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ABSTRACT

The data presented in this report are indicators of the level of success of the North Carolina Community College System (NCCCS) 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, as measured by number of continuing students; progress of literacy students; number of high school equivalency diplomas awarded compared to the number of state dropouts; performance of transfers after two semesters; rate of success on licensure exams; program completion rates; and passing rates for remedial and general education courses; (2) resources, measured by institutional salaries; student/faculty ratio; participation in staff development program; currentness of equipment; library standards; and system funding for full-time equivalent (FTE) students; (3) access, assessed in terms of enrollment of high school dropouts, handicapped, single parents, nontraditional high school diploma earners, and inmates; number served by literacy programs; percentage of students receiving financial aid; and percent of population in service area enrolled; (4) education continuum, examined in terms of number and percent of high school graduates enrolled; enrollment in cooperative agreements with high schools; tech prep student enrollment; and number and percent of University of North Carolina students who attended a community college; (5) workforce development, evidenced by the number of employers and trainees served; number of workplace literacy sites; employer satisfaction; and graduate employment status; (6) community services, measured in terms of courses offered, senior citizen enrollment, and support of community services; and (7) program management and accountability, assessed by an annual program audit, program reviews, and accredited programs. (KP)

1994 CRITICAL SUCCESS FACTORS

FOR THE

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Fifth Annual Report

North Carolina Department of Community Colleges
Planning & Research Section

April 1994

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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, 1994

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.

In 1993 the General Assembly passed a special provision on accountability. The special provision mandated that the State Board of Community Colleges review the critical success factors and measures for the purpose of establishing performance standards for those measures that would indicate colleges' progress in addressing system goals. An accountability task force was established during the summer of 1993 and began the process of reviewing the critical success factors and measures and establishing performance standards. Once approved by the State Board of Community Colleges and the General Assembly, the reporting on these performance standards will be incorporated into future annual critical success reports.

Over the 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.

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

- **Accountability**
- **Development of Strategic Goals**
- **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 are 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, 1993-94

FACTOR I Student Success	A. Number of students returning from previous quarters	B. Progress of literacy students	C. Number of GED's and AHSD'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 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, the General Assembly has directed the State Board of Community Colleges to develop performance standards for colleges on those critical success factors and measures that indicate colleges' performance relative to system goals.

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
B. 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.

Beginning in 1991-92 a new data field was added to the Curriculum Student Progress Information System (CSPIS) to capture student intent. Student intent was classified into six codes to indicate why a student was enrolled at the institution. It was felt that, by knowing student intent, a more accurate retention figure could be calculated.

An examination of the 1992-93 data, however, revealed that student intent data were not useful in calculating the retention rate. When the data were analyzed it was found that 82 percent of the students had an intent code of "6" which is the code for "data unavailable." With only 18 percent of the students being studied having some intent code other than "6" it was felt that any calculations taking this factor into account would be misleading.

Implications

The data indicate that retention rates continue to remain high for the system. The reason for the increasing retention rate over the past five years is not evident. The higher retention rate over the past five years 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
1988-89	66.6
1989-90	67.6
1990-91	74.9
1991-92	79.4
1992-93	78.1

Source: ***Planning and Research Unit, DCC.***

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. More emphasis should be given to collecting student intent data.

FALL CURRICULUM STUDENTS WHO SUBSEQUENTLY ENROLL IN THE WINTER AND\OR SPRING QUARTER OF THE SAME ACADEMIC YEAR, 1992-93

INSTITUTION	FTE	% RE-ENROLL
<1,000 FTE		
Pamlico CC	220	79.2
Montgomery CC	681	74.3
Tri-County CC	713	70.3
Bladen CC	824	77.2
McDowell TCC	853	77.5
Anson CC	953	70.1
Martin CC	989	78.6
1,000-1,999		
Roanoke-Chowan CC	1,010	83.6
Brunswick CC	1,149	79.6
James Sprunt CC	1,162	77.1
Mayland CC	1,223	77.9
Piedmont CC	1,227	76.5
Sampson CC	1,355	84.2
Carteret CC	1,431	76.0
Halifax CC	1,515	76.7
Wilson TCC	1,515	76.5
Mitchell CC	1,530	78.8
Nash CC	1,545	79.4
Haywood CC	1,564	85.1
Southwestern CC	1,577	83.3
Cleveland CC	1,626	73.7
Beaufort Co. CC	1,634	77.4
Blue Ridge CC	1,644	78.0
Stanly CC	1,651	83.2
College of The Albemarle	1,671	78.8
Randolph CC	1,674	79.5
Richmond CC	1,710	77.6
Southeastern CC	1,758	82.2
Isothermal CC	1,767	77.0
Rockingham CC	1,781	84.3
Edgecombe CC	1,870	75.7
Wilkes CC	1,946	80.2
Robeson CC	1,986	72.3
2,000-2,999		
Craven CC	2,173	77.2
Western Piedmont CC	2,254	78.2
Davidson Co. CC	2,337	82.3
Caldwell CC/TI	2,387	77.1
Lenoir CC	2,426	79.9
Surry CC	2,520	78.5
Vance-Granville CC	2,535	75.3
Rowan-Cabarrus CC	2,770	68.1
Wayne CC	2,816	83.0
Alamance CC	2,936	77.4
Cape Fear CC	2,953	78.9
Sandhills CC	2,978	86.6
3,000-4,999		
Catawba Valley CC	3,103	79.8
Johnston CC	3,177	75.1
Coastal Carolina CC	3,238	79.3
Pitt CC	3,253	81.1
Asheville-Buncombe TCC	3,264	81.2
Central Carolina CC	3,387	72.9
Durham TCC	3,441	77.9
Gaston CC	3,550	78.5
Forsyth TCC	4,409	78.2
>4,999 FTE		
Guilford TCC	5,776	77.0
Wake TCC	5,884	77.5
Fayetteville TCC	8,384	80.7
Central Piedmont CC	10,224	77.2
System	137,929	78.1

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 whc 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

In 1992-93 there was an increase in the percent of students who exited a literacy program without completing the level in which they were enrolled. At the same time, however, there was a slight increase in the percent of students who advanced to the next level of literacy and were still enrolled in a literacy program. It is not known, at this time, why the percentage of non-completers who exited increased in 1992-93, however, it should serve as a signal of something to watch over the next few years.

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 1992-93 a total of 60,581 students with an AHSD or a GED enrolled in a curriculum or occupational extension program. With only two 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
1992-93	26	56	10	8

Source: *Annual Literacy Report, DCC.*

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
1992-93	18,710	13,847	9,805	18,219

Source: *Planning and Research Unit, DCC.*

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, 1992-93

INSTITUTION	FTE	EXIT NON-COMPLETER	PROGRESSING SAME LEVEL	EXIT COMPLETER	ADVANCED NEXT LEVEL
<1,000					
Pamlico CC	220	24	63	2	10
Montgomery CC	681	49	36	12	4
Tri-County CC	713	17	67	4	12
Bladen CC	824	0	88	8	4
McDowell TCC	853	33	48	9	18
Anson CC	953	42	44	3	10
Martin CC	989	21	61	4	14
1,000-1,999					
Roanoke-Chowan CC	1,010	24	66	3	7
Brunswick CC	1,149	31	53	14	2
James Sprunt CC	1,162	23	64	6	7
Mayland CC	1,223	17	62	7	22
Piedmont CC	1,227	49	34	9	7
Sampson CC	1,355	30	53	6	12
Carteret CC	1,431	38	39	17	6
Halifax CC	1,515	27	55	16	8
Wilson TCC	1,515	20	70	4	6
Mitchell CC	1,530	9	58	3	31
Nash CC	1,545	45	47	4	4
Haywood CC	1,564	35	51	17	4
Southwestern CC	1,577	34	49	12	5
Cleveland CC	1,626	9	86	2	3
Beaufort Co. CC	1,634	49	30	18	3
Blue Ridge CC	1,644	28	46	18	8
Stanly CC	1,651	26	61	7	5
College of the Albemarle	1,671	42	37	16	4
Randolph CC	1,674	38	47	11	4
Richmond CC	1,710	7	73	15	19
Southeastern CC	1,758	34	47	10	8
Isothermal CC	1,767	18	72	10	8
Rockingham CC	1,781	28	59	9	4
Edgecombe CC	1,870	6	83	9	3
Wilkes CC	1,946	23	64	5	8
Robeson CC	1,986	36	44	16	4
2,000-2,999					
Craven CC	2,173	6	81	6	6
Western Piedmont CC	2,254	30	49	12	8
Davidson Co. CC	2,337	37	42	15	6
Caldwell CC & TI	2,387	36	45	8	12
Lenoir CC	2,426	30	62	2	6
Surry CC	2,520	25	59	8	8
Vance-Granville CC	2,535	16	70	8	6
Rowan-Cabarrus CC	2,770	1	70	7	23
Wayne CC	2,816	19	68	6	6
Alamance CC	2,936	15	72	11	2
Cape Fear CC	2,953	40	46	9	4
Sandhills CC	2,978	39	40	10	11
3,000-4,999					
Catawba Valley CC	3,103	26	54	9	11
Johnston CC	3,177	18	68	12	2
Coastal Carolina CC	3,238	30	44	21	5
Pitt CC	3,253	21	54	8	17
Asheville-Buncombe TCC	3,264	36	41	8	14
Central Carolina CC	3,387	35	49	8	8
Durham TCC	3,441	4	84	4	7
Gaston CC	3,550	21	69	2	7
Forsyth TCC	4,409	38	37	14	11
>4,999					
Guilford TCC	5,776	15	68	12	6
Wake TCC	5,884	24	65	4	7
Fayetteville TCC	8,384	41	45	8	6
Central Piedmont CC	10,224	25	42	5	28
System	137,929	26	56	10	8

NUMBER OF STUDENTS WITH A GED OR AHSD ENROLLED IN A CURRIUCLUM PROGRAM OR IN OCCUPATIONAL EXTENSION, 1992-93

INSTITUTION	FTE	CURRICULUM		OCCUPATIONAL EXT.	
		GED	AHSD	GED	AHSD
<1,000					
Pamlico CC	220	53	3	60	41
Montgomery CC	681	248	54	0	88
Tri-County CC	713	188	96	86	74
Bladen CC	824	90	45	71	92
McDowell TCC	853	256	89	36	156
Anson CC	953	186	82	152	153
Martin CC	989	153	150	53	60
1,000-1,999					
Roanoke-Chowan CC	1,010	150	96	2	101
Brunswick CC	1,149	147	169	48	87
James Sprunt CC	1,162	224	40	77	73
Mayland CC	1,223	0	86	93	160
Piedmont CC	1,227	191	112	0	141
Sampson CC	1,355	177	105	77	84
Carteret CC	1,431	162	140	196	326
Halifax CC	1,515	341	152	286	210
Wilson TCC	1,515	298	194	0	430
Mitchell CC	1,530	282	98	218	238
Nash CC	1,545	328	110	114	163
Haywood CC	1,564	164	95	264	123
Southwestern CC	1,577	319	190	229	203
Cleveland CC	1,626	88	100	146	243
Beaufort Co. CC	1,634	72	36	138	245
Blue Ridge CC	1,644	6	85	178	265
Stanly CC	1,651	278	149	178	417
College of the Albemarle	1,671	28	76	161	13
Randolph CC	1,674	272	61	84	398
Richmond CC	1,710	173	199	123	172
Southeastern CC	1,758	141	120	19	186
Isothermal CC	1,767	1	217	0	177
Rockingham CC	1,781	235	301	74	232
Edgecombe CC	1,870	335	174	0	141
Wilkes CC	1,946	191	91	254	117
Robeson CC	1,986	104	115	52	1,577
2,000-2,999					
Craven CC	2,173	506	201	271	446
Western Piedmont CC	2,254	491	190	180	144
Davidson Co. CC	2,337	272	99	451	197
Caldwell CC & TI	2,387	378	399	401	231
Lenoir CC	2,426	567	261	24	230
Surry CC	2,520	40	302	57	280
Vance-Granville CC	2,535	562	166	6	316
Rowan-Cabarrus CC	2,770	495	478	0	673
Wayne CC	2,816	313	281	99	229
Alamance CC	2,936	702	86	153	165
Cape Fear CC	2,953	194	323	97	577
Sandhills CC	2,978	337	183	0	406
3,000-4,999					
Catawba Valley CC	3,103	572	312	338	566
Johnston CC	3,177	432	127	0	349
Coastal Carolina CC	3,238	532	236	0	505
Pitt CC	3,253	641	225	2	314
Asheville-Buncombe TCC	3,264	701	247	239	435
Central Carolina CC	3,387	533	240	257	444
Durham TCC	3,441	262	892	473	634
Gaston CC	3,550	680	692	473	681
Forsyth TCC	4,409	488	1127	22	867
>4,999					
Guilford TCC	5776	0	901	363	906
Wake TCC	5,884	836	718	737	472
Fayetteville TCC	8,384	736	866	1045	895
Central Piedmont CC	10,224	1,559	465	648	71
System	137,929	18,710	13,847	9,805	18,219

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 the 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 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

From 1988-89 to 1991-92 there was a steady decline in the number of new dropouts added to the dropout pool, while, at the same time, the number of GED/AHSDs awarded increased. 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.

It is not known at present why the number of dropouts increased in 1992-93 or why the number of GED/AHSDs awarded decreased. One year's data is not enough to base any conclusions on, but it does indicate the need to watch for any trends that might be developing in the dropout rate.

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 any given year were awarded to these individuals and thus the impact on the increase in the dropout pool may be overestimated.

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
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
1992-93	17,639	16,512	1,127

Source: GED/AHS Files, DCC.

Contact: Joy Matthews, GED & AHSD, DCC.

Source: Dropout Records, State Department of Public Instruction.

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/AHSDs AWARDED, 1992-93

INSTITUTION	FTE	GED	AHS
<1,000			
Panlico CC	220	33	
Montgomery CC	681	79	
Tri-County CC	713	91	
Bladen CC	824	31	8
McDowell TCC	853	194	
Anson CC	953	91	
Martin CC	989	67	0
1,000-1,999			
Roanoke-Chowan CC	1,010	73	
Brunswick CC	1,149	116	
James Sprunt CC	1,162	114	7
Mayland CC	1,223	261	
Piedmont CC	1,227	185	18
Sampson CC	1,355	84	5
Carteret CC	1,431	157	19
Halifax CC	1,515	181	
Wilson CC	1,515	107	37
Mitchell CC	1,530	242	23
Nash CC	1,545	155	58
Haywood CC	1,564	135	
Southwestern CC	1,577	325	
Cleveland CC	1,626	155	195
Beaufort Co. CC	1,634	67	
Blue Ridge CC	1,644	350	
Stanly CC	1,651	89	86
College of the Albemarle	1,671	285	24
Randolph CC	1,674	306	19
Richmond CC	1,710	510	53
Southeastern CC	1,758	102	78
Isothermal CC	1,767	112	175
Rockingham CC	1,781	85	20
Edgecombe CC	1,870	256	22
Wilkes CC	1,946	91	57
Robeson CC	1,986	48	288
2,000-2,999			
Craven CC	2,173	257	37
Western Piedmont CC	2,254	354	37
Davidson Co. CC	2,337	177	186
Caldwell CC	2,387	178	87
Lenoir CC	2,426	179	14
Surry CC	2,520	199	
Vance-Granville CC	2,535	326	3
Rowan-Cabarrus CC	2,770	241	257
Wayne CC	2,816	54	124
Alamance CC	2,936	353	18
Cape Fear CC	2,953	256	88
Sandhills CC	2,978	396	
3,000-4,999			
Catawba Valley CC	3,103	330	
Johnston CC	3,177	70	152
Coastal Carolina CC	3,238	370	25
Pitt CC	3,253	269	0
Asheville-Buncombe TCC	3,264	574	
Central Carolina CC	3,387	363	135
Durham TCC	3,441	138	177
Gaston CC	3,550	639	54
Forsyth CC	4,409	312	101
>4,999			
Guilford CC	5,776	389	125
Wake CC	5,884	593	53
Fayetteville CC	8,384	409	181
Central Piedmont CC	10,224	481	243
Anson/Stanly Arrangement	--	139	--
System	137,929	13,223	3,289

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 with 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.

The data also show an increase in the number of transfers from community colleges offering a pre-baccalaureate program and a corresponding decrease from community colleges not offering the pre-baccalaureate program. This reflects the impact of some colleges offering the pre-baccalaureate program in 1992-93 that had not offered it in previous years.

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:				
YEAR	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
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
1992-93	3,647	76.0	9.9	5.6	7.9	0.6

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:				
YEAR	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
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
1992-93	375	80.0	6.1	4.5	8.8	0.5

* 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
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
1992-93	3,647	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
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
1992-93	375	2.56	2.67

Source: UNC General Administration.

Contact: Diana Haywood, UNC General Administration

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES, 1992-93

INSTITUTION	NUMBER	PERCENT OF STUDENTS WHOSE STANDING IS:				
		GOOD	PROBATION	SUSPENDED	WITHDREW	GRAD.
<1000						
Pamlico CC*	3	100.0	0.0	0.0	0.0	0.0
Montgomery CC	2	50.0	50.0	0.0	0.0	0.0
Tri-County CC	31	74.2	0.0	19.4	6.5	0.0
Bladen CC*	33	69.7	3.0	6.1	18.2	3.0
McDowell TCC*	7	28.6	14.3	14.3	28.6	14.3
Anson CC*	8	75.0	25.0	0.0	0.0	0.0
Martin CC	18	83.3	5.6	5.6	5.6	0.0
1,000-1,999						
Roanoke-Chowan CC*	13	69.2	15.4	0.0	15.4	0.0
Brunswick CC*	12	83.3	0.0	8.3	8.3	0.0
James Sprunt CC	27	74.1	0.0	14.8	11.1	0.0
Mayland CC*	18	61.1	27.8	11.1	0.0	0.0
Piedmont CC*	4	100.0	0.0	0.0	0.0	0.0
Sampson CC*	39	84.6	2.6	7.7	5.1	0.0
Carteret CC	26	92.3	0.0	3.8	3.8	0.0
Halifax CC	22	81.8	0.0	9.1	9.1	0.0
Wilson TCC*	5	80.0	20.0	0.0	0.0	0.0
Mitchell CC	61	75.4	11.5	3.3	8.2	1.6
Nash CC	27	88.9	3.7	3.7	3.7	0.0
Haywood CC*	21	61.9	0.0	14.3	23.8	0.0
Southwestern CC	49	55.1	0.0	14.3	28.6	2.0
Cleveland CC	21	52.4	4.8	14.3	28.6	0.0
Beaufort Co. CC	32	78.1	3.1	12.5	6.3	0.0
Blue Ridge CC	44	75.0	13.6	6.8	4.5	0.0
Stanly CC	31	90.3	0.0	3.2	6.5	0.0
College of the Albemarle	102	80.4	6.9	8.8	3.9	0.0
Randolph CC*	43	93.0	4.7	0.0	2.3	0.0
Richmond CC	28	64.3	3.6	7.1	25.0	0.0
Southeastern CC	70	71.4	7.1	5.7	15.7	0.0
Isothermal CC	64	75.0	15.6	4.7	4.7	0.0
Rockingham CC	68	85.3	10.3	2.9	1.5	0.0
Edgecombe CC	12	66.7	16.7	8.3	8.3	0.0
Wilkes CC	111	78.4	12.6	3.6	5.4	0.0
Robeson CC*	50	64.0	12.0	4.0	20.0	0.0
2,000-2,999						
Craven CC	68	77.9	2.9	11.8	7.4	0.0
Western Piedmont CC	82	73.2	8.5	8.5	9.8	0.0
Davidson Co. CC	98	77.6	15.3	4.1	3.1	0.0
Caldwell CC	77	77.9	15.6	1.3	5.2	0.0
Lenoir CC	55	76.4	7.3	10.9	5.5	0.0
Surry CC	155	83.2	9.0	1.3	6.5	0.0
Vance-Granville CC	52	65.4	13.5	9.6	11.5	0.0
Rowan-Cabarrus CC	30	50.0	33.3	3.3	13.3	0.0
Wayne CC	75	78.7	9.3	1.3	10.7	0.0
Alamance CC*	54	96.3	0.0	1.9	1.9	0.0
Cape Fear CC	140	73.6	5.0	12.9	8.6	0.0
Sandhills CC	144	67.4	11.8	9.7	6.3	4.9
3,000-4,999						
Catawba Valley CC	75	81.3	8.0	4.0	6.7	0.0
Johnston CC*	43	90.7	2.3	4.7	2.3	0.0
Coastal Carolina CC	148	84.5	3.4	2.0	9.5	0.7
Pitt CC	81	72.8	8.6	13.6	4.9	0.0
Asheville-Buncombe TCC	126	69.0	8.7	5.6	15.9	0.8
Central Carolina CC*	22	86.4	4.5	0.0	9.1	0.0
Durham TCC	123	81.3	6.5	2.4	5.7	4.1
Gaston CC	171	68.4	19.3	4.7	6.4	1.2
Forsyth TCC	131	76.3	11.5	2.3	9.2	0.8
>4,999						
Guilford TCC	212	79.7	11.3	2.8	6.1	0.0
Wake TCC	53	77.4	5.7	5.7	11.3	0.0
Fayetteville TCC	158	85.4	3.8	0.0	10.8	0.0
Central Piedmont CC	547	74.0	14.1	5.3	6.2	0.4
System	3,647	76.0	9.9	5.6	7.9	0.6
System*	375	80.0	6.1	4.5	8.8	0.5

TRANSFERS' FALL AND END OF YEAR GPA, 1992-93

INSTITUTION	TRANSFER#	FALL GPA	SPR. GPA
<1,000			
Pamlico CC*	3	2.66	2.27
Montgomery CC	2	2.08	2.00
Tri-County CC	31	2.44	2.54
Bladen CC*	33	2.55	2.65
McDowell TCC*	7	2.73	2.82
Anson CC*	8	2.56	2.49
Martin CC	18	2.53	2.73
1,000-1,999			
Roanoke-Chowan CC*	13	2.28	2.11
Brunswick CC*	12	2.48	2.46
James Sprunt CC	27	2.48	2.53
Mayland CC*	18	2.45	2.42
Piedmont CC*	4	2.53	2.78
Sampson CC*	39	2.48	2.50
Carteret CC	26	2.77	2.86
Halifax CC	22	2.31	2.34
Wilson TCC*	5	2.00	1.95
Mitchell CC	61	2.73	2.64
Nash CC	27	2.68	2.73
Haywood CC*	21	2.60	2.55
Southwestern CC	49	2.52	2.64
Cleveland CC	21	2.20	2.14
Beaufort Co. CC	32	2.66	2.59
Blue Ridge CC	44	2.60	2.65
Stanly CC	31	2.52	2.80
College of the Albemarle	102	2.87	2.91
Randolph CC*	43	3.00	3.03
Richmond CC	28	2.48	2.54
Southeastern CC	70	2.52	2.59
Isothermal CC	64	2.37	2.42
Rockingham CC	68	2.39	2.45
Edgecombe CC	12	1.75	1.97
Wilkes CC	111	2.64	2.66
Robeson CC*	50	2.13	2.25
2,000-2,999			
Craven CC	68	2.63	2.65
Western Piedmont CC	82	2.43	2.45
Davidson Co. CC	98	2.59	2.59
Caldwell CC	77	2.63	2.63
Lenoir CC	55	2.36	2.33
Surry CC	155	2.74	2.75
Vance-Granville CC	52	1.87	2.10
Rowan-Cabarrus CC	30	2.72	2.38
Wayne CC	75	2.74	2.63
Alamance CC*	54	2.68	2.81
Cape Fear CC	140	2.38	2.45
Sandhills CC	144	2.44	2.48
3,000-4,999			
Catawba Valley CC	75	2.82	2.74
Johnston CC*	43	2.38	2.56
Coastal Carolina CC	148	2.85	2.91
Pitt CC	81	2.26	2.37
Asheville-Buncombe TCC	126	2.73	2.76
Central Carolina CC*	22	2.88	2.81
Durham TCC	123	2.64	2.72
Gaston CC	171	2.55	2.46
Forsyth TCC	131	2.77	2.72
>4,999			
Guilford TCC	212	2.51	2.45
Wake TCC	53	2.67	2.66
Fayetteville TCC	158	3.12	3.01
Central Piedmont CC	547	2.69	2.60
System	3,647	2.61	2.61
System*	375	2.56	2.67

Recommendation

The availability of data differentiating students from technical programs and from pre-baccalaureate programs is being developed and should be available for future CSF reports. 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 13 of the licensing and certification boards were obtained. Data were not available from two licensing boards that had provided data in past years. The NC Department of Human Resources, which is responsible for the Emergency Medical Technican (EMT) licenses, is in the process of changing their computer systems and thus could not supply the data on EMT license exams. The Amercian Occupational Therapy Certification Board Inc. has contacted the Department of Community Colleges with their concern about the amount of staff time they must commit to provide the Department with college data. We will continue to work with them to overcome this obstacle.

The data that were obtained are for first time test takers who took the exam between July 1, 1992 and June 30, 1993. The one exception to this is the insurance exam results which were for January 1, 1993 - December 31, 1993. In past CSF reports the exam results for cosmetology students reflected students taking the test more than once. In 1992-93 the NC State Board of Cosmetology developed a student database which allows them to report first time test takers and their success rate more accurately.

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 have expanded over the years.

Data on the passing rates for 21 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.

Five 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. It is also not known as to what percent of those who fail the exam the first time, retake the exam and are successful. 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 GRAD. PASSING EXAMS	% NON-CC TAKERS PASSING EXAM	
				HOSPITAL DIPLOMA	UNIVERSITY
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
1993	1,474	65	96	97	95

Source: *NC Board of Nursing*

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	63	97
Airframe 1	84	100
Power Plant	57	98
Basic Law Enforcement Trng.	1,718	98
Cosmetology	557	92
Dental Assisting	173	79
Dental Hygiene	120	92
Insurance		
Life, Accident, Health	374	73
Fire & Casualty	440	55
Medicaid/Medicare Supp.	19	84
Medical Records	26	83
Medical Sonography		
Physics	21	67
Abdomen	16	81
OB-GYN	12	67
Echo	1	100
Nursing		
RN	1,474	96
PN	1,044	99
Opticianry	16	56
Physical Therapist Assistant	92	96
Real Estate		
Broker	227	66
Sales	1,288	65
Veterinary Medicine Tech.	29	86

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, 1992-93

NURSING

INSTITUTION	FTE	PRACTICAL NURSING		REGISTERED NURSING	
		#TESTED	%PASS	#TESTED	%PASS
<1,000					
Pamlico CC	220				
Montgomery CC	681	23	96		
Tri-County CC	713	12	92		
Bladen CC	824				
McDowell TCC	853	17	100		
Anson CC	953	17	94		
Martin CC	989				
1,000-1,999					
Roanoke-Chowan CC	1,010	24	100	15	100
Brunswick CC	1,149	19	100		
James Sprunt CC	1,162	20	95	29	83
Mayland CC	1,223	28	100		
Piedmont CC	1,227			22	86
Sampson CC	1,355	20	90	23	100
Carteret CC	1,431	23	91		
Halifax CC	1,515				
Wilson TCC	1,515				
Mitchell CC	1,530			34	91
Nash CC	1,545				
Haywood CC	1,564	15	100		
Southwestern CC	1,577	15	100		
Cleveland CC	1,626	13	100		
Beaufort Co. CC	1,634	15	100	27	100
Blue Ridge CC	1,644			20	100
Stanly CC	1,651	5	100	23	96
College of the Albemarle	1,671	11	100	21	100
Randolph CC	1,674			29	93
Richmond CC	1,710	26	92	17	94
Southeastern CC	1,758	15	100	38	97
Isothermal CC	1,767	22	100		
Rockingham CC	1,781	21	90	30	93
Edgecombe CC	1,870				
Wilkes CC	1,946			18	100
Robeson CC	1,986	39	100	24	96
2,000-2,999					
Craven CC	2,173	20	85	32	97
Western Piedmont CC	2,254			46	91
Davidson Co. CC	2,337			43	93
Caldwell CC & TI	2,387	25	100	37	100
Lenoir CC	2,426	14	100	18	100
Surry CC	2,520	21	100	39	95
Vance-Granville CC	2,535	6	100	36	94
Rowan-Cabarrus CC	2,770	28	100	37	89
Wayne CC	2,816			26	100
Alamance CC	2,936	29	100	26	85
Cape Fear CC	2,953	12	100	29	100
Sandhills CC	2,978	19	100	42	100
3,000-4,999					
Catawba Valley CC	3,103			50	92
Johnston CC	3,177	21	100	15	100
Coastal Carolina CC	3,238	12	100	19	100
Pitt CC	3,253	53	100	60	97
Asheville-Buncombe TCC	3,264	39	100	36	97
Central Carolina CC	3,387	39	100	20	95
Durham TCC	3,441	32	97	24	96
Gaston CC	3,550	17	100	39	100
Forsyth TCC	4,409	52	98	99	95
>4,999					
Guilford TCC	5,776	53	100	44	98
Wake TCC	5,884			80	99
Fayetteville TCC	8,384	16	94	49	96
Central Piedmont CC	10,224	12	100	55	100
NEWH Consortium		124	99	65	98
Clyde Consortium				38	100
System	137,929	1,044	99	1,474	96

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
BASIC LAW ENFORCEMENT TRAINING

INSTITUTION	FTE	BLET	
		#TESTED	%PASSED
<1,000			
Pamlico CC	220		
Montgomery CC	681	39	95
Tri-County CC	713		
Bladen CC	824	22	100
McDowell TCC	853		
Anson CC	953		
Martin CC	989		
1,000-1,999			
Roanoke-Chowan CC	1,010		
Brunswick CC	1,149	25	96
James Sprunt CC	1,162	23	100
Mayland CC	1,223	38	95
Piedmont CC	1,227		
Sampson CC	1,355		
Carteret CC	1,431	51	98
Halifax CC	1,515	19	84
Wilson TCC	1,515	50	100
Mitchell CC	1,530	14	100
Nash CC	1,545		
Haywood CC	1,564		
Southwestern CC	1,577	30	100
Cleveland CC	1,626	21	100
Beaufort Co. CC	1,634	23	87
Blue Ridge CC	1,644		
Stanly CC	1,651	43	98
College of the Albemarle	1,671	18	100
Randolph CC	1,674	37	100
Richmond CC	1,710		
Southeastern CC	1,758	20	100
Isothermal CC	1,767	40	95
Rockingham CC	1,781		
Edgecombe CC	1,870		
Wilkes CC	1,946	24	96
Robeson CC	1,986	37	100
2,000-2,999			
Craven CC	2,173	47	100
Western Piedmont CC	2,254	43	100
Davidson Co. CC	2,337	91	100
Caldwell CC & TI	2,387		
Lenoir CC	2,426		
Surry CC	2,520	21	100
Vance-Granville CC	2,535	49	98
Rowan-Cabarrus CC	2,770	67	97
Wayne CC	2,816	54	100
Alamance CC	2,936	13	100
Cape Fear CC	2,953	67	100
Sandhills CC	2,978		
3,000-4,999			
Catawba Valley CC	3,103	49	100
Johnston CC	3,177	50	100
Coastal Carolina CC	3,238	48	100
Pitt CC	3,253	83	95
Asheville-Buncombe TCC	3,264	92	100
Central Carolina CC	3,387	23	91
Durham TCC	3,441		
Gaston CC	3,550	112	100
Forsyth TCC	4,409	42	98
>4,999			
Guilford TCC	5,776	32	97
Wake TCC	5,884	53	100
Fayetteville TCC	8,384	108	100
Central Piedmont CC	10,224		
System	137,929	1,718	98

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINIATIONS, 1992-93
REAL ESTATE

INSTITUTION	FTE	SALES		BROKER	
		# TESTED	% PASS	# TESTED	% PASS
<1,000					
Pamlico CC	220				
Montgomery CC	681				
Tri-County CC	713	12	92		
Bladen CC	824	2	100		
McDowell TCC	853	10	50	1	100
Anson CC	953	10	20		
Martin CC	989	1	100		
1,000-1,999					
Roanoke-Chowan CC	1,010	9	11		
Brunswick CC	1,149	32	63	14	71
James Sprunt CC	1,162	1	0		
Mayland CC	1,223				
Piedmont CC	1,227				
Sampson CC	1,355	1	100		
Carteret CC	1,431	3	33		
Halifax CC	1,515	19	74	1	100
Wilson TCC	1,515	9	89		
Mitchell CC	1,530	10	60		
Nash CC	1,545	30	53	3	67
Haywood CC	1,564	5	80		
Southwestern CC	1,577	33	82		
Cleveland CC	1,626	10	50		
Beaufort Co. CC	1,634	4	50		
Blue Ridge CC	1,644	27	74		
Stanly CC	1,651	1	0		
College of the Albemarle	1,671	22	73	12	67
Randolph CC	1,674	13	85	3	100
Richmond CC	1,710	5	80		
Southeastern CC	1,758	4	25	2	50
Isothermal CC	1,767	21	57		
Rockingham CC	1,781	5	80		
Edgecombe CC	1,870				
Wilkes CC	1,946	19	58		
Robeson CC	1,986	2	50	2	50
2,000-2,999					
Craven CC	2,173	3	100	1	100
Western Piedmont CC	2,254	13	62	2	0
Davidson Co. CC	2,337	27	59	8	75
Caldwell CC & TI	2,387	31	71	15	60
Lenoir CC	2,426	8	38		
Surry CC	2,520	21	48	2	100
Vance-Granville CC	2,535	4	75		
Rowan-Cabarrus CC	2,770	26	65	2	100
Wayne CC	2,816	3	67	4	50
Alamance CC	2,936	31	74	13	92
Cape Fear CC	2,953	44	75	9	78
Sandhills CC	2,978	12	92	7	57
3,000-4,999					
Catawba Valley CC	3,103	31	65	1	0
Johnston CC	3,177	16	88		
Coastal Carolina CC	3,238	52	85	1	100
Pitt CC	3,253	49	53	2	50
Asheville-Buncombe TCC	3,264	15	80	7	86
Central Carolina CC	3,387	33	70	2	100
Durham TCC	3,441	58	59	23	43
Gaston CC	3,550	28	46	1	0
Forsyth TCC	4,409	109	55	2	100
>4,999					
Guilford TCC	5,776	65	68	5	60
Wake TCC	5,884	74	72	18	89
Fayetteville TCC	8,384	41	54	18	56
Central Piedmont CC	10,224	174	64	46	57
System	137,929	1,288	65	227	66

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
INSURANCE

INSTITUTION	FTE	LIFE, ACCIDENT & HEALTH		FIRE & CASUALTY		MEDICAID/MEDICARE SUPPLEMENT	
		# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
<1000							
Pamlico CC	220						
Montgomery CC	681						
Tri-county CC	713	2	100	5	40		
Bladen CC	824						
McDowell TCC	853						
Anson CC	953						
Martin CC	989	1	100	1	0		
1,000-1,999							
Roanoke-Chowan CC	1,010						
Brunswick CC	1,149			4	25		
James Sprunt CC	1,162						
Mayland CC	1,223						
Piedmont CC	1,227						
Sampson CC	1,355						
Carteret CC	1,431	6	83	7	86		
Halifax CC	1,515	4	75	4	25		
Wilson TCC	1,515						
Mitchell CC	1,530						
Nash CC	1,545	32	75	23	52		
Haywood CC	1,564						
Southwestern CC	1,577	1	100				
Cleveland CC	1,626						
Beaufort Co. CC	1,634			1	100		
Blue Ridge CC	1,644						
Stanly CC	1,651	1	0				
College of the Albemarle	1,671	12	83	12	58	2	50
Randolph CC	1,674	14	79	7	43		
Richmond CC	1,710	1	100	6	33		
Southeastern CC	1,758	1	0	1	100		
Isothermal CC	1,767	4	25	8	50		
Rockingham CC	1,781			3	67		
Edgecombe CC	1,870	10	60	8	25		
Wilkes CC	1,946	7	71	7	100		
Robeson CC	1,986	4	25	2	100		
2,000-2,999							
Craven CC	2,173	1	0				
Western Piedmont CC	2,254	11	55	6	0		
Davidson Co. CC	2,337	11	64	35	69	4	100
Caldwell CC & TI	2,387	5	60	21	67		
Lenoir CC	2,426	41	68	38	68	2	100
Surry CC	2,520	1	100	3	67		
Vance-Granville CC	2,535						
Rowan-Cabarrus CC	2,770	1	100	9	44		
Wayne CC	2,816	9	67	4	50		
Alamance CC	2,936	8	75	13	38		
Cape Fear CC	2,953	11	91	2	50	1	100
Sandhills CC	2,978			4	100	1	100
3,000-4,999							
Catawba Valley CC	3,103	10	90	7	57		
Johnston CC	3,177	1	0	2	100	1	100
Coastal Carolina CC	3,238	18	78	9	33	2	100
Pitt CC	3,253						
Asheville-Buncombe TCC	3,264	14	57	9	78	2	100
Central Carolina CC	3,387			3	0		
Durham TCC	3,441	3	67	4	75		
Gaston College	3,550						
Forsyth TCC	4,409	9	100	30	57	2	0
>4,999							
Guilford TCC	5,776	9	89	12	42		
Wake TCC	5,884	9	56	13	54		
Fayetteville TCC	8,384	33	76	42	69	2	100
Central Piedmont CC	10,224	69	80	75	65		
System	137,929	374	73	440	55	19	84

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
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									
Pamlico CC	220								
Montgomery CC	681								
Tri-County CC	713	12	100						
Bladen CC	824	7	100						
McDowell TCC	853	17	88						
Anson CC	953								
Martin CC	989	15	100						
1,000-1,999									
Roanoke-Chowan CC	1,010	8	75						
Brunswick CC	1,149	27	85						
James Sprunt CC	1,162	5	80						
Mayland CC	1,223	7	100						
Piedmont CC	1,227	11	91						
Sampson CC	1,355	13	92						
Carteret CC	1,431	6	67						
Halifax CC	1,515								
Wilson TCC	1,515								
Mitchell CC	1,530								
Nash CC	1,545	8	88						
Haywood CC	1,564	25	100						
Southwestern CC	1,577	29	93						
Cleveland CC	1,626								
Beaufort Co. CC	1,634	15	87						
Blue Ridge CC	1,644	10	100						
Stanly CC	1,651	22	100						
College of the Albemarle	1,671	9	100						
Randolph CC	1,674								
Richmond CC	1,710								
Southeastern CC	1,758	14	100						
Isothermal CC	1,767	24	88						
Rockingham CC	1,781	17	100						
Edgecombe CC	1,870	37	86						
Wilkes CC	1,946								
Robeson CC	1,986	21	95						
2,000-2,999									
Craven CC	2,173	53	96						
Western Piedmont CC	2,254								
Davidson Co. CC	2,337					6	67		
Caldwell CC & TI	2,387	20	100						
Lenoir CC	2,426	12	100						
Surry CC	2,520								
Vance-Granville CC	2,535	43	70						
Rowan-Cabarrus CC	2,770								
Wayne CC	2,816								
Alamance CC	2,936								
Cape Fear CC	2,953								
Sandhills CC	2,978	19	100						
3,000-4,999									
Catawba Valley CC	3,103								
Johnston CC	3,177	24	92						
Coastal Carolina CC	3,238								
Pitt CC	3,253					10	100		
Asheville-Buncombe TCC	3,264								
Central Carolina CC	3,387	11	73					29	86
Durham TCC	3,441			16	88				
Gaston CC	3,550								
>4,999									
Forsyth TCC	4,409								
Guilford TCC	5,776	16	100						
Wake TCC	5,884								
Fayetteville TCC	8,384								
Central Piedmont CC	10,224					13	77		
System	137,929	557	92	16	88	29	83	29	86

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
DENTAL ASSISTING, DENTAL HYGIENE, PHYSICAL THERAPY ASSISTANT

INSTITUTION	FTE	DENTAL ASSISTING		DENTAL HYGIENE		PHYSICAL THERAPY	
		#TEST	%PASS	#TEST	% PASS	#TEST	% PASS
<1,000							
Pamlico CC	220						
Montgomery CC	681						
Tri-County CC	713						
Bladen CC	824						
McDowell TCC	853						
Anson CC	953						
Martin CC	989					14	79
1,000-1,999							
Roanoke-Chowan CC	1,010						
Brunswick CC	1,149						
James Sprunt CC	1,162						
Mayland CC	1,223						
Piedmont CC	1,227						
Sampson CC	1,355						
Carteret CC	1,431						
Halifax CC	1,515						
Wilson TCC	1,515						
Mitchell CC	1,530						
Nash CC	1,545					11	100
Haywood CC	1,564						
Southwestern CC	1,577					9	100
Cleveland CC	1,626						
Beaufort Co. CC	1,634						
Blue Ridge CC	1,644						
Stanly CC	1,651					19	95
College of the Albemarle	1,671						
Randolph CC	1,674						
Richmond CC	1,710						
Southeastern CC	1,758						
Isothermal CC	1,767						
Rockingham CC	1,781						
Edgecombe CC	1,870						
Wilkes CC	1,946	9	100				
Robeson CC	1,986						
2,000-2,999							
Craven CC	2,173						
Western Piedmont CC	2,254	8	38				
Davidson Co. CC	2,337						
Caldwell CC & TI	2,387					13	100
Lenoir CC	2,426						
Surry CC	2,520						
Vance-Granville CC	2,535						
Rowan-Cabarrus CC	2,770	12	67				
Wayne CC	2,816	21	86	19	89		
Alamance CC	2,936	14	64				
Cape Fear CC	2,953						
Sandhills CC	2,978						
3,000-4,999							
Catawba Valley CC	3,103						
Johnston CC	3,177						
Coastal Carolina CC	3,238	20	100	11	100		
Pitt CC	3,253						
Asheville-Buncombe TCC	3,264	12	83	14	93		
Central Carolina CC	3,387						
Durham TCC	3,441						
Gaston CC	3,550						
>4,999							
Forsyth TCC	4,409						
Guilford TCC	5,776	26	77	27	100		
Wake TCC	5,884	14	93				
Fayetteville TCC	8,384	16	81	16	81	6	100
Central Piedmont CC	10,224	21	62	33	88	20	100
System	137,929	173	79	120	92	92	96

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
MEDICAL SONOGRAPHY

INSTITUTION	FTE	PHYSICS		ABDOMEN		OB-GYN		ECHO	
		#TEST	%PASS	#TEST	%PASS	#TEST	%PASS	#TEST	%PASS
<1,000									
Pamlico CC	220								
Montgomery CC	681								
Tri-County CC	713								
Bladen CC	824								
McDowell TCC	853								
Anson CC	953								
Martin CC	989								
1,000-1,999									
Roanoke-Chowan CC	1,010								
Brunswick CC	1,149								
James Sprunt CC	1,162								
Mayland CC	1,223								
Piedmont CC	1,227								
Sampson CC	1,355								
Carteret CC	1,431								
Halifax CC	1,515								
Wilson TCC	1,515								
Mitchell CC	1,530								
Nash CC	1,545								
Haywood CC	1,564								
Southwestern CC	1,577								
Cleveland CC	1,626								
Beaufort Co. CC	1,634								
Blue Ridge CC	1,644								
Stanly CC	1,651								
College of The Albemarle	1,671								
Randolph CC	1,674								
Richmond CC	1,710								
Southeastern CC	1,758								
Isothermal CC	1,767								
Rockingham CC	1,781								
Edgecombe CC	1,870								
Wilkes CC	1,946								
Robeson CC	1,986								
2,000-2,999									
Craven CC	2,173								
Western Piedmont CC	2,254								
Davidson Co. CC	2,337								
Caldwell CC & TI	2,387	8	63	8	63	5	60		
Lenoir CC	2,426								
Surry CC	2,520								
Vance-Granville CC	2,535								
Rowan-Cabarrus CC	2,770								
Wayne CC	2,816								
Alamance CC	2,936								
Cape Fear CC	2,953								
Sandhills CC	2,978								
3,000-4,999									
Catawba Valley CC	3,103								
Johnston CC	3,177								
Coastal Carolina CC	3,238								
Pitt CC	3,253	8	75	3	100	7	71	1	100
Asheville-Buncombe TCC	3,264								
Central Carolina CC	3,387								
Durham TCC	3,441								
Gaston CC	3,550								
>4,999									
Forsyth TCC	4,409	5	60	5	100				
Guilford TCC	5,776								
Wake TCC	5,884								
Fayetteville TCC	8,384								
Central Piedmont CC	10,224								
System	137,929	21	67	16	81	12	67	1	100

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS, 1992-93
AVIATION

INSTITUTION	FTE	GENERAL		AIRFRAME		POWER PLANT	
		#TEST	%PASS	#TEST	%PASS	#TEST	%PASS
<1,000							
Pamlico CC	220						
Montgomery CC	681						
Tri-County CC	713						
Bladen CC	824						
McDowell TCC	853						
Anson CC	953						
Martin CC	989						
1,000-1999							
Roanoke-Chowan CC	1,010						
Brunswick CC	1,149						
James Sprunt CC	1,162						
Mayland CC	1,223						
Piedmont CC	1,227						
Sampson CC	1,355						
Carteret CC	1,431						
Halifax CC	1,515						
Wilson TCC	1,515						
Mitchell CC	1,530						
Nash CC	1,545						
Haywood CC	1,564						
Southwestern CC	1,577						
Cleveland CC	1,626						
Beaufort Co. CC	1,634						
Blue Ridge CC	1,644						
Stanly CC	1,651						
College of The Albemarle	1,671						
Randolph CC	1,674						
Richmond CC	1,710						
Southeastern CC	1,758						
Isothermal CC	1,767						
Rockingham CC	1,781						
Edgecombe CC	1,870						
Wilkes CC	1,946						
Robeson CC	1,986						
2,000-2,999							
Craven CC	2,173						
Western Piedmont CC	2,254						
Davidson Co. CC	2,337						
Caldwell CC & TI	2,387						
Lenoir CC	2,426						
Surry CC	2,520						
Vance-Granville CC	2,535						
Rowan-Cabarrus CC	2,770						
Wayne CC	2,816	21	90	20	100	21	100
Alamance CC	2,936						
Cape Fear CC	2,953						
Sandhills CC	2,978						
3,000-4,999							
Catawba Valley CC	3,103						
Johnston CC	3,177						
Coastal Carolina CC	3,238						
Pitt CC	3,253						
Asheville-Buncombe TCC	3,264						
Central Carolina CC	3,387						
Durham TCC	3,441						
Gaston CC	3,550						
>4,999							
Forsyth TCC	4,409						
Guilford TCC	5,776	42	100	61	100	36	97
Wake TCC	5,884						
Fayetteville TCC	8,384						
Central Piedmont CC	10,224						
System	137,929	63	97	84	100	57	98

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.

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 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.

In 1992-93, salary data on administrative positions were available from the College and University Personnel Association (CUPA). The data are based on two-year institutions from across the nation and represent 316 reporting institutions. The median salary for each position is reported.

The Commission on the Future recommended that the North Carolina Community College System raise 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.

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 college 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 North Carolina State Appropriations Bills for 1993-95 includes a special provision in Section 115 entitled "Community College Faculty Salaries." This special provision recognizes that as a system the average full-time faculty salary is above the appropriated unit value ($33,035 versus $32,796), but also recognizes that a significant number (of the colleges in the system) have average full-time faculty salaries below the per unit value. Consequently, the special provision requires that "beginning with the 1993-94 fiscal year, each community college shall pay its full-time curriculum faculty an average salary that is the amount appropriated by the General Assembly for the curriculum unit value in the System's funding formula." Additionally, the State Board of Community Colleges may grant colleges an exemption to this requirement if it finds "sound educational reasons for such an exemption." The State Board of Community Colleges is also required to report, each year by May 1, to the Joint Legislative Commission on Governmental Operations on any exemptions granted under the special provision , including the reasons for the exemptions. In the 1993-94 academic year half (29 out of 58) of the colleges in the system did not meet this full-time curriculum faculty salary requirement.

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 MEDIAN ADMINISTRATIVE SALARIES COMPARED WITH NATIONAL MEDIANS

EMPLOYEE CATEGORY	CUPA MEDIAN SALARY 1992-93	NC MEDIAN SALARY 1992-93
Executive		
President	$84,000	$85,116
Executive Vice President	71,598	65,382
Academic		
Chief Instructional Officer	$63,874	$53,268
Inst. Research/Planning	46,957	34,896
Administrator-Vocational	53,808	45,798
Administrator-LRC	45,489	40,584
Institutional Research	36,136	31,758
Administrative		
Chief Business Officer	$60,924	$51,264
Admin.-Accounting	44,335	38,160
Supervising-Accounting	36,189	31,932
Mgmt/Plant Operations	43,116	28,980
Admin.-Computer Center	48,184	39,954
Computer Systems Admin.	46,691	30,978
Personnel Officer	47,800	28,176
Purchasing	33,935	28,692
Printing	28,088	18,864
Accounting-low	24,759	22,542
Accounting-high	31,570	21,966
Comp. Programmer-low	28,547	22,416
Comp. Programmer-high	32,846	22,800
External Affairs		
Inst. Development Officer	$38,448	$31,320
Public Information	41,786	29,172
Student Services		
Chief Student Services Officer	$57,510	$48,204
Admin.-Student Services	52,709	39,852
Financial Aid Officer	38,786	29,850
Registrar/Admissions	44,878	30,192

Source: CUPA Administrative Compensation Survey, 1992-93.

Contact: Bob Vanderheyden, Director of Research, DCC.

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
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
1992-93	$26,461	$32,302	81.9	14th

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

Source: SREB Fact Book On Higher Education

Contact: Joe Marks, SREB.

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. An improved data measure using the CUPA report is currently being investigated and will possibly be implemented for next years report. Additionally, 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 in the future. 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 past. 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.

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.

Beginning in 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

The data indicate that colleges are making use of Tier A money. It is still not possible, however, 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
1992-93	93.88

Source: Professional Competencies Program Final Report.

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, 1992-93

INSTITUTION	FTE	Percent of Funds Spent			
		1989-90	1990-91	1991-92	1992-93
<1,000					
Pamlico CC	220	95	100	100	98
Montgomery CC	681	80	56	53	91
Tri-County CC	713	98	73	74	100
Bladen CC	824	100	88	77	93
McDowell TCC	853	99	100	83	100
Anson CC	953	60	53	64	74
Martin CC	989	100	100	99	94
1,000-1,999					
Roanoke-Chowan CC	1,010	75	81	100	100
Brunswick CC	1,149	89	100	90	91
James Sprunt CC	1,162	100	84	99	96
Mayland CC	1,223	100	47	96	100
Piedmont CC	1,227	79	91	87	94
Sampson CC	1,355	81	96	100	89
Carteret CC	1,431	100	85	99	100
Halifax CC	1,515	92	83	97	73
Wilson TCC	1,515	90	98	68	100
Mitchell CC	1,530	75	95	100	100
Nash CC	1,545	100	86	100	99
Haywood CC	1,564	83	100	99	71
Southwestern CC	1,577	92	78	100	98
Cleveland CC	1,626	72	67	100	100
Beaufort Co. CC	1,634	100	100	98	99
Blue Ridge CC	1,644	100	82	100	100
Stanly CC	1,651	97	88	100	99
College of The Albemarle	1,671	99	52	100	100
Randolph CC	1,674	99	60	100	100
Richmond CC	1,710	96	100	75	67
Southeastern CC	1,758	76	100	87	86
Isothermal CC	1,767	74	69	98	95
Rockingham CC	1,781	94	54	96	93
Edgecombe CC	1,870	97	100	87	80
Wilkes CC	1,946	98	91	100	99
Robeson CC	1,986	97	99	97	100
2,000-2,999					
Craven CC	2,173	99	66	99	99
Western Piedmont CC	2,254	78	66	96	95
Davidson Co. CC	2,337	85	100	72	98
Caldwell CC & TI	2,387	98	100	100	100
Lenoir CC	2,426	98	99	100	100
Surry CC	2,520	95	78	97	59
Vance-Granville CC	2,535	100	100	100	100
Rowan-Cabarrus CC	2,770	85	77	99	94
Wayne CC	2,816	100	94	100	100
Alamance CC	2,936	100	100	100	89
Cape Fear CC	2,953	100	85	89	99
Sandhills CC	2,978	100	69	100	100
3,000-4,999					
Catawba Valley CC	3,103	98	91	90	98
Johnston CC	3,177	74	82	94	88
Coastal Carolina CC	3,238	90	93	100	93
Pitt CC	3,253	100	50	84	91
Asheville-Buncombe TCC	3,264	87	56	100	100
Central Carolina CC	3,387	91	90	89	92
Durham TCC	3,441	69	100	90	100
Gaston College	3,550	100	67	100	100
Forsyth TCC	4,409	97	77	100	100
>4,999					
Guilford TCC	5,776	100	100	100	94
Wake TCC	5,884	100	100	100	100
Fayetteville TCC	8,384	89	40	NO FUNDING	77
Central Piedmont CC	10,224	100	94	100	100
System	137,929	93	83	95	94

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, 76 percent of all equipment currently in use in the system is more than five years old, and 41 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
1992-93	24	35	41

Source: *Equipment Database, DCC.*

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 1992-93 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.

In 1992-93 the General Assembly doubled the appropriations for libraries at community colleges. The impact of this additional funding cannot be expected to affect the number of colleges meeting the ALA standards in 1992-93. However, this measure should be monitored carefully in the future to determine improvements in the number of colleges that do meet the ALA standards.

Data

LEARNING RESOURCE CENTERS:
COMPLIANCE WITH ACRL STANDARDS

MEASURE	BELOW STANDARD		MINIMUM LEVEL		EXCELLENT LEVEL	
	#	%	#	%	#	%
# of Book Titles	42	72	15	26	1	2
Serial Subscriptions	41	71	17	29	0	0
Expenditure per FTE Minus Salaries	57	98	1	2	0	0
Library Staff	51	88	7	12	0	0
Square Footage	57	98	1	2	0	0

Source: ***Planning and Research Unit, DCC***

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 average cost/FTE in 1991-92 is probably reflective of measures taken by the state in trying to balance the budget in a very difficult year. In 1991-92, the June pay date for many state workers was moved to July, thus making the funds come from the next fiscal year. As a result, 1991-92 for many state workers had an 11-month pay period rather than a 12-month pay period. This explanation is supported further when it is noted that average cost/FTE increased significantly in 1992-93 over 1991-92.

Data

AVERAGE COST PER FTE FOR THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

YEAR	AVERAGE COST/FTE
1988-89	$2,919.07
1989-90	$3,073.15
1990-91	$3,144.02
1991-92	$2,900.96
1992-93	$3,300.47

Source: *Annual Financial Report.*

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.

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 apply only to the literacy programs and programs funded by the federal Vocational Education Act. They do not include all community college students and, therefore, are 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.

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	1987-88	96,625
	1988-89	104,785
	1989-92	(data not avail.)
	1992-93	115,127
HANDICAPPED	1988-89	7,915
	1989-90	14,487
	1990-91	23,035
	1991-92	19,149
	1992-93	12,232
MENTALLY RETARDED ADULTS	1988-89	7,805
	1989-90	8,391
	1990-91	8,147
	1991-92	9,336
	1992-93	6,394
PUBLIC ASSISTANCE RECIPIENTS	1988-89	11,324
	1989-90	14,825
	1990-91	8,081
	1991-92	11,324
	1992-93	11,759
HOMELESS	1990-91	1,728
	1991-92	2,250
	1992-93	2,982
INMATES	1988-89	10,130
	1989-90	10,048
	1990-91	8,093
	1991-92	11,426
	1992-93	12,585

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.***

Contact: ***Terry Shelwood, Student Development Services, DCC.***

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

DISABLED	1988-89	6,553
	1989-90	9,242
	1990-91	6,730
	1991-92	4,236
	1992-93	4,306
DISADVANTAGED	1988-89	43,293
	1989-90	59,876
	1990-91	48,772
	1991-92	32,745
	1992-93	39,710
LIMITED ENGLISH PROFICIENCY	1988-89	3,410
	1989-90	3,674
	1990-91	2,499
	1991-92	876
	1992-93	1,821
CORRECTIONS	1988-89	1,267
	1989-90	1,524
	1990-91	2,282
	1991-92	2,714
	1992-93	3,681

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

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 1,416,966 adult North Carolinians, aged 16 or over, who have completed less than 12 grades of schooling (for those individuals 16 to 19 there is the additional requirement that they are not enrolled in school). 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 1992-93. 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 1992-93 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 5.6 percent to 8.9 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 23,000 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.
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	8.5
1991-92	77,005	20,955	29,258	8,137	125,660	8.8
1992-93	79,358	20,481	29,461	7,989	126,267	8.9

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.***

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, 1992-93

INSTITUTION	FTE	ABE	AHS	CED	ESL	GED	TOTAL	1990 CENSUS %POP
<1,000								
Panlico CC	220	92	0	58	69	67	286	10.0
Montgomery CC	681	276	0	26	105	265	672	9.03
Tri-County CC	713	278	0	42	6	52	378	3.72
Bladen CC	824	200	31	28	34	103	396	4.58
McDowell TCC	853	526	0	195	140	214	1,075	9.94
Anson CC	953	1,232	0	37	62	151	1,482	9.42
Martin CC	989	746	77	65	51	145	1,084	10.39
1,000-1,999								
Roanoke-Chowan CC	1,010	566	33	52	3	211	865	6.72
Brunswick CC	1,149	163	0	85	29	381	658	5.68
James Sprunt CC	1,162	507	15	61	395	363	1,341	10.96
Mayland CC	1,223	875	0	94	229	244	1,442	10.88
Piedmont CC	1,227	934	288	62	62	181	1,527	10.16
Sampson CC	1,355	698	46	146	100	135	1,125	8.84
Carteret CC	1,431	277	143	101	62	386	969	10.10
Halifax CC	1,515	1,110	0	38	3	162	1,313	5.50
Wilson TCC	1,515	1,177	86	101	18	266	1,648	9.56
Mitchell CC	1,530	1,324	128	95	151	87	1,785	7.76
Nash CC	1,545	1,449	184	45	476	217	2,371	12.40
Haywood CC	1,564	280	2	117	93	338	830	7.24
Southwestern CC	1,577	872	0	69	17	121	1,079	7.16
Cleveland CC	1,626	412	1,014	80	39	77	1,622	7.34
Beaufort Co. CC	1,634	562	0	138	192	237	1,129	6.81
Blue Ridge CC	1,644	491	0	162	119	763	1,535	8.37
Stanly CC	1,651	1,339	611	43	100	235	2,328	10.06
Coll. of the Albemarle	1,671	930	71	72	91	480	1,644	6.95
Randolph CC	1,674	561	285	80	201	644	1,771	5.95
Richmond CC	1,710	2,145	258	150	41	741	3,335	15.45
Southeastern CC	1,758	774	348	95	74	115	1,406	10.05
Isothermal CC	1,767	437	925	150	22	264	1,798	8.77
Rockingham CC	1,781	1,046	24	56	67	394	1,587	6.21
Edgecombe CC	1,870	1,081	203	98	68	1159	2,609	16.1
Wilkes CC	1,946	932	257	182	115	70	1,556	5.03
Robeson CC	1,986	406	1,367	71	100	232	2,176	7.30
2,000-2,999								
Craven CC	2,173	265	96	129	76	749	1,315	9.83
Western Piedmont CC	2,254	843	169	391	167	1,031	2,601	11.45
Davidson Co. CC	2,337	1,084	748	83	143	370	2,428	6.13
Caldwell CC & TI	2,387	1,643	620	107	23	364	2,757	9.58
Lenoir CC	2,426	1,824	145	337	264	256	2,826	12.65
Surry CC	2,520	547	0	140	253	900	1,840	6.50
Vance-Granville CC	2,535	1,310	42	154	77	974	2,557	7.26
Rowan-Cabarrus CC	2,770	1,364	497	228	138	177	2,404	4.72
Wayne CC	2,816	1,068	734	106	30	249	2,187	10.46
Alamance CC	2,936	1,116	393	225	168	951	2,853	11.29
Cape Fear CC	2,953	620	504	53	321	180	1,678	6.36
Sandhills CC	2,978	1,305	0	106	241	495	2,147	11.85
3,000-4,999								
Catawba Valley CC	3,103	915	3	117	395	976	2,406	6.48
Johnston CC	3,177	571	694	124	207	108	1,704	8.19
Coastal Carolina CC	3,238	1,616	260	63	235	917	3,091	20.55
Pitt CC	3,253	1,245	113	39	256	538	2,191	11.06
Asheville-Buncombe TCC	3,264	1,096	1	213	161	1,052	2,523	6.49
Central Carolina CC	3,387	1,225	796	302	962	1,015	4,300	12.82
Durham TCC	3,441	1,194	1,008	243	1,312	125	3,882	10.31
Gaston CC	3,550	3,070	312	112	86	784	4,364	6.91
Forsyth TCC	4,409	1,251	515	259	393	1,002	3,420	6.40
>4,999								
Guilford TCC	5,776	1,993	738	393	579	772	4,475	7.40
Wake TCC	5,884	3,864	422	231	1,703	1,551	7,771	17.05
Fayetteville TCC	8,384	2,788	1,109	235	915	347	5,394	15.67
Central Piedmont CC	10,224	2,286	1,871	361	1,227	1,010	6,755	9.67
System	137,929	60,801	18,186	7,645	13,666	26,393	126,691	9.20

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 1992-93 curriculum and extension data tapes was conducted. The analysis resulted in data on the number of students who enrolled in a community college during 1992-93 and who had left high school without completing between January 1, 1992 and June 30, 1993.

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 1/1/92 to 6/30/93. 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.

The large increase in the reported number of high school dropouts enrolled in a literacy program during 1992-93 is probably due, in part, to improved data collection and reporting by the colleges.

Data

NUMBER OF HIGH SCHOOL DROPOUTS WHO ENROLLED IN A LITERACY PROGRAM

YEAR DROPPED OUT OF HIGH SCHOOL	YEAR ENROLLED IN A COMMUNITY COLLEGE	NUMBER ENROLLED
1/1/91 - 6/30/92	1991-92	6,306
1/1/92 - 6/30/93	1992-93	11,418

Source: ***Statistical Service Section, DCC.***

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 1/1/92 AND 12/30/93 WHO ENROLLED IN A LITERACY PROGRAM AT A COMMUNITY COLLEGE DURING 1992-93

INSTITUTION	FTE	# ENROLLED
<1,000		
Pamlico CC	220	11
Montgomery CC	681	32
Tri-County CC	713	41
Bladen CC	824	31
McDowell TCC	853	56
Anson CC	953	98
Martin CC	989	146
1,000-1,999		
Roanoke-Chowan CC	1,010	89
Brunswick CC	1,149	58
James Sprunt CC	1,162	84
Mayland CC	1,223	212
Piedmont CC	1,227	133
Sampson CC	1,355	99
Carteret CC	1,431	122
Halifax CC	1,515	130
Wilson TCC	1,515	141
Mitchell CC	1,530	204
Nash CC	1,545	154
Haywood CC	1,564	16
Southwestern CC	1,577	246
Cleveland CC	1,626	164
Beaufort Co. CC	1,634	81
Blue Ridge CC	1,644	301
Stanly CC	1,651	267
College of the Albemarle	1,671	235
Randolph CC	1,674	131
Richmond CC	1,710	534
Southeastern CC	1,758	177
Isothermal CC	1,767	204
Rockingham CC	1,781	101
Edgecombe CC	1,870	327
Wilkes CC	1,946	128
Robeson CC	1,986	147
2,000-2,999		
Craven CC	2,173	243
Western Piedmont CC	2,254	153
Davidson Co. CC	2,337	249
Caldwell CC & TI	2,387	236
Lenoir CC	2,426	278
Surry CC	2,520	90
Vance-Granville CC	2,535	306
Rowan-Cabarrus CC	2,770	291
Wayne CC	2,816	279
Alamance CC	2,936	289
Cape Fear CC	2,953	261
Sandhills CC	2,976	214
3,000-4,999		
Catawba Valley CC	3,103	153
Johnston CC	3,177	113
Coastal Carolina CC	3,238	336
Pitt CC	3,253	272
Asheville-Buncombe TCC	3,264	217
Central Carolina CC	3,387	400
Durham TCC	3,441	271
Gaston CC	3,550	281
Forsyth TCC	4409	245
>4,999		
Guilford TCC	5,776	408
Wake TCC	5,884	401
Fayetteville TCC	8,384	724
Central Piedmont CC	10,224	34
System	137,929	11,544

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 NORTH CAROLINA COMMUNITY COLLEGE STUDENTS RECEIVING FINANCIAL AID *

YEAR	NUMBER OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	PERCENT OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	AVERAGE DOLLAR VALUE
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
1992-93	67,347	40.2	849.00

*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.***

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
1992-93	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, 1992-93

INSTITUTION	FTE	% OF POP
<1000		
Pamlico CC	220	17.4
Montgomery CC	681	19.0
Tri-County CC	713	13.3
Bladen CC	824	17.1
McDowell TCC	853	20.9
Anson CC	953	7.8
Martin CC	989	18.2
1,000-1999		
Roanoke-Chowan CC	1,010	12.5
Brunswick CC	1,149	11.6
James Sprunt CC	1,162	18.4
Mayland CC	1,223	18.9
Piedmont CC	1,227	17.3
Sampson CC	1,355	16.5
Carteret CC	1,431	19.6
Halifax CC	1,515	15.0
Wilson TCC	1,515	19.7
Mitchell CC	1,530	12.8
Nash CC	1,545	17.7
Haywood CC	1,564	16.3
Southwestern CC	1,577	13.8
Cleveland CC	1,626	13.4
Beaufort Co. CC	1,634	15.7
Blue Ridge CC	1,644	11.7
Stanly CC	1,651	10.7
College of the Albemarle	1,671	10.0
Randolph CC	1,674	12.7
Richmond CC	1,710	15.2
Southeastern CC	1,758	19.4
Isothermal CC	1,767	18.1
Rockingham CC	1,781	14.8
Edgecombe CC	1,870	21.0
Wilkes CC	1,946	15.7
Robeson CC	1,986	15.5
2,000-2,999		
Craven CC	2,173	18.4
Western Piedmont CC	2,254	20.9
Davidson Co. CC	2,337	12.2
Caldwell CC & TI	2,387	15.0
Lenoir CC	2,426	18.3
Surry CC	2,520	17.0
Vance-Granville CC	2,535	13.0
Rowan-Cabarrus CC	2,770	10.3
Wayne CC	2,816	15.4
Alamance CC	2,936	18.9
Cape Fear CC	2,953	15.6
Sandhills CC	2,978	22.0
3,000-4,999		
Catawba Valley CC	3,103	15.7
Johnston CC	3,177	22.0
Coastal Carolina CC	3,238	18.1
Pitt CC	3,253	17.6
Asheville-Buncombe TCC	3,264	12.0
Central Carolina CC	3,387	15.0
Durham TCC	3,441	9.8
Gaston CC	3,550	12.8
Forsyth TCC	4,409	10.9
>4,999		
Guilford TCC	5,776	12.6
Wake TCC	5,884	11.4
Fayetteville TCC	8,384	20.2
Central Piedmont CC	10,224	15.1
System	137,929	15.8

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

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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 an intent to attend a community college declined slightly in 1992-93. The number of 18-20 year olds enrolled in 1992-93, however, is essentially unchanged from the previous year.

Several forces are likely to be responsible for the 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	
			#	%
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
1992-93	28,829	60,210	19,112	31.7

Source: *Statistical Service Section, DCC.*

Contact: *Steve Ijames, Director of Information Services*

Source: *NC Public Schools Statistical Profile.*

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 in 1991-92 since tuition was no longer required. Such an increase did not occur. In fact, the number of colleges involved in cooperative agreements has decreased over the past two years as has the number of students enrolled in these programs. 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
1992-93	32	46	3,788

Source: Program Division Records, DCC.

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 PUBLIC SCHOOL DISTRICTS RECEIVING TECH PREP GRANT MONEY

YEAR	NUMBER OF PROGRAMS
1989-90	4
1990-91	14
1991-92	67
1992-93	69

Source: *LEA Tech Prep Grant Recipient Report.*

Contact: *Ken Smith, NC State Department of Public Instruction.*

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. Currently a Tech Prep task force is developing accountability measures for this program. These measures will be incorporated into future critical success factors reports.

Recommendation

Once the Tech Prep task force has completed the development and implementation of accountability standards, this information should be reported in the critical success factors report for the system and for individual colleges.

EDUCATION CONTINUUM MEASURE D: *Number and Percent of Students in the UNC SystemWho 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 transfered to a university during the spring semester; the data only show those transfers that occured 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, the number of transfers from community colleges to the UNC system in 1992-93 is essentially the same as it was in 1991-92. The lack of growth in number of transfers might be the result of some ceiling placed on the number of transfers that universities in the UNC system will accept. Another explanation might be that, while in previous years there was a rapid expansion of college transfer programs across the 58 community colleges, that expansion is nearly complete and no significant number of new programs are being started.

Data

TRANSFERS FROM COMMUNITY COLLEGES TO THE UNC SYSTEM

YEAR	NUMBER	PERCENT CHANGE	PERCENT OF ALL TRANSFERS
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
1992	4,021	-0.3	40.2

Source: ***Statistical Abstract of Higher Education in North Carolina.***

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.

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.

Renewed emphasis has been placed on the role of North Carolina community colleges in workforce development by the State Board of Community Colleges. A new mission statement for the system and a new set of system goals have been adopted by the State Board of Community Colleges which emphasis training and retraining for a "sterling silver workforce."

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

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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 1992-93.

Data

NEW & EXPANDING INDUSTRY TRAINEES & PROJECTS

YEAR	TRAINEES	PROJECTS
1988-89	16,833	149
1989-90	16,807	165
1990-91	14,857	140
1991-92	15,738	151
1992-93	16,640	160

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

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

FOCUSED INDUSTRIAL TRAINING: TRAINEES & INDUSTRIES SERVED*

YEAR	TRAINEES	INDUSTRIES
1988-89	6,559	883
1989-90	8,861	954
1990-91	8,906	794
1991-92	11,461	1.062
1992-93	12,510	1,225

* Includes the apprenticeship program.

Source: *Program Services Section Records.*

Contact: *Glynda Lawrence, Program Coordinator, DCC*

SMALL BUSINESS CLIENTS SERVED

YEAR	# OF CENTERS	PARTICIPANTS	COUNSEL	REFERRAL	EXT./CURR. COURSE PARTICIPANT
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
1992-93	53	46,511	12,922	7,447	10,307

Source: ***Small Business Progress Report***

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. It is estimated that in 1990, 35 percent of all jobs in the nation were unskilled. By the year 2000 only 15 pecent of the jobs will be unskilled. Clearly there is a great need to upgrade the skills of today's unskilled workers.

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
1992-93	417	10,547

Source: *Workplace Basic Skills Sites in NC, 1991-92. Federal Annual Literacy Report*

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 State 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. The system, similar to one that has been established in Florida and several other states, utilizes information from the Unemployment Insurance database maintained by the Employment Security Commission. Under this system, student records from the community colleges are 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 project has been completed. Student records have successfully been matched with information in the Unemployment Insurance files. Employment rates of community college graduates have been calculated and are reported in Factor V, Measure D. Efforts will continue to focus on the further development of this tracking system and the assessment of employer satisfaction.

Recommendation

Employer evaluation of programs is an essential accountability tool. The Department of Community Colleges should continue to work with the NC SOICC 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 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 occuring 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 SOICC on the development of an interagency student follow-up system that will utilize the unemployment insurance database maintained by the Employment Security Commission. Data regarding employment status are now available for approximately 80 percent of the 1990-91 graduates.

The data used for this brief come from the collaborative efforts mentioned above. The students in the cohort studied completed their program during the 1990-91 academic year. The specific data elements that are used are:

1. quarterly earnings for the most recent eight quarters that were available in mid-March of 1993, and
2. dates of the students' most recent contacts with the Employment Security Commission. The reasons for these contacts are as follows:
   a. registered for job placement services,
   b. filed for unemployment benefits, or
   c. received an unemployment check.

For the purposes of this report, measures for each quarter are calculated independently of the other three quarters. This methodology parallels traditional calculations of employment measures.

Traditionally, (un)employment rates are derived through a special survey conducted by the U. S. Department of Labor or its equivalent at the state level (i.e., North Carolina Labor Market Information Division of the ESC). A survey such as the one mentioned will have a high cost. Therefore, calculating the same measure for community college completers is not cost effective. However, a parallel employment ratio can be calculated from the data available.

Due to the nature of the data collected, people who were self-employed, employed as an unpaid worker in a family owned business, or employed by the railroad are not included in the analysis. The data on these people are not available since, Unemployment Insurance is not paid on earnings for these people. Also excluded are persons who were unemployed and seeking employment, but who did not file for assistance or benefits through the North Carolina ESC.

In this analysis, the person is designated as employed in a quarter, if an individual had earnings reflected in the UI reports during that quarter, or was positively matched with Department of Defense personnel files. The person is designated as not employed (in the quarter), but is part of the population in the analysis, if:

1. that person had no earnings for the single quarter in question, and

2. that person contacted the ESC for services in the previous quarter or later and the person was not positively matched with the Department of Defense files.

This methodology will occasionally designate an individual as not employed for the quarter, when in fact, the individual was not seeking employment during the quarter. The resulting employment ratio will be a conservative estimate of the actual employment ratio.

Implications

Data used to calculate the employment ratios indicate that students are successful in their search for employment. This is especially true for the completers of technical and vocational programs. In future reports, students who successfully transfer to four-year institutions can be removed from the cohort resulting in a more reliable measure.

Data

PROPORTION OF 1990-91 COMPLETERS EMPLOYED BY PROGRAM TYPE AND YEAR-QUARTER OF EMPLOYMENT

YEAR-QUARTER	COLLEGE TRANSFER STUDENTS		GENERAL EDUCATION STUDENTS		TECHNICAL STUDENTS		VOCATIONAL STUDENTS		ALL STUDENTS	
	# Emp.	% Emp.	# Emp.	% Emp.	# Emp.	% Emp.	# Emp.	% Emp.	# Emp.	% Emp.
92-3rd	881	95	152	96	7,585	97	3,190	96	11,808	97
92-2nd	885	89	157	91	7,721	94	3,213	91	11,976	93
92-1st	806	89	144	90	7,547	96	3,134	93	11,631	95
91-4th	824	88	150	91	7,725	95	3,202	92	11,901	94

Recommendation

Placement rates are one of the essential indicators for programs focused on the workforce, but a more appropriate measure would focus on employment rate in a related field. The Department of Community Colleges should continue to work with the NC SOICC on the interagency follow-up system to expand the data collection efforts to include the determination of whether or not the employment is in a related field.

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. For fiscal year 1992-93, the block grant to support community service was reduced by another 14.4 percent and the North Carolina Arts Council made the decision to discontinue the visiting artist program with community colleges.

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 and by another 9.4 percent in 1992-93. This is undoubtedly the result of the community services block grant being reduced. The greatest decline, 15 percent, occurred in academic courses. Enrollment in recreational courses did increase in 1992-93, 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
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
1992-93	24,030	41,999	27,971	5,996	95,190*	12.5

*Unduplicated total enrollment.

Source: *Annual Enrollment Report.*

Contact: *Steve Ijames, Information Services, DCC.*

Source: *Master Course List, Continuing Education.*

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 beginning with 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 1992-93 a total of 31,473 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.

It is evident from the data that the number of senior citizens participating in community services program has declined over the past two years. The exact reason for this decline is not currently known, but a likely explanation is that with the reduction in the community service block grant, the number of programs that may have been offered to senior citizens has been reduced.

Data

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

YEAR	COMMUNITY SERVICE
1988-89	34,103
1989-90	44,262
1990-91	44,536
1991-92	36,662
1992-93	31,473

Source: *Annual Statistical Report.*

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. Two 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 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.

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 on the next page.

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 1992-93 remained the same as it was in 1991-92 while the number of hours of facilities usage increased. It should be pointed out that three years' worth of data are 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
1992-93	4,238	77	81,403	1,480

Source: Planning and Research Unit, DCC.

Contact: J. Keith Brown

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 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
1992-93	1,699	31	1,168	21

Source: *Planning and Research Unit, DCC.*

Contact: *J. Keith Brown*

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 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 visiting artist program no longer being offered.

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. The North Carolina State Board of Community Colleges has adopted, as one of four system goals, the goal of Accountability and Standards.

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 1992-93 covering program years 1986-87 through 1991-92. 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

Overall, there was an increase in the number of colleges cited for exceptions in 1992-93 as well as an increase in the percent of audits with exceptions and the resulting financial adjustment. A significant amount of the resulting financial adjustment was a result of audit exceptions at one college.

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.
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
1992-93	58	28	47	$1,174,682	0.45

Source: ***Annual Audit Summary.***

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, 1992-93:
COLLEGES CITED FOR EXCEPTIONS AND RESULTING FINANCIAL ADJUSTMENTS

INSTITUTION	FTE	RESULTING FINAN. ADJUSTMENT	% OF INSTRUC. BUDGET
<1,000			
Pamlico CC	220		
Montgomery CC	681		
Tri-County CC	713		
Bladen CC	824	$9,027	0.58
McDowell TCC	853		
Anson CC	953		
Martin CC	989		
1,000-1,999			
Roanoke-Chowan CC	1,010		
Brunswick CC	1,149	$14,093	0.81
James Sprunt CC	1,162		
Mayland CC	1,223		
Piedmont CC	1,227	$35,565	1.48
Sampson CC	1,355		
Carteret CC	1,431	$5,188	0.19
Halifax CC	1,515		
Wilson TCC	1,515	$40,994	1.57
Mitchell CC	1,530	$19,235	0.65
Nash CC	1,545		
Haywood CC	1,564		
Southwestern CC	1,577		
Cleveland CC	1,626		
Beaufort Co. CC	1,634	$22,029	0.77
Blue Ridge CC	1,644		
Stanly CC	1,651		
College of The Albemarle	1,671	$5,816	0.5
Randolph CC	1,674	$5,234	0.17
Richmond CC	1,710	$22,103	0.72
Southeastern CC	1,758		
Isothermal CC	1,767	$30,790	0.85
Rockingham CC	1,781		
Edgecombe CC	1,870	$18,161	0.85
Wilkes CC	1,946		
Robeson CC	1,986		
2,000-2,999			
Craven CC	2,173		
Western Piedmont CC	2,254		
Davidson Co. CC	2,337		
Caldwell CC & TI	2,387	0	0
Lenoir CC	2,426		
Surry CC	2,520	$10,244	0.21
Vance-Granville CC	2,535	$5,055	0.11
Rowan-Cabarrus CC	2,770		
Wayne CC	2,816	$2,707	0.05
Alamance CC	2,936	$523,236	9.35
Cape Fear CC	2,953	0	0
Sandhills CC	2,978	$123,172	2.16
3,000-4,999			
Catawba Valley CC	3,103		
Johnston CC	3,177	$29,438	0.53
Coastal Carolina CC	3,238	$4,741	0.07
Pitt CC	3,253	$7,584	0.12
Asheville-Buncombe TCC	3,264	$38,946	0.6
Central Carolina CC	3,387	$166,342	2.62
Durham TCC	3,441	$3,525	0.05
Gaston CC	3,550	0	0
>4,999			
Forsyth TCC	4,409		
Guilford TCC	5,776		
Wake TCC	5,884	$10,376	0.1
Fayetteville TCC	8,384	$21,081	0.14
Central Piedmont CC	10,224		
System	137,929	$1,174,682	0.45

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. A task force on program review was established and, working with an accountability task force, has developed new guidelines for program review. If approved by the State Board of Community Colleges and the General Assembly, these new guidelines will require, among other things, the annual review of all programs using a "desktop audit" model that is being developed.

Implications

The data show that 58 percent of the system's approved programs have been reviewed and a report submitted to DCC as of January 1, 1994 as compared with 27 percent having been reviewed one year ago.

Data on individual colleges are presented, however, the data may be misleading. The current accounting system at the Department of Community Colleges includes new programs that have begun during the 5 year cycle. Thus, a college that had reviewed 100 percent of its programs the previous year, may, in this report, show only 95 percent of the programs reviewed due to a new program being added to the college's offerings.

Data

NUMBER AND PERCENT OF PROGRAMS REVIEWED
(As of January 1, 1994)

NUMBER OF APPROVED PROGRAMS	NUMBER OF OFFERED PROGRAMS	NUMBER OF PROGRAMS REVIEWED	% OF PROGRAMS REVIEWED
1,871	1,739	1,004	58

Source: ***Curriculum Program Review Summary.***

Contact: ***Donald Bradsher, Program Services, DCC***

Recommendation

If the system does adopt the annual review of all programs, then this measure will become meaningless. A measure should be developed that presents the outcomes of the annual program reviews conducted at the colleges.

NUMBER AND PERCENT OF PROGRAMS REVIEWED
(As of 1/01/94)

INSTITUTION	FTE	# OFFERED	# REVIEW	% REVIEW
<1,000				
Pamlico CC	220	7	3	43
Montgomery CC	681	18	6	33
Tri-County CC	713	16	8	50
Bladen CC	824	15	9	60
McDowell TCC	853	27	0	0
Anson CC	953	21	3	14
Martin CC	989	16	9	56
1,000-1,999				
Roanoke-Chowan CC	1,010	21	2	15
Brunswick CC	1,149	23	9	39
James Sprunt CC	1,162	28	17	61
Mayland CC	1,223	20	13	65
Piedmont CC	1,227	21	8	38
Sampson CC	1,355	15	13	87
Carteret CC	1,431	24	14	58
Halifax CC	1,515	25	20	80
Wilson TCC	1,515	32	27	84
Mitchell CC	1,530	18	0	0
Nash CC	1,545	27	5	19
Haywood CC	1,564	31	9	29
Southwestern CC	1,577	32	4	13
Cleveland CC	1,626	25	4	16
Beaufort Co. CC	1,634	23	21	91
Blue Ridge CC	1,644	28	24	86
Stanly CC	1,651	32	14	44
College of the Albemarle	1,671	23	22	96
Randolph CC	1,674	24	21	88
Richmond CC	1,710	16	23	100
Southeastern CC	1,758	26	21	81
Isothermal CC	1,767	30	20	67
Rockingham CC	1,781	27	9	33
Edgecombe CC	1,870	27	13	48
Wilkes CC	1,946	23	27	100
Robeson CC	1,986	17	16	94
2,000-2,999				
Craven CC	2,173	33	43	100
Western Piedmont CC	2,254	43	38	88
Davidson Co. CC	2,337	30	11	37
Caldwell CC & TI	2,387	31	11	35
Lenoir CC	2,426	39	23	59
Surry CC	2,520	28	19	68
Vance-Granville CC	2,535	33	26	79
Rowan-Cabarrus CC	2,770	26	22	85
Wayne CC	2,816	40	35	88
Alamance CC	2,936	42	25	60
Cape Fear CC	2,953	34	13	38
Sandhills CC	2,978	28	11	39
3,000-4,999				
Catawba Valley CC	3,103	37	26	70
Johnston CC	3,177	28	2	7
Coastal Carolina CC	3,238	31	31	100
Pitt CC	3,253	45	32	71
Asheville-Buncombe TCC	3,264	39	13	33
Central Carolina CC	3,387	34	24	71
Durham TCC	3,441	35	8	23
Gaston CC	3,550	40	3	8
Forsyth TCC	4,409	39	25	64
>4,999				
Guilford TCC	5,776	52	52	100
Wake TCC	5,884	60	27	45
Fayetteville TCC	8,384	58	33	57
Central Piedmont CC	10,224	76	37	49
System	137,929	1,739	1,004	58

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 Peggy Ball of the Programs Division of the Department of Community Colleges identified 47 technical and vocational programs being offered throughout the system which were eligible for voluntary accreditation. During 1992-93 these 47 programs totaled 457 offerings throughout the system, 31 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 (T041)	12	2	17
Associate Degree Nursing (T059)	36	7	19
Automation/Robotics Technology (T173)	2	1	50
Automotive Body Repair (V001)	24	0	0
Automotive Mechanics (V003)	35	0	0
Automotive Service Technician (T156)	11	3	27
Automotive Technology	18	1	6
Biomedical Equipment Technology (T158)	3	0	0
Biotechnology (T186)	1	0	0
Cardiovascular Sonography (T234)	1	1	100
Chemical Engineering Technology (T038)	1	1	100
Civil Engineering Technology (T038)	8	5	63
Computer Engineering Technology (T040)	11	1	9
Correctional & Juvenile Service (T102)	2	0	0
Criminal Justice (T129)	39	3	8
Cytotechnology (T232)	1	1	100
Dental Assisting (V011)	12	12	100
Dental Laboratory Technology (T055)	1	1	100
Drafting & Design Engineering Tech (T043)	19	2	11
Electrical Engineering Technology (T044)	5	1	20
Electromechanical Technology (T039)	5	0	0
Electronics Engineering Technology (T045)	40	8	20
Forest Management Technology (T007)	3	1	33
Funeral Service Education (T057)	2	2	100
Horticultural Technology (T009)	10	0	0
Industrial Engineering Technology (T047)	6	2	33
Instrumentation Technology (T048)	2	0	0
Juvenile Justice (T169)	0	0	0
Landscape Architecture Technology (T219)	1	0	0
Laser & Electro-Optics Technology (T200)	1	0	0
Law Enforcement Technology (T064)	9	1	11
Manufacturing Engineering Technology (T050)	10	2	20
Mechanical Engineering Technology (T051)	8	2	25
Medical Assisting (T058)	12	7	58
Medical Assisting (V031)	9	5	56
Medical Laboratory Technology (T110)	11	10	91
Medical Sonography (T180)	3	3	100
Nuclear Medicine Technology	2	2	100
Paralegal Technology (T120)	19	3	16
Phlebotomy (V168)	14	14	100
Radiation Therapy (T221)	2	2	100
Radiologic Technology (T061)	15	15	100
Respiratory Care Technology (T091)	14	12	86
Surgical Technology (V071)	9	7	78
Surveying Technology (T125)	6	0	0
Tool Design Technology (T194)	1	0	0
Veterinary Medical Technology	1	1	100
TOTAL	457	141	31

Source: *Programs Division, DCC.*

Contact: *Paul Nagy, Planning and Research, DCC.*

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Recommendation

An analysis of the costs and benefits of undergoing voluntary accreditation of curriculum programs should be conducted.