

Policy Discussion 1:

Performance Model for

Enrollment and Funding

Background

Over the past five years the University has been taking a step-by-step approach to implementing a performance-based plan that will make a real difference in student achievement.

We have (1) raised admissions standards so that only qualified students are admitted; (2) established intensive summer "academic boot camps" for rising freshmen needing more preparation to be ready for college (Fayetteville State University, UNC- Pembroke Elizabeth City State University, and North Carolina A&T State University now offer such programs); (3) provided more intensive academic advising and counseling for those entering, to increase their progress; (4) established retention and graduation goals based on missions and peer campuses; and (5) moved to restrict enrollment growth at campuses not making significant progress.

Each step is part of the process that has placed us in a position to devise and implement a performance-based system for both enrollment growth and reward. The targets set for retention and graduation now can be measured by actual performance in 2008-09 and in subsequent years as data become available. The plan before you adds efficiency in degree production to retention and graduation as key performance measures.

The University also is working with the community colleges to project enrollment demand, facilitate joint admissions, improve transfers between the systems and increase the number of North Carolinians earning college degrees.

DRAFT

A Model for Access and Student Success

Performance Funding and Enrollment Restraints

Assessment of Performance

The purpose of the model is to identify where enrollment may be increased and where it should be restrained and where performance on key indicators should lead to funding. The current economic conditions and the condition of the State budget have significantly shifted the expectations for enrollment growth in UNC institutions. It is clear that the University will have to defend its growth requests more vigorously than ever before. Developing this model at this time will be complicated since it may be necessary to restrain overall growth. That means that there may be growth restraints tied to performance and growth restraints that are simply a function of the lack of State funding.

The concept of funding universities on a performance basis is being examined at many higher education institutions across the country. Discussions focus on providing a portion of State support to institutions based on outcomes (e.g., the number of courses successfully completed, increases in the graduation rate and number of degrees awarded) rather than the number of credit hours of instruction to be delivered.

The past decade has been a period of rapid growth at UNC, with funding of the University's enrollment expansion requests by the General Assembly. That funding supported the growth of UNC in the past decade by over 60,000 students, bringing the 2009 total to over 222,000 students. A key component of this growth was differential growth on the campuses, some growing rapidly while others grew modestly or very little. This growth has exceeded the projections on which the 2000 bond program was based. Access was significantly expanded by the growth of all campuses, with special opportunities afforded to the Focused Growth Campuses (ECSU, FSU, NCA&T, NCCU, UNCP, WCU, and WSSU).

As the University addresses the current funding environment and the environment that is likely to persist for the near term it must adopt an approach to account for its new circumstances. The national mood for higher education has, as has UNC's, shifted to student success and degree production along with expanding access. The production of undergraduate degrees will play a larger and larger role as this model is developed and implemented. It is becoming clearer and clearer that access that does not result in student success is providing a disservice to our students. While some college, even without a degree, provides a positive, measurable economic impact, our goal is to marry access and student success so that access means access to a post-secondary credential. In the case of UNC, that is a baccalaureate degree.

There are two factors that will be important to consider as drivers of this model. One is the historical levels of campuses' performance on a variety of measures and the other is the degree of improvement

regardless of the campuses' past historical level of performance. It is clear that there are national data relating levels of performance to the selectivity of institutions. On the other hand, the Educational Trust has shown that there are high-performing campuses with substantially the same characteristics as other campuses which have a much lower historical level of performance. Both of these considerations are relevant to our ongoing analysis of enrollment and performance. One provides some explanation of where we are and the other challenges us to improve significantly.

Among the great results of the Bond Program and the Focused Growth Initiative was significant expansion in the number of enrollment slots across the campuses and especially on the Focused Growth Campuses. The Focused Growth Campuses also developed a significantly expanded set of choices among available academic degree programs. Given this historical expansion, there is a continuing capacity for these campuses to address access as well as for other campuses with expanded capacity to do so.

The idea is to use the historical levels of performance and current and ongoing performance to address both whether and where there should be restraints on expansion of enrollment and what funding for performance should accrue to campuses.

The model is developed in the first instance to identify where there should be restraint and where there should be reward based on the relation of historical, current, and ongoing levels of performance. This model can operate best when State funding for both enrollment growth and for rewarding performance is available.

If the University finds it necessary to significantly restrain enrollment growth, historical levels of performance may have to play a larger role. In order to achieve student success and increase the number of baccalaureate degrees awarded, calculations of efficiency will also be relevant in such a restrained environment.

The template that has been developed includes a number of measures, some of which can be used now and some which will be developed over the next few months. Where possible, the measures will involve historical performance over time of the institution, whether the agreed-upon goals are met, how the campus performs in relation to peers, and how the campus performs in relation to predictive models. The categories to be included follow.

Freshmen-to-Sophomore Retention. This is the standard IPEDS measure of the percentage of first-time, full-time freshmen who return fall term of the next year.

Six-Year Graduation Rates. This is the standard IPEDS measure of what percent of first-time, full-time freshmen graduate from that institution within six years.

Graduation Rates of Community College Transfers with an Associate's Degree within Four Years. Because of the relatively low numbers of associate degree transfers these are grouped into three-year rolling cohorts.

Graduation Rates of Community College Transfers without an Associate's Degree. Since a larger number transfer without an associate degree it will be important to track this group.

All Undergraduates Six-Year Graduation Rates. This is a different measure that looks at the entire undergraduate enrollment on a campus in a given year then calculates how many have graduated within six years, regardless of how they entered the university.

Increased Numbers of Baccalaureate Degrees and the Efficiency with Which They Are Produced. This will be based on the number of degrees produced in relation to targets as well as on the efficiency with which they are produced. Efficiency will involve both number of degrees produced per 100 FTE undergraduates and the cost of those degrees if effective measures can be established. Time to degree, enrolled time to degree, and total credits hours attempted for a degree are potential measures to be developed.

Degree Production in High-Need Areas Such as Teacher Education, Nursing, and the STEM Areas. Degree production in teacher education and nursing has increased significantly in recent years and a new set of targets will be negotiated for teacher education this fall, and then in the other areas.

Supplemental Data.

While detailed targets will not be established, data for retention and degree completion of “at-risk” students will be broken down by gender, race, ethnicity, and socio-economic profile to provide a context for understanding how sub-groups are doing.

While it is important to consider all appropriate measures, it is also important to have a relatively small number of focused measures that capture the key components of student and institutional success. It is also important to use several data points and not depend on a single target

A next step is to set degree targets. While campuses now have targets for the percent of students who graduate, targets will be considered that focus directly on the number of baccalaureate degrees produced. Focusing on degree targets will shift attention from the freshmen entry point to a wider range of entry points such as AA/AS transfers from the community colleges, other transfers from the community colleges, transfers from other institutions, and adults returning to complete undergraduate degrees.

Restraints on enrollment need to be carefully defined. So far we have identified five categories where enrollment expansion and restraints might be relevant: freshmen enrollment growth, retention improvement-based growth, AA/AS transfer growth, other transfer growth, graduate growth in relation to undergraduate performance. They will be further developed below.

Even under conditions of restrained enrollment growth, options such as rigorous summer bridge programs that demonstrate they can significantly improve student success will be available as potential avenues to increase enrollment.

As these measures are developed for undergraduate degrees, it will also be necessary to recognize the importance of graduate education and that graduate degree production is a key component of North Carolina's success in the research-based knowledge economy.

Performance Funding and the UNC Enrollment Expansion Funding Model

Both limits on enrollment growth and funding based on performance are directly relevant to the Enrollment Expansion Funding Model. Restraints on enrollment may mean lower requests in terms of numbers of students and funding based on performance will mean that adjustments will have to be made to the funding formula.

Of immediate concern is the need to implement the directive advanced by the President and the Board of Governors to tie student success, as measured through retention and graduation rates and other measures, to enrollment funding. The legislature is also expecting UNC to make changes in this direction. This should be done within the request for enrollment funding that is submitted to the General Assembly for the 2011-13 biennium. Following are a set of recommendations for a change to the enrollment funding model that would tie student success to new enrollment funding. Each campus's success would be relative to its own set of Board of Governors-approved peers, improvements over time, meeting its targets, and performance in relation to predicted outcomes.

Background for recommendation:

- The Board of Governors has made it clear that student success at UNC campuses is as important as providing access to the University, that access is access to a post-secondary credential or degree.
- The primary measures of student success that have been discussed are retention rates, graduation rates, and the efficiency with which degrees are produced. Campus-specific goals have been established for some of these measures and others are in process. When reviewing progress against goals, the immediate focus is on retention rates because the impact of improvements can be seen in a shorter time. Improvements in graduation rates are directly tied to improvements in retention rates; however, the graduation rate improvements do not materialize until a longer period of time passes.
- The funding model for enrollment growth contains "undergraduate cost factors" that provide incremental funding to growing institutions. Current cost factors provide funding for campuses that have a larger-than-normal population of disadvantaged students, a non-doctoral mission, diseconomies of scale, and a liberal arts mission.
- The current funding model provides significant and important funding for the University. It is almost constantly under scrutiny and, of course, must be thoroughly defensible.

Recommendation: For an institution to be allowed to increase freshman enrollment at all, the institution would be required to demonstrate substantial progress (to be defined) in meeting its retention goals. A prohibition on increasing enrollment would separately apply to freshman enrollment and would not preclude an institution from increasing its enrollment growth through transfer students, particularly community college transfer students. Beginning in 2013-15, an institution would not be allowed to increase enrollment if it was not meeting or making progress in meeting its graduation goals.

It is proposed that retention and graduation rates be more closely linked to enrollment growth by replacing two of the current undergraduate cost factors with three new factors that recognize the Board's focus on student success as well as the efficiency of degree production. Two undergraduate cost factors would remain while the cost factors for liberal arts and non-doctoral mission would not. The first remaining factor recognizes that campuses serving students from disadvantaged backgrounds require funding to accommodate the needs of those students. The factor is applied to any campus with more than one-third of undergraduate resident students receiving Pell Grants. The model increases the number of faculty positions serving undergraduate students by 5% in recognition of this need. The schools that currently qualify for this 5% are ECSU, FSU, NCA&T, NCCU, UNCP, and WSSU.

The second remaining factor is one that recognizes diseconomies of scale (5%). The two institutions to which this factor is currently applied are ECSU and UNCA.

To encourage campuses to improve retention rates, a new undergraduate cost factor would be introduced. If a campus is making progress in meeting retention goals or has a retention rate above a specific percentage agreed to with General Administration based on that campus's peer results (say 85%), an undergraduate cost factor (say 5%) would be applied. It is important to note that the funding model already recognizes retention by providing funding for students who continue to matriculate within the campus.

To encourage campuses to improve graduation rates, a second new undergraduate cost factor would be introduced. If a campus was making progress in meeting graduation goals or had 6-year graduation rates in excess of a set percentage agreed to with General Administration based on that campus's peer results (say 60%), an undergraduate cost factor (say 5%) would be applied.

The third new cost factor (say 10%) would recognize the efficiency of undergraduate degree production on a campus. The proposed metric would be degrees/100FTEs and cost/degree and the comparator group would be an institution's peer group as approved by the Board of Governors.

To recognize strong performance at a campus, the Board of Governors should also consider requesting additional appropriations (say \$1 or \$2 million) on top of the regular enrollment request to create a pool of funds to award high-performing campuses. The Board would need to determine a set of campus-specific metrics (including retention, graduation, the number of new degrees awarded, and efficiency [degrees/100FTE, cost/degree] relative to a campus's peer institutions or any of the other metrics

discussed in the beginning of this document) that would be measured and, based on success in achieving the metrics, the pool of funds would be allocated to the campuses. Should the legislature not be supportive of the request for funding, the President will use \$1,000,000 of strategic initiatives funding or trust funds to launch this initiative.

These steps are proposed to be made effective with the 2011-13 biennium. UNC would continue to examine the success of this approach and consider other approaches as additional measures are considered.

Implementation

There are two parts to the implementation of the model. One is to identify the implication of performance for campus enrollment growth and the other is to relate performance to funding.

Implementing the Relation of Performance to Enrollment Growth

As indicated above, there are at least five possible categories in which a campus can plan to grow or restrain growth. Based on performance, the campus can continue with normal growth, or there may be some restraints on growth, or for some situations it may be that the campus should not grow in that category. The table below relates the five areas for growth to the three judgments that can independently be made about each area based on the campus's performance. This makes it clear that a campus which might be restrained in freshman growth could have several other avenues of growth and that the restraint on growth is being targeted where problems are detected.

Relation of Performance to Growth

Enrollment Growth/Change	Options for Growth/Change*
Freshmen Enrollment	None, Restricted, Normal
Retention Improvement Enrollment	None, Restricted, Normal
AA Transfer Enrollment	None, Restricted, Normal
Other Transfer Enrollment	None, Restricted, Normal
Graduate Enrollment Change in Relation to Undergraduate Performance	None, Restricted, Normal

*Growth rates at different campuses vary, so this depends on past growth/change levels. The overall budgetary situation in the State may require redefinition of normal.

Implementing the Revised Undergraduate Cost Factors

There are three performance-based undergraduate cost factors related to specific performance on retention, graduation, and degree production and efficiency. Cost factors can be included or not included in the enrollment budget request depending on the performance on each one. For example, a campus could get a cost factor included in the funding request for retention but not for graduation. The fourth category, while not a cost factor as such, is meant to be a way for recognizing and rewarding exemplary performance. The table below relates the four categories of reward to the options available for each.

Application of Undergraduate Cost Factors Based on Performance

Performance-Related Funding	Options
Related to Retention	Yes, No
Related to Graduation	Yes, No
Related to Degree Production and Efficiency	Yes, No
Related to Overall High Performance	Yes, No

Display of the Data

The following spread sheet includes the data by campus for the various data points being developed for your review and discussion.

Template for Factors Relating to the Model for Performance Funding and Enrollment Restraint

Measure	ASU	ECU	ECSU	FSU	NCA&T	NCCU	NCSU	UNCA	UNC-CH	UNCC	UNCG	UNCP	UNCW	UNCSCA	WCU	WSSU
RETENTION																
Retention (Freshman-to-Sophomore)																
Historical Level of Retention Data Level (Quartile 1-4: Q1-Q4)																
Rate	85.6%	77.2%	75.9%	72.1%	71.9%	74.6%	89.6%	78.2%	96.3%	77.7%	76.5%	69.0%	84.4%	77.5%	70.8%	73.4%
Improvement in Historical Retention Level	0.8	1.6	0.4	1.5	5.2	2.4	1.3	3.7	-0.6	0.2	0.1	-1.5	0.3	-0.1	5.4	4.4
Meet or Not Meet Retention Goal																
Meet (Yes/No)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes
Goal	86.0%	79.0%	76.0%	74.0%	72.0%	76.0%	90.5%	80.0%	96.5%	78.0%	76.6%	70.8%	86.0%	76.0%	69.0%	71.0%
Actual	86.4%	78.8%	76.3%	73.6%	77.1%	77.0%	90.9%	81.9%	95.7%	77.9%	76.6%	67.5%	84.7%	77.4%	76.2%	77.8%
Difference	0.4	-0.2	0.3	-0.4	5.1	1.0	0.4	1.9	-0.8	-0.1	0.0	-3.3	-1.3	1.4	7.2	6.8
Above/Below All Peer Retention Average	5.9	0.6	11.3	4.2	4.5	6.3	-0.9	-3.3	0.4	1.4	-3.7	-5.7	1.7	1.7	-2.7	6.6
Above/Below Public Peer Retention Average																
Above/Below Predicted Range for Retention																
Enrolled at Another UNC Campus, year 2	2.9%	2.6%	2.9%	5.7%	1.2%	3.5%	2.2%	4.1%	0.6%	3.9%	3.9%	4.6%	3.7%	1.3%	4.9%	3.4%
GRADUATION																
Six-Year Graduation Rate																
Historical Level of 6-Yr Graduation Rates Level (Quartile 1-4: Q1-Q4)																
Rate	62.4%	54.6%	47.3%	37.8%	39.7%	48.3%	69.8%	54.1%	83.6%	49.3%	51.2%	35.9%	64.3%	53.6%	47.4%	43.8%
Improvement in Historical 6-Year Graduation Rates	2.0	2.2	-1.5	-6.3	-2.5	-3.9	3.4	4.6	1.3	4.6	0.4	-1.8	4.2	7.6	1.4	-7.3
Meet or Not Meet 6-Yr Graduation Goals																
Meet (Yes/No)	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
Goal	64.0%	56.5%	43.0%	40.0%	43.0%	50.0%	72.0%	56.0%	83.5%	50.0%	51.8%	36.0%	67.0%	53.0%	48.5%	46.0%
Actual	64.4%	56.8%	45.8%	31.5%	37.2%	44.4%	73.2%	58.7%	84.9%	53.9%	51.6%	34.1%	68.5%	61.2%	48.8%	36.5%
Difference	0.4	0.3	2.8	-8.5	-5.8	-5.6	1.2	2.7	1.4	3.9	-0.2	-1.9	1.5	8.2	0.3	-9.5
Above/Below Predicted Range for 6-Yr Grad Rate																
Above/Below Ave. All Peers 6-Yr Grad. Rate	2.8	4.3	8.4	-9.2	-8.0	2.0	-5.6	-12.6	-2.1	2.7	-7.9	-14.3	2.7	0.5	-10.6	-6.3
Above/Below Ave. Pub. Peers 6-Yr Grad. Rate							-4.7	-6.0	0.2					4.6		
First-time Full-time Freshmen from Initial Cohort Who Graduate in 6 Years from Other Institutions in UNC																
6.3%	4.7%	2.1%	3.3%	2.1%	2.1%	2.1%	4.8%	9.8%	1.4%	5.3%	6.8%	6.3%	8.1%	2.4%	5.8%	2.5%
Graduation Rates for CC Transfers with an Associate Degree																
Historical Level of CC Associate Degree Transfer Graduation Rates Level (Quartile 1-4: Q1-Q4)																
Rate	75.5%	65.9%	67.6%	56.8%	50.3%	62.0%	67.8%	62.1%	71.9%	62.0%	66.5%	70.0%	75.8%	n/a	74.4%	65.8%
Improvement in Historical CC Transfer Graduation Rates	-1.5	3.1	-5.6	7.2	3.7	-8.0	8.2	-2.1	-3.9	6.0	-2.5	-10.0	5.2	n/a	-1.4	-7.8
Meet or Not Meet CC Transfer Grad. Rate Goal																
Meet (Yes/No)	No	No	No	Yes	Yes	No	Yes	No	No	Yes	No	No	Yes	n/a	No	No
Goal	78.0%	71.0%	66.0%	58.0%	51.0%	63.0%	72.0%	67.0%	69.0%	62.5%	67.0%	71.0%	78.0%	n/a	76.5%	65.0%
Actual	74.0%	68.0%	61.0%	63.0%	53.0%	55.0%	75.0%	60.0%	68.0%	68.0%	63.0%	59.0%	81.0%	60.0%	73.0%	57.0%
Difference	-4.0	-3.0	-5.0	5.0	2.0	-8.0	3.0	-7.0	-1.0	5.5	-4.0	-12.0	3.0	n/a	-3.5	-8.0
Total Undergraduate Students Graduation Rate																
Graduation Rate of Total Undergraduates in Fall 2002 Level (Quartile 1-4: Q1-Q4)																
Rate	81.9%	75.0%	65.7%	62.3%	55.3%	61.9%	82.2%	77.3%	90.6%	69.5%	73.2%	63.3%	83.2%	67.3%	74.6%	60.2%

**Template for Factors Relating to the Model for Performance Funding and Enrollment Restraint
(Data Sources and Calculations)**

Measure	Data Sources and Calculations
RETENTION	
Retention (Freshman-to-Sophomore)	
Historical Level of Retention Data	From Student Data File (SDF.ER001), each year and institution's # of students who returned from freshman to sophomore was calculated based on the cohort # and retention rate. Five-year rate was then calculated and sorted from high to low. Quartiles were calculated in Excel for the 16 campuses. Current year rate is compared to the 5-year rate to determine the improvement.
Level (Quartile 1-4: Q1-Q4)	
Rate	
Improvement in Historical Retention Level	
Meet or Not Meet Retention Goal	
Meet (Yes/No)	Goals were agreed to by the campuses and GA. The most recent year retention rates were compared to the goals and the differences were calculated (if positive, goal was met; negative - no.)
Goal	
Difference	
Above/Below All Peer Retention Average	IPEDS data was used. Majority UNC institutions selected public institutions as peers.
Above/Below Public Peer Retention Average	Four (NCSU, UNCA, UNC-CH, and UNCSA) included private ones.
Above/Below Predicted Range for Retention	
Enrolled at Another UNC Campus, year 2	Data was from SDF.
GRADUATION	
Six-Year Graduation Rate	
Historical Level of 6-Year Graduation Rates	From Student Data File (SDF.ER001), each year and institution's # of students who graduated in 6 years was calculated based on the cohort # and graduation rate. Five-year rate was then calculated and sorted from high to low. Quartiles were calculated in Excel for the 16 campuses. Current year rate is compared to the 5-year rate to determine the improvement.
Level (Quartile 1-4: Q1-Q4)	
Rate	
Improvement in Historical 6-Year Graduation Rates Level	
Meet or Not Meet 6-Year Graduation Goals	
Meet (Yes/No)	Goals were agreed to by the campuses and GA. The most recent year 6-year graduation rates were compared to the goals and the differences were calculated (if positive, goal was met; negative - no.) .
Goal	
Difference	
Above/Below Predicted Range for 6-Year Graduation Rate	
Above/Below Average All Peers 6-Year Graduation Rate	IPEDS data was used. Majority UNC institutions selected public institutions as peers.
Above/Below Average Public Peers 6-Year Graduation Rate	Four (NCSU, UNCA, UNC-CH, & UNCSA) included private ones.
First-time Full-time Freshmen from initial Cohort Who Graduate in 6 Years from:	
Home Institution	Information was obtained from VSA for Fall 2003 entering class.
Other Institutions	
Any institutions	
Graduation Rates for CC Transfers with an Associate Degree	
Historical CC Associate Degree Transfer Graduation Rate Levels	From NCCCS provided data and SDF (in TSP Report on IRA web site - Persist.GR005.P), each of the two 3-year cohorts (1996-98 & 1999-2001) and institution's # of CC transfers who graduated in 4 years were calculated based on the cohort # and graduation rates. Four-year CC transfers' (two 3-year cohorts) graduation rates were then calculated for the campuses and sorted from high to low. Quartiles were calculated in Excel for the 16 campuses. The most recent cohort (2002-04) rate is compared to the two 3-year cohorts (total 6 years of historical data) rate to determine the improvement.
Level (Quartile 1-4: Q1-Q4)	
Rate	
Improvement in Historical CC Graduation Rates Level	
Meet or Not Meet CC Graduation Rate Goal	
Meet (Yes/No)	Goals were agreed to by the campuses and GA. The most recent cohort (2002-04) graduation rates were compared to the goals and the differences were calculated (if positive, goal was met; negative - no.) .
Goal	
Difference	
Total Undergraduate Students Graduation Rate	
Graduation Rate of Total Undergraduates in 2002	The undergraduates in 2002 were tracked. The graduation rate is 6-year for freshmen; 5-year for sophomores; 4-year for juniors; 3-year for seniors; 2-year for those in fifth year or more. Quartiles were calculated in Excel based on the total rate.
Level (Quartile 1-4: Q1-Q4)	
Rate	
DEGREE PRODUCTION AND EFFICIENCY	
Increased Production of Baccalaureate Degrees	
Baccalaureate Degrees Produced per 100 FTE Enrolled Students	Information was based on IPEDS data. The average of 6 years (2003-08) was calculated and used.
Above/Below Public Peers Average Production per 100 FTE Enrolled Students	Differences were calculated between UNC and peer average.
Subject to Acceptable Methodology, Cost per Degree Produced Compared to Peers	
Assessment	
Restraints:	
Freshmen Enrollment Growth	
Retention Improvement Enroll. Growth	
Transfer AA Growth	
Transfer Growth	
Graduate Growth in Relation to Undergraduate Performance	
Rewards:	
Specific Reward Related to Retention	
Specific Reward Related to Graduation	
Degree Production and Efficiency	
Rewards Related to High Performance	