DRAFT

Report on Measures Used in Decision Making for Incoming Freshmen for Admission and Placement

FINAL REPORT
FOR
HOUSE BILL 1246
GENERAL ASSEMBLY of NORTH CAROLINA
SESSION LAWS 2001-312

Submitted to Joint Legislative Education Oversight Committee

By

Board of Governors The University of North Carolina

December 1, 2003

Executive Summary

House Bill 1246 from the 2001 session of the NC General Assembly directed the Board of Governors of the University of North Carolina (UNC), in cooperation with the State Board of Education, and the State Board of Community Colleges to study the measures used in decision making for incoming freshmen for admission, placement, and advanced placement. The required study was then conducted by a Study Committee established by UNC President Molly Broad, NC Community College System President Martin Lancaster, and State Superintendent Michael Ward. The committee membership is provided in Attachment 2.

Data on end-of-course (EOC) exams were collected from the Department of Public Instruction and data on university admissions, course placement, and advanced placement were collected from the sixteen UNC campuses. A number of statistical studies were conducted to evaluate the data collected. Additionally, qualitative input on the use of EOC exams and standardized test scores for admission, placement, and advance placement was received from UNC Directors of Admission, Secondary School Counselors, and Community College Transfer Counselors.

Summary of Findings

Findings revealed that each UNC campus has taken great care to develop the admissions requirements and processes appropriate to that institution's mission and level of admissions selectivity. All sixteen campuses consider a student's overall high school record as the most important admissions factor with other factors, including standardized test scores, carrying less weight than long term achievement in college preparatory courses in high school. Further, each campus has faculty from the appropriate discipline

involved in the decisions for the academic placement of students and the advanced placement of accelerated students. Neither high school end-of-course tests nor other high school based measures are sufficient at this time to replace campus based instruments or policies used for placement and /or advanced placement.

As a result of this study, The HB 1246 Study Committee concluded the following:

- admissions decisions are a complex process and involve the use of multiple variables in assessing a student's probability for success;
- each of the UNC campuses has demonstrated responsible management in the decision making process and annually review their criteria for admission;
- the admissions offices take great care to insure that the criteria and level of selectivity for admission is consistent with the mission of the campus;
- the high school GPA provides the single greatest predictive value for success in college and the end of course (EOC) test results have been appropriately factored into the GPA; and
- although the GPA is the single best predictor of success in college, the use of the SAT/ACT with the GPA enhances the overall prediction of college success.

Given the above points, the Study Committee recommends that the campuses continue current practices including the use of multiple factors in making admissions, placement and advanced placement decisions. In addition, the Study Committee recommends that a follow-up study be conducted after campuses have had experience with the New SAT, which will be first administered in March 2005 to see what, if any, impact the test enhancements have had on predictive validity in the admissions decision making process. Finally, the UNC Office of the President should direct the campuses to regularly review their admissions, placement and advanced placement policies and practices to insure these policies are dynamic to reflect changes in testing and assessment of prospective students.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2001

HOUSE BILL 1246 RATIFIED BILL

AN ACT TO DIRECT THE BOARD OF GOVERNORS OF THE UNIVERSITY OF NORTH CAROLINA, IN COOPERATION WITH THE STATE BOARD OF EDUCATION AND THE STATE BOARD OF COMMUNITY COLLEGES, TO STUDY THE MEASURES USED FOR ADMISSIONS, PLACEMENT, AND **PLACEMENT DECISIONS** THE **CONSTITUENT** ADVANCED BY INSTITUTIONS OF THE STATE'S UNIVERSITY SYSTEM, TO ALLOW INTELLECTUALLY **GIFTED YOUTHS** TO **ATTEND COMMUNITY** COLLEGES, AND TO ALLOW CERTAIN YOUTHS TO BE EMPLOYED BY INSTITUTIONS OF HIGHER EDUCATION.

The General Assembly of North Carolina enacts:

SECTION 1 (a) The Board of Governors of The University of North Carolina, in cooperation with the State Board of Education and the State Board of Community Colleges, shall study the measures used by the constituent institutions to make admissions, placement, and advanced placement decisions regarding incoming freshmen and shall assess the various uses made of those measures and the validity of those measures with regard to a student's academic performance and as predictors of a student's future academic performance. They shall also assess whether other alternative measures may be equally valid or more accurate as indicators of a student's academic performance. In the study, particular consideration should be given to whether or not to eliminate, continue, or change the emphasis placed on the Scholastic Aptitude Test (SAT) and ACT Assessment for North Carolina students as a mandatory university admissions measure. The study should review incorporating the State's testing program into admissions, placement, and advanced placement decisions. Based on its findings, the Board of Governors of The University of North Carolina, in cooperation with the State Board of Education and the State Board of Community Colleges, may develop recommendations to improve the measures used to assess a student's academic performance, to adopt alternative measures, or to use various combinations of both to determine more accurately a student's academic knowledge and performance.

SECTION 1 (b) The study required by subsection 1(a) of this act may address all of the following:

(1) Admissions. - The Board of Governors may examine the key elements used for making admissions decisions in the State's University System.

Included in the factors to be studied are grade point average, class rank, and the SAT and ACT Assessment. Each element may be studied for reliability and validity independently and as used together. The Board of Governors may also compare the State's end-of-course testing with the SAT and ACT Assessment, assess how each reflects a student's academic performance, and consider shifting the emphasis currently placed on the SAT and ACT Assessment as an admissions measure to the State's end-of-course tests or other available tests as an admissions measure. In its study, the Board of Governors may consider eliminating, continuing, or changing the emphasis placed on the SAT and ACT Assessment as an admissions measure for North Carolina students applying to the State's constituent institutions. The Board of Governors may also consider methods for accurately comparing the academic performance of applicants who do not have the benefit of the State's end-of-course testing program with applicants who do have the State's testing program. Recommendations should be made to improve the consistency and fairness of each measure independently and as used together for admissions decisions. These recommendations may include the use of North Carolina end-ofcourse tests as an element in admissions decisions alone or in combination with a change of the weight of emphasis on the SAT and ACT Assessment. The recommendations may also include maintaining the current process. The Board of Governors may review with the State Board of Education recommendations that incorporate end-of-course testing as part of the admissions process. The State Board of Education may develop recommendations to improve the alignment of end-ofcourse tests and secondary coursework with the expectations of the constituent institutions and the State Board of Community Colleges.

- (2) Placement. The Board of Governors may consider reviewing the assessment methods currently used by constituent institutions for remediation placement decisions. Recommendations may be developed to provide greater consistency, reliability, and validity for remediation decisions. North Carolina end-of-course tests may be considered for use in these decisions.
- (3) Advanced placement testing. The Board of Governors may review the use of test scores in granting college-level course credit by constituent institutions.
- (4) Other relevant issues. The Board of Governors may study any other issues relevant to college and university admissions, placement, and advanced placement measures.

SECTION 1 (c) The Board of Governors may make an interim report regarding its studies and plans to the Joint Legislative Education Oversight Committee no later than March 1, 2002, and shall submit a final report to that Committee by December 1, 2003. It is recommended that the study continue beyond the final report date. Interim and final reports of the Committee may include recommended legislation.

SECTION 2 Article 1 of Chapter 115D of the General Statutes is amended by adding a new section to read: "§ 115D-1.1. Discretion in admissions.

- (a) Notwithstanding G.S. 115D-1, a student under the age of 16 may enroll in a community college if the following conditions are met:
 - (1) The president of the community college or the president's designee finds, based on criteria established by the State Board of Community Colleges, that the student is intellectually gifted and that the student has the maturity to justify admission to the community college; and
 - One of the following persons approves the student's enrollment in a community college:
 - a. The local board of education, or the board's designee, for the public school administrative unit in which the student is enrolled.
 - b. The administrator, or the administrator's designee, of the nonpublic school in which the student is enrolled.
 - c. The person who provides the academic instruction in the home school in which the student is enrolled.
 - d. The designee of the board of directors of the charter school in which the student is enrolled.
- (b) The State Board of Community Colleges, in consultation with the Department of Public Instruction, shall adopt rules to implement this section. SECTION 3 G.S. 95-25.5 is amended by adding anew subsection to read: "(m) Notwithstanding any other provision of this section, youths who are enrolled at an institution of higher education may be employed by the institution provided the employment is not hazardous. As used in this subsection, "institution of higher education" means any constituent institution of The University of North Carolina, any North Carolina community college, or any college or university that awards postsecondary degrees." SECTION 4 Section 2 of this act is effective when it becomes law, and shall apply to the 2001-2002 academic year. Section 2 of this act expires September 1, 2004. The remainder of this act is effective when it becomes law. In the General Assembly read three times and ratified this the 18th day of July, 2001.

Beverly E. Perdue
President of the Senate
James B. Black
Speaker of the House of Representative

	Michael F. Easley Governor	_	
Approved	this	day of	, 2001

The Charge

House Bill 1246 from the 2001 session of the NC General Assembly directed the Board of Governors of the University of North Carolina (UNC), in cooperation with the State Board of Education, and the State Board of Community Colleges to study the measures used in decision making for incoming freshmen for admission, placement, and advanced placement by the constituent institutions of the UNC system. Further, the study was to assess the various uses of those measures and the validity of those measures with regard to academic performance and as predictors of a student's future academic performance. In accordance with Section 1(c) of HB 1246, the UNC Board of Governors submits this final report to the Joint Legislative Education Oversight Committee. This final report follows the Interim Report that was submitted on February 25, 2002 (Attachment 1).

Initial Steps

An initial meeting was held with representatives from UNC, the North Carolina Community College System, and the Department of Public Instruction (DPI) on October 10, 2001 to discuss a study that would assess the measures used for admissions, placement, and advanced placement decisions by the constituent institutions of the University system. There was a general discussion about the bill and the study to be conducted. Possible data that could be used to address the issues was shared by each participating agency. The university and DPI officials agreed to share data sets that could be used for the study. Also, participants were asked to check with their respective president or state superintendent on representatives that should serve on the Study Committee.

A second meeting was held with the same representatives on December 18, 2001. The Group discussed the following items:

- Status report on sharing data between UNC and DPI;
- Data that will be needed from individual UNC campuses;
- Research studies in the field to be reviewed;
- Recommendations for representatives to serve on the Study Committee; and
- Tentative timeline for next steps and report dates.

Following the December 18, 2001 meeting, the Study Committee was formally established by President Broad, President Lancaster, and Superintendent Ward. The committee membership is provided in Attachment 2. The Committee held numerous meetings between its formation in December 2001 and the UNC Board of Governor's review and approval of this final report in November 2003. All meetings were held at the UNC General Administration Building in Chapel Hill.

The Study Process

A series of steps were undertaken to collect the available data on the measures that are used in making decisions for admissions, placement, and advanced placement within the UNC system. Each UNC campus was asked to provide information in these areas (Attachment 3).

In addition, the Study Committee asked DPI to provide a summary of available data sets, such as end-of-course or end-of-grade test data that could be examined as potential predictors for decision-making in admissions, course placement and advanced placement.

While the complete set of data available for analyses was being collected, the Study Committee reviewed the current research in the field and determined a set of studies to be conducted with the available data. Results of these analyses were used to guide the additional steps in the study.

Further, input was sought from Directors of Admissions, school counselors, and other groups, as needed. Periodic study updates were provided to the UNC, NC Community College, and State Department of Public Instruction governing boards.

Timeline

The study continued over several months with regular meetings of the Study Committee. Reports were presented at least twice each year to the UNC system Directors of Admission and the Chief Academic Officers to ask for their feedback and insights on each of the three areas under study.

A final Study Committee report and related recommendations were made to the Board of Governors at their November 2003 meeting. Copies of the final report were also shared with the Chief Executive Officers of both the NC Community College System and the State Department of Public Instruction.

Data Review and Analysis

The UNC Student Data Files (SDF) contain demographic data on applied, accepted, and enrolled students for each UNC institution. These files also contain data on students' standardized test scores such as the SAT and/or ACT. In more recent years data are available on other linkable files that contain measures of student success in college like remediation, retention, GPAs, and graduation.

From the Department of Public Instruction, files containing students' grades in End of Course (EOC) high school exams were obtained for 1999-2000 and 2000-01. The EOC exams were established as a standardized measure of course mastery to be administered at the completion of selected courses. The high school courses for which EOC exams are administered include:

- English I
- English II
- Algebra I
- Geometry
- Algebra II
- Physical Science
- Biology
- Chemistry
- Physics
- ELPS (Economic, Legal, and Political Systems)
- U.S. History

Data on NC students' EOC exams from 1999-2000 and 2000-01 were obtained from the DPI in a fashion that permitted their linkage to UNC SDF files on a student-by-student basis for statistical analysis.

These linkages provided the ability to conduct meaningful statistical analyses to address the issues raised in the requiring legislation.

Results

Admissions

A survey of each of the admissions offices within the UNC system indicated both great consistency in the fundamental measures and factors considered in the admissions process and significant differences in the levels of selectivity, driven by admissions demand, among the sixteen campuses.

All UNC system campuses consider a student's high school academic record as the most important measure in their admissions decision making process. Specifically, emphasis is placed both on a student's high school course selection insuring that the UNC Minimum Course Requirements (MCR) have been met and overall academic performance as measured by grade point average and class rank. The more selective campuses also carefully consider the rigor of courses taken by a student given the availability of advanced level courses at a particular high school, i.e. did the student take full advantage of the advanced course opportunities at his/her school. The point was specifically made by the campuses that students were not disadvantaged if their particular high school did not offer the advanced course opportunities offered at other schools.

Standardized test scores, either the SAT or the ACT, are used by all sixteen campuses in conjunction with the student's high school record. The admissions offices on all sixteen campuses were clear that the overall high school record was the most important academic factor considered while standardized test scores were less important.

Both national studies and our own internal research confirmed and supported that a student's high school record is the very best predictor of success in college but that the high school record considered in conjunction with standardized test scores provides an even better measure of predicted performance than the record on its own. There is a significant correlation (p<.05) between a student's high school record and performance on standardized tests with students having the best records generally scoring higher on the tests. The more selective UNC campuses admit the students with the best high school records which explains why those schools also have higher than average standardized test scores.

Placement

Surveys completed by each of the sixteen campuses in the UNC system indicated that there is no consistent measure or approach to a freshman's placement in courses across the sixteen campuses. Several campuses do not use placement instruments at all, other campuses use a variety of placement tools including campus-based placement tests, national placement instruments such as the Nelson Denny Test, the Mathematical Association of America placement instrument, the SAT II achievement test results, International Baccalaureate (IB) test results, ACT sub-scores, and SAT – math and verbal scores. Campuses use these test results to determine if remediation is required or if advanced placement is warranted. In short, UNC campuses use the placement tools and processes they have determined best work for them and their students.

In conjunction with this study twelve UNC campuses have begun exploring the creation of a common math placement test to be used across several of the campuses. Although the SAT II Math Exam is required by UNC-CH and NC State for placement decisions, a common placement test will provide a tool for assessment of math skills that can be applied consistently across the other participating campuses.

Advanced Placement

Each UNC campus has clearly articulated and published placement and/or credit policies for the College Board Advanced Placement examinations and the International Baccalaureate (IB) program examinations. All UNC credit and placement policies are available on the web as a part of the "Institutional Profiles, University of North Carolina 2002-2003 Edition publication (Attachment 3) at www.northcarolina.edu/pres/publications/publications.cfm and are widely distributed in the Profiles publication. All UNC campuses were clear that all placement and/or credit policies were academic decisions made by faculty in each respective discipline on each campus.

Prompted by the HB 1246 study, the UNC Office of the President directed the chief academic officers on each campus to perform a faculty review of their AP and IB credit and placement policies to ensure that each campus had current and appropriate policies in place. It is significant to note that IB placement and credit policies have now been developed on each UNC campus following state and national Association of IB Programs guidelines. This reflects the rapid growth of this relatively new advanced study opportunity in North Carolina high schools and across the country.

Use of the SAT and/or ACT

The Study Committee examined closely each campus's use of SAT and/or ACT scores in their admissions decision making process and determined that those standardized test scores were being used appropriately. Each campus indicated a clear campus-based statistical foundation as to test score validity as an admissions factor. Further the Committee determined that SAT and/or ACT scores were significantly less important in each campus's admissions decision process than a student's overall high school record. The Study Committee's research findings mirrored the College Board's national findings that the best single predictor of college success is a student's high school record including grade point average and class rank as well as rigor and depth of courses taken. However, that prediction of success is enhanced and is more statistically valid, when SAT or ACT test scores are also considered. Note that when ACT scores are received, UNC campuses convert those scores to SAT equivalents following a nationally recognized and recommended score conversion concordance table.

Beginning in March 2005, the College Board will implement the New SAT to reflect several important changes in this widely used standardized college admissions test. Specifically, the New SAT will have, for the first time, a separate writing section that will include a student produced essay along with a multiple choice section on standard written English. Additionally, the old SAT verbal section will be changed to Critical Reading under the New SAT to reflect a new emphasis on that critical college success skill and the New SAT math will be expanded to include elements of algebra II, again to reflect the importance of this fundamental college success skill. Recognizing the importance of these New SAT changes, especially the focus on writing, the UNC Board of Governors has passed a policy requiring that beginning in March 2005 writing must be included as part of any standardized test results submitted with an admission application. This policy is in response to the optional writing component of the ACT, the other standardized admissions test used by UNC applicants. Writing is not an option for SAT test takers and now will not be optional for ACT test takers applying to a UNC campus either.

Because of these very significant changes in the standardized tests used in admissions, the Study Committee recommends the UNC campuses re-examine their policies and practices in 2007, after the campuses have had some experience with the new tests, to ensure their continued appropriate use in the admissions decision making process.

Use of Other Factors in Admissions Decisions

Many UNC campuses indicated that factors in addition to the quantifiable academic factors of grade point average, class rank, and standardized test scores (SAT or ACT) may be used in their admissions decision making process. These other factors, often referred to as "non-cognitive" variables include: strength of curriculum relative to opportunities; extra or co-curricular involvement including part-time work; demonstrated leadership; first generation college student; overcoming a significant hardship; exceptional talent or abilities; community service; recommendations; underrepresented students; and essays. The professional judgment of experienced admissions staff was cited by several campuses as important in highly selective admissions decisions.

Use of End-of-Course (EOC) Tests or Other Available Tests as an Admissions Measure

The committee members spent a good deal of time reviewing and discussing End of Course Testing in North Carolina to be certain they understood fully the state's end of course testing program. The state's EOC policy can be found on the world-wide-web at www.ncpublicschools.org/parents/whatistestedhs.html. It should be noted that end of course tests are not administered for all of the courses included in the UNC system minimum course requirements (MCR). Also, it is important to note that the State Board of Education requires that EOC test results constitute a minimum of 25% of a student's final grade in courses for which EOC tests are administered. Analysis indicated, as expected, a very high correlation between high school grades in a course and the EOC test results. Since EOC test scores are already incorporated in high school grades, using EOC test results as a separate predictor does not improve or enhance a student's predicted chance for success at the University. There are no other known school related state-wide tests administered in North Carolina that would enhance admissions decision making for UNC campuses.

Summary

The HB 1246 Study Committee learned a great deal about the admissions practices across the UNC system and was particularly impressed with how professional all of the Admissions Offices are and with the obvious care and attention with which they make their admissions decisions. The Committee was also impressed to learn how very similar the various offices were in the factors considered for admission with the differences in freshman class quality driven by the great demand for admission on some campuses compared to others.

Although a number of policy reviews were underway the timing of the HB 1246 study reaffirmed and contributed a positive impact on the following initiatives:

- The alignment of the new UNC Minimum Course Requirements with high school graduation requirements for the college/university prep course of study.
- The alignment of the college tech program with the high school graduation requirements for the college tech prep course of study.
- Each campus conducted a faculty review of AP and IB credit awarded and updated their policies as appropriate.
- Twelve campuses have undertaken an initiative to develop a common math placement test.
- A new BOG policy has been passed requiring students to submit the New SAT with writing or the ACT with writing beginning in 2005.

As a result of this study, The HB 1246 Study Committee concluded the following:

- a) admissions decisions are a complex process and involve the use of multiple variables in assessing a student's probability for success;
- b) each of the UNC campuses have demonstrated responsible management in the decision making process and annually review their criteria for admission;
- c) the admissions offices take great care to insure that the criteria and level of selectivity for admission is consistent with the mission of the campus;
- d) the high school GPA provides the single greatest predictive value for success in college and the end of course test results are already factored into the GPA; and
- e) even though the GPA is the single best predictor of success in college, the use of the SAT/ACT with the GPA enhances the overall prediction of college success

Recommendations

As a result of this study, the Study Committee recommends:

- (1) the campuses continue current practices including the use of multiple factors in making admissions, placement and advanced placement decisions, appropriate to that institution's mission and level of admissions selectivity;
- (2) a follow-up study be conducted after campuses have had experience with the New SAT to see what, if any, impact the test enhancements have had on predictive validity in the admissions decision making process; and
- (3) the UNC Office of the President should direct the campuses to regularly review their admissions, placement and advanced placement policies and practices to insure these policies are dynamic to reflect changes in testing and assessment of prospective students.

Interim Report For House Bill 1246

Initial Steps

An initial meeting was held with representatives from UNC, the North Carolina Community College System, and the Department of Public Instruction on October 10, 2001. There was a general discussion about the bill and the study to be conducted. Possible data that could be used to address the issues was shared by each participating agency. The university and DPI officials agreed to share data sets that might be used for the study by the next meeting. Also, participants were asked to check with their respective president or state superintendent on representatives that should serve on the Study Committee.

A second meeting was held with the same representatives on December 18, 2001. The Group discussed the following items:

- Status report on sharing data between UNC and DPI;
- Data that will be needed from individual UNC campuses;
- Research studies in the field to be reviewed:
- Recommendations for representatives to serve on the Study Committee; and
- Tentative timeline for next steps and report dates.

The Study Committee has now been established by President Broad, President Lancaster, and Superintendent Ward. The committee membership is provided in Attachment 1. The Committee is scheduled to meet March 14, 2002 from 9:00 a.m. to 12:00 noon at the UNC General Administration Building in Chapel Hill.

Next Steps

The next series of steps will be to collect the available data that is currently used in making decisions for admissions, placement, and advanced placement. Each campus has been asked to provide an initial set of information in these areas (see Attachment 2).

In addition, the Study Committee has asked DPI to provide a summary of available data sets, such as end-of-course or end-of-grade data that could be examined as potential predictors for decision-making.

Once the complete set of data that is available for analyses is known, the Study Committee will review the current research in the field and determine a set of studies to be conducted with the available data. Results of these preliminary analyses will be used to guide future steps in the study.

In addition, input will be sought from Directors of Admissions, school counselors, and other groups, as needed. Periodic updates will be provided to the three governing boards.

Timeline

The study will continue over the next several months with regular meetings of the Study Committee. Reports will be presented at least twice each year to the Directors of Admissions and the Chief Academic Officers to ask for their feedback and insights on each of the three areas under study.

A final report and any related recommendations will be made to the Board of Governors in the fall of 2003 so that a final report can be given to the Joint Legislative Education Oversight Committee by December 1, 2003.

Interim Report

Study Committee Roster

Admissions Office Survey