

# Task Force Report on Undergraduate Retention and Graduation Rates at NC State

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Gail W. O'Brien, Chair, Associate Dean for Academic Affairs, College of Humanities and Social Sciences, and Professor of History  
John T. Ambrose, Director, First Year College, and Professor of Entomology  
Alton J. Banks, Faculty Senate Representative and Professor of Chemistry  
Amy L. Caison, Coordinator for Planning and Comparative Studies, University Planning and Analysis  
Thomas E. Conway, Interim Vice Provost for Enrollment Management  
Kenneth L. Esbenshade, Associate Dean and Director of Academic Programs, College of Agriculture and Life Sciences, and Professor of Animal Science  
Louis D. Hunt, University Registrar  
Bruce I. Mallette, Vice Provost for Academic Administration, Fall 2002  
Tony L. Mitchell, Assistant Dean and Director of Minority Programs, Engineering  
Malika M. Mustafa, Senior, Biological Sciences

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## I. Executive Summary

Despite the personal, social, and economic value of a college education, “more students leave their college or university prior to degree completion than stay” (Tinto, 1993, p. 1). Additionally, although the overwhelming majority of college students who enroll in post-secondary education do so with the intention of graduating (98.7%), only 27% of the baccalaureate students who attend public 4-year institutions complete their education in 4 years (NCES, 1996), and the average five-year graduation rate for public four-year institutions in 2001 was 41.9%, down from 52.2% in 1983 (Postsecondary Education Opportunity, 2002).

NC State’s 4-year graduation rate is consistent with the national average and slightly above the national 5-year rate, but when compared with the fifteen institutions that the University regards as peers, NC State consistently ranks in the bottom half in terms of the retention of students at the beginning of their sophomore year, 4-year graduation rates, and 5- and 6-year graduation rates. Even more significantly, when the University’s actual rates are compared with its predicted rates, NC State scores -3% on retention, -7.9% on 5-year graduation rate, and -3.7% on 6-year graduation rate.

Because NC State is strongly committed to excellence, which includes the satisfaction and success of its undergraduates, objectives that correlate very closely with retention and graduation rates, this University Task Force was appointed and charged in the Fall, 2002 by Provost Stuart L. Cooper with developing recommendations and strategies for improving retention, and in turn, graduation rates within the University. To this end, the Task Force reviewed national literature on the topic, analyzed a variety of data related to retention and graduation rates, and developed a list of 6 recommendations, along with rationales for the recommendations and implementation strategies. It also reviewed Academic Regulations related to retention and graduation and made suggestions for changes that need to be implemented as soon as possible. These regulations include adding and dropping courses, course load, class attendance, graduation requirements, evaluations, and feedback to students. The six recommendations follow; in each case selected items from the Implementation lists are included. These items serve as examples only; neither inclusion in the Executive Summary nor the order in which items appear indicate rankings by the Task Force.

**Recommendation 1:** The administration at NC State will emphasize retention and graduation rates in all planning endeavors.

- The University should add advising to its goals/objectives, with emphasis on quality advising.
- Provost will emphasize retention and graduation rates as part of compact planning process with Deans; Deans will emphasize retention and graduation rates as part of compact planning process with Department Heads; Department Heads will discuss and emphasize the importance of retention and graduation rates with faculty who teach and advise.
- All discussions regarding retention and graduation rates will emphasize accountability and will be used in assessing organizational effectiveness. All colleges and departments will be asked to explain their situation and to design plans for ongoing monitoring and enhancement where feedback indicates it is warranted. These plans may include the need for more resources, but this should not be the sole strategy.

**Recommendation 2:** Faculty and administrators will strongly encourage students who enter State as full-time students to remain in that status.

- Work with advisors, especially those who advise freshmen, to implement the Progress Toward Degree Policy very meticulously. Freshmen should be encouraged to plan their academic careers from the time they arrive on campus, and they should be encouraged frequently to stick with their plan, or if necessary, to revise their plan. They should be strongly discouraged from enrolling for courses without a plan.
- Include in guidelines to be developed for use at Visiting/Recruiting Days and at Orientation, i.e. when parents, as well as students, are present, advice regarding course loads necessary to graduate in 4 years.

**Recommendation 3:** Faculty and administrators will work closely with students in order to achieve academic success.

- Strongly urge faculty to monitor their students' success very closely and to report to students and their advisors when students are doing poorly on assignments and tests and/or failing to attend class
- Encourage advisors to be more aggressive in contacting advisees who are in trouble and giving them advice
- Develop at-risk indicators that advisors can use in advising students
- Require Colleges and Departments to continually monitor and evaluate advising and its effectiveness

**Recommendation 4:** Faculty, with the support of the administration, will develop additional opportunities for students who cannot matriculate into their major of choice, and faculty and administrators will improve communication with students about these opportunities.

- Encourage Colleges to create degrees similar to the BS in Engineering; for example, a BA or BS in Life Sciences, Textiles, Physical Sciences, and Social Sciences

**Recommendation 5:** Retention and graduation rates should be given priority in the development or alteration and evaluation of academic regulations and should be considered in relation to one another.

- Fully implement the Progress Toward Degree Policy and plan for the collection of data and on-going assessment of its effectiveness
- The appropriate body(ies) should begin considering the alteration of the Academic Regulations recommended by the Task Force as soon as possible

**Recommendation 6:** Efforts to implement appropriate strategies for improving retention and graduation rates, to monitor and assess these strategies, and to modify these strategies and develop new ones as necessary should be institutionalized immediately.

- Charge the Provost and his/her designee with overseeing the implementation of the recommendations of the Task Force and with taking additional steps as necessary to monitor and improve retention and graduation rates on an on-going basis

## Task Force on Undergraduate Retention and Graduation Rates

- Make implementing retention and graduation rate intervention strategies a top priority at NC State at every level

NC State has long had a commitment to educating non-traditional students, including adults who need to return to an institution of higher education on a part-time basis. At the same time, this commitment should not blind us to the fact that the vast majority of students enrolling as freshmen at NC State expect to go full-time and to complete their degrees in a timely manner. It is the job of these students, and the faculty, staff, and administration at this institution, to see that their goals are realized. This effort will only be successful if these objectives are institutionalized and regarded very seriously on a continuous basis by everyone within the University community.

## II. Introduction

Higher education is widely accepted as a key factor in upward social mobility and an emerging requirement for membership in the American middle class. Therefore, the baccalaureate degree serves as an institution's *de facto* certification of an individual's knowledge and skills, and often doubles as justification for inclusion in such socioeconomic status (Pascarella & Terenzini, 1991). However, despite the value of the baccalaureate, the National Center for Education Statistics estimates that 16% of first-time undergraduates in public 4-year institutions leave in their first year of enrollment and of these students, 36% never return to postsecondary education (Horn & Carroll, 1998). Further, of baccalaureate graduates who attend public 4-year institutions, only 27% graduate in four years and approximately 12% take more than ten years to complete their degree (NCES, 1996).

In light of these reports, retention and graduation rates for undergraduates have received considerable attention in the higher education literature. In part, researchers, policymakers, faculty, and college administrations place a priority on these variables, because they serve, according to recent studies, as proxies for student satisfaction and success (Thayer, 2000; Wang & Grimes, 2000; Padilla, 1999). Additionally, colleges and universities have focused on retention and graduation rates, because average time-to-degree is a contributing factor to the rising cost of an undergraduate education. Not surprisingly, as institutions have been pressured to efficiently deploy limited resources to maximize student satisfaction and success, there has been an increase in efforts to develop programs and strategies to effect improvement in these domains.

Because NC State is committed to continually improving the undergraduate experience and achievement of its students, Provost Stuart Cooper charged the Undergraduate Retention and Graduation Rate Task Force to:

- identify the major factors contributing to retention and attrition,
- consider the impact of the new Progress Toward Undergraduate Degree Completion initiative as it pertains to retention and review plans to track its effects on retention and time to degree,
- recommend specific strategies for improving retention at NC State University,
- and develop plans to assess the effectiveness of recommended strategies for improving retention at NC State University.

This task force, comprised of faculty, staff, and student representatives, collaborated to study retention and graduation rates at NC State during the 2002-03 academic year and to make recommendations for improvement that are designed to improve student satisfaction and success, thereby increasing retention and graduation rates. This report addresses the task force's charge by presenting the findings and recommendations of the Undergraduate Retention and Graduation Rate Task Force. These include a review of the literature on undergraduate retention and graduation rates and a survey of relevant institutional data. Based on this information, the report presents recommendations to improve retention and graduation rates, implementation and assessment strategies, and proposed alterations to current policies.

### III. The Relevance of Retention and Graduation Rates as a Measure of Student Satisfaction and Success: Literature Review

Despite the personal, social, and economic value of a college education, Vincent Tinto (1993) notes that “more students leave their college or university prior to degree completion than stay” (p. 1). Additionally, although the overwhelming majority of college students who enroll in postsecondary education do so with the intention of graduating (98.7%), the average five-year graduation rate for public four-year institutions in 2001 was 41.9%, down from 52.2% in 1983 (Postsecondary Education Opportunity, 2002). Not surprisingly, the level of student attrition and time-to-degree have resulted in concerns by state legislators who worry about the efficient use of limited resources, and by students and parents who are apprehensive about the likelihood of successful degree completion. One expression of these concerns is the popularity of the college rankings published by *US News and World Report*. These rankings use graduation rate performance as a measure of institutional quality (among several others) to determine “America’s best colleges.” Despite flaws in such approaches (Porter, 1999; Porter, 2001), the attention given to the ranking system, including graduation rate performance, necessitates that colleges and universities pay attention to these measures. Furthermore, if students are not retained and subsequently graduated at rates that are appropriate to an institution’s characteristics (Astin, 1997), the organization should be concerned about the implications of this disparity (McLaughlin, Brozovsky & McLaughlin, 1998).

Recognizing the importance of retention and timely graduation, college and university administrators and researchers have responded with studies of factors related to these key indicators, with national and regional conferences that provide enrollment professionals with opportunities to share best practices, and with customized intervention programs at numerous institutions that are designed to improve student retention and graduation rates (Lang, 2001). This section will explore the literature on retention and graduation rates and provide a context for an overview of NC State retention and graduation rates in Section IV and for the recommendations of the Undergraduate Retention and Graduation Rate Task Force in Sections V and VI.

When an enrolled student completes an academic term and continues to be enrolled the following term, a student is considered retained. Attrition is the non-enrollment of previously enrolled students and can take two forms: voluntary withdrawal or involuntary suspension. Without question, some students who withdraw from an institution do so to transfer to another institution, but an institution’s retention rate is defined only from the perspective of the first institution. If a student is no longer enrolled for whatever reason, the initial institution must consider that student not retained. A complicating issue arises when a student initially enrolls in an institution, withdraws at some point, stays out of the institution for some period of time and then returns to the initial institution. This scenario is called a stop-out and since it is impossible to forecast which students will stop-out or which will stay out, retention rates are static snapshots in time of student enrollment. Retention can be measured from semester to semester or from year to year, but the typical measure is from year to year. Research has indicated that attrition is highest from the freshman to sophomore year (Pascarella & Terenzini, 1980; Porter, 1990; Berkner, 1996) and, as a result, the typical statistic reported in retention studies and national rankings is the freshman retention rate, or rather, the percentage of students who return after their first year to enroll for their second year.

Research has generated a variety of theories for student retention that are designed to explain why students persist in higher education. Bean's theory of student attrition (1980) and Tinto's (1975, 1993) theory of integration are among the more prominent theories that researchers have used in studying student retention. Bean's (1990) model of student attrition asserts that organizational and environmental factors impact student behavior similar to the way these factors affect employee turnover in the workplace. Drawing on the premise of the Price/Mueller human resources model, Bean believes that an individual's experiences in an institution will influence that individual's perceptions about the institution and will subsequently impact the person's desire to continue enrollment. Bean asserts that these perceptions will combine with background characteristics to influence student performance, satisfaction, and ultimately, persistence.

Tinto's theory is perhaps the most prevalent in the literature and grows out of the work by Durkheim (1951) on suicidal behavior. Durkheim concluded that suicidal behavior was the result of the inability to integrate socially and intellectually into society. Tinto (1975) viewed withdrawal from postsecondary education as analogous to suicidal behavior in Durkheim's theory and consequently postulated that student attrition was due to inadequate social and academic integration into the institutional culture. Successful students enter college with background characteristics (e.g., aptitude and motivation) that are the basis for their initial contact with the institution. As students become more integrated into the culture of the institution, their goal commitment increases, which fosters their continued enrollment and academic progress. Tinto's theory has undergone numerous validation efforts (e.g., Terenzini & Pascarella, 1980; Pascarella & Terenzini, 1980; Terenzini, Lorang, & Pascarella, 1981; Tinto, 1982; Knight, 2002) and has been shown to perform reasonably well in predicting student attrition. Further, Nelson, Scott, and Bryan (1984) have noted that students who ultimately leave an institution can be identified with some precision as early as their first semester by focusing on factors such as early academic and social integration and personal assessment of academic performance. Students who ultimately left their institution expressed early dissatisfaction with their academic performance and with their social involvement on campus.

Researchers have used the tenets of these and other less well-known theories to develop predictive models of student attrition. Their efforts have been directed toward identifying student characteristics that are related to attrition, so that these characteristics can then be used to develop intervention strategies designed to provide at-risk students with appropriate support to prevent them from withdrawing from the institution. While no model has sufficiently explained the causes of student attrition (and thereby the key to improved student retention), some factors have routinely been identified as having some explanatory value in models of student attrition. These factors include background characteristics (e.g., socioeconomic status, scholastic achievement, and age) and goal commitments (e.g., highest degree expected, student involvement) (Pascarella & Terenzini, 1980).

Following an examination of NC State's retention and graduation rates in a national context, the task force looked at a number of variables believed to influence the academic and social integration of students at the University, and thereby to impact their ultimate success (Tinto 1975, 1993). The most significant of these findings, discussed in Section IV, serve as the platform for the Task Force recommendations (Section V) and for the academic policy review and suggested revisions (Section VI).

## IV. Retention and Graduation Rates Analyses

The Undergraduate Retention and Graduation Rate Task Force explored a variety of data sources in order to better understand the context of retention and graduation rates at NC State. The Task Force examined a number of measures for the university as a whole and for the individual colleges in an effort to identify areas of excellence and areas of concern. Data examining how NC State compares to other institutions in the United States is presented first, followed by data pertaining to retention rates and graduation rates at NC State. It is important to note that the data presented in this report are based on snapshots in time of student data and are not wholly representative of student behavior

### A. Retention and Graduation Rates at NC State in a National Context

#### 1. Standard Measures

NC State University often compares itself to a defined set of peer institutions on critical measures to contextualize its performance. Graduation rates refer to the percentage of freshmen who graduated within a six-year period for most recent cohort (based on 2001 data). The data excludes transfers to the university. Average freshman retention rate is calculated as the percentage of first-year freshmen who returned to the same college or university the following fall, averaged over the first-year classes entering between 1997 and 2000. In terms of retention and graduation rates, NC State consistently ranks in the bottom half of this group (see Table 1, and Figures 1, 2, 3, and 4).

Table 1. NC State Retention and Graduation Rates Compared to Peer Institutions

Institution	Average Freshman Retention Rate	4-Year Graduation Rate 1996 Cohort	5-Year Graduation Rate 1995 Cohort	6-Year Graduation Rate 1994 Cohort
Duke University	97	88	93	94
U of California-San Diego	94	48	77	82
Penn State-University Park	93	45	77	81
Carnegie Mellon	92	63	76	79
U of Illinois-Urbana-Champaign	92	54	75	78
U of Wisconsin-Madison	92	41	72	77
Case Western	91	53	76	78
U of California-Davis	91	28	65	75
U of Georgia	90	43	65	69
<b>NC State-Raleigh</b>	<b>89</b>	<b>26</b>	<b>55</b>	<b>62</b>
Georgia Tech	88	21	57	68
Purdue-West Lafayette	88	29	57	62
Rutgers-New Brunswick	88	42	66	73
Texas A&M-College Station	88	27	66	74
Virginia Tech	88	39	67	72
Iowa State	84	25	57	64

Figure 1. NC State Freshman Average Retention Rate Compared to Peer Institutions (1997-2000 Cohorts)

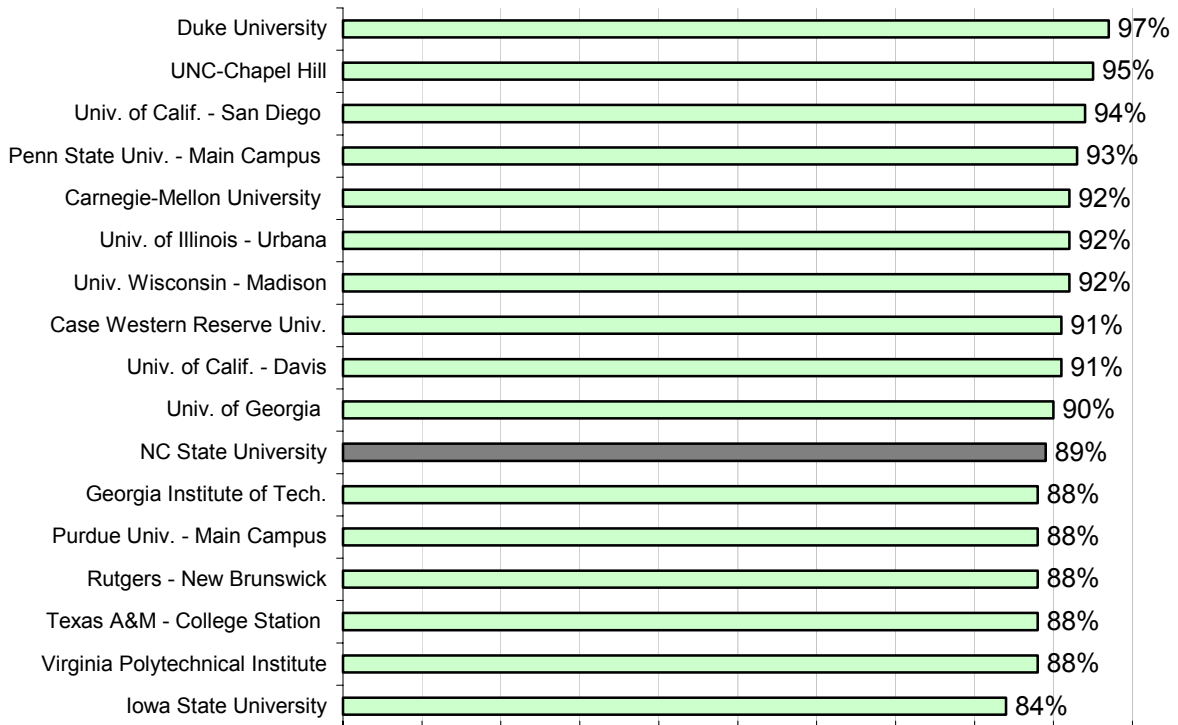


Figure 2. NC State Four-Year Graduation Rate Compared to Peer Institutions (1996 Cohort)

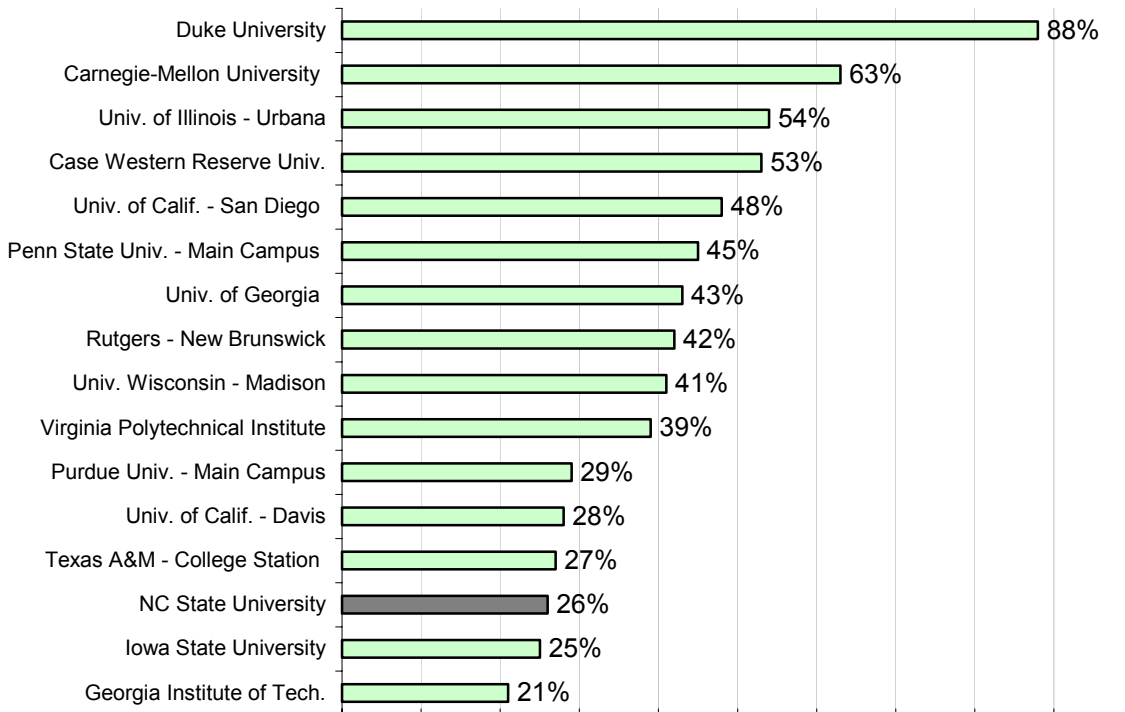


Figure 3. NC State Five-Year Graduation Rate Compared to Peer Institutions (1995 Cohort)

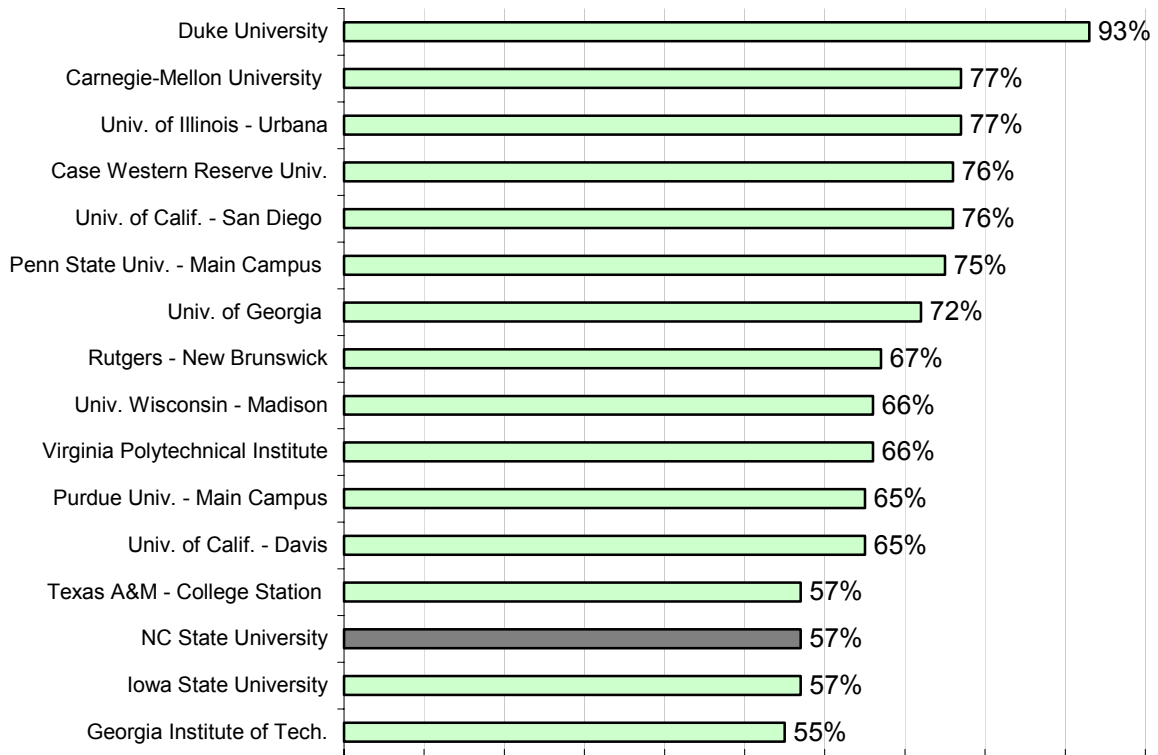
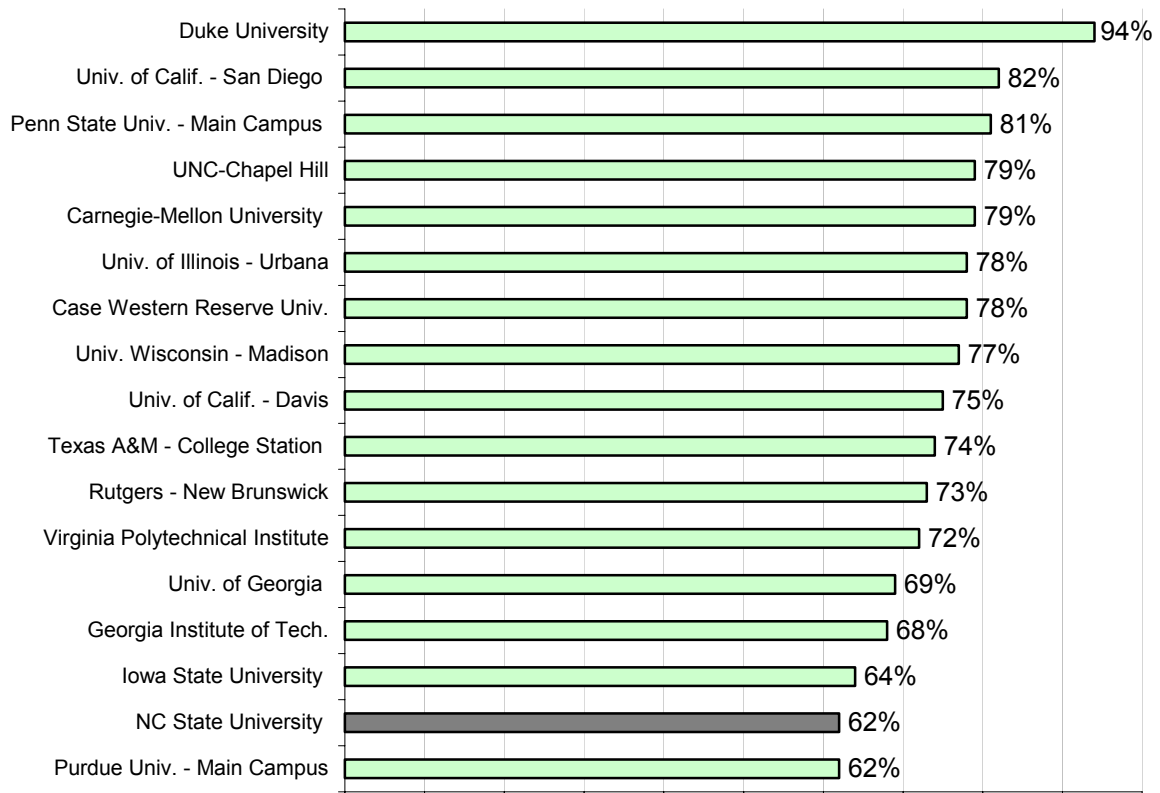


Figure 4. NC State Six-Year Graduation Rate Compared to Peer Institutions (1994 Cohort)



2. Emerging, Alternative Measure

Despite the care taken to choose peer institutions that are similar in mission and scope, there remain considerable differences between these institutions and NC State on a variety of points. Thus, direct comparisons between institutions can result in the amplification of discrepancies between institutions on various performance measures. According to Astin (1997), when considering retention and graduation rates, it can be very misleading to directly compare an institution's performance against that of other institutions. In fact, the majority of variance in institutional rates is attributable to the types of students that the institution enrolls. Thus, it is essential to understand how NC State compares to its predicted rate.

Astin's methodology was adapted to the available data and NC State's predicted retention rate and five- and six-year graduation rates were compared NC State to similar statistics for thirty-nine other research extensive institutions in the United States (see Tables 2, 3, and 4). Three different linear regression models were developed: predicted retention rate ( $R^2=0.7071$ ), predicted five-year graduation rate ( $R^2=0.8399$ ), and predicted six-year retention rate ( $R^2=0.8560$ ). Independent variables identified by Astin to account for the bulk of the variance were used in developing these models, including average high school GPA of freshmen, average SAT Math and Verbal scores, the percentage of white students at the institution, freshman retention rate (in models predicting graduation rates), and five- and six-year graduation rates (in models predicting freshman retention rate). According to this analysis, NC State under-performs in all three measures with underperformance especially pronounced in the five-year graduation rates; however, it is important to note that this analysis is limited by the nature of the available data (see Tables 2, 3, and 4). Astin's (1997) work relied on individual student data from the Cooperative Institutional Research Program (CIRP) while the NC State analysis relied on summary statistics published in the 2001 edition of the US News and World Report college and university rankings. This analysis was designed to provide a relative ranking tool to allow for a better understanding of how NC State's retention and graduation rates compare with predicted rates and with other institutions and their predicted rates.

Task Force on Undergraduate Retention and Graduation Rates

Table 2. Actual and Predicted Retention

Independent Variables: HSGPA, SATM, SATV, % white students, 5-year graduation rate, and 6-year graduation rate. R <sup>2</sup> =0.7071	Actual Freshman Retention Rate	Predicted Freshman Retention Rate	Difference
Penn State University-Main Campus	93	87.2	5.8
University of Oregon	91	86.5	4.5
University of Michigan	95	91.1	3.9
University of Wisconsin-Madison	92	88.7	3.3
Syracuse University	91	88.0	3.0
University of Virginia	97	94.8	2.2
University of California-Irvine	93	90.8	2.2
Columbia University	98	96.3	1.7
University of Washington	91	89.4	1.6
Michigan State University	88	86.4	1.6
Princeton University	99	97.7	1.3
Duke University	97	95.7	1.3
Virginia Polytechnic Institute	88	87.1	0.9
Brandeis University	92	91.2	0.8
SUNY-Buffalo	83	82.2	0.8
Johns Hopkins University	96	95.3	0.7
Carnegie-Mellon University	92	91.4	0.6
University of California-San Diego	94	93.5	0.5
University of Florida	91	90.5	0.5
University of Pennsylvania	97	96.6	0.4
University of California-Davis	91	90.6	0.4
University of North Carolina-Chapel Hill	94	93.7	0.3
University of California-Berkeley	95	94.9	0.1
University of Georgia	89	89.2	-0.2
University of California-Los Angeles	96	96.4	-0.4
Tulane University	85	85.4	-0.4
Stanford University	98	98.5	-0.5
University of Southern California	94	95.3	-1.3
Emory University	92	93.9	-1.9
University of California-Santa Barbara	89	90.9	-1.9
University of Maryland-College Park	89	91.4	-2.4
New York University	90	93.0	-3.0
<b>North Carolina State University</b>	<b>88</b>	<b>91.0</b>	<b>-3.0</b>
Iowa State University	84	87.2	-3.2
Catholic University of America	84	87.4	-3.4
University of Colorado-Boulder	83	86.4	-3.4
SUNY-Stony Brook	83	86.5	-3.5
University of Iowa	83	87.2	-4.2
Georgia Institute of Technology	87	92.9	-5.9

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Table 3. Actual and Predicted 5-Year Graduation Rate

Independent Variables: HSGPA, SATM, SATV, % white students, freshman retention rate, and 6-year graduation rate. R <sup>2</sup> =0.8399	Actual 5-Year Graduation Rate	Predicted 5-Year Graduation Rate	Difference
Catholic University of America	69	58.1	10.9
University of Virginia	91	83.2	7.8
Emory University	86	79.3	6.7
University of Iowa	62	55.4	6.6
University of Colorado-Boulder	60	54.1	5.9
University of California-Irvine	67	62.2	4.8
Brandeis University	84	79.4	4.6
University of Pennsylvania	90	86.3	3.7
Virginia Polytechnic Institute	67	63.3	3.7
Duke University	92	88.5	3.5
University of North Carolina-Chapel Hill	78	75.1	2.9
University of California-Los Angeles	76	73.5	2.5
Syracuse University	72	69.9	2.1
University of Michigan	80	78.2	1.8
Penn State University-Main Campus	75	73.2	1.8
University of California-Berkeley	78	76.5	1.5
Michigan State University	61	60.0	1.0
Princeton University	96	95.1	0.9
University of California-Davis	63	62.5	0.5
University of California-Santa Barbara	62	61.5	0.5
University of California-San Diego	72	71.6	0.4
SUNY-Stony Brook	48	47.6	0.4
Johns Hopkins University	84	84.4	-0.4
SUNY-Buffalo	52	52.4	-0.4
University of Washington	65	65.8	-0.8
Stanford University	90	90.9	-0.9
Carnegie-Mellon University	74	75.5	-1.5
New York University	72	74.1	-2.1
Tulane University	68	70.1	-2.1
Iowa State University	55	57.6	-2.6
University of Wisconsin-Madison	71	73.8	-2.8
University of Florida	64	68.2	-4.2
University of Georgia	62	67.7	-5.7
University of Southern California	68	74.5	-6.5
University of Maryland-College Park	58	65.1	-7.1
Columbia University	85	92.4	-7.4
<b>North Carolina State University</b>	<b>53</b>	<b>60.9</b>	<b>-7.9</b>
Georgia Institute of Technology	57	65.8	-8.8
University of Oregon	54	67.1	-13.1

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Table 4. Actual and Predicted 6-Year Graduation Rate

Independent Variables: HSGPA, SATM, SATV, % white students, freshman retention rate, and 6-year graduation rate. R <sup>2</sup> =0.8650	Actual 6-Year Graduation Rate	Predicted 6-Year Graduation Rate	Difference
Catholic University of America	70	62.0	8.0
University of Virginia	92	85.8	6.2
University of California-Davis	74	68.6	5.4
SUNY-Stony Brook	64	59.1	4.9
University of California-Irvine	74	69.2	4.8
Virginia Polytechnic Institute	72	67.4	4.6
Penn State University-Main Campus	80	75.8	4.2
Emory University	85	81.3	3.7
University of Colorado-Boulder	64	60.3	3.7
Duke University	92	89.6	2.4
University of California-San Diego	79	76.7	2.3
University of North Carolina-Chapel Hill	81	78.9	2.1
Tulane University	72	70.0	2.0
University of California-Santa Barbara	69	67.4	1.6
University of Pennsylvania	90	88.5	1.5
University of California-Berkeley	82	80.6	1.4
Michigan State University	66	64.9	1.1
University of Michigan	82	81.0	1.0
Princeton University	96	95.1	0.9
University of Washington	71	70.3	0.7
Brandeis University	81	80.4	0.6
Johns Hopkins University	87	86.7	0.3
Stanford University	92	92.2	-0.2
University of California-Los Angeles	79	79.4	-0.4
SUNY-Buffalo	56	56.9	-0.9
Iowa State University	61	62.3	-1.3
Georgia Institute of Technology	69	70.4	-1.4
Syracuse University	71	73.0	-2.0
Columbia University	90	92.3	-2.3
University of Wisconsin-Madison	74	76.5	-2.5
Carnegie-Mellon University	75	78.5	-3.5
<b>North Carolina State University</b>	<b>63</b>	<b>66.7</b>	<b>-3.7</b>
University of Iowa	51	54.8	-3.8
New York University	72	76.6	-4.6
University of Florida	67	72.5	-5.5
University of Georgia	65	71.0	-6.0
University of Maryland-College Park	64	70.0	-6.0
University of Southern California	71	78.9	-7.9
University of Oregon	59	70.4	-11.4

*B. Retention and Graduation Rates At NC State: Major Findings*

1. Retention and Graduation Rates by College

Retention and graduation rates were calculated for cohorts of NC State new freshmen from 1994 through 2001. Overall, NC State’s freshman retention rate has increased yearly since 1998 (from 87.6% in 1998 to 88.9% in 2001). Table 5 presents the one- and two-year retention rates for recent cohorts by college. For the 1998 through 2001 cohorts, Design and Engineering have one-year and two-year retention rates that surpass that of the university as a whole. Most CHASS cohorts from this period have been retained at a rate below that of the university average for both one-and two-year metrics. It is important to note, however, that retention rates for each college are calculated on the basis of the freshmen who enter the college; thus, students who transfer within the University from one college to another appear in the table as if they remained in the college they entered as freshmen. An analysis of Internal Transfer Patterns, however, indicates that within a five-year period from 1998-2002, Engineering experienced the only net loss of students (-144) in the University, excluding the First-Year College, which is expected to lose students, while CHASS averaged the largest net gain (322) and the College of Management experienced the second largest net gain (251). All other colleges experienced a gain but none exceeded 57 students.

A complete, detailed analysis of retention, graduation, withdrawal, and suspension rates for all colleges can be found in Appendix A of this report. In an effort to attempt to identify any segment of the NC State student population which might be substantively affecting the overall retention and graduation rates, these rates were recalculated without various groups in the analysis population to see what would happen to the rates without these groups in the calculation. Each college and students who at any point in their career participated in the co-op program were systematically excluded from the calculation of total retention rates. The results of this analysis do not reveal a substantive point of concern and the full analysis is presented in Appendix B.

Table 5. One- and Two-Year Retention Rates by Cohort and College

Entering College	One-Year Retention Rate (% of students continuing)				Two-Year Retention Rate (% of students continuing)		
	1998	1999	2000	2001	1998	1999	2000
CALS	87.3	86.0	89.2	86.9	75.8	78.1	81.9
Design	92.8	94.7	95.0	93.8	88.0	91.5	88.8
Education	92.3	75.8	82.5	87.7	86.2	69.7	70.2
COE	90.6	90.6	90.8	90.4	82.5	86.5	85.6
CNR	84.0	85.5	87.9	92.9	82.1	72.3	84.8
CHASS	83.2	84.9	84.6	86.9	74.1	73.6	77.2
PAMS	88.2	94.6	87.8	89.4	79.0	84.6	84.6
Textiles	88.2	84.2	88.1	91.7	78.5	78.3	80.4
COM	88.8	88.3	87.9	86.2	81.5	79.9	81.3
UGA	84.7	89.9	86.6	88.4	75.1	78.9	78.5
NC State	87.6	88.7	88.5	88.9	78.9	80.9	81.8

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Table 6 presents the four- and five-year graduation rates for recent cohorts by college. For the 1995 through 1998 cohorts, CALS, CHASS, Design, Education, Management, and PAMS show four-year graduation rates consistently above those of the university as a whole. CALS, Design, Education, Engineering, and Textiles post five-year graduation rates, UGA and Natural Resources students have four- and five-year graduation rates below the university rates. Table 7 presents six-year graduation rates by college and cohort where CALS, Design, Engineering, Management, and Textiles students exceed the university total, while CHASS, CNR, Education, and UGA students fall short.

Table 6. Four- and Five-Year Graduation Rates by College and Cohort

Entering College	4-Year Graduation Rate (% of students graduating)				5-Year Graduation Rate (% of students graduating)		
	1995	1996	1997	1998	1995	1996	1997
CALS	35.8	35.2	33.2	38.6	58.6	59.2	56.6
Design	37.6	41.7	55.4	48.2	68.8	79.8	80.4
Education	38.9	46.3	40.4	50.8	64.8	58.5	70.2
COE	19.4	23.7	24.0	24.2	57.4	59.8	57.9
CNR	22.2	17.9	17.3	21.7	59.8	57.1	52.0
CHASS	27.5	33.7	29.6	40.2	49.1	56.6	53.2
PAMS	32.2	38.4	39.1	34.5	53.3	64.6	63.3
Textiles	30.2	30.1	21.3	34.7	59.7	68.4	66.0
COM	30.3	34.5	34.2	40.5	54.7	59.0	55.6
UGA	18.0	18.1	18.3	19.6	46.4	48.8	49.8
NC State	25.8	27.6	26.5	29.7	54.8	57.5	56.2

Table 7. Six-Year Graduation Rates by College and Cohort

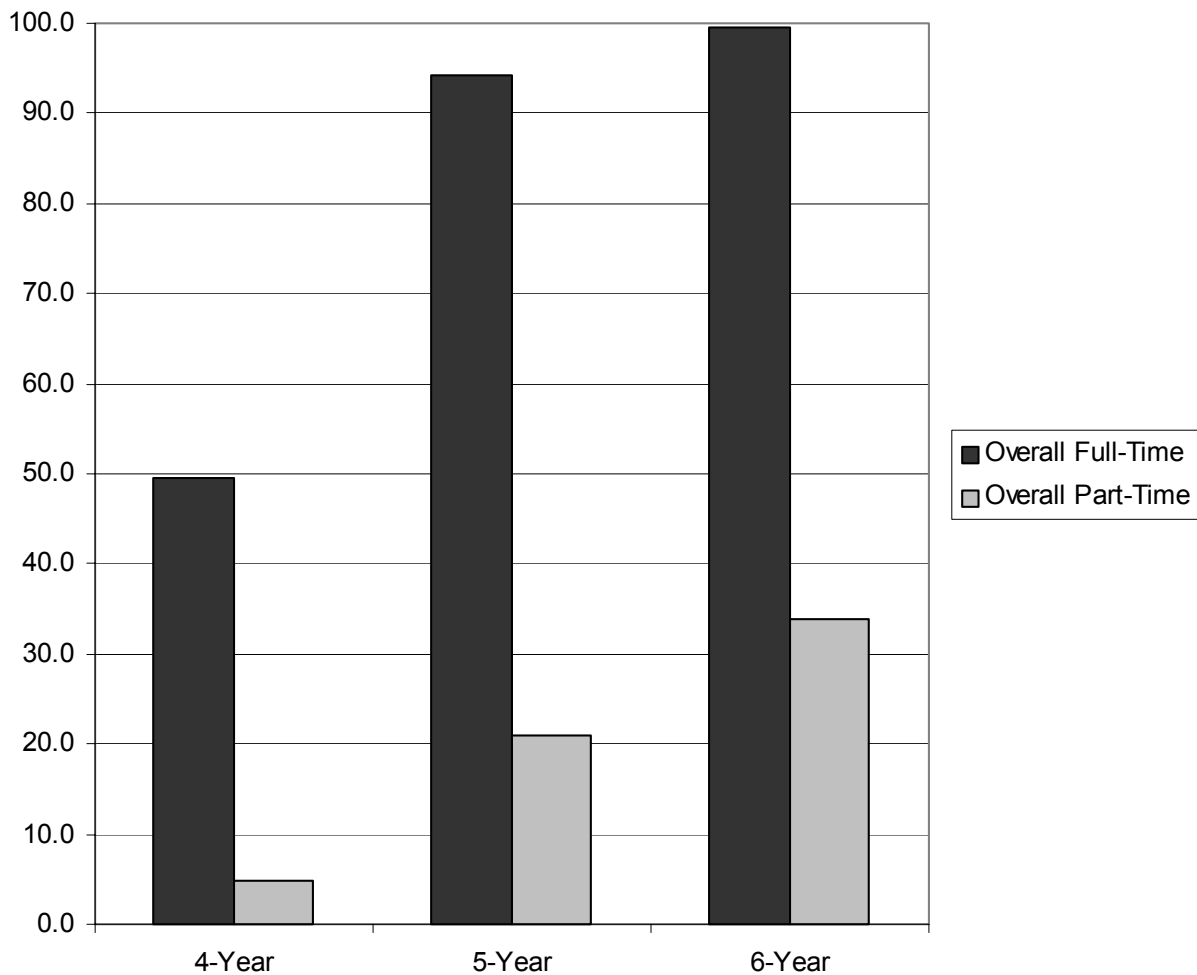
Entering College	6-Year Graduation Rate (% of students graduating)		
	1994	1995	1996
CALS	60.3	63.6	64.6
Design	84.1	73.1	85.7
Education	64.9	68.5	61.0
COE	60.8	64.7	68.4
CNR	61.4	67.5	63.1
CHASS	58.1	56.1	59.3
PAMS	60.1	58.6	68.7
Textiles	62.8	64.7	72.9
COM	61.3	63.0	64.8
UGA	53.9	55.0	56.4
NC State	60.2	61.6	64.0

Source: University Planning & Analysis

2. Graduation Rates by Enrollment Status

Average 4-, 5-, and 6-Year graduation rates by enrollment status were calculated to explore the impact of enrolling full-time continuously as an undergraduate. *Full-time* students are defined as those enrolled for at least 12 hours at the end of each semester they were at NC State. *Continuous* means that students were enrolled each fall and spring after entry. Co-op semesters do not move students to the non-continuous part-time category. This analysis demonstrates the importance of maintaining continuous full-time enrollment for timely graduation from the university (see Figure 4). The average number of students in each cohort from 1992 through 1997 was 3,414; yet, the average number maintaining continuous full-time enrollment during this six-year period at NC State was only 1,629 (47.7%). In contrast, an analysis of first-year student surveys from 1995-1997 indicates less than 1% of students indicate an intention to attend NC State part-time (0.5%, 0.3%, 0.2%, respectively) (University Planning and Analysis, 2001).

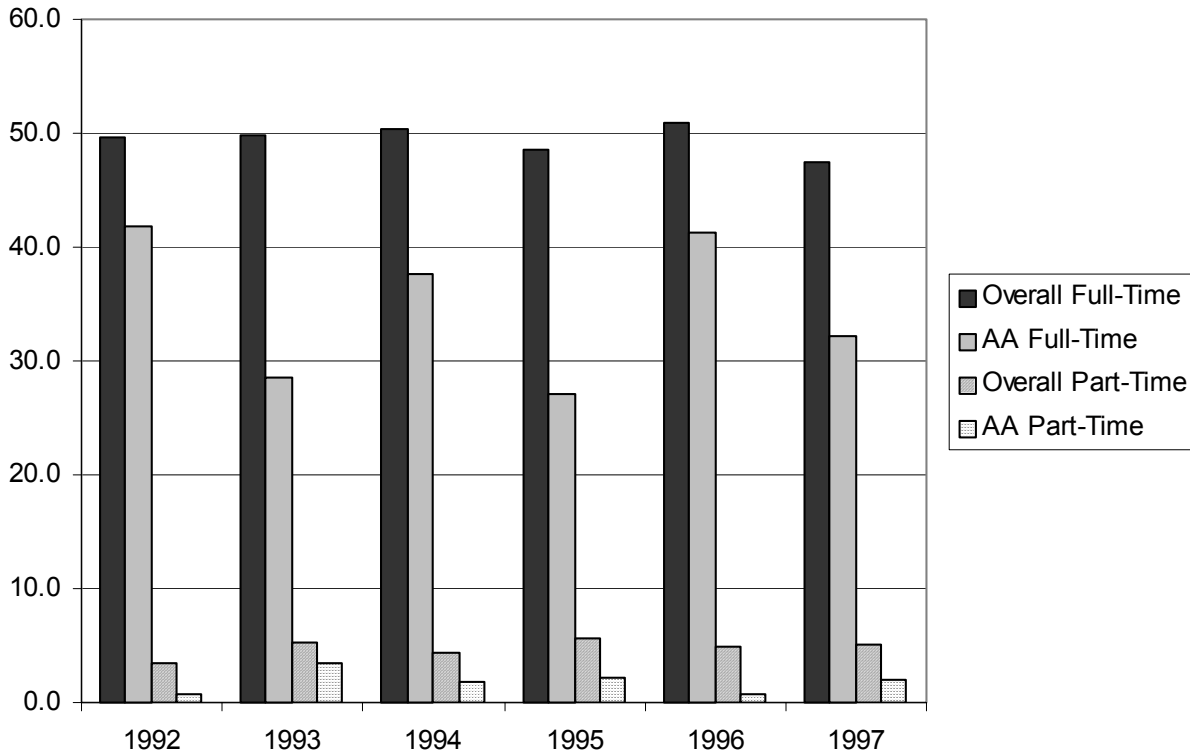
Figure 4. Average 4-, 5-, and 6-Year Graduation Rates by Enrollment Status



a. Graduation Rates, Race, and Enrollment Status

In an effort to explore the impact of race and enrollment status on the graduation rates at NC State, an analysis was conducted comparing African American rates to those of the overall population (in which African Americans are included) according to the students' enrollment status. Students were identified as either *full-time* or *part-time* where *full-time* were continuously enrolled students taking at least twelve hours each semester and anyone who had either dropped below twelve hours in any semester or stopped out for at least one semester. African Americans' four-, five-, and six- graduation rates by enrollment status, are presented in Figures 5, 6, and 7, respectively.

Figure 5. Overall and African American Four-Year Graduation Rates by Enrollment



As expected, there is a wide gulf between the four-year graduation rates of full-time, continuously enrolled students as compared to part-time students (see Figure 4). In each enrollment status, African Americans lag behind the overall population for the 1992-97 cohorts on this measure.

Figure 6. African American Five-Year Graduation Rates by Enrollment

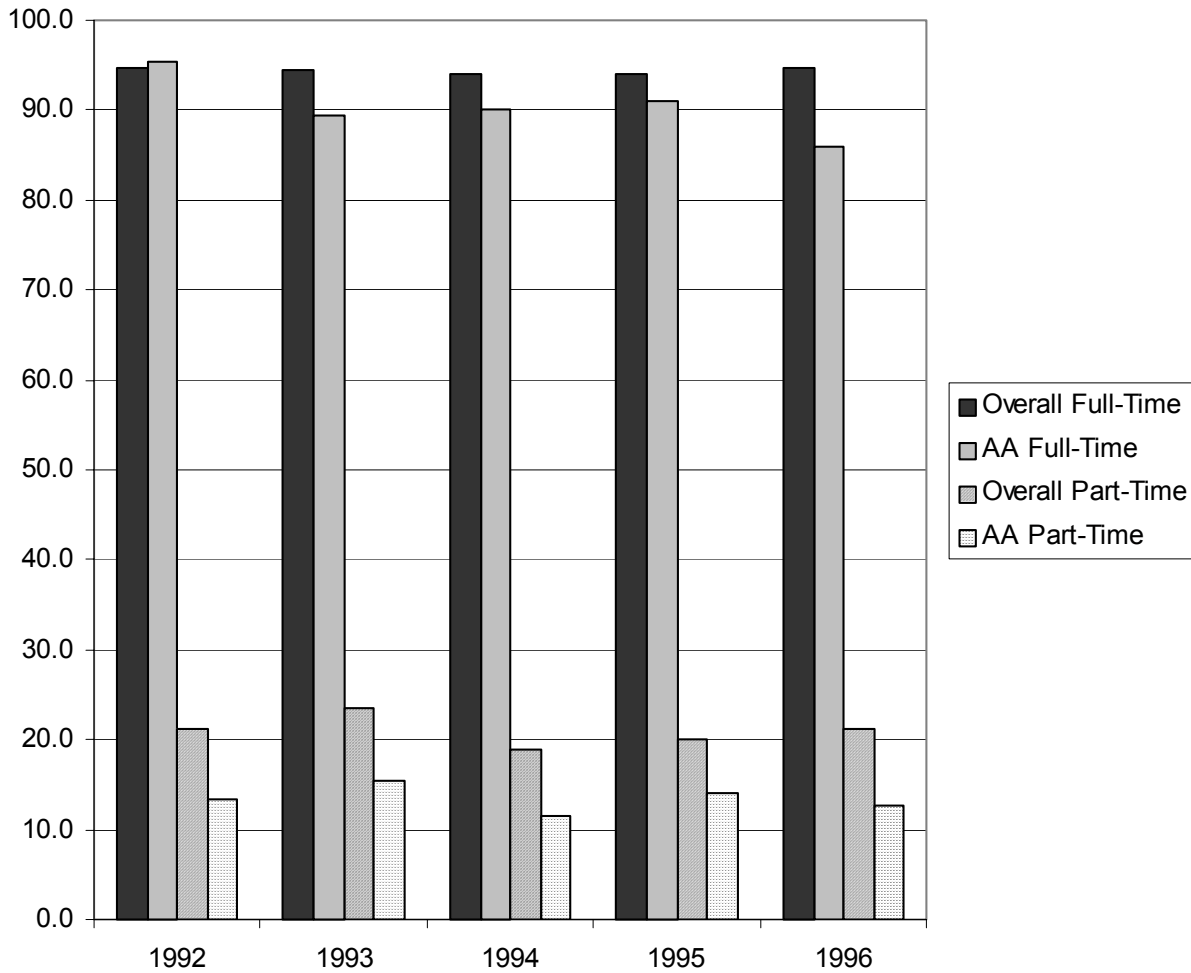
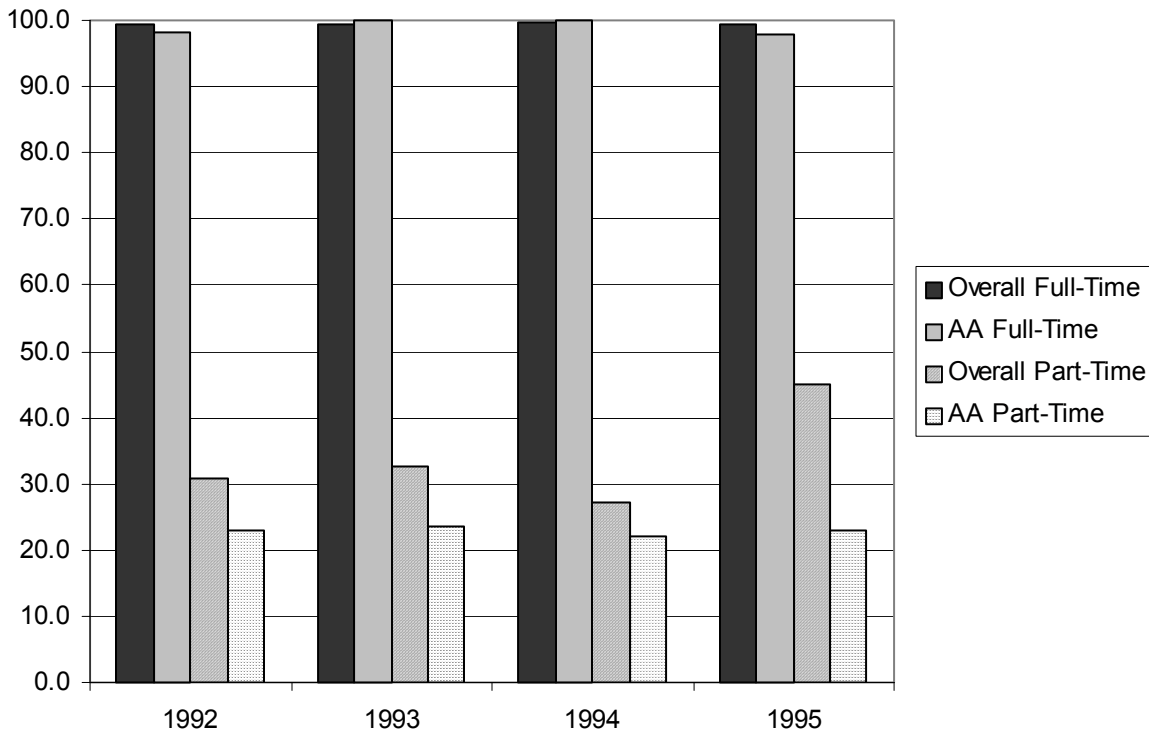


Figure 5 demonstrates a similar pattern as found in Figure 4; however, for five-year rates, the differential between African Americans and the overall population is greatly reduced, especially among the full-time students. This trend continues in continuously enrolled, full-time six-year graduation rates (see Figure 6) where race is shown not to be a factor. There still remains a large gap between continuously enrolled full-time students and part-time students, though this is expected due to the challenges of attending college on a part-time basis.

Figure 7. African American Six-Year Graduation Rates by Enrollment



b. Graduation Rates, Gender, and Enrollment Status

A similar analysis was conducted to explore graduation rates by gender and enrollment. Figure 8 shows a similar gap between full-time and part-time enrollment by gender, yet females dramatically out-perform males on this measure. Given that engineering majors typically take five years to complete and are over 80% male, this discrepancy makes sense. This conclusion is affirmed by the five- and six-year graduation rates by gender (see Figures 9 and 10) in which the gap between males and females is greatly reduced. Nevertheless, the gap remains between full-time continuously enrolled students and part-time students.

Figure 8. Four-Year Graduation Rates by Gender and Enrollment

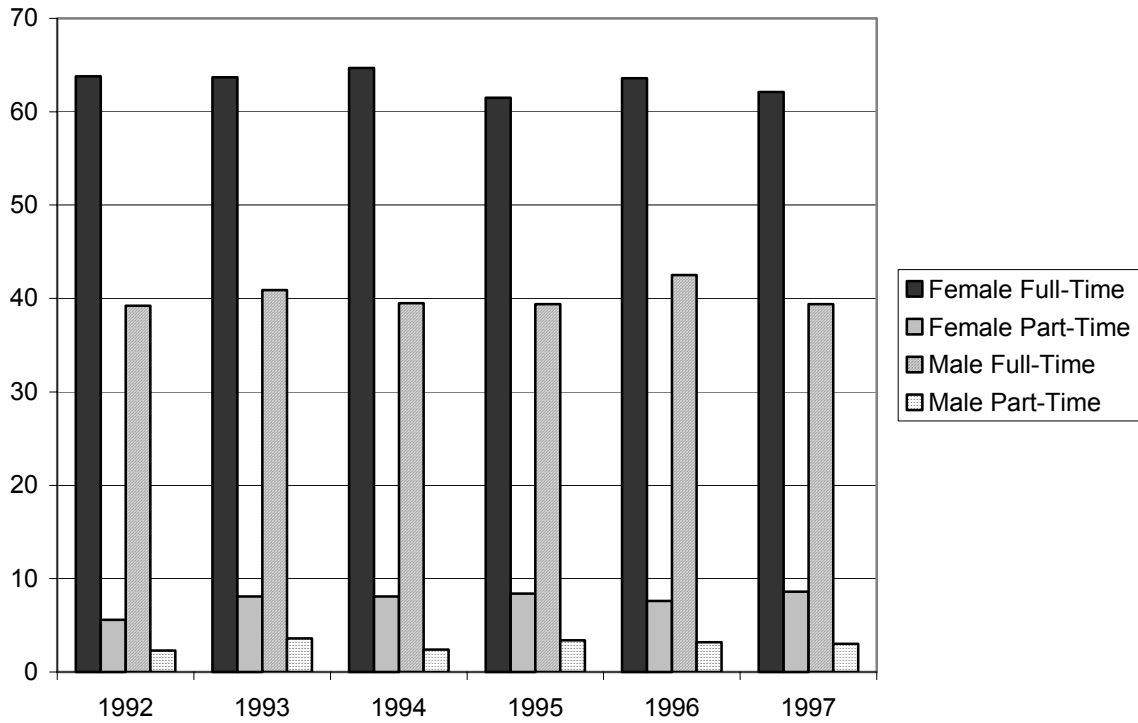


Figure 9. Five-Year Graduation Rates by Gender and Enrollment

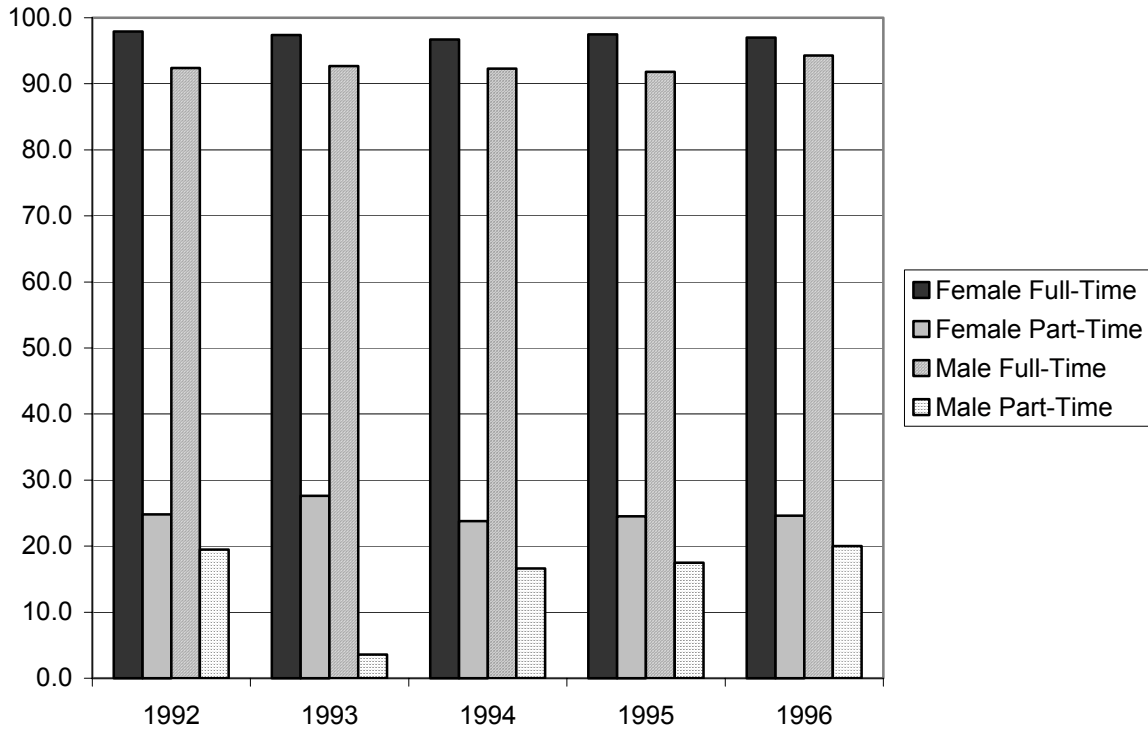
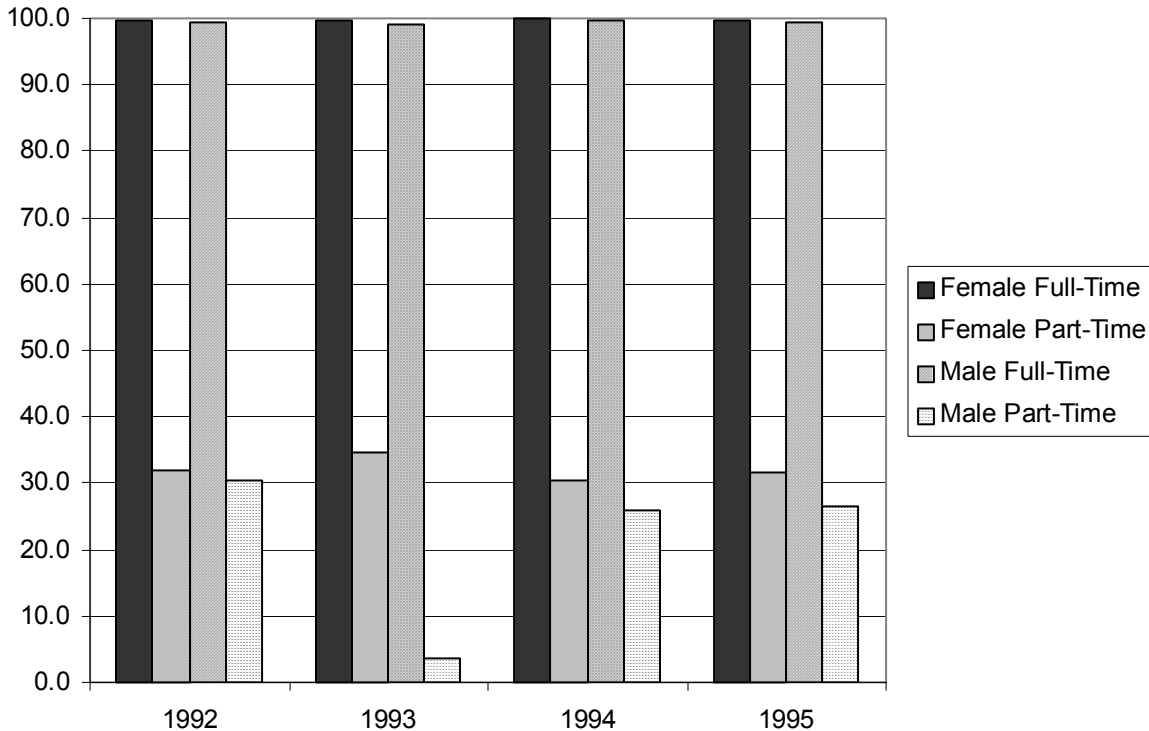


Figure 10. Six-Year Graduation Rates by Gender and Enrollment



### 3. Graduation Rates and Student Academic Performance

As a means of better understanding the characteristics of successful students, descriptive enrollment statistics were computed for the students who graduated in the spring or summer of 2002 (N=2822). Students in this population took an average of 9.31 (SD=1.99, max=23, min=4) semesters (fall and spring only, no summer sessions) to attain their degrees and 75.4% (N=2,128) enrolled for at least one session of summer school during their undergraduate career. The mean end-of-first-year GPA was 3.06 (SD=0.59). As a comparison, the end-of-first-year GPA for the students from the fall 1997 cohort who were still enrolled after 5 years was 2.52 (SD=0.62).

Because early academic performance has been linked to retention, and ultimately graduation rates, the 2002 enrollment status of students from the 1995-1998 cohorts who had a first-year GPA of less than a 2.00 was explored. Results indicate that 90.3% of students with less than a 1.50 first-year GPA were either suspended or were withdrawn as of census, 2002. Similarly, the percent enrolled and percent graduated showed a positive increase as GPA increased (see Table 8).

Table 8. 1995-1998 Cohorts: Students With Less than a 2.00 Cumulative GPA at the End of Their First Year

	Status at 2002 Census by First Year GPA							
	Enrolled		Graduated		Suspended		Withdrawn	
Less than 1.50	73	3.4%	27	1.3%	470	21.7%	459	21.2%
1.50 - 1.59	30	1.4%	25	1.2%	70	3.2%	54	2.5%
1.60 - 1.69	38	1.8%	28	1.3%	79	3.6%	63	2.9%
1.70 - 1.79	43	2.0%	45	2.1%	53	2.4%	74	3.4%
1.80 - 1.89	59	2.7%	61	2.8%	59	2.7%	76	3.5%
1.90 - 1.99	64	3.0%	70	3.2%	65	3.0%	83	3.8%
Total	307	14.2%	256	11.8%	796	36.7%	809	37.3%

#### 4. Leavers and Academic Success

In an effort to gain insight into the educational path of students who leave NC State (either voluntarily or through suspension) University, students from the 1997 cohort (N=3650) who had not graduated or were no longer enrolled as of census, fall 2002 were analyzed to identify those who had withdrawn or who had been suspended. The National Student Clearinghouse database was queried on these students for any subsequent enrollment at other institutions. From this cohort, 1172 students were identified as leavers as of Fall 2002. Tables 9 and 10 show that 62.0% of this group transferred to another institution, and of the group who transferred, 53% enrolled at another four-year institution. Of the 727 former NC State students who transferred, 22.6% graduated by the time of this analysis. North Carolina residents who transferred, typically stayed within the state and attended other North Carolina institutions while non-residents typically transferred to an institution in another state (see Table 11). This information illustrates that the majority of students who leave NC State remain committed to higher education and possess the capacity to succeed.

Table 9. Subsequent Enrollment of Students who Left NC State

Total Leavers (N=1172)	N	%
Transferred to Another Institution	727	62.0
No Transfer Record Found	438	37.3
Not Found in Clearinghouse	8	0.7

Table 10. Transfer Activity of Students who Left NC State

Transferred to Another Institution (N=727)	N	%
Four-Year	385	53.0
Two-Year	341	46.9
Less than 2-Year Institution	1	0.1
Graduated from Another Institution	164	22.6

Table 11. Residency of Transfers

	Transferred to an Institution in...			
	North Carolina		Another State	
	N	%	N	%
NC Resident	501	86.2	80	13.8
Non-Resident	22	15.1	124	84.9

Based on the findings presented in this segment of the report, the Task Force offers six recommendations. These recommendations are presented in Section V, along with their rationales and suggested implementation strategies.

## V. Recommendations, Rationales, and Implementation Strategies

**Recommendation 1:** The administration at NC State will emphasize retention and graduation rates in all planning endeavors.

### Rationale

As seen in Section IV, NC State has been making steady improvements in graduation rates in recent years. Additionally, when one includes in the larger picture students who leave NC State, enroll in another institution of higher learning, and graduate in a timely fashion, the success of the University is even more evident. Still, even when the emerging, alternative model is used, and the University compares its actual retention and graduation rates with its predicted rates, it is clear that there is room for improvement. To make further, significant gains, two things must occur: 1) the Chancellor and other top level administrators must emphasize these issues in their deliberations, and 2) Academic Affairs must make these issues a top priority, enlisting not only deans and department heads in its efforts, but also faculty who teach and advise.

Top-level administrators must be involved in the effort, because coordination must occur across various units: Admissions, Development, Financial Aid, Finance and Business, Housing, and Student Affairs, as well as Academic Affairs. Academic Affairs must emphasize the improvement of retention and graduation rates from the Provost through academic units if real progress is to be made, because it is at the unit level that specific issues and problems can be identified and solutions implemented. NC State is a large university; one size does not fit all, but commitment and coordination throughout the institution are essential.

### Implementation

- University should add advising to its goals/objectives, with emphasis on quality advising.
- More resources/scholarships must be made available for the recruitment of outstanding students. NC State does well in terms of the quality of students who apply, but the University needs to improve yield rates in many colleges, including CALS, CHASS, Education, Management, and PAMS where freshmen yield rates were below 50% in 2001 and 2002.
- University should continue to move in the direction of Living and Learning Communities. Students who are socially and academically integrated in the University are more likely to be successful.
- University Planning and Analysis will continue to provide retention and graduation rate data annually by department for use in compact planning.
- Provost will emphasize retention and graduation rates as part of compact planning process with Deans.
- Deans will emphasize retention and graduation rates as part of compact planning process with Department Heads.

## Task Force on Undergraduate Retention and Graduation Rates

- Department Heads will discuss and emphasize the importance of retention and graduation rates with faculty who teach and advise.
- All discussions regarding retention and graduation rates will emphasize accountability and will be used in assessing organizational effectiveness. All colleges and departments will be asked to explain their situation and to design plans for ongoing monitoring and enhancement where feedback indicates it is warranted. These plans may include the need for more resources, but this should not be the sole strategy.

**Recommendation 2:** Faculty and administrators will strongly encourage students who enter NC State as full-time students to remain in that status.

### Rationale

Regardless of race or gender, students who remain full-time graduate at strikingly higher rates in 4 years, 5 years, and 6 years, than students who go part-time, and this is the case even if a student drops only 3 hours below full-time status, i.e. to 9 hours. (See Section IV.) The vast majority of freshmen enter the University planning to go full-time (over 99%); about 50% of all students and 30% of African American students maintain full-time status. The goal of this recommendation is to keep more students in full-time status.

### Implementation

- More University resources, such as scholarships for enrolled students who are doing well, should be utilized to enhance students' ability to remain in full-time status
- University policies and procedures should be designed to encourage full-time status
- Work with advisors, especially those who advise freshmen, to implement the Progress Toward Degree Policy very meticulously. Freshmen should be encouraged to plan their academic careers from the time they arrive on campus, and they should be encouraged frequently to stick with their plan, or if necessary, to revise their plan. They should be strongly discouraged from enrolling for courses without a plan.
- Collect and evaluate data showing reasons students choose to attend part-time
- Strongly encourage all students to complete financial aid applications (FAFSA) so that we can better understand financial need on this campus and the resources necessary to meet it
- Include in guidelines to be developed for use at Visiting/Recruiting Days and at Orientation, i.e. when parents, as well as students, are present, advice regarding course loads necessary to graduate in 4 years

**Recommendation 3:** Faculty and administrators will work closely with students in achieving academic success.

Rationale

Students who end their freshman year with less than 2.0 GPA are headed for trouble. As noted in Section IV, the status of the 2,168 students on Census Day in 2002 who entered NC State between 1995-1998, and who had less than a 2.0 GPA at the end of their freshmen year, was as follows: 307 (still enrolled); 256 (graduated); 796 (suspended); 809 (withdrawn); or put simply, successful—26%; unsuccessful—74%. Students who hover just above a 2.0 are also much less likely to graduate than their peers with higher GPAs. As also noted in Section IV, the mean GPA of the 1997 cohort that was still enrolled after 5 years was 2.52, while the mean GPA of Spring, Summer 1, and Summer 2, 2002 graduates was 3.06. The goal of this recommendation is to monitor closely students who are experiencing academic difficulty and to move quickly and aggressively in communicating with, and making academic support available to, these individuals.

Implementation:

- Develop guidelines that can be used in Orientation and in Orientation courses
- Include in guidelines to be developed for use at Visiting/Recruiting Days and at Orientation advice regarding the importance of class attendance and shared responsibility (faculty and students)
- Strongly urge faculty to monitor their students' success very closely and to report to students and their advisors when students are doing poorly on assignments and tests and/or failing to attend class.
- Encourage advisors to be more aggressive in contacting advisees who are in trouble and giving them advice
- Develop an academic support services website for students and advisors
- Include advice for academic support services in letter of academic warning
- Develop at-risk indicators that advisors can use in advising students
- Ensure ongoing evaluation and enhancement of supplemental instruction to ensure it is meeting the needs of students
- Encourage colleges to develop procedures for ensuring advising excellence
- Require Colleges and Departments to continually monitor and evaluate advising and its effectiveness

**Recommendation 4:** Faculty, with the support of the administration, will develop additional opportunities for students who cannot matriculate into their major of choice, and faculty and administrators will improve communication with students about these opportunities.

### Rationale

In August, 2001, 321 juniors and seniors at NC State were not in a position to complete a degree. Largely, these were students who had never entered a degree-granting program but remained instead in Undesignated categories in the various colleges. Many of these students were in the First-Year College or Engineering. Since that time, both colleges have taken steps to alleviate the problem. The FYC has strongly encouraged Admissions to admit only applicants to its College who are truly undecided about their major. It urged this action, because students who are truly undecided tend to identify a major and move on in a timely fashion; those who never wanted to be in FYC but really wished instead to be in Engineering or Design tend to remain in the FYC. Admissions, of course, is in a difficult situation, because it is trying to admit the very best students it can, whether or not they are undecided. It is for this reason that certain colleges need more scholarship resources, i.e. so that the University can achieve a higher yield rate from the upper half of its applicant pool. See Implementation under Recommendation 1. Additionally, the FYC, in conjunction with the College of Design, crafted a letter that is sent by Admissions to prospective students explaining the low probability of transferring from other colleges into Design. In Engineering, the Academic Affairs team has taken a number of steps to inform Undesignated students of other opportunities within the University.

The problem of having juniors or seniors who have not matriculated into a degree-granting program should ease as a result of the Progress-Toward-Degree Policy, since that policy states that a student must choose a major by the completion of their sophomore year. Still, the problem of having students who have GPAs that allow them to continue at the University, and even to graduate, but who cannot get into the major of their choice will remain. This is the case, because a number of majors, either because of academic requirements, resource issues, or a combination of the two must set GPAs that are higher than 2.0. To address this problem, the University needs to create and fund additional programs for these students. To this end, the Task Force makes Recommendation 4.

### Implementation

- Encourage Colleges to create degrees similar to the BS in Engineering; for example, a BA or BS in Life Sciences, Textiles, Physical Sciences, and Social Sciences
- Inform students about other options such as BA/BS in Science, Technology, & Society and the BA/BS in a self-designed major

**Recommendation 5:** Retention and graduation rates should be given priority in the development or alteration and evaluation of academic regulations and should be considered in relation to one another.

Rationale

Too often Academic Regulations are developed or revised in isolation from one another and without appropriate consideration being given to retention and graduation rates. Those making recommendations need to be aware of the whole picture, to see these regulations as they impact retention and graduation rates in relation to one another.

Implementation

- Fully implement the Progress Toward Degree Policy and plan for the collection of data and on-going assessment of its effectiveness
- Clarify the lines of authority for developing and revising academic regulations Currently, it is unclear how the Academic Policy Committee of the Faculty Senate and the Undergraduate Academic Operations Council are supposed to work in relation to one another.
- Strongly encourage representatives on the Council on Undergraduate Education to consult within their respective Colleges regarding major issues being considered by the CUE.
- Any group considering changes to existing Academic Regulations should consult Section VI of this report
- The appropriate body(ies) should begin considering the alteration of the Academic Regulations recommended by the Task Force as soon as possible

**Recommendation 6:** Efforts to implement appropriate strategies for improving retention and graduation rates, to monitor and assess these strategies, and to modify these strategies and develop new ones as necessary should be institutionalized immediately.

Rationale

For too long, the improvement of retention and graduation rates has been assigned to task forces on an intermittent basis and subsequently neglected and forgotten. If the University is really serious about improvement in these areas, it must embed responsibility for driving the effort forward within the institutional framework of the University.

Implementation

- Charge the Provost and his/her designee with overseeing the implementation of the recommendations of the Task Force and with taking additional steps as necessary to monitor and improve retention and graduation rates on an on-going basis
- Expect the person overseeing the implementation and evaluation of the recommendations to work with appropriate groups and individuals to carry out these recommendations: Chancellor and the Executive Council, Faculty Senate, Provost, Deans' Council, Associate Deans of Academic Affairs, Advising Roundtable, and any Ad Hoc Committees deemed appropriate
- Make this effort a top priority at NC State at every level

## **VI. Academic Policies Affecting Retention and Graduation Rates**

As Bean's (1990) model of student attrition suggests, individuals' experiences shape their perceptions and ultimately influence their decisions to remain at an institution or to leave. Since academic policies are key avenues for student interaction with an institution, these policies can influence their perceptions of the institutional culture, and ultimately their decisions to continue progressing toward graduation. For example, if a student is having difficulty with a personal situation (e.g., illness or family issues) that begins to affect academic performance, the support that student receives from the administrative areas in dropping courses, obtaining medical withdrawals, or course repeats, can influence that student's commitment to continue pursuing a degree. The academic policies reviewed by the Task Force, with recommended modifications, are detailed below.

## **Policy: Adding and Dropping Courses**

### Summary:

This policy defines how and when students can add or drop courses. The policy allows students to drop undergraduate courses through the sixth week of class during fall or spring semesters. After census date, students must have permission of their Academic Dean to drop below 12 hours. This policy is intended to allow students enough time to evaluate their performance in a class, and then give them the option to drop courses where their performance is less than expected.

### Potential Effect on Graduation and Retention Rates:

Students routinely drop courses in which their performance is less than desired. If dropping the course will put them below 12 hours, many students change the course to credit-only. Although courses taken as credit-only cannot be used for specific degree requirements, they have the advantage of not affecting a student's grade point average (GPA).

There are currently no limits on the number of courses that a student can drop during their academic career, nor is there a penalty for courses dropped during the first six weeks of the semester. The drop policy protects a student's GPA since they can drop courses that will negatively affect it; however, the policy has several negative effects:

- It allows students to register for more courses than they intend to complete, since they can drop courses later without penalty. Tuition and fees are the same for undergraduate students taking 12 or more hours, so registering for extra classes has no additional costs associated with it.
- It may encourage students to give up and drop a class (or change it to credit-only), rather than work harder and complete it.
- Overall, fewer courses are completed in a given semester, since courses dropped after census date are unavailable to other students who may have wanted to enroll in them.

### Recommendations:

We recommend limiting the number of drops that a student is allowed during an undergraduate career to no more than four (after the census date). Often-heard complaints about students being able to find seats in courses that are full prior to census date and greatly emptied after that date, thereby limiting the ability of other students to occupy those empty seats, could be addressed if we limit the shopping cart mindset of students.

Any drops for non-attendance (see Attendance Policy) would count toward the total.

Any drops greater than four would require the approval of the student's advisor and the associate dean. Consideration should also be given to limiting the number of changes from letter grading to credit-only.

**Policy: Course Load**

**Summary:**

The course load policy for undergraduate degree students states that the maximum course load for undergraduate degree students is 21 credit hours in a semester and two courses plus a physical education course in a summer session. To carry more than the maximum, students must obtain the approval of their academic advisors and of their college deans. Undergraduate students who propose to register for 19 or more credit hours in a semester must obtain approval from their academic advisers. First semester freshmen with admissions indices less than 2.0 and continuing students with a grade point averages less than 2.0 should be advised to carry no more than 16 credit hours in a semester.

The minimum course load for full-time undergraduate degree students is 12 credit hours, except in their final semester, when a lesser number may be taken if that is all the student needs to fulfill the requirements for a degree. In order to receive financial aid a student must meet the minimum course load requirements of the appropriate funding agency.

The number of hours for which a student is officially enrolled is that number in which the student is enrolled for credit at the end of the second week of classes, i.e., the last day to withdraw or drop a course with a refund.

**Potential Effect on Graduation and Retention Rates:**

The average course load carried by undergraduate students at census date in Fall, 2002 was approximately 14.4 hours, and students rarely complete 21 hours successfully in a given semester. On the other hand, students routinely enroll in more courses than they intend to complete, and then drop prior to the last day to drop. This behavior makes scheduling more difficult, especially for under-classmen and lifelong students.

**Recommendations:**

We recommend that the statement of the policy (Section III) be changed to emphasize the course load necessary to graduate within four years. With an average degree requirement of 120 hours, an eight-semester effort requires completion of 15 hr/semester. Leaving the minimum course load of 12 hours for insurance/financial aid/and other similar considerations is appropriate but thought should be given to changing that minimum to perhaps 15 hrs/semester. The maximum course load for undergraduates should be reduced from 21 to 18 hours, unless the student has permission.

Section VII of the policy needs to be updated to reflect actual TRACS operating period.

**Policy: Attendance**

Summary:

Instructors should state an attendance policy in their course syllabus, and instructors of 100 and 200 level courses should track class attendance.

Potential Effect on Graduation and Retention Rates:

Class attendance is an integral part of the learning process. Failure to attend class early in the semester may result in students falling behind and limit their chances for success in the course. In addition, students who do not attend early in the semester are probably more likely to drop a course, which results in inefficient use of a limited resource. A related problem involves students who never attend a class and then petition for a retroactive withdrawal.

Recommendations:

We recommend the addition of a part B to the present attendance policy:

By the second class/laboratory period or the fifth business day of the semester (whichever comes first) students who have not attended class or contacted the instructor regarding his/her absences may be dropped from the class roll. This drop will be initiated by the Associate Dean of the College upon the request of the instructor. The student may petition for readmission to the class if s/he has been dropped in error, or in the event the student experiences extenuating circumstances, provided the request is received by the tenth business day of the semester. Students who intend to drop a course continue to have the responsibility to officially drop and are encouraged to do this on a timely basis, following normal university procedures.

## **Policy: Graduation Requirements**

### **Summary:**

This policy gives authority to colleges and departments for establishing graduation requirements for their respective academic programs. It adds that students are eligible for graduation when they have satisfactorily met the residence requirements and completed all academic requirements of their degree program as specified by their major department, their college, and the University. Embedded within this policy are GPA Requirements and Performance Requirements in Specific Courses. All programs require a consistent 2.0 GPA for graduation, although the College of Education notes that the NC. State Board of Education requires 2.5 overall and in the student's teaching field before the student is allowed to student teach. In terms of Program Requirements, some programs require "better than a 'D'" in specific courses; others require "better than a 'D+'."

### **Potential Effect on Graduation and Retention Rates:**

Clearly, academic requirements set by colleges and departments for their respective academic programs have major implications for retention and graduation rates. Even if a student remains in the same major while at NC State and is able to count every hour toward graduation, s/he will not finish in 4 years if the program requires more than 120 hours and the student takes an average load of 15 hours per semester. If, additionally, a student changes majors or does poorly in some courses and retakes them or takes other courses, time to graduation will be even longer. In turn, financial demands increase, and students are less likely to remain in full-time status or to remain at the University. Not surprisingly, retention and graduation rates are negatively impacted.

### **Recommendations:**

We recommend that 120 hours plus 2 hours of physical education be regarded as the norm for the 4-year degree at NC State, and that programs that go beyond 122 hours for graduation be expected to justify the exception that they require to their respective college curriculum committees and the UCCC, as well as their respective Deans who will, in turn, keep the Provost informed. Curricula requiring more than 128 hours will continue to be 5-year degree programs. Exceptions granted should be reviewed on a periodic basis.

We also recommend that whether or not a student must pass a course with a "D" or "D+" be made uniform across the University.

**Policy: Evaluations, Feedback to Students**

**Summary:**

This policy strongly urges faculty to provide “substantive evaluative feedback” to students before the six-week drop period ends. It notes further that faculty may provide feedback to students and their academic advisors at any time during the semester by using the Academic Progress Reports function available on-line through the Registration and Records website.

**Potential Effect on Graduation and Retention Rates:**

Students with GPAs below or only slightly above 2.0 are far less likely to continue at the University and to graduate than those who are making satisfactory progress. For this reason, faculty need to inform students and their academic advisors as soon as possible when a student is experiencing difficulty in a course, not so that the student can drop the course, but so that the student can take appropriate action(s) to correct the problem(s) and succeed in the course. These actions might include consultation with the instructor, supplemental instruction, or assistance at the University tutorial center.

**Recommendations:**

Stringent efforts should be made to ensure that all faculty are informed about the means of sending feedback to students who are in academic difficulty and to their academic advisors

Faculty should be encouraged to take this action as early in a course as possible

Academic advisors, in turn, should know appropriate actions a student in academic difficulty can take and should be proactive in getting in touch with advisees about their situations and the means of dealing with them.

## **VII. Conclusion**

NC State has long had a commitment to educating non-traditional students, including adults who need to return to an institution of higher education on a part-time basis. At the same time, this commitment should not blind us to the fact that the vast majority of the students enrolling as freshmen at NC State are traditional. They enter the University directly from high school, they enter with some support from their families, and they enter intending to go full-time and to graduate in a timely fashion. It is the job of these students, and the faculty, staff, and administration at this institution, to see that their goals are realized. Achieving them will not be easy; the process for doing so must be evolutionary and continuous. This Task Force on Retention and Graduation Rates is not the first at NC State. If we are to be successful in achieving our objectives, it must be the last, for success will only come when the goals of improving retention and graduation rates become fully institutionalized within the University. Shelved and forgotten intermittent reports will not do the job; commitment and continued vigilance from everyone in the University community are essential.

## VIII. References

- Astin, A.W. (1997). How good is your institution's retention rate? *Research in Higher Education*, 38(6): 647-658.
- Bean, J. P. (1990). Why students leave: Insights from research. In Hossler, Bean, and Associates, *The strategic management of college enrollments*, pp. 147-169. San Francisco: Jossey-Bass.
- Bean, J.P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12(2), 155-187.
- Berkner, L.K., et al. (1996), *Descriptive summary of 1989-1990 beginning postsecondary students; Five years later, with an essay on postsecondary persistence and attainment*. Washington, DC: National Center for Education Statistics. (ERIC Document Reproduction Service No. ED396597).
- Durkheim, E. (1951). *Suicide*. New York: Free Press.
- Horn, L.J. & Carroll, C.D. (1998). *Stopouts or stayouts? Undergraduates who leave college in their first year* (Statistical Analysis Report). Washington, DC: National Center for Education Statistics. (ERIC Document Reproduction Service No. ED425683).
- Knight, W.E. (2002, Winter). *Toward a comprehensive model of influences upon time to bachelor's degree attainment*. (AIR Professional File Number 85). Tallahassee, FL: Association for Institutional Research.
- Lang, M. (2001-2002). Student retention in higher education: Some conceptual and programmatic perspectives. *Journal of College Student Retention*, 3(3): 217-229.
- McLaughlin, G.W., Brozovsky, P.V., & McLaughlin, J.S. (1998). Changing perspectives on student retention: A role for Institutional Research. *Research in Higher Education*, 39(1): 1-17.
- National Center for Education Statistics (1996). *A descriptive summary of 1992-93 bachelor's degree recipients one year later*. (NCES 96-158). Washington, DC: Author.
- Nelson, R.B., Scott, T.B., & Bryan, W.A. (1984). Precollege characteristics and early college experiences as predictors of freshman year persistence. *Journal of College Student Personnel* 25: 50-54
- Padilla, R.V. (1999). College student retention: Focus on success. *Journal of College Student Retention*, 1(2): 131-145.
- Pascarella, E.T., & Terenzini, P.T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education*, 51(1): 60-75.

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- Pascarella, E.T., & Terenzini, P.T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass, Inc.
- Porter, O.F. (1990). *Undergraduate completion and persistence at four-year colleges and universities*. Washington, DC: The National Institute of Independent Colleges and Universities.
- Porter, S.R. (1999, March). *The robustness of the "graduation rate performance" indicator used in the US News and World Report College Rankings*. Paper presented at the AIR-CASE Conference, Washington, DC).
- Porter, S.R. (2001). *Predicted retention and graduation rates as performance indicators: The neglected role of uncertainty*. Paper presented at the Annual Meeting of the Southern Association of Institutional Research, Myrtle Beach, SC).
- Postsecondary Education Opportunity (2002, March). *Institutional graduation rates by control, academic selectivity and degree level: 1983 to 2001*. (Number 117). Oskaloosa, IA: Author.
- Terenzini, P.T., & Pascarella, E.T. (1980). Toward the validation of Tinto's Model of College Student Attrition: A review of recent studies. *Research in Higher Education*, 12(3): 271-282.
- Terenzini, P.T., Lorang, W.G., & Pascarella, E.T. (1981). Predicting freshman persistence and voluntary dropout decisions: A Replication. *Research in Higher Education*, 15(2): 109-127.
- Thayer, P.B. (2000). *Retention of students from first generation and low income backgrounds*. (Number 9). Oskaloosa, IA Postsecondary Education Opportunity. (ERIC Document Reproduction Service No. ED446633).
- Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45: 89-125.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, University of Chicago Press.
- Tinto, V. (1982). Limits of theory and practice in student attrition. *Journal of Higher Education*, 53(6): 687-700.
- University Planning and Analysis. (2001). *2001 first-year student survey*. Raleigh, NC: Author.
- Wang, H. & Grimes, J.W. (2001). A systematic approach to assessing retention programs: Identifying critical points for meaningful interventions and validating outcomes assessment. *Journal of College Student Retention*, 2(1): 59-68.

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