News and Research on Policies that Impact North Carolina's Working Families

The Ghost in the Machine: The Student Credit Hour Funding Model & UNC Enrollment Growth

BTC Brief; July 2008

by John Quinterno, Research Associate

Funding to cover projected enrollment growth within the University of North Carolina (UNC) has emerged as a point of contention in the state budget negotiations. But what exactly is enrollment growth, and how is it measured? To a surprising degree, the answers to those questions hinge on the technical assumptions embedded in the Student Credit Hour (SCH)
Funding Model used by UNC to forecast enrollment changes.

Enrollment Funding for Fiscal Year 2008-09

The original budget approved by the General Assembly for Fiscal Year 2008-09 reserved $39.8 million to cover projected enrollment increases at UNC. More recent projections, however, suggest that FY 2009 enrollment will exceed the original expectations. In response, UNC requested an additional $34.6 million in state funds. The Senate included the entire
$34.6 million in its budget, but the House included just $14.6 million. That $20-million difference reportedly has become a sticking point in the budget negotiations.

The Key to the Debate: Understanding the Enrollment Growth Model

For the past 10 years, UNC has used a formula based on the projected number of credit hours taken at each campus to calculate enrollment growth. The formula has three components. First, the number of credit hours that will be taken at each institution is projected based on enrollment data from the Fall semester. Second, the number of additional instructors
needed to serve the projected enrollment is estimated based on various ratios of credit hours per instructor. Finally, the funds needed to cover the additional salaries, academic costs, library services and general institutional support are calculated.

The SCH model is used for most, though not all, university programs. It applies to credit-bearing courses offered on campus during the regular term (Fall and Spring semesters) or through distance-learning technologies. The model is not used for programs in law, medicine, dentistry, pharmacy and veterinary medicine or those offered at the School of the Arts and the School of Science and Math. Nevertheless, the SCH model drives UNC's enrollment funding needs. For FY 2009, for instance, the model generated 96 percent of the university's total request for enrollment growth funding.

Assumptions Matter

Like any effort to project future trends and estimate costs, the SCH model hinges upon the underlying data and assumptions. And UNC has a great deal of discretion in choosing data and assumptions. UNC determines instructional areas and levels, the ratio of credit hours per instructor and the applicable cost factors. Changing any of those assumptions can alter the amount needed to cover enrollment growth (see below).

For instance, the Office of State Budget and Management (OSBM) in the past has questioned some of the SCH cost factors and has suggested using lower factors. If the OSBM cost factors were applied to UNC's current request, holding all else equal, the total requirement needed for SCH-based enrollment growth would be some $11 million less. This is why it is possible for the two legislative chambers to come to different conclusions about the funding needed to support enrollment growth.

None of this should be taken to say that the SCH model is somehow flawed, but rather that, like any model, it depends upon various assumptions and does not generate a "magical" or "right" number. Policymakers therefore have a responsibility to ask critical questions instead of accepting figures at face value. The need for vigilance is even more pronounced when public dollars are limited, and leaders are weighing individual budget requests against a larger array of needs and priorities.

THE SCH FORMULA IN DETAIL

The SCH model works as follows. Based on criteria established by the Board of Governors, credit hours offered at each university are classified into one of 12 categories reflective of the area of instruction (four possible categories) and level of instruction (undergraduate, masters and doctoral). Projections for the number of credit hours that will be taken in
each category then are developed.

Next, the number of projected credit hours in each area is converted into the number of additional instructors needed to meet the anticipated enrollment. This is done on the basis of various ratios of student credit hours per instructor. Doctoral credits in engineering, for example, would have a lower ratio than undergraduate credits in sociology. For some schools, like those with high concentrations of low-income students, the number of needed undergraduate instructors is weighted to provide additional instructors.

Dollar requirements then are calculated. First, salary costs are generated by multiplying the number of needed instructors by the average instructional salary rate at each campus. Second, an amount equal to 44.89 percent of the salary cost is
added to cover fringe benefits and other academic costs. The resulting sum represents total academic costs. Third, an amount equal to 11.48 percent of the total

academic costs is added to support library services. Fourth, an amount equal to 54.05 percent of the total academic costs is added to cover general institutional support. Finally, the academic, library and
general institutional costs are summed together, and anticipated tuition receipts are subtracted. The difference equals the total request.

Attachment	Size
btcbrief3july08uncfund.pdf	77.83 KB