) This measure shows how many people of whatever ages come back to get their diplomas compared to the number of dropouts in any given year. The number of adults without these credentials is reduced only in two other ways: by their dying or moving out of North Carolina.

Ideally, we would like to see the numbers of dropouts continue to go down at the same time that the numbers of GEDs and AHSDs are raised. That would be attacking the problem at both ends!

There are also problems in the collection of data. For example, students who go directly out of high school to an AHSD or GED program are frequently counted as transfers, not dropouts, thus preventing a true measure of the number of students who leave high school without graduating. A comprehensive study of student flow is needed to completely understand this problem.

Implications

While the numbers of dropouts have gone down, so have the numbers of people in the high school age groups. The numbers of GEDs and AHSDs awarded reached a peak in 1986-87 and dropped in 1987-88, probably because of changes in the programs. A writing sample was added to the GED exam, and the price of the exam was raised to cover the cost of grading it. In addition, 1986-87 was the last year that the GED was accepted by the military on the same basis as a diploma. Awards have risen since 1989-90, while the number added to the dropout pool each year has decreased.

In 1991-92 the number of GEDs and AHSDs awarded exceeded the number of new dropouts added to the dropout pool. This was due to the decrease in the number of dropouts reported by the Department of Public Instruction and an increase in the number of GEDs and AHSDs awarded. The net increase in the dropout pool from these two factors was -593.

Again it should be emphasized that the number of dropouts reported by the Department of Public Instruction does not include students who did not complete high school and who transferred to a community college. It is likely that some portion of the GEDs and AHSDs awarded in 1991-92 were awarded to these individuals and thus the impact on the increase in the dropout pool was not as dramatic as the data indicate. Nevertheless, the closing of the gap between the number of new dropouts and the number of GEDs and AHSDs awarded by community colleges is a positive sign of educational improvement for North Carolina.

Data

**NUMBER OF GEDs AND AHSDs AWARDED COMPARED TO THE
NUMBER OF DROPOUTS STATEWIDE**

YEAR	NEW DROPOUTS ADDED TO DROPOUT POOL	GED/AHS DIPLOMAS AWARDED	INCREASE IN DROPOUT POOL
1986-87	22,813	19,599	3,214
1987-88	22,770	16,263	6,507
1988-89	24,367	14,460	9,907
1989-90	23,000	15,013	7,987
1990-91	19,417	16,606	2,811
1991-92	17,190	17,785	-593

Source: GED/AHS Files, DCC.

Frequency: Annual.

Scope: State and institution data.

Contact: Joy Matthews, GED & AHSD, DCC.

Source: Dropout Records, State Department of Public Instruction.

Frequency: Compiled annually. Available in winter.

Scope: State level and local district data.

Contact: Johnnie McLaughlin, North Carolina Department of Public Instruction.

Recommendation

Data on the number of dropouts and the number of GEDs and AHSDs awarded provide a good measure of the success of the educational institutions in North Carolina in increasing the educational attainment of its citizens. To fully understand the success of the system, however, efforts should be made to gather data on the number of students who transfer to community colleges without completing high school in order to accurately determine the impact of the system on the dropout pool.

NUMBER OF GEDs AND AHSDs AWARDED, 1991-92

INSTITUTION	TOTAL FTE	GED	AHSD
<1,000 FTE			
Panlico CC	188	50	
Tri-County CC	701	113	
Montgomery CC	709	57	
Anson CC	711	65	
Bladen CC	762	57	5
Martin CC	923	77	
McDowell TCC	923	169	
Roanoke-Chowan CC	962	108	
1,000-1,999 FTE			
Brunswick CC	1,114	105	
James Sprunt CC	1,114	92	7
Hayland CC	1,256	235	0
Piedmont CC	1,289	199	21
Sampson CC	1,367	89	12
Carteret CC	1,369	138	25
Halifax CC	1,416	162	
Nash CC	1,469	155	79
Southwestern CC	1,485	290	
Southeastern CC	1,527	75	75
Cleveland CC	1,544	156	102
Wilson TCC	1,550	132	34
Mitchell CC	1,566	322	31
College of The Albemarle	1,573	281	11
Beaufort Co. CC	1,616	74	
Blue Ridge CC	1,654	397	
Stanly CC	1,698	122	89
Haywood CC	1,708	173	
Randolph CC	1,752	331	24
Richmond CC	1,754	503	27
Rockingham CC	1,790	181	28
Isothermal CC	1,905	110	182
Edgecombe CC	1,952	276	28
2,000-2,999 FTE			
Craven CC	2,091	231	26
Robeson CC	2,112	47	213
Caldwell CC & TI	2,316	155	110
Western Piedmont CC	2,330	358	42
Davidson Co. CC	2,462	220	127
Vance-Granville CC	2,492	302	3
Wilkes CC	2,545	54	25
Surry CC	2,560	214	
Lenoir CC	2,605	238	2
Wayne CC	2,668	56	285
Cape Fear CC	2,880	251	72
Rowan-Cabarrus CC	2,901	262	173
Sandhills CC	2,913	443	
Catawba Valley CC	2,995	383	
3,000-4,999 FTE			
Johnston CC	3,040	56	145
Pitt CC	3,098	303	0
Gaston College	3,259	663	
Asheville-Buncombe TCC	3,365	711	
Coastal Carolina CC	3,430	486	20
Durham TCC	3,440	190	265
Alamance CC	3,445	311	23
Central Carolina CC	3,454	363	176
Forsyth TCC	4,270	458	105
>4,999 FTE			
Wake TCC	5,639	644	56
Guilford TCC	5,906	470	182
Fayetteville TCC	8,661	440	210
Central Piedmont CC	10,299	561	329
System	138,513	14,164	3,369

STUDENT SUCCESS MEASURE D:

Performance of Transfers After Two Semesters

Background

The primary aim of community college transfer programs is to provide educational experiences that will enable transfer students to make the transition to a baccalaureate program and perform as well as the students who start out at the receiving institution.

Technical and vocational programs are not designed to qualify students for transfer. However, programs such as Associate Degree Nursing and Engineering Technology allow students to concentrate on practical courses in the first two years and to complete the complementary portion of their programs later. Often, this enables the student to work in the field while getting his or her baccalaureate. It also may accommodate students who do not think they want to get a baccalaureate until after they have had some success in the early portion of the program. This type of program is likely to become more popular, especially as more working adults decide they want a baccalaureate.

The data on academic standing are available only for students who first enrolled at the university during the summer or fall semester. This may exclude many community college transfers. Colleges which do not offer college transfer programs, transfer students with certain technical and/or general education credits. These colleges may also be involved in a contractual program in which a senior college provides general education programs to the community college students. The data are reported separately for students who transferred from community colleges via an approved college transfer program and from those without.

Implications

The data show that after two semesters, community college students perform very well as measured both by academic standing and grades, and that their performance has improved, in general, over the last five years.

It should be noted that since the data are for performance after two semesters and most transfers still need at least four semesters to graduate, few can have been expected to appear as graduates in this data.

Data

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES OFFERING PRE-BACCALAUREATE PROGRAMS, AFTER TWO SEMESTERS, END OF YEAR MEASURES

PERCENT OF STUDENTS* WHOSE STANDING IS:

	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
1987-88	1,897	70.6	10.3	5.7	11.6	1.3
1988-89	1,984	75.2	10.0	4.8	9.3	0.8
1989-90	2,326	78.5	8.4	3.7	8.6	0.8
1990-91	2,573	80.6	6.6	5.1	7.2	0.4
1991-92	3,153	75.5	10.2	5.7	7.9	0.7

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES NOT OFFERING PRE-BACCALAUREATE PROGRAMS, AFTER TWO SEMESTERS, END OF YEAR MEASURES

PERCENT OF STUDENTS* WHOSE STANDING IS:

	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
1987-88	524	68.9	6.1	5.3	19.3	0.4
1988-89	569	80.3	3.7	5.1	10.4	0.5
1989-90	536	76.9	6.2	7.1	9.9	0.0
1990-91	615	78.4	4.4	5.4	11.9	0.0
1991-92	880	77.5	5.1	7.7	9.5	0.1

*Numbers do not add to 100 percent due to rounding.

**TRANSFERS' FALL AND END OF YEAR G.P.A.,
COMMUNITY COLLEGES OFFERING PRE-BACCALAUREATE DEGREE
PROGRAMS**

YEAR	NUMBER	FALL GPA	END OF YEAR GPA
1987-88	1,897	2.53	2.56
1988-89	1,984	2.56	2.56
1989-90	2,326	2.59	2.59
1990-91	2,573	2.56	2.57
1991-92	3,153	2.61	2.61

**TRANSFERS' FALL AND END OF YEAR G.P.A.,
COMMUNITY COLLEGES NOT OFFERING PRE-BACCALAUREATE DEGREE
PROGRAMS**

YEAR	NUMBER	FALL GPA	END OF YEAR GPA
1987-88	524	2.48	2.60
1988-89	569	2.66	2.73
1989-90	536	2.50	2.58
1990-91	615	2.56	2.59
1991-92	880	2.47	2.51

Source: UNC General Administration.

Frequency: Annual.

Scope: System and institution data.

Contact: Diana Haywood, UNC General Administration

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES, 1991-92

INSTITUTION	NUMBER	PERCENT OF STUDENTS WHOSE STANDING IS:				
		GOOD	PROBATION	SUSPENDED	WITHDREW	GRAD.
<1,000 FTE						
Pamlico CC *	3	66.7	0.0	33.3	0.0	0.0
Tri-County CC	28	75.0	0.0	7.1	17.9	0.0
Montgomery CC	***	***	***	***	***	***
Anson CC *	***	***	***	***	***	***
Bladen CC *	65	86.2	1.5	7.7	4.6	0.0
Martin CC	14	78.6	14.3	0.0	0.0	7.1
McDowell TCC *	15	53.3	33.3	6.7	6.7	0.0
Roanoke-Chowan CC *	29	69.0	10.3	0.0	20.7	0.0
1,000-1,999 FTE						
Brunswick CC *	20	65.0	0.0	15.0	20.0	0.0
James Sprunt CC	32	59.4	9.4	15.6	15.6	0.0
Mayland CC *	15	60.0	26.7	0.0	13.3	0.0
Piedmont CC *	9	100.0	0.0	0.0	0.0	0.0
Sampson CC *	37	83.8	0.0	10.8	5.4	0.0
Carteret CC *	40	92.5	2.5	2.5	2.5	0.0
Halifax CC	11	72.7	9.1	18.2	0.0	0.0
Nash CC	27	77.8	3.7	14.8	3.7	0.0
Southwestern CC	52	69.2	3.8	9.6	17.3	0.0
Southeastern CC	99	77.8	7.1	7.1	8.1	0.0
Cleveland CC	23	52.2	21.7	13.0	13.0	0.0
Wilson TCC *	8	62.5	0.0	0.0	25.0	12.5
Mitchell CC	55	74.5	14.5	3.6	7.3	0.0
College of The Albemarle	99	74.7	9.1	2.0	14.1	0.0
Beaufort Co. CC	38	81.6	10.5	5.3	2.6	0.0
Blue Ridge CC	48	87.5	6.3	2.1	4.2	0.0
Stanly CC	19	89.5	10.5	0.0	0.0	0.0
Haywood CC *	10	70.0	0.0	0.0	30.0	0.0
Randolph CC *	48	93.8	6.3	0.0	0.0	0.0
Richmond CC	35	74.3	0.0	5.7	17.1	2.9
Rockingham CC	71	80.3	8.5	4.2	7.0	0.0
Isothermal CC	61	80.3	13.1	4.9	1.6	0.0
Edgecombe CC	15	60.0	13.3	26.7	0.0	0.0
2,000-2,999 FTE						
Craven CC	81	69.1	6.2	11.1	11.1	2.5
Robeson CC *	38	86.8	2.6	0.0	10.5	0.0
Caldwell CC/TI	90	80.0	11.1	2.2	6.7	0.0
Western Piedmont CC	96	72.9	14.6	5.2	6.3	1.0
Davidson Co. CC	136	79.4	8.1	7.4	5.1	0.0
Vance-Granville CC	37	78.4	8.1	8.1	5.4	0.0
Wilkes CC	123	77.2	13.8	1.6	7.3	0.0
Surry CC	127	72.4	15.7	4.7	7.1	0.0
Lenoir CC	76	75.0	7.9	6.6	6.6	3.9
Wayne CC	51	86.3	3.9	2.0	7.0	0.0
Cape Fear CC	194	67.5	3.1	20.1	9.3	0.0
Rowan-Cabarrus CC	20	70.0	25.0	0.0	5.0	0.0
Sandhills CC	171	73.7	6.4	6.4	12.3	1.2
Catawba Valley CC	58	74.1	8.6	5.2	12.1	0.0
3,000-4,999 FTE						
Johnston CC *	42	83.3	7.1	4.8	4.8	0.0
Pitt CC	94	77.7	9.6	11.7	1.1	0.0
Gaston CC	155	73.5	12.3	8.4	5.2	0.6
Asheville-Buncombe TCC	99	70.7	8.1	3.0	18.2	0.0
Coastal Carolina CC	126	79.4	4.8	11.1	4.0	0.8
Durham TCC	115	88.7	0.9	1.7	5.2	3.5
Alamance CC *	59	91.5	5.1	1.7	1.7	0.0
Central Carolina CC *	26	69.2	11.5	7.7	11.5	0.0
Forsyth TCC	94	74.5	12.8	2.1	10.6	0.0
>4,999 FTE						
Wake TCC	49	79.6	6.1	8.2	6.1	0.0
Guilford TCC	204	77.5	14.2	0.5	7.8	0.0
Fayetteville TCC	150	77.3	5.3	2.7	14.7	0.0
Central Piedmont CC	495	70.9	13.7	6.1	8.1	1.2
System	3,153	75.5	10.2	5.7	7.9	0.7
System*	880	880	77.5	5.1	7.7	9.5

*Does not offer pre-baccalaureate program

TRANSFERS' FALL AND END OF YEAR GPA, 1991-92

INSTITUTION	NUMBER	FALL GPA	END OF YEAR GPA
<1,000 FTE			
Pamlico CC *	3	1.47	1.34
Tri-County CC	28	2.78	2.77
Montgomery CC	***	***	***
Anson CC *	***	***	***
Bladen CC *	65	2.38	2.38
Martin CC	14	2.65	2.78
McDowell TCC *	15	2.02	2.10
Roanoke-Chowan CC *	29	2.10	2.16
1,000-1,999 FTE			
Brunswick CC *	20	2.09	2.11
James Sprunt CC	32	2.45	2.39
Mayland CC *	15	2.67	2.61
Piedmont CC *	9	2.34	2.52
Sampson CC *	37	2.39	2.45
Carteret CC *	40	2.60	2.58
Halifax CC	11	2.12	2.23
Nash CC	27	2.52	2.51
Southwestern CC	52	2.69	2.71
Southeastern CC	99	2.34	2.41
Cleveland CC	23	2.48	2.35
Wilson TCC *	8	2.47	2.56
Mitchell CC	55	2.58	2.54
College of The Albemarle	99	3.09	3.10
Beaufort Co. CC	38	2.63	2.72
Blue Ridge CC	48	2.64	2.57
Stanly CC	19	2.43	2.31
Haywood CC *	10	2.49	2.48
Randolph CC *	48	2.81	2.98
Richmond CC	35	2.67	2.64
Rockingham CC	71	2.52	2.45
Isothermal CC	61	2.52	2.58
Edgecombe CC	15	2.25	2.30
2,000-2,999 FTE			
Craven CC	81	2.59	2.57
Robeson CC *	38	2.49	2.49
Caldwell CC/TI	90	2.71	2.78
Western Piedmont CC	96	2.75	2.76
Davidson Co. CC	136	2.60	2.63
Vance-Granville CC	37	2.48	2.49
Wilkes CC	123	2.67	2.71
Surry CC	127	2.67	2.70
Lenoir CC	76	2.51	2.54
Wayne CC	51	2.69	2.74
Cape Fear CC	194	2.15	2.20
Rowan-Cabarrus CC	20	2.95	2.49
Sandhills CC	171	2.39	2.49
Catawba Valley CC	58	2.71	2.62
3,000-4,999 FTE			
Johnston CC *	42	2.20	2.02
Pitt CC	94	2.53	2.64
Gaston CC	155	2.54	2.53
Asheville-Buncombe TCC	99	2.65	2.61
Coastal Carolina CC	126	2.64	2.68
Durham TCC	115	2.64	2.73
Alamance CC *	59	2.47	2.72
Central Carolina CC *	26	2.60	2.28
Forsyth TCC	94	2.64	2.67
>4,999 FTE			
Wake TCC	49	2.67	2.46
Guilford TCC	204	2.38	2.45
Fayetteville TCC	150	2.97	2.89
Central Piedmont CC	495	2.75	2.61
System	3,153	2.61	2.61
System*	880	2.47	2.51

*Does not offer pre-baccalaureate program

Recommendation

Data on performance of native students should be available for the 1994 CSF report and will be used to compare the performance of community college transfer students. The availability of data differentiating students from technical programs and from pre-baccalaureate programs is being developed and should be available for the 1994 CSF report. Data on the performance of community college transfers to non-UNC institutions should be investigated. The UNC-General Administration and Department of Community Colleges should continue to examine the transfer issues as part of their current study. A common definition of what constitutes a transfer student should be developed.

STUDENT SUCCESS MEASURE E:

Rate of Success on Licensure Exams

Background

There are 27 technical/vocational curriculums which prepare students for licensing and/or certification exams. Not all the licensing boards have cooperated with the Department by providing data. This year data from fifteen of the licensing and certification boards were obtained. The data obtained is for first time test takers who took the exam between July 1, 1991 and June 30, 1992. The one exception to this is the insurance exam results which were for January 1, 1992 - December 31, 1992. In addition, the data on cosmetology reports repeat test takers as new, first time test takers. For example, if a student takes the test twice, failing once and passing once, the student is reported as two individuals, both first time test takers, with one failing and one passing. This is the nature of the data reported by the licensing board to the system.

Passing rates indicate how successful the program has been. However, passing rates can be affected by the native ability of the students or their preparation prior to entering the curriculum. In addition, many students take coursework to learn a skill and do not necessarily intend to become licensed. Since these students do not take the licensure test, the success of programs in their preparation cannot be determined using passing rates on exams. Finally, without established baselines on examination passing rates, it is difficult to make judgements as to what constitutes a "good" or "bad" passing rate.

Implications

In the case of nursing, graduates of associate degree and baccalaureate degree programs take the same examination to become licensed as a registered nurse, and community college associate degree graduates have consistently had higher passing rates than baccalaureate nursing program graduates.

The nursing data show very high passing rates for community college graduates, indicating that continued support for this program is warranted. Nursing scores have been maintained even though the numbers enrolled and completing are expanding rapidly.

Data on the passing rates for 27 other exams were obtained. The data for several of these exams, however, were available for the first time this year. No trend data in passing rates for community college students on these exams are available. In addition, comparative data on passing rates for students who were not enrolled in community colleges or students in training programs in other states were not available. This limits our ability to evaluate how well our students are doing.

Seven of the licensure exams had a passing rate of less than 70 percent. At this point it is not known why the rates were as low as they were nor how these rates compare with the passing rates of other schools. In the cases of real estate and insurance, it should be pointed out that students do not have to complete the program to be eligible for the licensure exam. It is likely that a large number of students taking the exam, especially those taking the exam for the first time (which are reported here), have only completed the minimum required courses for the exam, not the entire program.

Data

**PERCENTAGE OF NCCCS GRADUATES PASSING
THE NC LICENSING EXAM FOR NURSES (RN)**

YEAR	# OF CC GRAD. TAKING EXAM	CC GRADUATES AS % OF TOTAL TAKING EXAM	% OF GRADUATES PASSING EXAMS	% NON-CC TAKERS PASSING EXAM	
				HOSPITAL DIPLOMA	UNIVERSITY
1988	884	48	88	86	80
1989	1,078	71	88	83	85
1990	1,303	73	94	94	92
1991	1,332	73	94	94	91
1992	1,511	71	94	93	93

Source: NC Board of Nursing

Frequency: Exam administered biannually.

Scope: System level data.

Contact: Mary Ann Brewer, NC Board of Nursing;
Elizabeth Jones, Associate Director for Health Occupations, DCC.

**PERCENTAGE OF COMMUNITY COLLEGE STUDENTS PASSING
LICENSING AND CERTIFICATION EXAMINATIONS**

FIELD	NUMBER OF STUDENTS TAKING EXAM	% PASSING EXAM
Aviation Maintenance		
General	62	100
Airframe 1	38	100
Airframe 2	38	95
Power Plant	26	100
 Basic Law Enforcement Trng.	 1,955	 97
 Cosmetology	 784	 69
 Dental Assisting	 148	 80
 Dental Hygiene	 119	 91
Emergency Medical		
Defibrillation	815	95
Ambulance Attendant	140	95
Emergency Medical Tech.	3,612	73
EMT-Intermediate	681	79
Mobile Nurse	21	95
EMT-Paramedic	330	97
EMT-Advanced	115	96
Insurance		
Life, Accident, Health	404	67
Fire & Casualty	536	52
Medicaid/Medicare Supp.	31	74
 Medical Records	 4	 100
 Medical Sonography	 11	 65
Nursing		
RN	1,511	94
PN	1,067	87
 Occupational Therapy	 11	 91
 Opticianry	 16	 56

FIELD	NUMBER OF STUDENTS TAKING EXAM	% PASSING EXAM
Physical Therapist Assistant	73	96
Real Estate Broker	251	66
Sales	1,498	66
Veterinary Medicine Tech.	27	93

Source: Planning and Research Unit, DCC

Contact: Paul Nagy

Recommendation

These data are especially valuable. They have a direct and unambiguous relationship to the quality of the program and should be carefully monitored over time.

The remaining licensing boards must begin to supply the data on community college graduates. Difficulties identifying these graduates can and should be overcome. Comparative data on passing rates for each licensure exam should be identified and collected.

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92**

NURSING

INSTITUTION	FTE	PRACTICAL NURSE		REGISTERED NURSE	
		#TESTED	%PASS	#TESTED	%PASS
<1,000 FTE					
Pamlico CC	188				
Tri-County CC	701	10	100		
Montgomery CC	709	18	100		
Anson CC	711	10	100		
Bladen CC	762				
Martin CC	923				
McDowell TCC	923	16	94		
Roanoke-Chowan CC	962	16	100	25	96
1,000-1,999 FTE					
Brunswick CC	1,114	20	90		
James Sprunt CC	1,114	20	90	31	71
Mayland CC	1,256	26	96		
Piedmont CC	1,289			24	71
Sampson CC	1,367			29	100
Carteret CC	1,369	14	100		
Halifax CC	1,416				
Nash CC	1,469				
Southwestern CC	1,485	14	100		
Southeastern CC	1,527	11	100	44	86
Cleveland CC	1,544	13	100		
Wilson TCC	1,550				
Mitchell CC	1,566			27	70
College of The Albemarle	1,573	17	94	19	100
Beaufort Co. CC	1,616	19	89	22	100
Blue Ridge CC	1,654			22	100
Stanly CC	1,698	10	100	24	100
Haywood CC	1,708	8	100		
Randolph CC	1,752			34	91
Richmond CC	1,754	18	94	11	73
Rockingham CC	1,790	21	90	33	97
Isothermal CC	1,905	19	79		
Edgecombe CC	1,952				
2,000-2,999 FTE					
Craven CC	2,091	19	100	50	96
Robeson CC	2,112	31	94	26	96
Caldwell CC & TI	2,316	33	94	42	100
Western Piedmont CC	2,330			38	97
Davidson Co. CC	2,462			27	100
Vance-Granville CC	2,492	8	100	25	88
Will's CC	2,545			10	80
Surry CC	2,560	25	96	39	97
Lenoir CC	2,605	18	89	23	96
Wayne CC	2,668			25	100
Cape Fear CC	2,880	11	100	29	100
Rowan-Cabarrus CC	2,901	31	100	33	94
Sandhills CC	2,913	17	100	33	100
Catawba Valley CC	2,985			39	92
3,000-4,999 FTE					
Johnston CC	3,040	36	100	16	100
Pitt CC	3,098	58	100	40	98
Gaston College	3,259	9	100	34	100
Asheville-Buncombe TCC	3,365	28	100	41	93
Coastal Carolina CC	3,430	11	100	24	100
Durham TCC	3,440	27	96	30	93
Alamance CC	3,445	58	97	35	91
Central Carolina CC	3,454	38	100	30	90
Forsyth TCC	4,270	54	94	84	96
>4,999 FTE					
Wake TCC	5,639			74	99
Guilford TCC	5,906	51	100	55	98
Fayetteville TCC	8,661	17	94	62	89
Central Piedmont CC	10,299	14	100	44	93
NEWH Consortium		104	96	92	89
Region.A Nursing Consortium				45	100
System	138,513	1,092	87	1,511	94

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92**

BASIC LAW ENFORCEMENT TRAINING AND EMERGENCY MEDICAL TECHNOLOGY

INSTITUTION	FTE	BLET		EMER. MED. TECH.		AMBULAN. ATTEND.	
		# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
<1,000 FTE							
Pamlico CC	188			10	40		
Tri-County CC	701			11	91	8	75
Montgomery CC	709	76	91	22	73		
Anson CC	711			40	68		
Bladen CC	762	38	100	24	72		
Martin CC	923			29	66		
McDowell TCC	923						
Roanoke-Chowan CC	962			36	39		
1,000-1,999 FTE							
Brunswick CC	1,114	19	95	59	69	18	100
James Sprunt CC	1,114	31	100	37	76		
Mayland CC	1,256	23	100	39	56		
Piedmont CC	1,289			56	75		
Sampson CC	1,367			24	75		
Carteret CC	1,369	36	100	84	79	21	90
Halifax CC	1,416	30	93	21	71	6	100
Nash CC	1,469			48	65		
Southwestern CC	1,485	34	94	17	100	10	90
Southeastern CC	1,527	34	94	42	69		
Cleveland CC	1,544			50	30		
Wilson CC	1,550	57	100	37	92		
Mitchell CC	1,566	46	100	10	100		
College of The Albemarle	1,573	21	95	74	68	1	0
Beaufort Co. CC	1,616	40	83	57	67		
Blue Ridge CC	1,654			36	72		
Stanly CC	1,698	41	100	31	74		
Haywood CC	1,708			21	81		
Randolph CC	1,752	50	96	62	69		
Richmond CC	1,754			23	83		
Rockingham CC	1,790			40	50		
Isothermal CC	1,905	57	95	46	80		
Edgecombe CC	1,952			5	100		
2,000-2,999 FTE							
Craven CC	2,091	29	100	86	76	10	100
Robeson CC	2,112	96	100	74	73		
Caldwell CC/TI	2,316			82	79		
Western Piedmont CC	2,330	75	100	53	70		
Davidson Co. CC	2,462	77	97	82	77	10	100
Vance-Granville CC	2,492	43	93	118	58	8	75
Wilkes CC	2,545	78	96	44	75		
Surry CC	2,560	36	92	26	62		
Lenoir CC	2,605			43	72	23	96
Wayne CC	2,668	34	100	65	69	27	93
Cape Fear CC	2,880	69	100	135	81	1	100
Rowan-Cabarrus CC	2,901	91	98	154	74		
Sandhills CC	2,913			42	69	11	91
Catawba Valley CC	2,985	47	100	88	72		
3,000-4,999 FTE							
Johnston CC	3,040	44	98	68	69		
Pitt CC	3,098	66	100	30	77	12	92
Gaston CC	3,259	53	98	113	68		
Asheville-Buncombe TCC	3,365	106	100	129	78	36	94
Coastal Carolina CC	3,430	67	94	192	89		
Durham TCC	3,440			141	84		
Alamance CC	3,445			26	85		
Central Carolina CC	3,451	22	95	116	66		
Forsyth TCC	4,270	55	93	55	71	12	92
>4,999 FTE							
Wake TCC	5,639	56	96	160	78		
Guilford TCC	5,906	69	94	135	73		
Fayetteville TCC	8,661	71	100	181	77		
Central Piedmont CC	10,299	79	92	173	81		
System	138,513	1,996	97	3,702	73	140	95

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92
REAL ESTATE**

INSTITUTION	FTE	SALES		BROKER	
		# TESTED	% PASS	# TESTED	% PASS
<1,000 FTE					
Pamlico CC	188	4	75		
Tri-County CC	701	12	75	2	50
Montgomery CC	709				
Anson CC	711	4	50		
Bladen CC	762	3	67	1	0
Martin CC	923	6	17		
McDowell TCC	923	3	33		
Roanoke-Chowan CC	962				
1,000-1,999 FTE					
Brunswick CC	1,114	41	68	9	56
James Sprunt CC	1,114	1	0		
Mayland CC	1,256	9	89		
Piedmont CC	1,289	4	25		
Sampson CC	1,367	1	100		
Carteret CC	1,369				
Halifax CC	1,416	15	67	1	100
Nash CC	1,469	29	66	3	100
Southwestern CC	1,485	15	73		
Southeastern CC	1,527	5	40	1	0
Cleveland CC	1,544	9	44		
Wilson TCC	1,550	13	38	1	0
Mitchell CC	1,566	10	70		
College of The Albemarle	1,573	22	77	4	75
Beaufort Co. CC	1,616	18	72		
Blue Ridge CC	1,654	23	61		
Stanly CC	1,698	9	78	2	100
Haywood CC	1,708	4	75		
Randolph CC	1,752	9	100	1	100
Richmond CC	1,754	2	100		
Rockingham CC	1,790	4	25		
Isothermal CC	1,905	8	75	5	80
Edgecombe CC	1,952	7	57		
2,000-2,999 FTE					
Craven CC	2,091	10	80	1	100
Robeson CC	2,112	9	89	3	100
Caldwell CC & TI	2,316	27	78	2	100
Western Piedmont CC	2,330	31	58	5	80
Davidson Co. CC	2,462	46	65	8	63
Vance-Granville CC	2,492	10	70		
Wilkes CC	2,545	27	59		
Surry CC	2,560	14	50	2	50
Lenoir CC	2,605	8	88		
Wayne CC	2,668	3	100		
Cape Fear CC	2,880	45	71	23	70
Rowan-Cabarrus CC	2,901	64	75	2	50
Sandhills CC	2,913	21	67	7	71
Catawba Valley CC	2,985	26	69	5	60
3,000-4,999 FTE					
Johnston CC	3,040	16	75	4	50
Pitt CC	3,098	35	66	7	43
Gaston College	3,259	66	76	8	63
Asheville-Buncombe TCC	3,365	17	82	6	67
Coastal Carolina CC	3,430	24	71	4	100
Durham TCC	3,440	69	72	18	61
Alamance CC	3,445	34	68	9	67
Central Carolina CC	3,454	19	74	8	50
Forsyth TCC	4,270	98	66	4	75
>4,999 FTE					
Wake TCC	5,639	82	74	21	81
Guilford TCC	5,906	86	69	23	78
Fayetteville TCC	8,661	62	44		
Central Piedmont CC	10,299	259	58	51	53
System	138,513	1498	66	251	66

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**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1992
INSURANCE**

INSTITUTION	FTE	LIFE, ACCIDENT, HEALTH		FIRE & CASUALTY		MEDICAID/MEDICARE SUPPLEMENT	
		# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
<1,000 FTE							
Panlico CC	188						
Tri-County CC	701						
Montgomery CC	709						
Anson CC	711						
Bladen CC	762						
Martin CC	923	7	57	10	20		
McDowell TCC	923						
Roanoke-Chowan CC	962					3	67
1,000-1,999 FTE							
Brunswick CC	1,114			8	38		
James Sprunt CC	1,114						
Mayland CC	1,256						
Piedmont CC	1,289						
Sampson CC	1,367						
Carteret CC	1,369	8	75	2	50	1	0
Halifax CC	1,416			1	0		
Nash CC	1,469	36	56	43	42		
Southwestern CC	1,485						
Southeastern CC	1,527	1	0				
Cleveland CC	1,544						
Wilson TCC	1,550	12	17				
Mitchell CC	1,566	1	100				
College of The Albemarle	1,573	5	80	14	5		
Beaufort Co. CC	1,616						
Blue Ridge CC	1,654						
Stanly CC	1,698						
Haywood CC	1,708	2	100	5	40		
Randolph CC	1,752	9	78	12	50	1	100
Richmond CC	1,754	3	67				
Rockingham CC	1,790			4	50		
Isothermal CC	1,905	6	50	17	41	10	70
Edgecombe CC	1,952	17	47	18	33		
2,000-2,999 FTE							
Craven CC	2,091						
Robeson CC	2,112	2	100	12	42		
Caldwell CC & TI	2,316	4	50	8	63		
Western Piedmont CC	2,330	3	67	23	65		
Davidson Co. CC	2,462	10	60	22	64		
Vance-Granville CC	2,492						
Wilkes CC	2,545	6	100	10	80		
Surry CC	2,560	3	67	8	38		
Lenoir CC	2,605	31	48	38	55		
Wayne CC	2,668	10	50	6	50		
Cape Fear CC	2,880	5	80	10	80		
Rowan-Cabarrus CC	2,901	9	67	2	0		
Sandhills CC	2,913						
Catawba Valley CC	2,985	10	70	19	74		
3,000-4,999 FTE							
Johnston CC	3,040	1	100	5	40		
Pitt CC	3,098			6	33		
Gaston College	3,259						
Asheville-Buncombe TCC	3,365	1	100	22	41	6	83
Coastal Carolina CC	3,430	5	80	19	47		
Durham TCC	3,440			5	40		
Alamance CC	3,445	7	57	22	73	1	100
Central Carolina CC	3,454			4	100		
Forsyth TCC	4,270	13	38	12	67	1	0
>4,999 FTE							
Wake TCC	5,639	23	74	16	56		
Guilford TCC	5,906	7	71	19	58		
Fayetteville TCC	8,661	59	85	40	60		
Central Piedmont CC	10,299	88	76	74	46	8	88
System	138,513	404	67	536	52	31	74

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92**

COSMETOLOGY, OPTICIANRY, MEDICAL RECORDS, VETERINARY MED. TECH

INSTITUTION	FTE	COSMETOLOGY		OPTICIANRY		MED. RECORDS		VET MED TECH	
		#TEST	%PASS	#TEST	%PASS	#TEST	%PASS	#TEST	%PASS
<1,000 FTE									
Panlico CC	188								
Tri-County CC	701	17	88						
Montgomery CC	709								
Anson CC	711								
Bladen CC	762	9	100						
Martin CC	923	19	74						
McDowell TCC	923	23	87						
Roanoke-Chowan CC	962	10	40						
1,000-1999 FTE									
Brunswick CC	1,114	31	97						
James Sprunt CC	1,114	23	70						
Mayland CC	1,256	41	51						
Piedmont CC	1,289	15	73						
Sampson CC	1,367	19	89						
Carteret CC	1,369	23	78						
Halifax CC	1,416								
Nash CC	1,469	20	65						
Southwestern CC	1,485	13	92						
Southeastern CC	1,527	32	81						
Cleveland CC	1,544								
Wilson TCC	1,550								
Mitchell CC	1,566	13	77						
College of The Albemarle	1,573	13	100						
Beaufort Co. CC	1,616	17	82						
Blue Ridge CC	1,654	13	85						
Stanly CC	1,698	19	84						
Haywood CC	1,708	9	67						
Pandolph CC	1,752								
Richmond CC	1,754								
Rockingham CC	1,790	24	75						
Isothermal CC	1,905	40	73						
Edgecombe CC	1,952	40	38						
2,000-2,999 FTE									
Craven CC	2,091	57	82						
Robeson CC	2,112	31	74						
Caldwell CC & TI	2,316	20	85						
Western Piedmont CC	2,330								
Davidson Co. CC	2,462								
Vance-Granville CC	2,492	55	58						
Wilkes CC	2,545								
Surry CC	2,560								
Lenoir CC	2,605	30	63						
Wayne CC	2,668	14	100						
Cape Fear CC	2,880								
Rowan-Cabarrus CC	2,901								
Sandhills CC	2,913	34	79						
Catawba Valley CC	2,985								
3,000-4,999 FTE									
Johnston CC	3,040	33	79						
Pitt CC	3,098								
Gaston College	3,259								
Asheville-Buncombe TCC	3,365								
Coastal Carolina CC	3,430								
Durham TCC	3,440			16	75				
Alamance CC	3,445								
Central Carolina CC	3,454	22	73					27	93
Forsyth TCC	4,270								
>4,999 FTE									
Wake TCC	5,639								
Guilford TCC	5,906	22	82						
Fayetteville TCC	8,661								
Central Piedmont CC	10,299					4	100		
System	138,513	801	69	16	75	4	100	27	93

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92**

DENTAL ASSISTING, DENTAL HYGIENE, PHYSICAL THER. ASSIS., MED. SONOGRAPHY

INSTITUTION	FTE	DENTAL ASSIS		DENTAL HYG.		PHYS. THER.		MED. SONOG.	
		#TEST	%PASS	#TEST	%PASS	#TEST	%PASS	#TEST	%PASS
<1,000 FTE									
Pamlico CC	188								
Tri-County CC	701								
Montgomery CC	709								
Anson CC	711								
Bladen CC	762								
Martin CC	923					16	94		
McDowell TCC	923								
Roanoke-Chowan CC	962								
1,000-1,999 FTE									
Brunswick CC	1,114								
James Sprunt CC	1,114								
Mayland CC	1,256								
Piedmont CC	1,289								
Sampson CC	1,367								
Carteret CC	1,369								
Halifax CC	1,416								
Nash CC	1,469					10	80		
Southwestern CC	1,485					7	100		
Southeastern CC	1,527								
Cleveland CC	1,544								
Wilson TCC	1,550								
Mitchell CC	1,566								
College of The Albemarle	1,573								
Beaufort Co. CC	1,616								
Blue Ridge CC	1,654								
Stanly CC	1,698					11	91		
Haywood CC	1,708								
Randolph CC	1,752								
Richmond CC	1,754								
Rockingham CC	1,790								
Isothermal CC	1,905								
Edgecombe CC	1,952								
2,000-2,999 FTE									
Craven CC	2,091								
Robeson CC	2,112								
Caldwell CC & TI	2,316							11	55
Western Piedmont CC	2,330	9	22						
Davidson Co. CC	2,462								
Vance-Granville CC	2,492								
Wilkes CC	2,545	11	64						
Surry CC	2,560								
Lenoir CC	2,605								
Wayne CC	2,668	10	90	16	81				
Cape Fear CC	2,880								
Rowan-Cabarrus CC	2,901	17	88						
Sandhills CC	2,913								
Catawba Valley CC	2,985								
3,000-4,999 FTE									
Johnston CC	3,040								
Pitt CC	3,098							6	83
Gaston College	3,259								
Asheville-Buncombe TCC	3,365	12	75	13	92				
Coastal Carolina CC	3,430	19	95	15	80				
Durham TCC	3,440								
Alamance CC	3,445	15	87						
Central Carolina CC	3,454								
Forsyth TCC	4,270							5	100
>4,999 FTE									
Wake TCC	5,639	10	80						
Guilford TCC	5,906	17	100	23	100				
Fayetteville TCC	8,661	14	71	19	95	9	100		
Central Piedmont CC	10,299	14	71	33	91	21	100		
System	138,513	148	80	119	91	74	95	22	73

**PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS,
1991-92
AVIATION**

INSTITUTION	FTE	GENERAL		AIRFRAME 1		AIRFRAME 2		POWER PLANT	
		#TEST	%PASS	#TEST	%PASS	#TEST	%PASS	#TEST	%PASS
1,000-1999 FTE									
Pamlico CC	188								
Tri-County CC	701								
Montgomery CC	709								
Anson CC	711								
Bladen CC	762								
Martin CC	923								
McDowell TCC	923								
Roanoke-Chowan CC	962								
1,000-1999 FTE									
Brunswick CC	1,114								
James Sprunt CC	1,114								
Mayland CC	1,256								
Piedmont CC	1,289								
Sampson CC	1,367								
Carteret CC	1,369								
Halifax CC	1,416								
Nash CC	1,469								
Southwestern CC	1,485								
Southeastern CC	1,527								
Cleveland CC	1,544								
Wilson TCC	1,550								
Mitchell CC	1,566								
College of The Albemarle	1,573								
Beaufort Co. CC	1,616								
Blue Ridge CC	1,654								
Stanly CC	1,698								
Haywood CC	1,708								
Randolph CC	1,752								
Richmond CC	1,754								
Rockingham CC	1,790								
Isothermal CC	1,905								
Edgecombe CC	1,952								
2,000-2,999 FTE									
Craven CC	2,091								
Robeson CC	2,112								
Caldwell CC & TI	2,316								
Western Piedmont CC	2,330								
Davidson Co. CC	2,462								
Vance-Granville CC	2,492								
Wilkes CC	2,545								
Surry CC	2,560								
Lenoir CC	2,605								
Wayne CC	2,668	17	100	9	100	9	100	19	100
Cape Fear CC	2,880								
Rowan-Cabarrus CC	2,901								
Sandhills CC	2,913								
Catawba Valley CC	2,985								
3,000-4,999 FTE									
Johnston CC	3,040								
Pitt CC	3,098								
Gaston College	3,259								
Asheville-Buncombe TCC	3,365								
Coastal Carolina CC	3,430								
Durham TCC	3,440								
Alamance CC	3,445								
Central Carolina CC	3,454								
Forsyth TCC	4,270								
>4,999 FTE									
Wake TCC	5,639								
Guilford TCC	5,906	62	100	38	100	38	95	26	100
Fayetteville TCC	8,661								
Central Piedmont CC	10,299								
System	138,513	79	100	47	100	47	95	45	100

**PROFESSIONAL BOARD CONTACTS FOR CSF MEASURE
I.E. LICENSURE PASSING RATES**

Exam	Agency	Contact
Basic Law Enforcement	NC Dept of Justice 919/733-2530	Scott Perry
Cosmetology	NC State Board of Cosmetology 919/850-2793	Epsie Dobbin
Dental Assisting	Dental Assisting National Board Inc. 312/642-3368	Fred Davis
Dental Hygiene	NC State Board of Dental Examiners 919/781-4901	Lisa Mayberry
Emergency Medical Technician	NC Dept of Human Resources 919/733-2285	Hadley Whittemore
Insurance	NC Dept of Insurance 919/733-7487	Louis Johnson
Medical Records	American Health Information Management Association 312/787-2672	Judith Merritt
Nursing	NC Board of Nursing 919/782-3211	Rose Woodlief
Occupational Therapy	The American Occupational Therapy Certification Board Inc. 301/990-7979	Edna Wooldridge
Opticianry	NC State Board of Opticians 919/733-9321	Willard Barnes
Physical Therapy	NC Board of Physical Therapy 919/490-6393	Constance Peake
Real Estate	NC Real Estate Commission 919/733-9580	Evelyn Johnston
Veterinary	NC Veterinary Medical Board 919/733-7689	Barbara Perryman

STUDENT SUCCESS MEASURE F:

Program Completion Rates

Background

Students attend community colleges for a wide variety of reasons. Unlike traditional university students, a large number of students enrolled in community colleges are not pursuing a degree. Some students are pursuing basic literacy skills, others are in search of job preparation skills or job retraining, still others are preparing for transfer to a four-year institution. These students attend community colleges in order to obtain specific skills or knowledge that will enable them to attain their goal, which may be employment, transferring to a four-year institution, or simply self-improvement.

Depending on the reason for attending, students may enroll in a community college for just one quarter or they may be in the pursuit of a certificate, diploma, or Associate Degree. Further, many students who enroll in community colleges do so on a part-time basis. These students, due to employment constraints or family responsibilities, simply cannot attend college on a full-time basis or even necessarily attend each quarter. As a result, calculation of program completion rates and the assessment of the appropriateness of a program completion rate is difficult.

The calculation of an accurate program completion rate must account for student intention. That is to say, since many students enroll in a community college without the intention of completing a program, any calculation of a program completion rate must eliminate these students. To be accurate, a program completion rate must be based solely on those students who enroll in a community college with the intent of earning a certificate, diploma, or Associate Degree.

Presently it is not possible to compute an accurate completion rate. Steps have been undertaken that will allow for the future calculation of program completion rates. Beginning in 1991-92, student intent was added to the Curriculum Student Progress Information System. Information is now being gathered at all colleges on students' intentions for enrolling. Among the reasons for enrolling that students can select is the intent of obtaining a certificate, degree, or diploma. With this information, a program completion rate based on student intent can be calculated in the future.

Recommendation

Efforts should continue to develop an accurate program completion rate. The computation and assessment of a program completion rate must take into account student intent, the accuracy of the student intent data, and the enrollment pattern of students (part-time vs. full-time). In addition, efforts should be made to identify the core courses in a program that enable a student to leave the program, without completing, but possessing marketable skills. With this information, a modified program completion rate could be developed that would reflect students gaining marketable skills.

STUDENT SUCCESS MEASURE G:

Passing Rates for Remedial Courses

Background

Students who enroll in community colleges are often unprepared for college level coursework. Unlike the traditional university, community colleges maintain an "open door" philosophy and, as a result, serve non-traditional students and students who have not been properly prepared for post-secondary education. For many of these students, the colleges must first equip them with the basic skills and knowledge necessary to pursue college level courses.

Colleges have developed remedial courses for students who have deficiencies in core course areas. The purpose of the remedial courses is to prepare students with the skills and knowledge necessary for success in their college studies. Once students have successfully completed the remedial courses, they can then move into the regular college program.

The passing rates for remedial courses is one measure of student success. This measure provides an indication of the success of colleges in alleviating student deficiencies and preparing students for college level work. In other words, it is a measure of the success of the colleges in providing students with the basic skills necessary for post-secondary education.

It is currently not possible to identify passing rates for remedial courses. A computer program has been developed and is being implemented at the colleges that will identify remedial courses, students who are enrolled in these courses, and passing rates for these courses. Data on this measure should be available next year.

Recommendation

The data on passing rates for remedial courses should be gathered and analyzed. In addition, efforts should be undertaken to develop a measure of the success of students who pass remedial courses in future college courses.

STUDENT SUCCESS MEASURE H:

Passing Rates for "General Education" and "Related" Courses

Background

Student success measures often focus on "end point" measures such as program completion rates, licensure passing rates, and degrees awarded. While these are appropriate measures of student success, they overlook the success of students while they are progressing through a program of study. In addition, these measures often fail to capture students who enroll in a community college and do not have an intent of completing a program.

Passing rates for "General Education" and "related" courses provide a measure of the success of students in progressing through a course of study. These courses are designed to provide students with traditional academic studies (e.g., English, mathematics, social sciences) and are a compliment to the technical and vocational components of their programs. "General Education" and "related" courses can be thought of as that component of a student's program that provides a "well-rounded" education.

Currently it is not possible to compute passing rates for "General Education" and "related" courses. As with Student Success Measure G, passing rates for remedial courses, the appropriate computer programs have been developed and are being implemented that will result in the calculation of passing rates for "General Education" and "related" courses. These rates should be available next year.

Recommendation

The data on passing rates should be collected from the colleges and reported in next year's report.

CRITICAL SUCCESS FACTOR II: RESOURCES

For any institution, educational or industrial, there is a critical mass of resources necessary for the organization to perform at an optimal level. When resources fall below this critical mass level, performance declines and quality suffers. The level of resources can be thought of as an indicator of the health of an organization.

During the 1960s, resources available for higher education were readily available. During the past two decades, however, colleges and universities have had to contend with a shrinking availability of resources. The economic down-turn of the past five years has impacted greatly on educational institutions, for as tax revenues have declined and demands for public funds has increased, the share of the budget pie for education has declined.

While resources have declined over the past two decades, the demands on community colleges have increased dramatically. Enrollment has continued to increase, with more and more North Carolinians turning to the community colleges for job training skills and for the first two years of a baccalaureate program. The role of community colleges in literacy education and community services has grown continuously over the years. Colleges are being asked to provide more services to more people with fewer resources.

An examination of the colleges' resources will indicate the capability of the institutions in providing quality educational programs. Whereas resources alone do not guarantee that a quality education will be present, without the appropriate resources a college cannot provide students with an adequate learning experience.

The measures selected as indicators of the health of the system and the colleges as determined by resources are:

- A. Average Salaries as a Percent of the Southeastern Regional Average
- B. Student/Faculty Ratio
- C. Participation in Staff Development Programs: Tier A
- D. Currentness of Equipment
- E. Percent of Libraries Meeting American Library Association Standards
- F. System Funding/FTE

RESOURCES MEASURE A:

Institutional Salaries as a Percent of the Southeastern Regional Average

Background

This measure is an indicator of a key "input" to education: the personnel who make it happen. While it is true that dedicated people will provide very high quality education for low salaries, it is unrealistic to expect that education can continue to attract highly skilled, knowledgeable people who have significantly higher paying alternatives. If these alternatives are in other educational systems-- if a dedicated teacher can teach elsewhere for more pay-- it is even more unrealistic. In addition, community colleges must compete for technically skilled people in areas like electronics and nursing, in which the relevant labor market is outside education. Measures for market competitiveness of salaries should be developed.

The Commission on the Future recommended that the goal be to raise North Carolina Community College System salaries to the upper quartile of community college salaries in the Southeast. We have chosen to use faculty salaries in the southeastern region as a conservative basis for comparison since these other states are similar to North Carolina in terms of cost of living. Other things to consider include the fact that technical education is a greater part of what community colleges do in North Carolina than elsewhere, even in the South, and that technical personnel are typically more expensive.

Attaining the average is not setting a very high goal, especially since southeastern regional salaries are 92 percent of the national average. Also, the average is a moving target, since it will change when any state makes an effort to raise salaries. This benchmark should be revisited periodically to insure that it is appropriate.

Salaries are not measured or reported consistently between states and the data are confusing. The average monthly salary, including fringes, is considered to be the most comparable figure, since colleges and systems define full-time in various ways. The salary question also involves issues related to longevity: a long-time faculty member may have a higher salary due to seniority, or conversely, it may have been necessary to pay more to get the newest person in a competitive labor market.

In 1991-92, salary data on administrative positions were available from the College and University Personnel Association (CUPA). The data is based on two-year institutions from across the nation and represents 354 reporting institutions. The median salary for each position is reported.

Implications

The data indicate that North Carolina remains significantly behind the southeastern regional average for faculty salaries. The impact of low salaries is reflected in colleges losing key personnel, especially to industry, and in not being able to hire their first choice in certain fields.

A recently completed study of faculty and staff in the system provides further evidence of the low status of faculty salaries at North Carolina community colleges (McKay, 1992). Currently North Carolina ranks 46th in the nation in salaries paid to community colleges faculty. When compared with instructors in the university system, the average salary paid to community college faculty is only 75 percent of the average salary paid to instructors in the UNC system. It should be pointed out that instructors in the university system typically have Masters degrees and thus are comparable in education to the majority of community college faculty.

The data on administrative salaries shows that the community colleges are behind in most categories. One year's data, however, are not enough to draw any major conclusions.

Data

**NORTH CAROLINA COMMUNITY COLLEGE FACULTY SALARIES
AS A PERCENTAGE OF THE SOUTHEAST AVERAGE AND RANK
AMONG 15 SOUTHEASTERN STATES**

YEAR	NC SALARY	SREB AVE. SALARY	% OF SREB AVE.	RANK
1987-88	\$23,908	\$27,528	86.8	12th
1988-89	\$25,360	\$29,653	86.0	10th
1989-90	\$26,800	\$31,566	84.9	9th
1990-91*	\$25,690	\$31,555	81.5	15th
1991-92	\$26,014	\$32,015	81.3	15th

*Reflects change in the method used by SREB to calculate salaries.

Source: SREB Fact Book On Higher Education

Frequency: Biennial.

Scope: Southeast, state level data.

Contact: Joe Marks, SREB.

**NORTH CAROLINA COMMUNITY COLLEGE MEDIAN ADMINISTRATIVE SALARIES
COMPARED WITH NATIONAL MEDIANS**

EMPLOYEE CATEGORY	CUPA MEDIAN SALARY 1991-92	NC MEDIAN SALARY 1991-92	% OF CUPA MEDIAN
Executive			
President	\$80,400	\$85,212	106
Exec. Vice President	68,537	62,640	91
Academic			
Dean of Instruction	\$61,083	53,700	88
Dean of Cont. Ed.	49,490	45,660	92
Institutional Research	45,072	33,216	74
Administrative			
Chief Business Official	\$58,124	\$50,178	86
Computer Systems Admin.	43,457	30,012	69
Personnel Officer	44,656	29,484	66
External Affairs			
Institutional Dev. Officer	\$48,298	\$31,566	65
Public Information Officer	36,600	32,196	88
Student Services			
Dean of Students	\$55,000	\$46,980	85
Counselor	29,500	30,588	104
Financial Aid Officer	36,593	28,692	78
Registrar/Admissions	36,755	28,704	78

Source: CUPA Administrative Compensation Survey.

Contact: Tom King, Senior Vice President and Chief Financial Officer, DCC.

Recommendation

Improving salary levels is a major cost item. We should continue to work with the SREB and other agencies to try to establish the monthly salary as the basis for comparison and to develop a consistent approach to collecting and reporting the data. Alternative benchmarks should also be investigated particularly in terms of market competitiveness.

RESOURCES MEASURE B:

Student/Faculty Ratio

Background

A key ingredient to a proper learning situation is the opportunity for interaction between instructor and student. In technical and vocational programs, where much of the teaching is "hands-on", instructors must be able to give individual attention to students in the classroom and in the lab/shop. Unfortunately, as enrollments have increased, many colleges have found that the only way to meet the demand for programs is by increasing class size.

The student/faculty ratio is an indicator of the health of the system. As the student/faculty ratio increases, it is logical to assume that the opportunity for students to receive individual attention decreases. An increasing student/faculty ratio also translates into an increased workload for the faculty for there are more students to teach/supervise and more papers to evaluate. As faculty workload increases, so does faculty "burnout."

An appropriate measure of the student/faculty ratio is currently being developed. In assessing the appropriateness of a student/faculty ratio, individual programs will need to be examined. It is likely that what may be an appropriate student/faculty ratio for a college transfer English class may not be appropriate for a welding class where the instruction is more "hands-on" oriented.

Recommendation

This measure should be developed for reporting next year. In developing the measure, consideration should be given to the types of programs offered by the system. In addition, comparable data from other systems should be collected.

RESOURCES MEASURE C:

Participation in Staff Development Programs: Tier A

Background

Like salaries, participation in staff development programs is an "input" indicator of the quality of teaching. Instructors who stay up-to-date in their field and incorporate new teaching technologies and methods into their delivery provide better quality instruction. Staff development activities also boost morale and creativity. Similar effects are realized by personnel in all classifications.

There is currently no way to measure the level of participation in staff development programs. The only indicator available is participation in "Tier A" programs, which are funded separately and have been restricted to certain types of activities. Prior to 1989-90 only faculty were eligible for Tier A program support. Other staff also need staff development activities. Funding for Tier A has remained at \$1.23 million each year over the five years the program has been in effect, thus not improving even to cover inflation. In addition, restrictions on the use of these funds were lifted as part of a flexibility measure to help colleges deal with the budget cuts of the last two years. Thus, colleges were able to use the funds to meet any legitimate college need.

In the course of normal operations, colleges spend additional dollars and involve personnel in developmental activities which are not covered by these funds. For example, travel funds are typically made available from college operating budgets to enable staff to attend conferences, etc. Colleges also hold on-campus developmental activities not covered with special funds. However, only limited funds are available from operating budgets, which are particularly restricted at this time.

An appropriate measure of participation in staff development programs is currently unavailable. In past years, the number of faculty and staff participating in Tier A sponsored activities has been reported. This data, however, have been very limited in that the type of activity and the quality of activity has not been assessed. Simply looking at participation rates did not provide any information on the activities and impact on college personnel. Indeed, if a college sponsored a mandatory workshop for all personnel, then the college would have a 100 percent participation rate, but it is not necessarily true that the college would have met the staff development needs of its personnel.

For 1991-92 it was decided to report on the percent of Tier A funds that were expended by the system and by the colleges. Data were collected and reported for the past three years. This data, it was believed, would provide some measure of the college's efforts in providing faculty and staff with staff development activities.

Implications

There has been an increase in the percent of Tier A funding expended during the past three years. It should be remembered that the level of funding has remained constant, so the increase in funds expended can be compared from year to year.

It is still not possible to determine the impact of the Tier A sponsored activities. It is also not possible to determine from available data the amount of additional funds expended by colleges on staff development activities. Efforts to define a meaningful staff development participation measure should continue.

Data

PERCENTAGE OF TIER A FUNDS EXPENDED FOR FULL- AND PART-TIME FACULTY AND STAFF

YEAR	% OF FUNDS EXPENDED
1989-90	92.47
1990-91	82.94
1991-92	94.58

Source: Professional Competencies Program Final Report.

Frequency: Annual

Scope: System and institution data.

Contact: Bob Allen, Program Development Services

Recommendation

Efforts to develop an appropriate measure of participation in staff development activities should continue. Such a measure should include staff development activities for all staff, not faculty only, and should provide evidence of the extent of involvement, such as hours or days devoted to developmental activities.

**PERCENTAGE OF TIER A FUNDS EXPENDED
FOR FULL- AND PART-TIME FACULTY AND STAFF, 1991-92**

INSTITUTION	FTE	% OF FUNDS SPENT
<1,000 FTE		
Pamlico CC	188	100
Tri-County CC	701	74
Montgomery CC	709	53
Anson CC	711	64
Bladen CC	762	77
Martin TCC	923	99
McDowell CC	923	83
Roanoke-Chowan CC	962	100
1,000-1,999 FTE		
Brunswick CC	1,114	90
James Sprunt CC	1,114	99
Mayland CC	1,256	96
Piedmont CC	1,289	87
Sampson CC	1,367	100
Carteret CC	1,369	99
Halifax CC	1,416	97
Nash CC	1,469	100
Southwestern CC	1,485	100
Southeastern CC	1,527	87
Cleveland CC	1,544	100
Wilson TCC	1,550	63
Mitchell CC	1,566	100
College of The Albemarle	1,573	100
Beaufort Co. CC	1,616	98
Blue Ridge CC	1,654	100
Stanly CC	1,698	100
Haywood CC	1,708	99
Randolph CC	1,752	100
Richmond CC	1,754	75
Rockingham CC	1,790	96
Isothermal CC	1,905	98
Edgecombe CC	1,952	87
2,000-2,999 FTE		
Craven CC	2,091	99
Robeson CC	2,112	97
Caldwell CC & TI	2,316	100
Western Piedmont CC	2,330	96
Davidson Co. CC	2,462	69
Vance-Granville CC	2,492	100
Wilkes CC	2,545	100
Surry CC	2,560	97
Lenoir CC	2,605	100
Wayne CC	2,668	100
Cape Fear CC	2,880	89
Rowan-Cabarrus CC	2,901	99
Sandhills CC	2,913	100
Catawba Valley CC	2,985	90
3,000-4,999 FTE		
Johnston CC	3,040	94
Pitt CC	3,098	88
Gaston College	3,259	100
Asheville-Buncombe TCC	3,365	100
Coastal Carolina CC	3,430	100
Durham TCC	3,440	90
Alamance CC	3,445	100
Central Carolina CC	3,454	89
Forsyth TCC	4,270	100
>4,999 FTE		
Wake TCC	5,639	100
Guilford TCC	5,906	100
Fayetteville TCC	8,661	NO FUNDING
Central Piedmont CC	10,299	100
System	138,513	95

RESOURCES MEASURE D:

Currentness of Equipment

Background

If colleges are to prepare students for the increasingly complex technological demands of the workplace, equipment that is appropriate to the skills students need to develop must be made available. It is not possible to adequately prepare workers for 21st century jobs using 20th century technology. A key component of fostering a "culture of quality" at community college institutions is the availability of equipment that is appropriate to the skills being taught.

Manufacturing today is very different from a decade ago, involving more automated processes that are computer driven. Today's worker must be skilled in this new technology if the needs of business and industry are to be met.

To assess the availability of appropriate equipment in the community college system, data were examined on the age of equipment in use in the system. The assumption underlying this analysis is that the development of skills needed in today's workplace requires experience with and knowledge of equipment that is current and up-to-date.

Implications

Data were collected on the age of equipment currently in use in the community college system. As can be seen from the data below, 75 percent of all equipment currently in use in the system is more than five years old, and 37 percent of that equipment is more than ten years old. It can be seen further from the data that equipment is aging at a faster rate than new equipment is being purchased. This information, coupled with the fact that 95 percent of the equipment has a depreciating life of five to seven years, suggests that an unacceptably high proportion of the equipment being used for training in the system is either obsolete or on the verge of obsolescence.

Data

PERCENT OF EQUIPMENT IN EACH AGE CATEGORY

YEAR	0-5 YEARS	6-10 YEARS	> 10 YEARS
1989-90	34	31	35
1990-91	31	34	35
1991-92	25	37	38

Source: Equipment Database, DCC.

Frequency: Annual.

Scope: System and institutional data.

Contact: Jeanette Ray, Facility and Property Services.

Recommendation

This measure should continue to be developed and refined. Future development should focus not just on the age of the equipment, but on the match between the equipment being used in training and the skills needed by workers in the various occupations.

RESOURCES MEASURE E:

Percent of Libraries Meeting American Library Association Standards

Background

Like current equipment, up-to-date libraries or learning resource centers are a key measure of the health of educational institutions. They provide the resources needed by students of all levels in the pursuit of education to support their classroom efforts.

The American Library Association (ALA) has adopted standards for learning resource centers at community, junior and technical colleges. Based on an institution's full-time equivalent (FTE) enrollment, the standards establish "minimum" and "excellent" levels for various areas of the learning resource centers (e.g., staff, collections, budget). In effect, ALA has established a "yardstick" by which an institution, or a system, can measure the adequacy of its library resources.

Using the ALA standards, data on the system libraries were collected and analyzed. The purpose of the analysis was to determine what percent of the institutions meet the ALA standards at either the "minimum" or "excellent" level. Only those factors in the standards for which data were readily available were included in the analysis. Data related to services are not now available and therefore were not included in this analysis.

Implications

Data on library operating expenditures, serial holdings, book collection size, library staff, and square footage of facilities were collected on each college. This information was compared with the "minimum" and "excellent" levels defined by ALA for each measure. It is important to note that different levels are specified for each measure depending on the size of the college as measured by FTE. In conducting the analysis, colleges were matched with the levels specified for their FTE. Though the standards do not differentiate between FTE and curriculum FTE, such a differentiation was made in this analysis. That is, our colleges were matched with the FTE level for each measure based on their curriculum FTE, not total FTE. The result of this approach is to make the most favorable judgement of our library resources, since in fact our learning resource centers must also serve the non-curriculum students.

The data indicate that the majority of the system's libraries do not meet the "minimum" levels specified by ALA. In the area of expenditures per FTE, only one college met the minimum level, whereas four colleges had met this level in 1990-91. In only one case did a library meet the "excellent" level for any one measure in 1991-92 as compared with two cases of a library meeting an "excellent" level in 1990-91. It appears, based on this information, that the system libraries are in great need of upgrading. It should also be noted that if full FTE had been used in the analysis instead of using curriculum FTE, the results would have been even more dismal.

Data

**LEARNING RESOURCE CENTERS:
COMPLIANCE WITH ACRL STANDARDS**

MEASURE	BELOW STANDARD		MINIMUM LEVEL		EXCELLENT LEVEL	
	#	%	#	%	#	%
# of Book Titles	41	71	16	27	1	2
Serial Subscriptions	42	72	16	28	0	0
Expenditure per FTE Minus Salaries	57	98	1	2	0	0
Library Staff	52	90	6	10	0	0
Square Footage	57	98	1	2	0	0

Source: Planning and Research Unit, DCC

Data: IPEDS, Academic Libraries Survey, 1992.

Contact: Paul Nagy

Recommendation

This measure should continue to be refined. Data on the number of services provided by each college's learning resource center should be collected. The appropriateness of the facilities measure (square footage of library) should be closely examined to determine its usefulness in assessing the quality of the system's libraries.

RESOURCES MEASURE F:

System Funding/FTE

Background

System funding/FTE can be thought of as the basis for all other resources available at a community college. It is the funding that makes possible adequate salaries for faculty, the purchase of equipment, the enhancement of libraries, and the means by which to offer staff development activities. Quite naturally, a high level of funding does not ensure that the appropriate resources will be available at colleges; the funds must be managed properly for this to occur. However, without an appropriate level of funding, other resources cannot be secured.

This measure was developed to indicate the trend in system funding/FTE over the past five years and to compare this trend with national data. As available information was analyzed, however, it was found that the data were not available in a form that made comparisons possible. For the system, the most reliable data found were on average cost per FTE. This data provides a measure of expended allocations for the year as a function of FTE.

On the national level, a consistent, comparative statistic was not available. The National Association of College and University Business Officers (NACUBO) does publish information on state appropriations per credit FTE student, but this information is based on a sample of community colleges rather than on the system. In addition, NACUBO reports a State Median statistic and a Mean of Medians statistic on the data. At this point it is unclear as to the usefulness and generalizability of these data. Because of the uncertain nature of the national data, only state data are being reported.

Implications

The data show that prior to 1991-92, average cost/FTE increased steadily, yet moderately. In 1991-92, however, average cost/FTE declined to a level below that of 1988-89. The decline in 1991-92 was undoubtedly the combined result of decreased funding due to reductions in state appropriations and increased enrollment.

Based on the data, no conclusions can be drawn on the impact of the decline in average cost/FTE. It is evident that less money is being spent per FTE, but it is not clear how this is impacting on students and the ability of the college to deliver services. The decline in average cost/FTE can be thought of, however, as a red flag signalling a decline in the availability of resources.

Data

**AVERAGE COST PER FTE FOR THE NORTH CAROLINA
COMMUNITY COLLEGE SYSTEM**

YEAR	AVERAGE COST/FTE
1987-88	\$2,732.47
1988-89	\$2,919.07
1989-90	\$3,073.15
1990-91	\$3,144.02
1991-92	\$2,900.96

Source: Annual Financial Report.

Scope: System and institution data.

Contact: Larry Morgan, Auditing and Accounting, DCC.

Recommendation

Efforts should be undertaken to refine this measure. A measure of system funding/FTE should be developed. Comparative data on SREB states and on the national level should be sought.

CRITICAL SUCCESS FACTOR III: ACCESS

At the core of the community college system's mission is its open door policy. Community colleges "take people from where they are to where they want to be" in the words of founding father Dallas Herring. The special mission of community colleges is to serve those who did not have opportunities to learn or who missed out on those opportunities, and to serve people who have special problems to overcome. Thus, there is an emphasis on reaching out to the underserved: dropouts, handicapped, economically or educationally disadvantaged and other groups who are not traditionally included in higher education.

There are many issues facing community colleges today, but perhaps none strike at the core of our mission as hard as does the reality of limited resources in this time of economic uncertainty. How long can the "open door" remain open when classes are filled to overflowing? As the demand for services continues to rise without a corresponding increase in resources, the "open door" that is the path to opportunity for so many closes just a little bit more.

The Commission on the Future stressed the importance to the state of bringing underserved groups into education. The state needs to raise the productivity of its citizens, and these are times in which people have a harder time being self-sufficient and raising families unless they have an education. Providing access to education, a constitutional duty of the state in North Carolina, is more and more important to individuals and to society. A successful community college system will be reaching out to underserved groups.

The measures selected to indicate how well the community college system is performing this role are:

- A. Enrollment of High School Dropouts; Handicapped; Disadvantaged; Single Parents; Nontraditional High School Diploma Earners; Inmates
- B. Number Served by Type Through Literacy Programs and Percent of Target Population Served
- C. Number and Percent of Dropouts Annually Who are Served by Literacy Programs
- D. Percent of Students Receiving Financial Aid and Amount of Aid Compared With Cost of Attendance
- E. Percent of Population in Service Area Enrolled

ACCESS MEASURE A:

Enrollment of High School Dropouts; Handicapped; Disadvantaged; Single Parents; Nontraditional High School Diploma Earners; Inmates

Background

The degree to which education is being delivered to the groups which need additional opportunities is a direct way to measure access. A simple accounting of the numbers of students with particular characteristics and/or needs is one such indicator.

In the fall of 1989, the system began to collect data on these target groups enrolled in all programs. Colleges have been required to report in these categories for programs supported by the Vocational Education Act. Data about enrollees in literacy programs also have been collected because of the federal funding of those programs. The data shown here therefore, apply only to the literacy programs and programs funded by the federal Vocational Education Act. They do not include all community college students, and are therefore not generalizable. Definitions of the categories are given with the data.

It should be noted that prior to 1989-90, students could not be enrolled in literacy programs if they already possessed a high school diploma. Therefore, the total enrollment of these programs could be considered to be high school dropouts. Since the policy change in 1989-90, enrollment numbers of dropouts in literacy were not consistently available. In 1991-92, the appropriate data elements were added to the Extension Registration file to identify whether or not a student was a high school dropout. This information, along with information generated from the Literacy Education Information System, will allow for the future reporting of dropouts enrolled in literacy. Access measure D does provide data on the number of dropouts in 1991 and 1992 who enrolled in a literacy program.

It should also be noted that it is not legal to require students to supply information that would categorize them (as handicapped or economically disadvantaged, etc.) though they may be requested to supply such information.

Implications

Community colleges are serving target groups in literacy and vocational programs funded with federal dollars. However, because the data are reported only on those students who are directly benefiting from the federal funds, the data are not inclusive and therefore have uncertain value as an indicator for all community college enrollments. The voluntary nature of the data also makes it suspect, especially for economically disadvantaged and handicapped. Measure B provides more insight into the literacy programs' service to the target groups.

The large increase in the number of public assistance recipients enrolled in the literacy program in 1989-90 may have been the result of the implementation of the new welfare program, JOBS. At this point it is not known why the number of public assistance recipients served dropped by such a large number in 1990-91 and increased dramatically again in 1991-92. It may be a problem related to data entry and the new Literacy Education Information System. The reason for the large fluctuations over the past five years in the number of handicapped students is unknown. This may reflect a coding problem with identifying handicapped students.

Data

SYSTEM LEVEL ENROLLMENTS IN THE LITERACY PROGRAM

HIGH SCHOOL DROPOUTS	1986-87	92,244
	1987-88	96,625
	1988-89	104,785
HANDICAPPED	1987-88	7,420
	1988-89	7,915
	1989-90	14,487
	1990-91	23,035
	1991-92	19,149
MENTALLY RETARDED ADULTS	1987-88	7,989
	1988-89	7,805
	1989-90	8,391
	1990-91	8,147
	1991-92	9,336
PUBLIC ASSISTANCE RECIPIENTS	1987-88	11,038
	1988-89	11,324
	1989-90	14,825
	1990-91	8,081
	1991-92	11,324
HOMELESS	1990-91	1,728
	1991-92	2,250
INMATES	1987-88	11,489
	1988-89	10,130
	1989-90	10,048
	1990-91	8,093
	1991-92	11,426

Definitions:

HIGH SCHOOL DROPOUT, a student who leaves a school for any reason except death, before graduation or completion of a program of study, and without transferring to another school.

HANDICAPPED, persons who are sixteen years of age and older with any type of physical or mental impairment that substantially limits or restricts one or more major life activities, including walking, seeing, hearing, speaking, learning, and working. This definition includes adults who are alcohol and drug abusers, mentally retarded, hearing-impaired, deaf, speech-impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impairments, and adults with specific learning disabilities.

MENTALLY RETARDED ADULTS, adults with documented mental retardation who may benefit from the program. These adults may not have attended public school, attended on a limited basis, or who simply need additional educational opportunities after leaving public school.

PUBLIC ASSISTANCE RECIPIENTS, adults who receive financial assistance from Federal, State, and/or local programs, such as Aid For Dependent Children, old-age assistance, general assistance, and aid to the blind or totally disabled. Social Security recipients should not be included in this category unless they are receiving old-age assistance.

INMATES, adults who are inmates in any prison, jail reformatory, work farm, detention center, or halfway house, community-based rehabilitation center, or any other similar Federal, State or local institution designed for the confinement or rehabilitation of criminal offenders.

Source: Annual Performance Report for Literacy Programs.

Frequency: Annual. Published every summer.

Scope: System and institutional data.

Contact: Terry Shelwood, Student Development Services, DCC.

**SYSTEM LEVEL ENROLLMENTS IN THE VOCATIONAL EDUCATION
PROGRAM - STUDENTS ASSISTED WITH CARL PERKINS FUNDS**

DISABLED	1987-88	6,160
	1988-89	6,553
	1989-90	9,242
	1990-91	6,730
	1991-92	4,236
DISADVANTAGED	1987-88	44,356
	1988-89	43,293
	1989-90	59,876
	1990-91	48,772
	1991-92	32,745
LIMITED ENGLISH PROFICIENCY	1987-88	3,605
	1988-89	3,410
	1989-90	3,674
	1990-91	2,499
	1991-92	876
CORRECTIONS	1987-88	2,273
	1988-89	1,267
	1989-90	1,524
	1990-91	2,282
	1991-92	2,714

Definitions:

DISABLED, when applied to individuals, means individuals who are mentally retarded, hard of hearing, deaf, speech or language impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or persons with specific learning disabilities, who by reason thereof require special education and related services, and who because of their handicapping condition, cannot succeed in the regular vocational education program without special education assistance.

DISADVANTAGED means individuals (other than handicapped individuals) who have economic or academic disadvantages and who require special services and assistance in order to enable them to succeed in vocational education programs. The term includes individuals who are members of economically disadvantaged families, migrants, individuals who have limited English proficiency and individuals who are dropouts from, or who are identified as potential dropouts from, secondary school.

LIMITED ENGLISH PROFICIENCY, when used with reference to individuals, means individuals - (1) Who were not born in the United States or whose native language is a language other than English; (1.b) Who came from environments where a language other than English is dominant; or (1.c) Who are American Indian and Alaskan Native students and who come from environments where a language other than English has had a significant impact on their level of English language proficiency; and (2) Who by reason thereof, have sufficient difficulty speaking, reading, writing, or understanding the English language to deny those individuals the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in our society.

CORRECTIONS (CRIMINAL OFFENDER), means any individual who is charged with or convicted of any criminal offense, including a youth offender or a juvenile offender.

Source: Annual Performance Report for the Vocational Education State-Administered Program

Frequency: Annual.

Scope: State level data.

Contact: J.W. Eades, Coordinator of Vocational Education, DCC.

Recommendation

The revised data collection processes that went into effect in the fall of 1989 should provide better data for target group enrollment in the future. It will take some experience with these data to understand how well they measure the ability of the colleges to address the needs of the underserved. Where possible, data on the numbers of people in the target groups within the relevant population should also be shown. It may be possible to get new census data by zip code so that service areas can be analyzed. We hope the student progress monitoring system can help us track the transition of students into curriculum programs. Qualitative studies (i.e., focus groups) could give a good picture of how target groups are received on campus and what factors support their success.

ACCESS MEASURE B:

Number Served by Type Through Literacy Programs and Percent of Target Population Served

Background

The underserved are especially likely to need literacy programs. This measure is intended to show to what extent the various types of literacy programs are providing services to the undereducated citizens who need them.

Enrollment in literacy programs is compared to the number in the target group, defined as the 1,738,084 adult North Carolinians, aged 16 or older and no longer enrolled in public schools, who have completed less than 12 grades of schooling. This figure comes from the 1980 census, and has undoubtedly changed. There especially may be far fewer people who lack an *eighth grade* education, since the oldest citizens are those who were more likely not to have had the opportunity to get through the twelve years that are now standard. At this point in time, data from the 1990 census on the number of persons 16 or older who are not enrolled in school and have not completed high school is not available. We will soon have 1990 data on educational attainment, but the numbers without a *high school diploma today*, are not likely to be substantially lower than in 1980 since the numbers of dropouts have continued to be high. In addition, this definition of the target group is an underestimate of those who need literacy programs since it does not include people who have spent years in school but whose skills do not measure up to the grade level they completed.

There now exist several different reports that present literacy data on the system. Each report is developed according to specific guidelines and therefore may report the data differently. For example, one report focuses on the last literacy program in which a student was enrolled during the year. Whereas the total number of literacy students being served would not change, the numbers of students in each literacy category would, depending on when the report was generated.

In order to maintain consistency in the reporting of participation rates in literacy, data from the Annual Statistical Report published by the Department of Community Colleges are reported. This report is considered to be the official source of system statistics generated from institutional data sent by the colleges. As a result of changing to one standard data source, the data for past years will not match previous critical success factors reports on this measure. A more valid comparison of the data from year to year should be possible by consistently using this one source of data.

Whereas the system data are duplicated across literacy categories, the available data on individual institutions were unduplicated and represented the **last** program in which a student was enrolled during 1991-92. The reporting of the data in this

manner may make it difficult for some colleges to match the data presented in this report with their own data since it is likely that the data at the college level are duplicated across type. The total enrollment in literacy for 1991-92 should be the same as the total unduplicated headcount in literacy kept by the college.

Implications

There has been a steady increase in the participation of students in literacy programs over the past five years. The percent of the target population served by the system's literacy programs has increased from 5.0 percent to 7.2 percent. The greatest increase in number of students has been in the Adult Basic Education (ABE) program. Participation in this program has increased by more than 25,000 students.

The data illustrate the important role that the community colleges play in serving the nontraditional student. By providing literacy programs to such a large number of people, the community colleges are preparing more individuals with the basic skills necessary to enter the labor market or to pursue further education.

Data

ADULT LITERACY PROGRAM ENROLLMENTS BY TYPE (Duplicated Across Type)

YEAR	ABE	AHSP	GED	CED	TOTAL	% TARGET POP.
1987-88	50,790	17,985	16,695	7,989	87,033	5.0
1988-89	56,055	16,989	22,160	8,508	96,680	5.6
1989-90	64,869	19,229	23,911	8,731	109,415	6.3
1990-91	73,535	20,549	25,844	8,436	120,043	6.9
1991-92	77,005	20,955	29,258	8,137	125,660	7.2

Definitions:

ADULT BASIC EDUCATION (ABE)-- a program of basic skills for adults, 16 or older, who are no longer enrolled in high school and score at 8.9 or below on tests approved by the Department of Community Colleges. This includes English as a Second Language students.

ADULT HIGH SCHOOL PROGRAM (AHSP)-- a program of instruction designed to help adult students earn a high school diploma.

GENERAL EDUCATIONAL DEVELOPMENT (GED)-- a program of instruction designed to prepare adult students to pass the GED tests in order to qualify for a high school equivalency diploma.

COMPENSATORY EDUCATION (CED)--a program to provide services to those mentally retarded adults who have not had an education or who received an inadequate one.

Source: Annual Statistical Report, 1990-91.

Frequency: Annual.

Scope: System level and institution data.

Contact: Steve Ijames, Information Services, DCC

Recommendation

Data on enrollments in literacy programs should continue to be collected. The data should be further analyzed to determine the characteristics of the students being served by literacy in order to estimate the impact of these programs on the workforce. Finally, efforts to fully implement the Literacy Education Information System should continue in order to track students through literacy programs and into the workforce or other educational programs.

ADULT LITERACY PROGRAM ENROLLMENTS BY TYPE, 1991-92

INSTITUTION	TOTAL FTE	ABE	AHS	CED	ESL	GED	TOTAL	%TARGET POP.
<1,000 FTE								
Panlico CC	188	84	0	75	27	62	248	6.9
Tri-County CC	701	435	0	39	0	0	474	3.8
Montgomery CC	709	294	0	28	131	250	703	8.2
Anson CC	711	938	0	32	63	78	1,111	5.8
Bladen CC	762	275	23	39	26	89	452	4.1
Martin CC	923	802	46	60	24	181	1,113	6.2
McDowell TCC	923	464	0	196	53	124	837	6.5
Roanoke-Chowan CC	962	449	122	57	0	295	923	5.4
1,000-1,999 FTE								
Brunswick CC	1,114	106	0	77	35	319	537	4.7
James Sprunt CC	1,114	545	40	66	327	200	1,178	7.9
Mayland CC	1,256	927	0	109	279	171	1,486	9.2
Piedmont CC	1,289	737	417	44	57	350	1,605	8.7
Sampson CC	1,367	755	54	146	119	130	1,204	7.0
Carteret CC	1,369	241	133	116	29	342	861	7.1
Halifax CC	1,416	1,221	0	36	0	193	1,450	5.1
Nash CC	1,469	1,212	254	40	731	101	2,338	10.6
Southwestern CC	1,485	885	0	68	13	118	1,084	6.0
Southeastern CC	1,527	537	328	103	78	125	1,171	6.5
Cleveland CC	1,544	407	1,024	104	37	192	1,764	6.1
Wilson TCC	1,550	1,195	106	99	140	227	1,767	8.4
Mitchell CC	1,566	1,181	0	108	204	640	2,133	7.7
College of The Albemarle	1,573	881	36	60	77	495	1,549	5.3
Beaufort Co. CC	1,616	524	0	133	129	368	1,154	6.8
Blue Ridge CC	1,654	538	34	156	197	718	1,643	7.2
Stanly CC	1,698	1,536	683	39	115	276	2,649	9.4
Haywood CC	1,708	184	1	101	24	190	500	3.2
Randolph CC	1,752	750	197	88	161	654	1,850	5.5
Richmond CC	1,754	2,361	187	169	34	507	3,258	12.4
Rockingham CC	1,790	931	96	73	39	491	1,630	5.2
Isothermal CC	1,905	595	832	159	13	324	1,923	8.0
Edgecombe CC	1,952	1,335	308	89	16	749	2,497	12.8
2,000-2,999 FTE								
Craven CC	2,091	206	61	121	74	805	1,267	7.3
Robeson CC	2,112	519	1,503	121	28	163	2,334	6.9
Caldwell CC/TI	2,316	1,488	1,042	73	0	44	2,647	8.1
Western Piedmont CC	2,330	696	183	353	111	989	2,332	8.7
Davidson Co. CC	2,462	1,112	810	92	146	457	2,617	5.4
Vance-Granville CC	2,492	1,236	17	116	129	884	2,382	5.6
Wilkes CC	2,545	1,102	256	194	144	81	1,777	5.0
Surry CC	2,560	492	0	113	6	870	1,481	4.2
Lenoir CC	2,605	1,876	52	416	379	309	3,032	10.8
Wayne CC	2,668	1,293	619	117	58	221	2,308	8.9
Cape Fear CC	2,880	557	520	93	375	166	1,711	5.4
Rowan-Cabarrus CC	2,901	978	864	257	58	181	2,338	3.7
Sandhills CC	2,913	583	15	128	202	1,188	2,116	10.1
Catawba Valley CC	2,985	1,558	0	129	399	654	2,740	6.3
3,000-4,999 FTE								
Johnston CC	3,040	574	665	122	215	100	1,676	6.8
Pitt CC	3,098	1,000	76	27	325	525	1,953	8.6
Gaston CC	3,259	2,022	0	136	58	1,039	3,255	4.4
Asheville-Buncombe TCC	3,365	937	2	203	126	1,615	2,883	5.5
Coastal Carolina CC	3,430	1,447	170	59	263	953	2,892	12.9
Durham TCC	3,440	1,320	1,083	295	1,412	170	4,280	9.2
Alamance CC	3,445	1,272	319	279	159	348	2,377	7.7
Central Carolina CC	3,454	1,905	682	224	918	295	4,024	9.8
Forsyth TCC	4,270	1,053	589	268	394	1,316	3,620	5.0
>4,999 FTE								
Wake TCC	5,639	4,591	643	183	2,084	779	8,280	15.2
Guilford TCC	5,906	2,199	747	412	543	545	4,446	5.8
Fayetteville TCC	8,661	2,777	1,296	237	834	200	5,344	11.6
Central Piedmont CC	10,299	2,070	2,127	361	1,139	781	6,478	7.7
System	138513	60,188	19,262	7,838	13,757	24,637	125682	7.2

ACCESS MEASURE C:

Number and Percent of Dropouts Annually Who are Served by Literacy Programs

Background

New and emerging technologies in the workplace have reshaped the concept of basic skills. Basic skills are no longer limited to fundamental reading, writing, and computational skills. Today's workers need to possess communication skills, problem solving skills, and critical thinking skills. It is estimated that the educational demands of today's jobs will require a minimum of 13 years of education.

Whereas twenty years ago high school dropouts could find employment in many areas of industry, the changing technology of today's workplace has eliminated many of these low-skilled occupations. High school dropouts are finding that all but the most menial of jobs are beyond their reach. As technology increases, the jobs available for high school dropouts decreases. As more dropouts find themselves closed out of the job market, more will become dependent on public assistance or will become involved in crime.

The community colleges serve as a safety net for many students. Today's high school dropout has the opportunity to pursue education and job training by enrolling in a community college. By providing an "open door," the community colleges are giving students who have not been successful in the traditional education track a second chance.

Prior to 1991-92 data were not available at the system level to determine the success of the colleges in enrolling recent high school dropouts. Data existed that documented the number of high school dropouts that were being served, but the data did not allow a determination of when students dropped out of high school. In 1991-92, however, changes were made in the Curriculum Registration and Extension Registration data files to include last year of high school attended.

To determine the number of recent dropouts served by literacy programs, an analysis of the 1991-92 curriculum and extension data tapes was conducted. The analysis resulted in data on the number of students who enrolled in a community college during 1991-92 and who had left high school without completing between January 1, 1991 and June 30, 1992.

Implication

Though the data indicate that the colleges are enrolling a significant number of recent high school dropouts, it is not currently possible to determine the percentage of high school dropouts being served. Data are not available on the

number of high school students who left high school without completing, whether from dropping out or transferring to a community college, during the time period 1/1/91 to 12/30/92. Since data are only available for one year, no judgement on the successfulness of the colleges in enrolling recent high school dropouts can be made.

Data

NUMBER OF HIGH SCHOOL DROPOUTS BETWEEN 1/1/91 AND 12/30/92 WHO ENROLLED IN A LITERACY PROGRAM

YEAR	NUMBER ENROLLED
1991-92	6,306

Source: Statistical Service Section, DCC.

Scope: System and institution level data.

Contact: Steve Ijames, Information Services, DCC.

Recommendation

The data present a limited measure of the success of the community colleges in serving as a safety net for recent high school dropouts. This measure should be further refined. In particular, data need to be collected on the number of students who left high school without completing, whether by dropping out or transferring to a community college, for each year. This data will enable the calculation of the percent of high school dropouts served by literacy programs. In addition, data need to be collected on this measure for several years to determine any improvements in the number of high school dropouts being served.

**NUMBER OF HIGH SCHOOL DROPOUTS BETWEEN 1/1/91 AND 12/30/92 WHO ENROLLED
IN A LITERACY PROGRAM AT A COMMUNITY COLLEGE DURING 1991-92**

INSTITUTION	TOTAL FTE	# ENROLLED
<1,000 FTE		
Pamlico CC	188	0
Tri-County CC	701	27
Montgomery CC	709	22
Anson CC	711	61
Bladen CC	762	25
Martin CC	923	92
McDowell TCC	923	14
Roanoke-Chowan CC	962	71
1,000-1,999 FTE		
Brunswick CC	1,114	26
James Sprunt CC	1,114	43
Mayland CC	1,256	82
Piedmont CC	1,289	80
Sampson CC	1,367	70
Carteret CC	1,369	40
Halifax CC	1,416	110
Nash CC	1,469	94
Southwestern CC	1,485	118
Southeastern CC	1,527	88
Cleveland CC	1,544	128
Wilson TCC	1,550	121
Mitchell CC	1,566	87
College of The Albemarle	1,573	0
Beaufort Co. CC	1,616	79
Blue Ridge CC	1,654	136
Stanly CC	1,698	171
Haywood CC	1,708	0
Randolph CC	1,752	108
Richmond CC	1,754	257
Rockingham CC	1,790	77
Isothermal CC	1,905	132
Edgecombe CC	1,952	262
2,000-2,999 FTE		
Craven CC	2,091	100
Robeson CC	2,112	33
Caldwell CC & TI	2,316	115
Western Piedmont CC	2,330	67
Davidson TCC	2,462	108
Vance-Granville CC	2,492	139
Wilkes CC	2,545	43
Surry CC	2,560	5
Lenoir CC	2,605	213
Wayne CC	2,668	239
Cape Fear CC	2,880	191
Rowan-Cabarrus CC	2,901	234
Sandhills CC	2,913	134
Catawba Valley CC	2,985	98
3,000-3,999 FTE		
Johnston CC	3,040	57
Pitt CC	3,098	130
Gaston College	3,259	36
Asheville-Buncombe TCC	3,365	217
Coastal Carolina CC	3,430	78
Durham TCC	3,440	192
Alamance CC	3,445	112
Central Carolina CC	3,454	275
Forsyth TCC	4,270	241
>4,999 FTE		
Wake TCC	5,639	309
Guilford TCC	5,906	234
Fayetteville TCC	8,661	112
Central Piedmont CC	10,299	489
System	138,513	6,828

ACCESS MEASURE D:

Percent of Students Receiving Financial Aid and Amount of Aid Compared with Cost of Attendance

Background

Financial need is a major barrier to participation in higher education, especially since a student not only has to pay the cost of tuition, fees, books, transportation and perhaps child care, but also gives up time that could be spent working to earn money. Without help, many students, particularly those with family responsibilities, cannot stay in school. The intent of this measure is to show how far financial aid goes in helping to overcome this barrier for the most needy people in the state.

In calculating the percent of students receiving financial aid, only curriculum students were examined since continuing education students and literacy students are not eligible for the types of financial aid for which data are available. Further, special credit students, co-op students, and dual enrollment students were omitted from the analysis since they also are not eligible for the types of financial aid for which data are available.

At this point a system measure on the average cost of attending a community college is being developed. Based on analyses conducted by Student Development Services, an estimated cost of attending four quarters ranges from \$3,813 for students (non-nursing) living with parents and no dependents to \$8,186 for students in the Associate Degree Nursing program with dependents. Refinement to the measure of cost of attending needs to continue.

Implications

The data show that the numbers of students receiving some aid have increased over the past several years as has the average dollar value of the aid. State and private sector scholarship funds have been a priority of the State Board of Community Colleges and have been increased. Tuition has significantly increased; other costs associated with attending a community college, including books, materials, transportation and child care, have also increased. However, the data do not show the percent of students in need who received aid nor whether the amount of aid was adequate.

Data

**PERCENT OF NC COMMUNITY COLLEGE STUDENTS
RECEIVING FINANCIAL AID ***

YEAR	NUMBER OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	PERCENT OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	AVERAGE DOLLAR VALUE
1987-88	33,481	26.8	650.00
1988-89	37,906	29.0	680.00
1989-90	43,465	31.8	720.00
1990-91	51,615	35.0	728.00
1991-92	59,224	36.9	834.00

*Financial aid includes college work study, Pell grants, loans, scholarships, grants, and awards provided. Beginning in 1990-91 nursing awards and loans were included in the data.

Source: Statistical Abstract of Higher Education in North Carolina.

Frequency: Annual. Available in spring for the prior year.

Scope: State level and institution data.

Contact: UNC General Administration, Linda Balfour.

Recommendation

Compare percent of students receiving aid to percent of students who are economically disadvantaged, differentiate between loans and grants, and develop a way to say something about amount of aid compared to cost. A study should be undertaken to determine the impact of tuition increases on traditionally underserved students.

ACCESS MEASURE E:

Percent of Population in Service Area Enrolled

Background

The open door policy of the community college system was established to ensure educational opportunities for all adults in North Carolina. The wide range of educational programs offered and the geographic distribution of the colleges across the state should provide for maximum accessibility by the adult population.

One measure of the extent to which the system is addressing the educational needs of the state is the percent of the population in the service area enrolled. This measure reflects the accessibility of the programs, and to some degree the appropriateness of the programs. This measure does not, however, provide information on specific target groups being served. At any given college, other limitations may come into play. For example, colleges which have not been able to build new facilities or arrange suitable sharing or lease agreements cannot start classes for which there may be a strong community demand. Indeed, many colleges report that they are utilizing all available space on their campus and are still not able to meet student demands for classes.

The most important limitation on enrollment growth in the current environment is probably funds availability. Colleges have strong incentives to maximize enrollments, but budget reversions and lack of expansion funds ultimately force reductions in the numbers of classes which can be offered.

Implications

Enrollment data for each college (a total of both curriculum and extension headcount) were compared with the adult population of its service area. The percentages served by each college were then averaged to produce a result which can be thought of as the percent of the adult population of the service area enrolled in the typical community college. Since the community college system enrolls adults, only the population of the service area 18 years old or older was included in the analysis.

Data

**PERCENT OF ADULT POPULATION IN SERVICE AREA
ENROLLED PER COLLEGE (STATE AVERAGE)**

YEAR	% OF SERVICE AREA POPULATION ENROLLED (SYSTEM AVE. PER COLLEGE)
1988-89	14.3
1989-90	15.7
1990-91	16.0
1991-92	15.8

Source: Annual Enrollment Report.

Contact: Steve Ijames, Information Services, DCC

Recommendation

Efforts should be made to determine the extent to which reversions, budget reductions and tuition increases have affected enrollment by various target groups. In addition, data should be collected on the number of classes that had to be cancelled and on enrollment limits that had to be set due to recent reversions and budget reductions.

PERCENT OF ADULT POPULATION IN SERVICE AREA ENROLLED, 1991-92

INSTITUTION	FTE	% OF POP.
<1,000 FTE		
Pamlico CC	188	17.0
Tri-County CC	701	15.5
Montgomery CC	709	19.7
Anson CC	711	7.3
Bladen CC	762	13.9
Martin CC	923	19.8
McDowell TCC	923	19.8
Roanoke-Chowan CC	962	12.4
1,000-1,999 FTE		
Brunswick CC	1,114	13.6
James Sprunt CC	1,114	17.7
Mayland CC	1,256	19.6
Piedmont CC	1,289	17.7
Sampson CC	1,367	16.3
Carteret CC	1,369	19.9
Halifax CC	1,416	15.0
Nash CC	1,469	17.1
Southwestern CC	1,485	13.5
Southeastern CC	1,527	18.2
Cleveland CC	1,544	13.3
Wilson TCC	1,550	20.5
Mitchell CC	1,566	13.6
College of The Albemarle	1,573	10.1
Beaufort Co. CC	1,616	15.8
Blue Ridge CC	1,654	12.2
Stanly CC	1,698	10.8
Haywood CC	1,708	15.0
Randolph CC	1,752	13.2
Richmond CC	1,754	15.0
Rockingham CC	1,790	15.2
Isothermal CC	1,905	20.1
Edgecombe CC	1,952	21.3
2,000-2,999 FTE		
Craven CC	2,091	18.9
Robeson CC	2,112	17.7
Caldwell CC/TI	2,316	16.4
Western Piedmont CC	2,330	21.0
Davidson Co. CC	2,462	12.1
Vance-Granville CC	2,492	12.5
Wilkes CC	2,545	17.1
Surry CC	2,560	16.0
Lenoir CC	2,605	19.1
Wayne CC	2,668	16.1
Cape Fear CC	2,880	15.5
Rowan-Cabarrus CC	2,901	11.0
Sandhills CC	2,913	22.2
Catawba Valley CC	2,985	16.3
3,000-4,999 FTE		
Johnston CC	3,040	22.4
Pitt CC	3,098	16.4
Gaston CC	3,259	11.0
Asheville-Buncombe TCC	3,365	12.7
Coastal Carolina CC	3,430	16.8
Durham TCC	3,440	9.7
Alamance CC	3,445	20.3
Central Carolina CC	3,454	15.6
Forsyth TCC	4,270	10.0
>4,999 FTE		
Wake TCC	5,639	11.3
Guilford TCC	5,906	12.9
Fayetteville TCC	8,661	18.3
Central Piedmont CC	10,299	15.7
System	138,513	15.8

CRITICAL SUCCESS FACTOR IV: EDUCATION CONTINUUM

The state's public schools, community colleges and universities are increasingly interdependent. Each part of the continuum has a function which is both vital to the education of North Carolinians and to the efficient and effective functioning of the others. To the extent that the sectors of education work together, each will be improved, and the people will benefit. Effective community college partnerships with the public schools are necessary to accomplish two major objectives:

- 1) to provide a safety net for youth who drop out of school before they complete a high school education, and
- 2) to provide post high school education for students interested in technical or vocational studies or the first two years of a baccalaureate program.

Partnerships with the university system and other four-year institutions include working to provide a smooth transition for students who attend community colleges and wish to continue to study at the upper division, as well as to secure well-prepared instructional, administrative and other professional staff.

These linkages are critical for the well-being of students. Student progress is greatly enhanced if the adults who are responsible for preparing them and helping them make the transitions cooperate in their best interests. Community colleges have taken the lead in encouraging cooperative programs with high schools under the Huskins bill and in the new "tech-prep" programs. Community colleges are also working to prepare students well for entry into university programs and to secure the cooperation of the university system in making that transition as smooth as possible.

The measures selected to indicate the success of the partnerships are:

- A. Number and Percent of Recent High School Graduates Enrolled in Community College Programs
- B. Number of and Enrollment in Cooperative Agreements with High Schools
- C. Percent of Tech Prep Students Enrolling in a Community College
- D. Number and Percent of Students in the UNC System Who Attended a Community College

EDUCATION CONTINUUM MEASURE A:

Number and Percent of Recent High School Graduates Enrolled in Community College Programs

Background

This measure is intended to show how successful community colleges are in attracting recent high school graduates into programs which will provide them with additional skills and enable them to be more productive citizens. In previous years it has not been possible to determine the year students enrolling in the community college graduated from high school. The Curriculum Registration file and the Extension Registration file were both modified in 1991-92 to include a data element for last year of high school attendance. In future years we should be able to reflect more accurately the number of recent high school graduates enrolled in community college programs.

The data we are using this year show the number of students aged 18-20 with 12 years of education (not dropouts) who enrolled in a community college. Clearly this could include graduates from several years, and does not really even approximate the most recent year's graduates.

The data also show high school graduates in a given year and the number of seniors who said in a survey at the end of their senior year that they intended to go to a community college the following fall.

Implications

The data show that the percent of high school seniors expressing intent to attend a community college has steadily increased over the past five years. The community college enrollment aged 18-20 did fall slightly in 1991-92; however, the decline is likely due to the decrease in the number of high school graduates in 1991-92.

Several forces are likely to be responsible for a steady percentage increase in enrollment by 18-20 year olds and expressed intent to attend a community college by high school seniors. First, many more jobs now require education beyond high school. So, more students overall are choosing to go on for more education. It is not as easy to get a good job without more education. Secondly, the cost of baccalaureate institutions has been rising rapidly, though wages have been static. So, more students may be choosing community colleges because they are more affordable. Third, admissions standards at the University of North Carolina institutions have changed. So, more students may be finding that they must enroll in a college transfer program prior to entering a university. Finally, the community colleges may have improved their reputation as a viable and acceptable alternative in the view of counselors, peer groups, students and their families.

Data

**ENROLLMENT OF RECENT HIGH SCHOOL GRADUATES AND
HIGH SCHOOL SENIOR INTENT TO ENROLL IN COMMUNITY COLLEGES**

YEAR	COMMUNITY COLLEGE ENROLLMENT AGED 18-20	NUMBER OF H.S. GRADUATES	# AND % OF SENIORS WITH C.C. INTENT	
			#	%
1987-88	24,943	66,148	16,537	25.0
1988-89	27,350	69,709	19,163	27.5
1989-90	30,312	64,521	18,530	28.7
1990-91	29,745	62,533	19,352	30.9
1991-92	28,886	60,911	19,709	32.4

Source: Statistical Service Section, DCC.

Frequency: Collected annually.

Scope: System and institution level data.

Contact: Steve Ijames, Director of Information Services

Source: NC Public Schools Statistical Profile.

Frequency: Annual.

Scope: Public school system and district data.

Contact: NC Department of Public Instruction.

Recommendation

Implement the student progress monitoring system providing year of high school graduation. This will be a good measure at the system level of the transition from high school to additional education. On a college by college basis, comparisons would be questionable since students in some areas have many alternatives for post-secondary study while those in other areas have few.

EDUCATION CONTINUUM MEASURE B:

Number of and Enrollment in Cooperative Agreements with High Schools

Background

Agreements between high schools and community colleges enable students to get credit at the community college for work completed during high school instead of repeating it for a college grade. They also enable high school students to take advantage of courses which are not available at their high school. Effective articulation requires coordination of curricula, schedules and other joint initiatives by school and college personnel. These efforts often encounter barriers of historical conflicts, turf protection and simply inadequate time for the necessary work to be undertaken.

There are a number of ways schools and colleges can work together to achieve joint goals, but state level approval is required if the college sets up classes specifically for the high school students, or if there is credit given. These approved agreements are the subjects of the data.

Implications

While the number of agreements shows that there is considerable cooperation between schools and community colleges, it also reflects the fact that about half the colleges have not set up cooperative agreements or have not been able to do so. The programs do not involve large numbers of students, a fact which should reassure those who fear that the state is paying twice for students to get a high school education or who fear that community colleges are unfairly recruiting high school students. However, the relatively low enrollment may also indicate unmet needs. An increase in cooperative agreements was expected this year since tuition was no longer required. Such an increase did not occur. In fact, the number of colleges involved in cooperative agreements decreased by one and the total number of agreements decreased by four. Nonetheless, the total number of students involved in cooperative agreement programs increased in 1991-92. The barriers to increased cooperation between schools and colleges would bear further examination.

Data

**NUMBER OF & ENROLLMENT IN COOPERATIVE
AGREEMENTS WITH HIGH SCHOOLS**

YEAR	NUMBER OF COLLEGES	NUMBER OF AGREEMENTS	NUMBER OF STUDENTS
1987-88	34	53	2,823
1988-89	28	51	3,103
1989-90	29	49	2,537
1990-91	33	64	3,478
1991-92	32	60	3,918

Source: Program Division Records, DCC.

Frequency: Monthly tabulations.

Scope: System and institutional data.

Contact: Judy Wilkerson, Programs, DCC.

Tech Prep

The tech prep program is a relatively new cooperative venture between the community college system and the public schools. In this program students complete a prescribed course of study during high school and then matriculate into the appropriate field at the community college. The number of tech prep programs has increased dramatically over the past three years. Data are unavailable on the number of students enrolled in the tech prep programs.

NUMBER OF TECH PREP PROGRAMS

YEAR	NUMBER OF PROGRAMS
1989-90	4
1990-91	14
1991-92	60

Source: The Tech Prep Center.

Contact: Myrtle Stogner, Richmond Community College.

Recommendation

The joint use of facilities is a common practice that should be the subject of some study. The barriers to cooperation should be further examined. Data should be collected on the number of students enrolled in tech prep programs.

EDUCATION CONTINUUM MEASURE C:

Percent of Tech Prep Students Enrolling in a Community College

Background

The Tech Prep programs were established as cooperative programs between North Carolina high schools and community colleges to provide a continuum of learning experiences for students involved in these programs. Through joint planning, the public schools and community colleges participating in the program have developed a sequence of courses beginning in high school and culminating at the community college that will prepare students academically for specific fields of study. The programs include both academic as well as technical courses.

The concept behind Tech Prep is to provide the traditionally non-college (four-year college) bound student with an alternative that will prepare them for a career path. Students completing the Tech Prep program and entering the community college should be better prepared than students who simply pass through a general education sequence in the public schools. The Tech Prep students should require less remediation and should be able to progress through a community college program at a quicker pace.

Since the Tech Prep program was initiated in 1989-90, not enough students have passed from the high schools to the community colleges to make this measure meaningful. However, as the number of students completing the high school component increases, it becomes important for data to be collected on the number that matriculate to a community college. Efforts will continue to establish a tracking system for Tech Prep students.

Recommendation

An appropriate method of identifying Tech Prep students who enroll in a community college should be developed. In addition, methods of determining the success of these students at the community college should be examined.

EDUCATION CONTINUUM MEASURE C:

Number and Percent of Students in the UNC System Who Attended a Community College

Background

The transfer program has been an important part of the community college mission from its beginning, even though the numbers of students involved are relatively small. This measure indicates how many students are transferring and what percentage of the UNC system's students were once community college students.

For some UNC system institutions, transfers are a significant percentage of enrollments (as at UNC-Charlotte). For others, they are a negligible number. While there are many factors involved, it is important that the university and community colleges work together to make transfer possible by insuring that curricula are complementary, that students know what they will need to transfer and that students are assisted by the receiving institution in complying with its rules.

The data understate the transfer picture since they do not include students who may have transferred to a university during the spring semester; the data only show those transfers that occurred in the summer or fall semester. It is not now possible to show how the transfer rates of community college graduates compare with non-graduates.

Community colleges can serve as a way to increase the numbers of citizens who eventually attain a baccalaureate or graduate degree by providing a transition point that may be more comfortable, affordable or better suited to the needs of many students. In this way, they also can provide educational opportunities for groups such as minorities who have been underserved in the past.

Implications

Community colleges are an untapped resource for North Carolina universities. They also represent a viable way that students are getting the first two years of baccalaureate education in a setting that is more affordable to themselves and to the state. The numbers of transfers are rising, in line with the resolution of the Joint Boards of Education adopted in March, 1989 which set a goal of a seven percent per year increase.

As the data below demonstrate, there was a significant increase in the number of transfers during 1991. Part of this increase is due to some students from contractual programs being recorded as transfers for the first time. Another possible explanation for the rise in transfers in 1991 is the increase in the number of students who are pursuing the first two years of a baccalaureate education at the community college, and the number of community colleges offering the transfer program.

Data

TRANSFERS FROM COMMUNITY COLLEGES TO THE UNC SYSTEM

YEAR	NUMBER	PERCENT CHANGE	PERCENT OF ALL TRANSFERS
1987	2,416	3.3	32.8
1988	2,554	5.7	34.0
1989	2,868	12.3	35.7
1990	3,207	11.8	35.9
1991	4,035	26.6	40.5

Source: Statistical Abstract of Higher Education in North Carolina.

Frequency: Annual.

Scope: State, system and institutional data in selected instances.

Contact: Linda Balfour, UNC General Administration.

Recommendation

These data need to be improved. Data on graduates and non-graduates should be developed and comparisons should be made to the performance of native students. It was suggested that numbers of students who applied for transfer but were denied be reported, but the existence of quotas at some UNC institutions would have to be considered when interpreting those data. There is a comprehensive study of college transfer by the UNC system and the Department of Community Colleges now underway that should shed more light on these issues.

CRITICAL SUCCESS FACTOR V: WORKFORCE DEVELOPMENT

Supporting North Carolina's economic development has been an important part of the mission of the community college system since its beginning. The system is a major tool for providing the state's citizens with the education and skills they need to be productive in the workforce. The system's institutions have traditionally worked closely with the businesses in their areas to insure that the programs offered by the college prepare citizens to take the jobs that are available. They have also provided citizens with the skills to be self-employed.

North Carolina originated customized training programs for new industries which agreed to come into the state, and its approach has been copied widely. This program remains a strong part of the state's economic development arsenal, along with other categorically funded programs for existing industries and small business.

In addition to these specialized programs, the system's ability to stay current with the job market protects the state from skill shortages and protects its citizens from finding their skills outdated by changing technology and market forces. Measures of the success of the system in staying on the cutting edge are difficult to determine but important.

The measures which have been identified for the success of the system in its economic development role are:

- A. Number of Employers and Trainees Served by: New and Expanding Industry, Focused Industrial Training, Small Business Centers, Apprenticeship Programs
- B. Number of Workplace Literacy Sites and Number of Students Being Served
- C. Employer Satisfaction With Graduates
- D. Employment Status of Graduates

WORKFORCE DEVELOPMENT MEASURE A:

Number of Employers and Trainees Served by: New and Expanding Industry, Focused Industrial Training, Small Business Centers, Apprenticeship Programs

Background

The programs which are examined by this measure are the categorical programs created specifically to address employer needs. They are very popular, partly due to the responsive and flexible way in which they allow the colleges to respond when specialized needs are identified.

North Carolina's New and Expanding Industry training program provides the customized training which has been a major part of the state's economic development strategy, and the Focused Industrial Training Program (FIT) has added similar services for existing businesses.

Small business centers were created to train entrepreneurs and existing small business owners. It is increasingly important to support home-grown enterprise, since the feasibility of attracting businesses from out of state has declined. It is also a fact that more jobs are created by small businesses than by large ones. These very popular programs provide only a limited amount of one-on-one assistance, but instead offer workshops and seminars for their clients and provide resource and referral services.

North Carolina has not had a history of strong apprenticeship programs. The community colleges have mainly supported apprenticeship by providing related instruction in areas where enough apprentices are enrolled to form a class.

Implications

New and Expanding Industry continues to serve an increasing number of trainees and a significant number of employers in any given year. FIT is a newer program. The years which show marked increases in FIT enrollees are years in which new FIT centers were funded. Both programs continue to reach substantial numbers of employers and employees with training services. The small business center program also continues to reach a large number of people with the range of services indicated.

The increase in the number of business clients served by the Small Business Centers can be attributed partially to the opening of three additional Centers in 1991-92. These three Centers, however, do not account for all the increase in business clients served in 1991-92. As the data indicate, the number of referrals during 1991-92 nearly doubled and the number of business clients who were counseled increased by 64 percent.

Data

NEW & EXPANDING INDUSTRY TRAINEES & PROJECTS

YEAR	TRAINEES	PROJECTS
1987-88	12,263	167
1988-89	16,833	149
1989-90	16,807	165
1990-91	14,857	140
1991-92	15,738	151

Source: Annual Report of Training Projects for New & Expanding Industries.

Frequency: Annual. Published every fall.

Scope: System and institution data.

Contact: Joe Sturdivant, Director, Business and Industry Services, DCC.

**FOCUSED INDUSTRIAL TRAINING:
TRAINEES & INDUSTRIES SERVED***

YEAR	TRAINEES	INDUSTRIES
1987-88	5,427	646
1988-89	7,253	924
1989-90	9,653	1,031
1990-91	8,686	780
1991-92	9,461	962

* Includes the apprenticeship program.

Source: Program Services Section Records.

Frequency: Annual.

Scope: System and institution level data.

Contact: Glynda Lawrence, Program Coordinator, DCC

SMALL BUSINESS CLIENTS SERVED

YEAR	# OF CENTERS	PARTICIPANTS	COUNSEL	REFERRAL	EXT./CURR. COURSE PARTICIPANT
1987-88	40	32,654	5,384	4,541	8,982
1988-89	50	36,161	7,389	5,508	11,704
1989-90	50	43,736	7,098	5,998	12,950
1990-91	50	43,563	9,456	6,143	10,847
1991-92	53	45,981	15,472	14,101	9,719

Source: Small Business Progress Report

Frequency: Annual. Published every summer.

Scope: System level data.

Contact: Jean Overton, Director of Small Business Centers, DCC.

Recommendation

These data do not indicate the quality or cost effectiveness of the training being provided by the programs involved. Ways to show those elements should be developed and/or provided through regular evaluation of the programs. Emphasis should be given to the development of outcomes measures for the programs. An ongoing assessment of these programs, as well as all other programs offered by the community colleges, should be implemented.

WORKFORCE DEVELOPMENT MEASURE B:

Number of Workplace Literacy Sites and Number of Students Being Served

Background

According to a June 26, 1990 report prepared for The Governor's Commission on Workforce Preparedness, the proportion of workforce participants in North Carolina with at least a high school diploma is only 60 percent. The large number of adults currently in the workforce without a high school diploma represents a major obstacle for the future economic development of the state. Whereas the old technology of industry could absorb those individuals lacking a high school diploma, the technology of today's industries cannot.

Workers of today must possess basic skills that are far different from those basic skills of yesterday. In addition to communication skills and basic mathematical skills, today's worker must be able to think critically, work effectively in teams, and apply problem-solving skills. The key to the future economic well being of the state is an appropriately educated workforce.

A major barrier that exists for many workers in need of literacy and basic skills training is the availability and accessibility of the training. These individuals are often under financial and other pressures that prevent them from pursuing literacy classes at the community college. In order to meet the needs of these workers, workplace literacy sites are being established across the state. A cooperative venture between the community colleges and the local industries, this program establishes basic skills classes at the industry site and tailors program content to complement workplace needs. The idea behind the program is that if classes are more accessible, more workers will participate, and if the content is more relevant to workplace needs, more workers will complete the program.

Implications

Data on the increase in the number of workplace literacy sites and on the number of students being served by these programs indicates the program's success. With the implementation of the Literacy Education Information System, data should be available in the future to determine the success of students participating in the workplace literacy site programs as compared with students in traditional basic skills programs.

Data

**NUMBER OF WORKPLACE LITERACY SITES
AND NUMBER OF STUDENTS BEING SERVED**

YEAR	NUMBER OF SITES	STUDENTS ENROLLED
1988-89	221	5,863
1989-90	325	7,611
1990-91	391	7,506
1991-92	430	10,404

Source: Workplace Basic Skills Sites in NC, 1991-92.

Contact: Don Snodgrass, Coordinator of ABE, DCC.

Recommendation

Data should continue to be collected on this measure. An analysis of the success of students participating in the workplace literacy program should be conducted. This analysis should not only determine the success of the students in the program, but should also examine factors related to the structure of the program at different industries and the effect those factors have on the success of the students. Further, some cost analysis on the workplace literacy program compared to other literacy programs may provide useful information.

WORKFORCE DEVELOPMENT MEASURE C:

Employer Satisfaction With Graduates

Background

Employer satisfaction with community college students is a critical test of all programs. A 1991 survey of North Carolina employers conducted for the Governor's Commission on Workforce Preparedness revealed that 72.4 percent of employers are satisfied, overall, with the preparation community college students are getting. This compared with only 29 percent expressing satisfaction with public schools. While such data are encouraging, nevertheless they do not reflect the performance of specific graduates nor do they provide insight on the nature of weaknesses which are encountered.

Individual institutions in the system conduct employer surveys as part of their planning process and/or program review process, but there is no systematic coordination of the effort. Such data were collected at one time through a state sponsored survey of employers, but they are no longer collected. The survey results were generally very favorable.

The Department of Community Colleges is now working with the North Carolina Occupational Information Coordinating Committee on the development of an interagency follow-up system that would track the education and training histories, placement, employment and wages of former participants in the state's education and training programs. Such a system, similar to one that has been established in Florida and several other states, would utilize information from the unemployment insurance database maintained by the Employment Security Commission. Under this system, student records from the community colleges could be matched with the unemployment insurance records revealing which students are employed, the name and address of their employer, and their quarterly wages. The data base does not include the position or job type of former students.

A second step would be to use the information on employers generated by the unemployment insurance database to survey employers. The survey would be designed to gather information on the position or job type of former students and on employer satisfaction.

The first phase of this employment follow-up project is scheduled to be completed in late April. At this time, data will be generated to show which program completers are employed, the name of their employer, quarterly wage data, and the job title of the employee. If the results of this first attempt at matching DCC records with UI files is successful, and if the project is funded at an appropriate level, then the next step would be to develop an employer satisfaction survey.

Recommendation

Employer evaluation of programs is an essential accountability tool. The Department of Community Colleges should continue to work with the NC OICC to develop and implement the interagency follow-up system. Funds and other resources should be sought to develop and implement a state-wide employer survey.

WORKFORCE DEVELOPMENT MEASURE D:

Employment Status of Graduates

Background

The most important measure of the effectiveness of programs intended to help people get and secure good jobs is the record of students of accomplishing that goal. There is much anecdotal data about the success of community college students. Often instructors who are close to their students and program heads who are close to the employers know whether their students are getting jobs. This anecdotal evidence is very strong for some programs, such as nursing, but absent or less promising for others. It is more difficult for an instructor with large classes or for program administrators when the programs have more dispersed labor markets to be as exact about the numbers of students who are placed, though they often have a good "feel" for the situation.

Nevertheless, comprehensive student follow-up is really the only way to have complete data on placement rates, and student follow-up is expensive. While a partial student follow-up was conducted each year for several years, the data included only twelve colleges each year. Thus, the data are not comparable over the state. Problems with response rates and the sample nature of the follow-up also precluded definitive results. The partial student follow-up was funded by the federal government as part of an assessment of vocational education programs. Those funds are no longer available and, as a result, the partial student follow-up will not be continued.

Many colleges are conducting student follow-up surveys, often in conjunction with program review. These surveys include questions related to employment status and provide valuable information to the college. The follow-up is not occurring at all colleges, however, and thus the data are not collected at the system level.

As discussed in Workforce Development Measure C, the Department of Community Colleges is working with the NC OICC on the development of an interagency student follow-up system that will utilize the unemployment insurance database maintained by the Employment Security Commission. Data on the employment status of graduates will be available in late April and will be reported in the 1994 CSF report.

Recommendation

Placement data are urgently needed. Placement rates are one of the essential indicators for programs focused on the workforce. The Department of Community Colleges should continue to work with the NC OICC on the interagency follow-up system.

CRITICAL SUCCESS FACTOR VI: COMMUNITY SERVICES

Part of the mission of the comprehensive community college is to provide special services for the citizens of the community. These services take the form of providing educational opportunities which help individuals to be better citizens, parents and just better people. We have tended to let community services become defined as the classes offered, particularly in avocational or leisure-time activities. However, the real meaning of community services encompasses the role of the college in supporting leadership development in the community, offering its facilities as a meeting place, providing cultural activities and other specialized functions. It includes the activities of college personnel in supporting the civic and benevolent activities of the community. The wide range of the types of things that community services includes is evidence of the key role community colleges play in the life of individual, and very different, communities.

Community services classes have been funded through a block grant since 1987-88. Funding for community services classes shows the effect of financial pressure, so enrollments have minimum value as a performance indicator. However, the data we have available measures the number of avocational, practical skills and other courses that are offered and their enrollment. Data have also been collected on the use of campus facilities by outside groups, and data on community financial support of the colleges have been compiled.

For fiscal year 1991-92, the funds for community service and the Visiting Artist program were cut in half and combined into one block grant. The legislature and the State Board of Community Colleges maintained their position that all colleges must have a presence in community service and the cultural arts.

The measures of community service are:

- A. Number of Courses Offered and Students Enrolled Through Community Services (Avocational, Practical Skills, Academic, Cultural/Civic)
- B. Enrollment of Senior Citizens
- C. Support of Community Service Activities (Use of Facilities by Outside Groups; Support of Civic and Cultural Activities)

COMMUNITY SERVICES MEASURE A:

Number of Courses Offered and Students Enrolled Through Community Services (Avocational, Practical Skills, Academic and Recreational)

Background

The community college mission in continuing education is well established. In the North Carolina system, a distinction has been made between continuing education courses designed to enhance occupational skills and those courses which offer non-credit academic, avocational, practical skills or recreational learning activities. All courses in these categories, except for recreational classes, must be approved by the State Board before a college can offer them, since they are eligible for state funding. Occupational classes are funded by an FTE formula similar to credit (or curriculum) courses, though at a lower level. The other categories are supported by a block grant for community services, an approach which was begun in 1987-88. Recreational classes must be self-supporting. Other classes **MAY** be offered on a self-supporting basis, but if so, they do not earn FTE toward the college's share of the block grant. Fees collected for such classes may be used to enable the college to continue and expand its community services program. This provision enables the community services program to grow even though state funding is kept to a minimum level.

Implications

The data show that total enrollment in community services courses declined by approximately 16 percent in 1991-92. This is undoubtedly the result of the community services block grant being cut in half. The greatest decline, 29 percent, occurred in Practical Skills courses. Enrollment in recreational courses did increase in 1991-92, but it should be remembered that these courses are self-supporting and would thus be unaffected by a change in block grant funding.

Data

ENROLLMENT IN COMMUNITY SERVICES COURSES
(Duplicated Across Type)

YEAR	ACADEMIC	AVOCA- TIONAL	PRAC. SKILLS	RECREA- TIONAL	TOTAL COM. SER. ENROLL	% OF SYS. ENROLL
1987-88	23,317	44,924	18,927	976	88,144	14.1
1988-89	22,543	47,754	20,234	2,044	86,940*	13.1
1989-90	28,152	53,135	34,858	2,087	110,451*	14.9
1990-91	30,275	52,897	41,059	2,831	119,708*	15.9
1991-92	28,348	45,040	29,162	3,891	100,798*	13.4

*Unduplicated total enrollment.

Source: Annual Enrollment Report.

Frequency: Annual. Published every winter.

Scope: State and institution data.

Contact: Steve Ijames, Information Services, DCC.

Source: Master Course List, Continuing Education.

Frequency: Annual.

Scope: System level.

Contact: Chuck Barham, Program Services Section, DCC.

Recommendation

This is a useful measure, especially as compared to system enrollments. These data should be carefully monitored to determine the impact of funding changes in community services. As was stated in the introduction of the community services factor, the block grants for community services and visiting artists were cut in half and combined into a single block grant for fiscal year 1991-92. In the future these data will be one of the indicators of the impact of this funding change.

COMMUNITY SERVICES MEASURE B:

Enrollment of Senior Citizens

Background

One of the purposes of community services activities is to reach citizens who have few alternatives. Senior citizens are the major group, but citizens in rest and nursing homes, prisons, mental health and alcohol rehabilitation facilities, etc. are also among those served with these classes and other activities.

Senior citizens make up a majority of those enrolled in community services classes. These citizens depend on community college activities for opportunities to fulfill learning objectives which may have been postponed, to help them cope with health, financial or other problems, and to improve their general quality of life. The state has a historic commitment to them and provides community college classes tuition-free. Community colleges contribute to making North Carolina attractive to retirees.

Data have not previously been collected on the characteristics of participants in community service activities. While such data can be readily collected from participants in classes, it is difficult and expensive to collect data from participants in other types of community service activities. It is possible, however, to determine the number of senior citizens enrolled in community services classes since age is collected at the time of registration.

Implications

The data demonstrate that community colleges play a vital role in enabling senior citizens to pursue learning. In 1991-92 a total of 36,662 senior citizens enrolled in community services programs at the community colleges. By reaching out to this segment of the population, community colleges are providing a valuable community service in enriching all citizens of North Carolina. By providing free tuition to senior citizens, colleges enable many North Carolinians to spend their senior years in meaningful, learning activities.

Data

**ENROLLMENT OF SENIOR CITIZENS (65 OR OLDER)
IN COMMUNITY SERVICES PROGRAMS**

YEAR	COMMUNITY SERVICE
1987-88	35,146
1988-89	34,103
1989-90	44,262
1990-91	44,536
1991-92	36,662

Source: Annual Statistical Report.

Frequency: Annual.

Scope: System level and institution data.

Contact: Steve Ijames, Information Services, DCC.

Recommendation

Data on the number of senior citizens enrolled is an important measure in understanding the breadth of the community college mission. These data should continue to be monitored. At the same time an estimate of lost revenue resulting from enrolling senior citizens tuition free should be developed. This measure could have implications for projecting tuition receipts in the future.

COMMUNITY SERVICES MEASURE C:

Support of Community Services (Use of Facilities by Outside Groups; Support of Civic and Cultural Activities)

Background

The role that community colleges play goes beyond the educational mission that is normally associated with colleges. In many communities the colleges provide a focal point for community activity and cultural events. Whether it is providing a central location for community groups to meet, holding forums during political debates, or sponsoring events in the fine arts, the colleges have a major impact on the quality of life in the community.

It is not easy to measure the true impact of the colleges on the quality of life in their service area with data that are currently being collected. It is possible, however, to demonstrate the extent to which the colleges provide services to the community. Three measures have been chosen to indicate the extent to which the community colleges support community services activities.

The first measure examines the role that the community colleges play as a center of local activity. The mission of the community college system relative to community service includes providing, where needed, a central location for meetings and events of local community groups. For many communities, the college provides the facilities that make many of their functions possible.

Each college was asked to record the number of outside groups using the facilities and the number of hours the facilities were used by these groups. An outside group was defined as any group not directly associated with the college. Thus, if the local chamber of commerce or the county commissioners held a meeting at the college, such an event would be recorded.

The second measure of support of community service activities is the number and types of cultural experiences the colleges made available to the community through the visiting artist program. This program allows colleges throughout the system the opportunity to sponsor an artist on campus. The visiting artist program enriches the offerings of the college and expands the community services function.

It is difficult to measure the impact on the community of a program such as the visiting artist program. There is no way at present to determine the effect the experience of being exposed to an artist has on the people of the community or how such a program affects the community's view of the college. Instead, the impact of the program can only be measured by the number of activities that result from its implementation.

The third measure of the colleges' support of community services activities is the number of civic and cultural events the colleges sponsor or co-sponsor. These non-FTE generating activities are designed to fulfill the community service mission of the colleges. For many communities, the colleges are the center of civic and cultural events, providing enriching experiences for all members of the community.

As with the visiting artist program, it is difficult to measure the impact that the civic and cultural events sponsored by the college have on the community. Colleges have been asked to maintain a total count on the number of non-FTE generating civic and cultural events that were either sponsored or co-sponsored by the college. The data are presented below.

Implications

The data on the number of outside groups using the college facilities and the total hours of usage indicate that the colleges do provide a valuable service to the community in making the college facilities available to outside groups. The data show that the number of outside groups using the college facilities in 1991-92 declined while the number of hours of facilities usage increased. It should be pointed out that two years' worth of data is not sufficient to interpret any trends in facilities usage. While data on availability of space to respond to requests was not systematically collected, many colleges reported not being able to meet all the requests for use of the facilities due to the scheduling of classes during the day and evening.

Data

NUMBER OF OUTSIDE GROUPS USING COLLEGE FACILITIES AND TOTAL HOURS OF FACILITIES USAGE BY OUTSIDE GROUPS

YEAR	NUMBER OF GROUPS		HOURS OF FACILITIES USAGE	
	TOTAL	MEAN	TOTAL	MEAN
1990-91	5,466	94	60,282	1,039
1991-92	4,240	75	65,838	1,176

Source: Planning and Research Unit, DCC.

Contact: J. Keith Brown

The data on the visiting artist program show the effect the cutting of the community services block grant and visiting artist grant in half and combining the two has had on the visiting artist program. In 1991-92 the number of visiting artists declined by 53 percent. During that same year, the number of presentations declined by 65 percent and the number of people served by the program declined by 42 percent. The greatest reduction was in the number of people from special populations served by the program, while the number of senior citizens served actually increased.

Data

VISITING ARTISTS PRESENTATIONS

YEAR	NUMBER OF VISITING ARTISTS	NUMBER OF PRESENTATIONS	NUMBER OF PEOPLE SERVED
1989-90	57	5,673	544,066
1990-91	58	5,631	476,630
1991-92	27	1,958	275,378

AUDIENCES SERVED BY THE VISITING ARTIST PROGRAM

YEAR	PRE-SCHOOL /ELEM.	MIDDLE SCHOOL	HIGH SCHOOL	COLLEGE	ADULT	SPEC. POP.	SENIOR CITIZ.
1989-90	101,234	46,189	46,489	25,886	238,390	68,770	61,891
1990-91	118,902	36,260	44,005	24,567	158,953	21,247	35,481
1991-92	43,956	13,729	12,129	11,145	93,617	5,779	42,855

NUMBER OF VISITING ARTISTS BY CATEGORY

YEAR	MUSIC (CLASSIC)	MUSIC (JAZZ)	THEATRE	VISUAL	FOLK	LITERA- TURE	DANCE
1989-90	30	4	11	3	5	4	0
1990-91	30	4	11	3	5	3	2
1991-92	17	4	3	2	0	0	1

Source: Visiting Artist End-of-Year Report.

Contact: Chuck Barham, Special Programs, DCC.

Like the previous two measures, the data on the colleges' support of civic and cultural events demonstrate that they are fulfilling their community service mission. In examining the data, it must be remembered that these civic and cultural events are in addition to the events resulting from the visiting artist program and in addition to FTE generating civic and cultural events.

Data

NUMBER OF NON-FTE GENERATING CIVIC AND CULTURAL EVENTS SPONSORED OR CO-SPONSORED BY COMMUNITY COLLEGES

YEAR	NUMBER OF SPONSORED EVENTS		NUMBER OF CO- SPONSORED EVENTS	
	TOTAL	MEAN	TOTAL	MEAN
1990-91	1,157	20	1,075	19
1991-92	1,303	23	935	17

Source: Planning and Research Unit, DCC.

Contact: J. Keith Brown

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Recommendation

This measure needs to be examined more closely. While it is clear that college facilities are being used extensively by outside groups, it is not known what types of groups are using the facilities or how the facilities are being used. This may be the topic of a special study to determine the impacts beyond educational program offerings that community colleges have on the counties in which they are located. In addition, a study should be designed to determine the impact that the visiting artist program and the sponsoring of civic and cultural events have on the community. The data on number of events and offerings should be carefully monitored to determine the effect of the reduction of funding for the visiting artist program and community services that occurred in 1991-92.

CRITICAL SUCCESS FACTOR VII: PROGRAM MANAGEMENT/ACCOUNTABILITY

Educational institutions across the nation are being held accountable for their actions as never before. Federal legislation in the form of the Campus Security and Right to Know Act and Carl Perkins Act regulations have caused colleges to look more closely not just at the process of what they are doing, but also at the end product-- the outcomes of their actions. The General Assembly, in examining budget requests, is keenly interested in the return on the state's investment in the community colleges. Accrediting agencies, the chief of which is the Southern Association of Colleges and Schools (SACS), have made demonstrated institutional effectiveness a major factor in the accreditation or reaffirmation of a college.

To be accountable is to be answerable for, implying that the accountable party is responsible for a satisfactory explanation. That in turn implies that the accountable party has sufficient authority and resources to produce a satisfactory account.

Accountability for the community college system is shared by the State Board, the local boards, state and local administrative staffs and faculty. Each has responsibilities for which it is held accountable. A well-organized and managed system will provide appropriate authority and resources at each level and hold each group appropriately accountable.

The entire process of planning, program review, evaluation of results and these critical success factors themselves makes up an essential part of the comprehensive accountability system. Traditionally, accountability has been defined primarily in terms of accountability for funds, but these measures also indicate how programs are managed.

The measures chosen are:

- A. Annual Educational Program Audit Summary--Number Audited and Percent of System Instructional Budget Cited for Exceptions
- B. Number and Percent of Programs Reviewed
- C. Number and Percent of Eligible Programs Accredited or Reaffirmed

ACCOUNTABILITY MEASURE A:

Annual Educational Program Audit Summary -- Number Audited and Percent of System Instructional Budget Cited for Exceptions

Background

Auditors from the Department of Community Colleges (DCC) review the records of each college and determine the integrity of the accounts. Since the funds are distributed by a formula which is primarily driven by the number of full-time equivalent (FTE) students in class, and the types of classes "earn" different amounts of dollars, it is important that students be properly counted and that classes be properly designated by type. Tuition must be properly charged and collected, and classes must meet in proper settings for approved periods of time. These and certain other details are the subject of the program audits.

The data show the number of audits conducted, the percentage of audits with exceptions, the resulting financial adjustments made as a result of the audits, and the percent of system instructional budget accounted for by the financial adjustments.

The available data are for audits conducted in 1987-88 through 1991-92 covering program years 1986-87 through 1990-91. During that period, the State Auditor conducted an operational audit of the DCC audit function. The number of auditors employed by the Department has increased over the years. This has resulted in increased ability to conduct more audits, to conduct more extensive audits, and to provide advice that prevents audit concerns. As recommended, the Department also changed its procedures to provide for more balance between the amount of auditors' time focused on continuing education and curriculum programs. These changes are reflected in shifts in the numbers and types of questions raised by the auditors.

Implications

The data on the number of audits are inconclusive, probably because prior to the increase in the number of auditors, there was a more marked trade-off between the number of audits which could be done and the thoroughness of each audit. The sharp increase in colleges cited for exceptions found in 1988-89 is a clear reflection of the increased number of auditors. In spite of the increased number of exceptions, the percentage of exceptions has declined.

While the percentage of audits with exceptions increased slightly in 1989-90, the total resulting financial adjustment declined dramatically. This indicates that the exceptions cited were not of a serious nature nor did they impact dramatically on the system. In 1991-92 the percentage of audits with exceptions showed a sharp decline for the second consecutive year, even though all 58 colleges were audited during the same year (one college was audited twice). There was approximately a 40 percent decrease in the resulting financial adjustments in 1991-92.

Data

**EDUCATION PROGRAM AUDIT SUMMARY:
NUMBER OF COLLEGES AUDITED, NUMBER OF EXCEPTIONS CITED,
PERCENTAGE OF AUDITS WITH EXCEPTIONS**

YEAR	COLLEGES AUDITED	COLLEGES CITED FOR EXCEPTIONS	% OF AUDITS WITH EXCEPTIONS	RESULTING FINANCIAL ADJUSTMENT	% OF SYSTEM INSTRUC. EXPEND.
1987-88	32	23	71	\$ 889,622	0.48
1988-89	56	36	64	\$ 487,214	0.25
1989-90	52	38	73	\$ 159,197	0.07
1990-91	58	32	52	\$ 285,348	0.12
1991-92	58	23	39	\$ 175,802	0.07

Source: Annual Audit Summary.

Frequency: Annual. Published every fall.

Scope: State and institution data.

Contact: Bill Cole, Auditing and Accounting Section, DCC.

Recommendation

The data on the number of audits and exceptions is useful, but a better way to indicate the seriousness of the exceptions and their satisfactory resolution needs to be developed. A way to show whether the colleges corrected problems or continued to have the same ones should be developed.

**EDUCATION PROGRAM AUDIT SUMMARY, 1991-92:
COLLEGES CITED FOR EXCEPTIONS AND RESULTING FINANCIAL ADJUSTMENTS**

INSTITUTION	FTE	RESULTING FINAN. ADJUSTMENT	% OF INSTRUC. BUDGET
<1,000 FTE			
Pamlico CC	188		
Tri-County CC	701		
Montgomery CC	709		
Anson CC	711		
Bladen CC	762	\$4,371	0.27
Martin CC	923	\$10,122	0.47
McDowell TCC	923		
Roanoke-Chowan CC	962	0	0.00
1,000-1,999 FTE			
Brunswick CC	1,114		
James Sprunt CC	1,114		
Mayland CC	1,256	0	0.00
Piedmont CC	1,289		
Sampson CC	1,367	0	0.00
Carteret CC	1,369		
Halifax CC	1,416	\$5,132	0.25
Nash CC	1,469	\$4,371	0.15
Southwestern CC	1,485		
Southeastern CC	1,527		
Cleveland CC	1,544		
Wilson TCC	1,550	0	0.00
Mitchell CC	1,566		
College of The Albemarle	1,573		
Beaufort Co. CC	1,616		
Blue Ridge CC	1,654		
Stanly CC	1,698		
Haywood CC	1,708		
Randolph CC	1,752		
Richmond CC	1,754		
Rockingham CC	1,790		
Isothermal CC	1,905		
Edgecombe CC	1,952	\$4,371	0.12
2,000-2,999 FTE			
Craven CC	2,091	\$2,477	0.06
Robeson CC	2,112		
Caldwell CC & TI	2,316		
Western Piedmont CC	2,330		
Davidson Co. CC	2,462		
Vance-Granville CC	2,492	0	0.00
Wilkes CC	2,545		
Surry CC	2,560	0	0.00
Lenoir CC	2,605		
Wayne CC	2,668	0	0.00
Cape Fear CC	2,880	0	0.00
Rowan-Cabarrus CC	2,901		
Sandhills CC	2,913	\$13,112	0.22
Catawba Valley CC	2,985	\$66,169	1.07
3,000-4,999 FTE			
Johnston CC	3,040	0	0.00
Pitt CC	3,098	\$13,112	0.21
Gaston College	3,259	0	0.00
Asheville-Buncombe TCC	3,365		
Coastal Carolina CC	3,430		
Durham TCC	3,440	0	0.00
Alamance CC	3,445	\$39,913	0.61
Central Carolina CC	3,454		
Forsyth TCC	4,270		
>4,999 FTE			
Wake TCC	5,639	\$12,652	0.12
Guilford TCC	5,906	0	0.00
Fayetteville TCC	8,661		
Central Piedmont CC	10,299		
System	138,513	\$175,802	0.07

ACCOUNTABILITY MEASURE B:

Number and Percent of Programs Reviewed

Background

The State Board adopted a policy in October 1989 requiring that each college review all its curriculum programs every five years. Models for comprehensive program reviews were developed by a consortium of five colleges and disseminated throughout the system. The colleges submit summaries of their reviews to the Program Services section of the Department of Community Colleges.

As the first five years of the policy go by, a larger number of reviews can be expected each year. Colleges are gaining knowledge about the review process and skills in conducting the investigations required. At the campus level, reviews are becoming increasingly valuable as sources of information about program strengths and weaknesses.

A recent report by the Government Performance Audit Committee (GPAC) has focused additional attention on program review. Contained in the report are recommendations that the system strengthen guidelines for program review and include guidelines for program termination. In addition, the report recommends that the State Board conduct a one time program review to eliminate programs that are unproductive, duplicative, unnecessary, or of weak quality. It is likely that program review will be examined more closely in the near future.

Implications

The data show that 46 percent of the system's approved programs have been reviewed and a report submitted to DCC as of March 5, 1993 as compared with 27 percent having been reviewed one year ago. As of that time, six colleges had not submitted any program reviews to DCC.

Data

NUMBER AND PERCENT OF PROGRAMS REVIEWED (As of March 5, 1993)

NUMBER OF APPROVED PROGRAMS	NUMBER OF OFFERED PROGRAMS	NUMBER OF PROGRAMS REVIEWED	% OF PROGRAMS REVIEWED
1,847	1,711	780	46

Source: Curriculum Program Review Summary.

Contact: Allen McNeely, Program Services, DCC

Recommendation

As a system level indicator, this measure will have little applicability beyond the first five years, since the number of reviews should even out and be comparable from year to year. Additional data on the quality of the program reviews or on the outcomes of program reviews would strengthen this measure.

NUMBER AND PERCENT OF PROGRAMS REVIEWED
(As of March 5, 1993)

INSTITUTION	FTE	# OFFERED	# REVIEWED	% REVIEWED
<1,000 FTE				
Pamlico CC	188	8	3	38
Tri-County CC	701	15	8	53
Montgomery CC	709	17	6	35
Anson CC	711	23	3	13
Bladen CC	762	14	6	43
Martin CC	923	18	9	50
McDowell TCC	923	26	0	0
Roanoke-Chowan CC	962	20	1	5
1,000-1,999 FTE				
Brunswick CC	1,114	14	1	6
James Sprunt CC	1,114	23	13	57
Mayland CC	1,256	24	13	54
Piedmont CC	1,289	23	8	35
Sampson CC	1,367	21	7	33
Carteret CC	1,369	23	5	22
Halifax CC	1,416	27	17	63
Nash CC	1,469	24	5	21
Southwestern CC	1,485	29	4	14
Southeastern CC	1,527	22	7	32
Cleveland CC	1,544	24	4	17
Wilson TCC	1,550	32	22	69
Mitchell CC	1,566	16	0	0
College of The Albemarle	1,573	25	22	88
Beaufort Co. CC	1,616	22	12	55
Blue Ridge CC	1,654	32	24	75
Stanly CC	1,698	30	11	37
Haywood CC	1,708	30	9	30
Randolph CC	1,752	22	20	91
Richmond CC	1,754	17	18	100
Rockingham CC	1,790	26	10	39
Isothermal CC	1,905	30	10	33
Edgecombe CC	1,952	28	13	46
2,000-2,999 FTE				
Craven CC	2,091	36	34	94
Robeson CC	2,112	23	12	52
Caldwell CC/TI	2,316	28	10	36
Western Piedmont CC	2,330	42	40	95
Davidson Co. CC	2,462	26	5	19
Vance-Granville CC	2,492	30	24	80
Wilkes CC	2,545	25	12	48
Surry CC	2,560	29	12	41
Lenoir CC	2,605	44	23	52
Wayne CC	2,668	39	17	44
Cape Fear CC	2,880	28	9	32
Rowan-Cabarrus CC	2,901	26	22	85
Sandhills CC	2,913	28	11	39
Catawba Valley CC	2,985	39	16	42
3,000-4,999 FTE				
Johnston CC	3,040	33	2	6
Pitt CC	3,098	45	19	42
Gaston CC	3,259	36	0	0
Asheville-Buncombe TCC	3,365	35	0	0
Coastal Carolina CC	3,430	33	31	94
Durham TCC	3,440	34	3	9
Alamance CC	3,445	40	26	65
Central Carolina CC	3,454	35	19	54
Forsyth TCC	4,270	37	18	49
>4,999 FTE				
Wake TCC	5,639	53	20	38
Guilford TCC	5,906	52	55	100
Fayetteville TCC	8,661	56	32	57
Central Piedmont CC	10,299	71	36	51
System	138,513	1,708	791	46

ACCOUNTABILITY MEASURE C:

Number and Percent of Eligible Programs Accredited or Reaffirmed

Background

In addition to approval by the State Board of Community Colleges, many curriculum programs are eligible for accreditation by outside agencies. For some programs, such as the Associate Degree Nursing program, accreditation by an outside agency is required by DCC in order for the program to be offered. A number of programs, however, do not have mandatory accreditation requirements. Colleges can choose whether or not to accredit these programs.

There are a number of reasons why a college would want to accredit a program that does not carry mandatory accreditation by DCC. In several cases, for a graduate to be a candidate for licensure or certification the program must be accredited by the agency issuing the license or certificate. In other cases, accreditation may raise the status of the program since it documents adherence to a given set of state or national standards. Finally, accreditation can be thought of as a program management tool, like program review, for it provides standards by which to judge the curriculum.

There are also reasons not to seek accreditation. The accreditation process can be costly, with some accreditations costing several thousand dollars. In addition, the college may not have the faculty or staff resources necessary to carry out the accreditation process; there is a time cost involved. Finally, the requirements for accreditation may be beyond the resources of the college. For example, there may be equipment or library requirements that the college simply cannot meet.

Implications

A survey conducted by the Programs Division of the Department of Community Colleges identified 13 technical programs being offered throughout the system which were eligible for voluntary accreditation. During 1991-92 these 13 technical programs totaled 201 offerings throughout the system, 20 percent of which were accredited. This number does not include those programs which have an accreditation requirement but are also eligible for secondary accreditations which are voluntary (for example, a nursing program must be accredited by the NC Board of Nursing but can also be accredited by the National League of Nursing if a school wishes to acquire a secondary accreditation).

Data

VOLUNTARY ACCREDITATION OF CURRICULUMS

PROGRAM	NUMBER OF OFFERINGS	NUMBER ACCREDITED	% ACCREDITED
Architectural Technology	12	3	25
Civil Engin. Technology	8	5	63
Computer Engin. Technology	11	2	18
Electrical Engin. Technology	5	1	20
Electronics Engin. Technology	40	8	20
Industrial Engin. Technology	6	2	33
Manufacturing Engin. Technology	10	2	20
Mechanical Engin. Technology	7	4	57
Basic Law Enforcement	37	7	19
Criminal Justice	37	3	8
Automotive Service Technology	12	1	8
Funeral Service Technology	14	1	7
Paralegal Technology	2	1	50
TOTAL	201	40	20

Source: Program Division, DCC.

Contact: Paul Nagy, Planning and Research, DCC.

Recommendation

Efforts should be made to improve the data on accreditation status of curriculum programs now being offered by the community colleges. In addition, an analysis of the costs and benefits of undergoing voluntary accreditation of curriculum programs should be conducted.

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Published April 1993

North Carolina Department of Community Colleges
675 copies were printed at a cost of \$508.55 or \$0.75 per copy
Robert W. Scott, President, N.C. Community College System

AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

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