



## **2006 INSTITUTIONAL EFFECTIVENESS REPORT**

### **INTRODUCTION**

This document is the University of South Carolina Beaufort's annual Report on Act 255 of 1992 and Act 629 of 1996. This report is required by the South Carolina Commission on Higher Education and the South Carolina Legislature. It covers the school year 2005 - 2006.

The Office of Institutional Effectiveness and Research at USC Beaufort is responsible for all institutional assessment activities. Through assessment, USC Beaufort improves its programs and services in order to offer the best educational experience possible. Student participation in assessment activities is a university priority. The Institutional Effectiveness Council is responsible for overseeing general education assessment as well as reviewing the academic units' assessment reports. These documents are maintained in the Office of Institutional Effectiveness and Research for future reference.

The 2006 Institutional Summary report for the University of South Carolina Beaufort addresses:

1. General Education
2. Majors/Concentrations (Biology, Early Childhood Education, and Psychology)

### **GENERAL EDUCATION**

USCB's definition of General Education is built into its Mission Statement for General Education:

#### **GENERAL EDUCATION AT USCB MISSION STATEMENT**

To graduate with a baccalaureate degree from the University of South Carolina Beaufort, all students must complete a program of general study designed to provide them with a well-rounded education. Students receive instruction and practice in effective oral and written communication, cultivate an understanding of the liberal and fine arts, broaden their historical and cultural awareness, and develop a proficiency in one foreign language. Students study the social and natural sciences, acquire technological and information literacy, and build skills in critical thinking and numerical and analytical reasoning.

This program of study, to be completed largely during the student's first two years at the university, serves as a foundation for later upper-division work within the student's major. It also ensures that USCB graduates have the sort of broad, well-rounded education that will enable them to succeed in graduate school or the workplace and more fully understand their place in the world and get the most out of life.

That is, USCB defines General Education as a program of general study, designed to be completed largely during a student's first two years at the university, which is intended both to provide students with a well-rounded education and to serve as a foundation for later upper-division work with the student's major.

### **Methodologies and Instruments for Assessment of General Education**

In the vital areas of writing and mathematics, USCB relies upon a pre-test/post-test methodology, supplemented by other course-embedded assessments and student, alumni, and employer surveys.

In English, all incoming freshmen take an English Placement Test designed and graded to mimic the ACT CAAP Writing Essay Test—a test which, when taken by USCB's incoming freshmen, has been shown to correlate highly with student performance in BENG 101 and with first year GPA at USCB. Students then take the ACT CAAP Writing Essay Test as Rising Juniors in even numbered years. We are thereby able to compare freshman performance with the performance of rising juniors. We are also able to compare the performance of our rising juniors with national norms and the performance of rising juniors at benchmark institutions. To measure student reading ability—as well as critical thinking, knowledge of literature, and writing ability—students also take a course-embedded assessment (common final exam) in English 102 every three years. All students are required to pass BENG 101, 101L, and 102 with a grade of C or higher. We also conduct student and alumni surveys and periodic surveys of grades in English at USCB.

All students are required to pass at least one course in mathematics at USCB, and we administer a placement test in mathematics to all incoming students at the university. This same placement test (which measures the skills deemed most important by USCB's mathematics faculty) is then administered as a course-embedded final every three years in BMTH 111 and BMTH 111L. This allows us to measure student improvement as a result of instruction in mathematics at USCB. To compare our students with national norms, USCB uses SAT scores. Information gained from these instruments is further supported by surveys of rising juniors, graduating seniors, and alumni.

USCB also employs ACT CAAP modules to test rising juniors in scientific reasoning and critical thinking, and it uses a combination of course requirements, course-embedded assessments, and surveys in most other areas. USCB's Institutional Effectiveness and Outcomes Assessment Master Plan for General Education Program is on file and available in the USCB Office of Institutional Effectiveness and Research.

### **Major Findings from Initial Assessments**

#### **Writing Skills**

The writing ability of USCB's incoming freshmen has been demonstrated to be an excellent predictor of student performance at USCB. A spring 2005 study of 756 English 101 grades at USCB (summer 2002 to fall 2004), demonstrated a remarkably strong correlation of 0.81 between English 101 grades and subsequent student GPA at USCB. (If we factor the students' English 101 grades out of their USCB GPA, this correlation remains an impressive 0.73.<sup>1</sup>) The ACT CAAP Writing Essay Test, given as a pilot test to incoming USCB freshmen in August 2003, similarly proved to be a strong predictor (correlation 0.60) of first-semester freshman GPA at USCB. (By comparison the SAT composite and SAT Verbal were weak predictors, 0.31 and

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<sup>1</sup> This would compare with a correlation of 0.51 between BMTH 111/111L grades and USCB GPA, again if we factor out the math grade itself from the student's USCB GPA.

0.26 respectively.) In light of such data and what they imply about the fundamental importance of writing skills to university success, we have made writing skills central to general education assessment at USCB.

The importance of writing skills has been further underscored by data revealing the importance of these skills to student retention at USCB. Our 2005 study of English 101 grades revealed that, between summer 2002 and summer 2004, 28% of USCB's English 101 students failed to earn a grade of C or higher in English 101, and of these failing students, 50% had dropped out of USCB by fall 2004. Restricting the study to students who failed to receive a grade of C or higher in English 101 in or before fall 2003 (giving students time to drop out of USCB) further increased the percentage of attrition to 58%. This compares with an attrition rate of 21% for students in the study who earned a C or higher in English 101 and 19% those who passed with a grade of B or higher. This difference in attrition rate between students who succeed and students who fail in English 101 suggests that between summer 2002 and summer 2004 USCB regularly lost something on the order of 16% of its incoming students to English 101-related attrition.<sup>2</sup>

In this light, it seems important that with the implementation of English 101L—a new lab companion to English 101 added to USCB's GE curriculum in fall 2004—we have significantly improved the failure rate in English 101. In fall 2003—before we had BENG 101L in place—28% of our English 101 students received grades of D+ or below. In fall 2004—our first semester with BENG 101L—only 17% of the students received grades of D+ or below. (This progress was made despite an assessment report distributed to USCB's English faculty which aimed to curb what little grade inflation existed in BENG 101.) This data suggests that we have already made significant progress in general education—but it will need to be further substantiated by testing of rising juniors who took BENG 101 both before and after the implementation of BENG 101L.

In the past few years, a good deal of energy has been devoted to establishing the baseline writing performance of USCB's incoming freshmen. Such baseline data is essential for measuring the progress made by our rising juniors. In 2004, the median SAT verbal score for USCB's incoming first-time full-time freshmen was 510, quite close to 2004's national mean SAT verbal score for college-bound seniors, 508. Yet, as noted above, the SAT has proved to be, on the whole, a relatively poor predictor of student GPA and student performance in BENG 101 at USCB. (If one focuses only at the low and high ends of SAT performance—omitting composite scores between 800 and 1200—this is no longer true.) A much better predictor—and therefore an indicator of much more interest—has been student performance on the ACT CAAP Writing Essay Test.

In August 2003, 94 incoming USCB students took part in a pilot test of the ACT CAAP, with 47 students taking the writing portion of the exam. About half of USCB's incoming freshmen scored in the mid-range, characterized by adequacy of language use (above the 49<sup>th</sup> national percentile for all takers of the test, and above the 61<sup>st</sup> national percentile for freshmen at public colleges). The other half scored in the lower range (with the bottom 18% of the nation's students), a range for papers which *“fail in some way to demonstrate proficiency in language use, clarity of organization, or engagement of the issue identified in the prompt.”* Grades were widely distributed, but there was a significant clustering of students at 3.00, the 49<sup>th</sup> national percentile on the exam (the 61<sup>st</sup> percentile for freshmen at public colleges).

The average entering freshman scored 2.86, with Hilton Head Campus freshmen outperforming Beaufort Campus freshmen (3.08 to 2.71). (This difference might seem slight, but it represents

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<sup>2</sup> This claim should be tempered by an awareness of the high correlation between performance in English 101 and performance in other courses at USCB. In other words, students who do well in English 101 tend to do well in their other courses; students who perform poorly in English 101 tend to perform poorly in their other courses at USCB.

the difference between being “above average” nationally and being in the lowest 18<sup>th</sup> percentile of national test-takers, or the lowest 29<sup>th</sup> percentile of freshmen at four-year public colleges.) Gender and socioeconomic status were significant variables in student performance. USCB women outperformed men (2.96 to 2.58); white Beaufort freshmen outperformed African American Beaufort freshmen (2.87 to 2.56); Hilton Head freshmen outperformed Beaufort freshmen when race was factored out (3.19 to 2.87). (Such data mirrors similar trends in statewide SAT data.)

The success of the ACT CAAP Writing Essay Test as a predictor of freshman GPA (correlation 0.60) and performance in BENG 101 (correlation 0.60) inspired us to create a freshman English placement exam that mimics the ACT CAAP Writing Essay Test, both in its structure and grading rubric. By August 2004, when we released our initial report on placement/assessment testing, 209 students had taken the test and the median score was 2.5. (As a placement tool for BENG 101L, with a cut-off score of 3.0 representing the boundary between adequate and inadequate writing skills, 40% of our freshmen placed out of 101L, 60% failed to place out of 101L.)

In the spring and summer of 2005, USCB administered the CAAP Writing Essay Test to rising juniors. We struggled with poor participation, testing only 52% of the eligible 92 students. These students, however, *did* meet our stated goal. The median score for students who took English 101 at USCB (excluding transfer students who took English 101 elsewhere) was 3.5, a full point higher than the 2.5 scored by incoming freshmen on the in-house placement test which mimics the CAAP (though only 0.5 points higher than the median score for freshmen in our 2003 pilot test of the CAAP). Pre-test/post-test information for individual students, however, was lacking, since only one student met this criteria (boosting her score from the 2003 pilot test by 0.75 points).

The median score of 3.5 for students who took English 101 at USCB (0.25 higher than for transfer students) would place our students in the 69<sup>th</sup> national percentile for the exam. 78% of the students who took English 101 at USCB scored in the 55<sup>th</sup> national percentile or above, with only 15% of these students scoring below the 43<sup>rd</sup> national percentile with a score below 3.0. If we include transfer students, 73% of the entire rising junior cohort scored in the 55<sup>th</sup> national percentile or above, with only 15% of these students scoring below the 43<sup>rd</sup> national percentile. 15% of our students scored in the 93<sup>rd</sup> national percentile. 85% of our students scored in the mid-range, characterized by “competence” or “adequacy” of language use (3-4, on a 6-point scale; on this scale a score of 4.0 places a student in the 93<sup>rd</sup> national percentile). 10% of the students score at the upper-end of the range for “weak” language skills. Only 1 student (2%) scored in the “inadequate” range. While these results look very good, much of the improvement in performance for rising juniors must be attributed to the attrition of students with poor writing skills from the eligible cohort. Analysis of the data also revealed that, due to our students’ extracurricular employment (85% of our rising juniors work, 56% of them more than 30 hours a week), the bulk of our rising juniors are one year (33%), two years (15%), or still further (49%) “behind schedule” to graduate in the traditional four years. This presents problems for assessment: so long as this continues, it takes years—much longer than expected—to see the effects of changes to freshmen curriculum in the performance of our rising juniors.

Survey data suggests that our incoming freshmen do not feel well served by their high schools when it comes to instruction in English. In 2004, incoming USCB freshmen were surveyed with additional questions on the CIRPS concerning their high school preparation for college writing. Of the 59 respondents, only 10% strongly agreed with the statement, “Thanks to my high school English classes, I am well prepared for writing at the university level.” Another 37% agreed more mildly with this statement. But this means 53% of our incoming freshmen either disagreed or were noncommittal about this statement concerning a basic skill. Results were very similar for the statement, “My high school English classes required a lot of reading and have prepared

me well for the reading I will have to do at the university level.” Only 12% strongly agreed with this statement, and 51% either disagreed or were noncommittal.

In light of this, it is reassuring that our rising juniors, graduates, and alumni have all expressed satisfaction with writing instruction at USCB. In our 2005 survey of rising juniors, 84% expressed satisfaction with their written language instruction at USCB. In our 2003 exit survey, 85% of graduates agreed that USCB enhanced their written communication skills (41% strongly agreed; 44% agreed; 15% were neutral; 0% disagreed). And in a 2003 alumni survey, 100% of our alumni expressed satisfaction with our written language instruction (50% satisfied; 50% very satisfied).

### **Mathematics**

In recent years at USCB, the other central focus of general education assessment—and of major curriculum reform in general education—has been mathematics.

USCB’s curricular reform in mathematics general education was driven, in large part, by baseline data collected in 2002. USCB’s 2002 entering freshmen had an average math SAT of 457, and students enrolled in MATH 111 had a lower average math SAT of 436—80 points below the national average. (This has since improved: USCB’s 2004 first-time full-time freshmen had a median math SAT of 490—still 28 points below the national average.) In our 2002 study, 92% of USCB’s applicants had taken all three of the required high school college preparatory mathematics courses, but a significant number of these students had “passed” these courses with D’s. When surveyed with additional questions on the CIRPS, only 3% of incoming freshmen strongly agreed with the statement, “Thanks to my high school mathematics courses, I am well prepared for science and mathematics courses at the university level.” (41% Expressed mild agreement with the statement, but 56% either disagreed or were noncommittal about it.) Clearly, USCB’s incoming freshmen felt under-prepared in mathematics, and 27% of USCB’s BMTH 111 students were failing to earn a grade of C or higher in the course. More to the point, USCB students were not even required to take a course in mathematics proper as part of their general education requirements. At that time, logic, computer science, or statistics would suffice.

In fall 2003, to further establish baseline student performance and test various instruments as indicators of student GPA and performance in BMTH 111, USCB conducted two pilot tests in mathematics. Of the 98 students who took a pilot test of the USC system’s Mathematics 111 Placement Exam in fall 2003, only 5% scored strongly enough (a score of 21+) to place out of BMTH 111. The median for the test was 12, with 51% of the students scoring 12 or below, in a range for students who are under-prepared for BMTH 111. In the other pilot test, 46 incoming students were given the mathematics module of the ACT CAAP Test. 71% of students who took the test scored below the national average, and the average student score (both mean and median, for both freshmen and non-freshmen) was 55, a score which would place a student in the 23<sup>rd</sup> national percentile. Gender and socioeconomics were of little significance to the mathematics test. Beaufort freshmen and Hilton Head freshmen both received an average score of 55. African American freshmen averaged 54, whereas white freshmen averaged 55; male freshmen averaged 56 (32<sup>nd</sup> national percentile), whereas female freshmen averaged 54 (17<sup>th</sup> national percentile). There was even a fairly small difference between students who self-reported high school GPA’s in the 2.01-2.50 range (54) and those who self-reported a GPA above 3.5 (56). USCB freshmen performed about the same on the Basic Algebra and College Algebra subscores (13.7 and 13.6 respectively), in each case placing them near the 30<sup>th</sup> percentile of the nation’s students.

The math portion of the SAT, the ACT CAAP math module, and USC’s Mathematics 111 Placement Exam all proved to be relative weak predictors of USCB GPA and student

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performance in BMTH 111. Of the three instruments, however, the Mathematics 111 Placement Exam proved to have the highest correlation with student BMTH 111 grades (correlation for Mathematics 111 Placement Exam, 0.39; for SAT math, 0.33; for ACT CAAP math module, 0.06).

In response to these findings, USCB's math faculty opted to test all incoming freshmen henceforth with USC's Mathematics 111 Placement Exam (Test B)—or, in the case of a small minority of students who wished to take the 141/142 calculus sequence, the Mathematics 141 Placement Exam (Test A). USCB's faculty also approved a major overhaul of our math requirements in general education. It is important to explain these changes here since they shaped the nature and purpose of mathematics assessment in following years. The Curriculum Committee and faculty mandated that, beginning with fall 2004's entering class, all students would take at least one course in mathematics at USCB, revising USCB's GE requirement in numerical and analytical reasoning to read as follows: "MATH 110 or MATH 111/111L or a higher level course in mathematics, plus an additional course in mathematics, logic, statistics, or computer science (6-7 hours)." In the process, the Math faculty created new general education course in mathematical modeling, MATH 110. This course aims to teach practical applications of college algebra to students in majors which do not require higher level math. Also, to better support students with insufficient preparation in mathematics, the math faculty created MATH 111L, an intensive 4-credit section of MATH 111, consisting of an extra one-hour-and-fifteen-minute weekly laboratory. As of fall 2004, students planning to take higher level mathematics at USCB were required to take BMTH 111L unless they could place into a traditional 3-credit section of BMTH 111 with a score of 11-20 on USCB's MATH 111 Placement Test. (Students who score 21 or above place into MATH 122.)

By August 18, 2004, we had administered 215 placement/assessment tests and obtained the following results: 90% of our students took Test B (for BMTH 111 & 111L); the median score was 11 (the cut-off established between BMTH 111 and 111L), with 48% placing into BMTH 111L, 47% placing into BMTH 111, and 5% placing into BMTH 122. 10% of our students took Test A (for BMTH 115 or 141); median score on Test A was 10, with 76% of students placing into BMTH 115 and 24% placing into BMTH 115. Overall, only 7% of our students were ready to place into calculus.

We had originally planned to assess rising juniors with the ACT CAAP Mathematics Exam, but the poor performance of this exam as a predictor of student performance in math courses at USCB in our 2003 pilot test and a rethinking of our assessment needs led the math faculty to change its plans. In November 2004, the mathematics faculty decided to assess all 111 and 111L students with a post-test of Placement Test B. (The late date of this decision is important—since it means that in our December 2004 assessment of these students no one "taught to the test," thereby skewing results.) While this decision sacrificed comparisons with national norms, it offered us excellent pre-test/post-test results with the same test, allowing us to pin-point precisely how much students were improving and to determine more effectively the value of our new course, BMTH 111L. The faculty also felt that we would better assess student improvement with a course-imbedded instrument, instead of with a separate instrument administered to rising juniors, perhaps a year after their last course in mathematics.

Another goal of this assessment was to determine whether or not our new course—BMTH 111L—was making any difference in student performance. While it is difficult to answer this question with certainty, it is beyond question that the BMTH 111L faculty did an outstanding job. In fact, *students in BMTH 111L outperformed those in traditional sections of MATH 111*—this in spite of significantly lower placement scores (median 8, compared with median 14 for students in traditional sections of 111). Students who passed BMTH 111L with a grade of C or higher had a median post-test score of 20 (just one point shy of placement into MATH 122), and 42% of these students had scores high enough to place them into MATH 122. By comparison,

students who passed traditional sections of MATH 111 with grades of C or higher had a median post-test score of 18, and 40% of them scored high enough on the post-test for placement into MATH 122. Thus, while students in traditional section of 111 improved their scores, on average, only by 4 points, students in 111L improved their scores, on average, by 12 points.

Such evidence would seem to indicate that BMTH 111L has been a howling success—yet BMTH 111L seems to have had little to no effect on math failure rates for this course (see *table 1* below). At least a comparison of fall 2003 and fall 2004 MATH 111/BMTH 111L performance reveals very little change. In fall 2003, 29% of MATH 111 students (if we exclude W's) failed to earn a grade of C or higher; in fall 2004, 28% of MATH 111/BMTH 111L students (again, if we exclude W's) failed to earn a grade of C or higher. In fall 2003, the median MATH 111 grade (excluding W's) was a B and the mean grade was a C+; in fall 2004, the median 111/111L grade (excluding W's) was a B and the mean was a C+. This doesn't suggest that MATH 111L has produced a dramatic change in overall student performance.

	NUMBER OF STUDENTS IN MATH 111/111L	MEDIAN GRADE IN MATH 111/111L	MEAN GRADE IN MATH 111/111L	PERCENTAGE OF STUDENTS EARNING GRADES BELOW C	PERCENTAGE OF STUDENTS EARNING W
Fall 2003	195 (MATH 111 only)	3.0	2.4	29%	9%
Fall 2004	164 (98 MATH 111 & 53 BMTH 111L)	3.0	2.5	28%	7%

*Table 1. Performance and failure statistics for MATH 111 and BMTH 111L, fall 2003 and fall 2004.*

Performance numbers seemed to vary most markedly and meaningfully when grouped by instructor (each instructor received a personalized assessment report for his or her own section[s] of 111/111L), which suggests that differences in performance between students in 111L and 111 may not reflect so much the additional contact hours of 111L as they do differences in teaching style and commitment to teaching those skills measured by the test. One might also attribute differences in performance to a student complacency resulting from placement out of 111L, or the psychological “kick in the pants” for students resulting from a failure to place out of 111L, but for the moment, we can only speculate about such factors. As yet we still do not have the necessary data—i.e., sections of 111 and 111L taught by the same instructor—to arrive at any meaningful conclusions. Such assessment is planned for the near future.

Detailed statistics for MATH 111 and BMTH 111L follow. *Table 2* lists those statistics for all students in 111 and 111L. *Table 3* gives the statistics for BMTH 111L. *Table 4* gives the statistics for traditional sections of MATH 111.

<b>ALL STUDENTS IN MATH 111 &amp; BMTH 111L, FALL 2004</b>				
	MEAN	MEDIAN	SD	COUNT
<b>Pre-Test:</b> all students in study	11.0	11	4.3	83
<b>Post-Test:</b> all students in study	17.8	18	5.8	98
<b>Pre-Test:</b> Overlapping Pre/Post-Test 111/111L students	11.1	11	4.4	78
<b>Post-Test:</b> Overlapping Pre/Post-Test 111/111L students	17.8	18	5.6	
<b>Pre-Test:</b> students with grades of C or higher in 111 or 111L	12.0	12	4.4	60
<b>Post-Test:</b> students with grades of C or higher in 111 or 111L	19.3	19	5.0	76
Correlation between Pre-Test and Math 111/111L Grade (107 students)			0.39	
Correlation between Post-Test and Math 111/111L Grade (98 students)			0.58	
Correlation between Pre-Test and Post-Test (78 students)			0.23	
Correlation between SAT Math and MATH 111/111L Grade (34 Students)			0.33	
Correlation between SAT Math and Pre-Test (52 Students)			0.48	
Percentage of students with C or higher who would place on Post-Test into MATH 122			41%	

*Table 2. Statistics for all students in MATH 111 and BMTH 111L, fall 2004.*

<b>ALL STUDENTS IN BMTH 111L, FALL 2004</b>				
	MEAN	MEDIAN	SD	COUNT
<b>Pre-Test:</b> all BMTH 111L students in study	7.6	8	2.6	40
<b>Post-Test:</b> all BMTH 111L students in study	17.2	19	6.5	41
<b>Pre-Test:</b> Overlapping Pre/Post-Test 111L students	7.5	8	2.7	36
<b>Post-Test:</b> Overlapping Pre/Post-Test 111L students	17.1	18.5	6.4	
<b>Pre-Test:</b> students with grades of C or higher in BMTH 111L	7.7	8	3.1	23
<b>Post-Test:</b> students with grades of C or higher in BMTH 111L	19.9	20	5.5	26
Correlation between Pre-Test and BMTH 111L grade (39 students)			0.11	
Correlation between Post-Test and BMTH 111L grade (41 students)			0.64	
Correlation between Pre-Test and Post-Test (36 students)			-0.05	
Percentage of students who pass BMTH 111L with a grade of C or higher			59%	
Percentage of students with C or higher who would place on Post-Test into MATH 122			42%	

*Table 3. Statistics for BMTH 111L for fall 2004.*

<b>ALL STUDENTS IN TRADITIONAL SECTIONS OF MATH 111, FALL 2004</b>				
	MEAN	MEDIAN	SD	COUNT
<b>Pre-Test:</b> all MATH 111 students in study	14.2	14	2.9	43
<b>Post-Test:</b> all MATH 111 students in study	18.4	18	5.2	59
<b>Pre-Test:</b> Overlapping Pre/Post-Test 111 students	14.2	14	2.9	44
<b>Post-Test:</b> Overlapping Pre/Post-Test 111 students	18.5	18	4.8	
<b>Pre-Test:</b> students with grades of C or higher in MATH 111	14.7	14.5	2.6	40
<b>Post-Test:</b> students with grades of C or higher in MATH 111	19.1	18	4.8	52
Correlation between Pre-Test and MATH 111 grade (43 students)			0.62	

Correlation between Post-Test and MATH 111 grade (59 students)	0.53
Correlation between Pre-Test and Post-Test ( students)	0.50
Percentage of students who pass MATH 111 with a grade of C or higher	88%
Percentage of students with C or higher who would place on Post-Test into MATH 122	40%

Table 4. Statistics for traditional sections of MATH 111 for fall 2004.

While the tables above indicate that students in MATH 111 are more likely to earn a grade of C or above (88%) than students in BMTH 111L (59%), the assessment suggested that this trend is more easily explained by differences in instructor grading habits than by the students' mastery of the skills on the placement test. Even factoring out student ability to earn a grade of C or higher, *all* students in BMTH 111L still outperformed (median score 19) *all* MATH 111 students (median score 18) in the study. A number of 111L students scored high enough on the post-test to place in MATH 122 (21+) but nonetheless failed BMTH 111L; conversely, a number of traditional 111 students scored marginally *lower* on their post-test than on their pre-test and yet managed to earn A's in MATH 111.

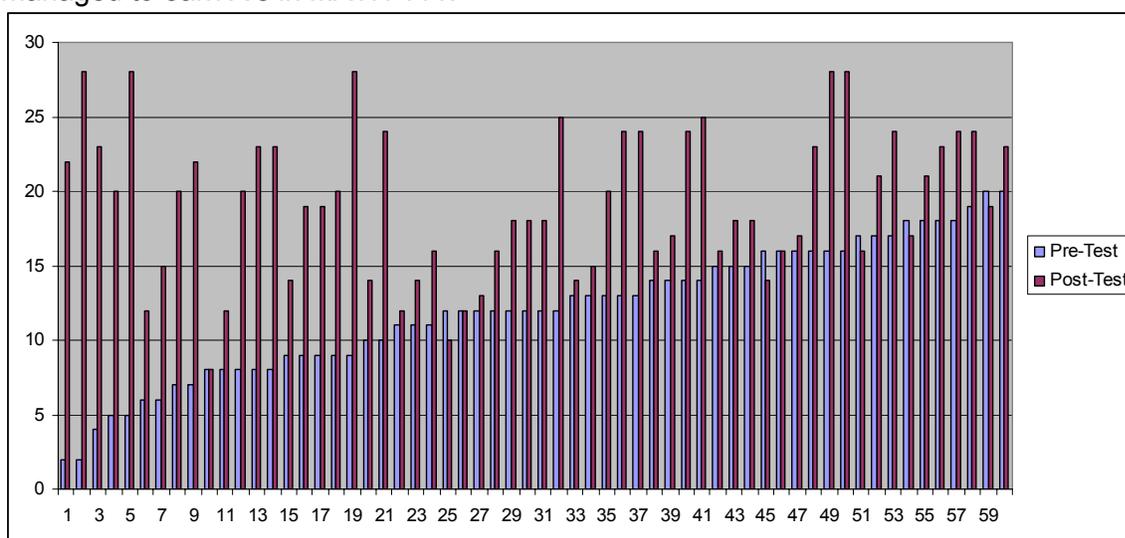


Chart 1. Pre-Test and Post-Test performance for students who earned a C or higher in Math 111 or BMTH 111L, fall 2004.

Results from surveys of rising juniors and graduating seniors have been mixed. In our 2003 exit survey, 78% of students agreed that USCB has enhanced their quantitative analysis skills: 30% strongly agreed; 48% agreed; 18% were neutral; and 3% disagreed. Results from our 2005 survey of rising juniors, however, were less promising. Only 62% of the rising juniors agreed with the statement, "The instruction and coursework required for the general education program at USCB have helped me to perform basic mathematical calculations and interpret data intelligently." 32% were neutral about this statement, and only 6% openly disagreed with it. This fell well short of our goal of 80% agreement—yet, at this point, it is difficult to assess the nature of the problem. 2005 rising juniors were not subject to USCB's new requirement (passed in the spring of 2004 and implemented for the entering class in fall 2004) for *all* graduates to take at least one course in mathematics; nor were they able to benefit from our new courses BMTH 110 & 111L. We will need to watch these self assessment numbers over the next few years to see if this problem disappears or persists.

## Foreign Language

In recent years, foreign language has been another focus of assessment and reform. In fall 2003, all students in all sections of SPAN 110 and FREN 110 were given USC Foreign Language Proficiency Tests as part of their final exams. Then, as now, a stated outcome of our general education program was that *“USCB aims to ensure that all graduates are able to speak and read one foreign language with proficiency.”* To ensure that our students satisfied this outcome, USCB then required that all students *either* pass a 109 and 110 course in a foreign language *or* place out of this requirement with a score of 2 or higher on a USC foreign language proficiency test.

In Spanish, 96% of these students scored S-2 or higher. All (8) students in all (1) sections of FREN 110 were given the USC Foreign Language Proficiency Test as part of their final exam in FREN 110, December 2003. 87.5% of these students scored F-2 or higher. The median raw score for Spanish students was 38 out of 70 (SD = 8.24), with 58% of the students scoring 38 (S-3) or higher, and 41% of the students scoring below 38. The median raw score for French students was 27 out of 60 (SD = 6.25), with 37.5% of the students scoring 30 (F-3) or higher, and 62.5% of the students scoring below 30.

In one respect, USCB should have been very happy with these results. 96% of our Spanish students and 87.5% of our French students were meeting our stated outcome. It is also worth noting that the very few Spanish students and very few French students who fell short of the mark were nevertheless very close to the mark—either one or two points away from success. Attention to these results, however, revealed a basic incoherence within USCB’s foreign language testing and curriculum.

By spring 2005, USCB had addressed the curricular problem—to ensure that the French and Spanish 109/110 sequences better prepared students for French and Spanish 122—and to ensure that students would need a score of F-3 or S-3 to place out of USCB’s general education requirement in foreign language. (Formerly this had been F-2 or F-3.)

## Information Literacy

Since fall 2003, USCB has required information literacy instruction and a course-embedded information literacy test as part of its BENG 101 curriculum. Fall 2003 Information Literacy Test results were as follows: 63 students took the test, and 97% of the students passed with a grade of 70 or higher. 92% of the students passed with a score of 80 or higher. The mean score was 90 (out of 100), and the median score was 93 (standard deviation: 8.6.). Proper citation in MLA and APA format was the area of the information literacy test where students had by far the most difficulty. A particular difficulty was the distinction between on-line and hard-copy versions of sources.

On surveys, USCB students, graduates, and alumni have all expressed satisfaction with information literacy education at USCB. 100% of the alumni in our 2003 alumni survey expressed satisfaction with this area of their education. In our 2003 exit survey, 84% of USCB’s recent graduates expressed satisfaction with information literacy education. 40% strongly agreed, 44% agreed, 13% were neutral, and 3% disagreed with the statement that their “research skills were enhanced” by their education at USCB. In our 2005 assessment of rising juniors, 89% of our students agreed with the statement, “The instruction and coursework required for the general education program at USCB have helped be to find, evaluate, and appropriately use information.” 33% strongly agreed; 56% agreed; and 11% were neutral. No one disagreed.

## Other Areas of GE

Other areas of general education have only been addressed by surveys in recent years. Results for the two most important surveys follow:

<b>2003 EXIT SURVEY</b>					
COMPARED TO BEGINNING MY DEGREE PROGRAM...	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
my written communication skills were enhanced.	41%	44%	15%	0%	0%
my oral communication skills were enhanced.	38%	46%	16%	0%	0%
ethical issues were discussed or were part of assignments.	31%	42%	21%	3%	3%
my problem solving skills were enhanced.	34%	49%	12%	4%	0%
my critical thinking skills were enhanced.	37%	49%	9%	4%	0%
my research skills were enhanced.	40%	44%	13%	3%	0%
my creative thinking skills were enhanced.	33%	47%	16%	3%	0%
my technology skills were enhanced.	34%	45%	15%	6%	0%
my problem analysis skills were enhanced.	30%	48%	18%	4%	0%
diversity issues and perspectives were discussed or were part of assignments.	32%	44%	15%	6%	3%
my quantitative analysis skills were enhanced.	30%	48%	18%	3%	0%

2005 Survey of Rising Juniors					
<i>The instruction and coursework required for the general education program at USCB (see below) have helped me to ....</i>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
• learn how to formulate a thesis, organize complex ideas, support ideas with appropriate evidence, and render them in coherent, grammatical, and properly punctuated written English.	42%	42%	14%	5%	0%
• read and think more carefully, analytically, and critically.	36%	58%	6%	0%	0%
• communicate more effectively in spoken English.	33%	56%	8%	3%	0%
• find, evaluate, and appropriately use information.	33%	56%	11%	0%	0%
• effectively use common computer hardware and software.	25%	35%	28%	6%	6%
• perform basic mathematical calculations and interpret data intelligently.	27%	35%	32%	3%	3%
• understand the scientific method and the fundamentals of the physical or life sciences.	19%	32%	49%	0%	0%
• understand and appreciate literature and the fine arts and their place in the culture.	34%	49%	17%	0%	0%
• understand the development of a culture over time and use a broad historical perspective to understand their position in the world.	31%	50%	19%	0%	0%
• understand their position in the world from a global and cultural perspective.	31%	49%	14%	6%	0%
• understand human behavior from the perspective of at least one of the social/behavioral sciences.	58%	25%	17%	0%	0%
• speak and read one foreign language with proficiency.	22%	14%	39%	19%	5%
• recognize similarities and differences and tolerate, empathize with, and respect those from other cultures, races, economic classes, and genders.	46%	38%	16%	0%	0%

### **Actions Taken or Planned to Improve GE in Response to Assessment Process**

#### **English**

In response to baseline data, and to better support students who are under-prepared in English composition, the faculty created BENG 101L, a 1-credit English laboratory to be taken as a co-requisite and supplement to traditional 3-credit sections of English 101. As of fall 2004, all freshmen were required to either take BENG 101L, and pass with a grade of C or higher, or place out of it with a score of 3 or higher on the Freshman English Placement Test (which mimics the CAAP Writing Essay Test.) (Course approved by Curriculum Committee, 10/15/03, and faculty, 11/21/03; course added to revised general education curriculum by Curriculum Committee, 1/14/04, and faculty, 1/23/04.) English faculty met to agree upon common syllabus for BENG 101L (5/18 & 6/17/04). BENG 101L implemented 8/19/04. This course seems to have been a significant success. See data above.

As part of the creation of BENG 101L, the English faculty created and implemented a freshman English placement test. This was implemented during the summer of 2004. The English faculty further decided to require the research paper in *both* English 101 and 102. (Formerly it was required only in 102.) This was instituted in fall semester, 2003.

The Program Director for General Education met with Edna Crews (November 2004), Superintendent for Beaufort Country Schools, to share data from the CIRPS Survey and additional data concerning the SAT and placement test performance of USCB students from Beaufort County high schools (with performance broken down by school). The Program Director stressed the importance of writing skills, noting the extremely high correlation between English 101 grades and student GPA and retention at USCB. Ms. Crews assured the Program Director that the new Collins Writing Curriculum being implemented in Beaufort County schools should significantly improve the writing skills of USCB's incoming freshmen.

The English faculty also received individualized reports comparing their individual grading distribution against the wider grade distribution for the department between summer 2002 and fall 2004—including data on the average USCB GPA of their students—as a measure of grade inflation and deflation at USCB. Except in one or two instances, grade inflation and deflation were determined not to be a problem, which should come as no surprise given the very high correlation between English 101 grades and USCB GPA.

Although we met our goals with the 2005 CAAP exam and in our survey of rising juniors, the Program Director has begun to ask the Curriculum Committee, Academic Affairs Council, and English Program to consider a junior-year writing requirement for students who fail to take the CAAP Writing Essay Test as rising juniors or who score below 3.0 on this test. This would boost student participation in this key assessment, and it would give us a final opportunity to boost the writing performance of the 15% of our rising juniors who fail to meet our goal for writing competency.

The English faculty still plans to implement its course-embedded assessment test in English 102 which has until now been delayed.

### **Mathematics**

In response to baseline data, the Curriculum Committee and mathematics faculty revised general education requirements in numerical and analytical reasoning to close a loop-hole (inherited from USC Columbia's general education curriculum) which formerly allowed students to graduate from USCB without taking any coursework in mathematics. Beginning with fall 2004's entering class, USCB now requires all students to take at least one course in math. The Curriculum Committee and faculty revised USCB's GE requirement in numerical and analytical reasoning to read as follows: "MATH 110 or MATH 111/111L or a higher level course in mathematics, plus an additional course in mathematics, logic, statistics, or computer science (6-7 hours)." (Approved by Curriculum Committee, 1/14/04; approved by faculty, 1/23/04; implemented 8/19/04).

As part of this process, the math faculty created a new general education course in mathematical modeling, MATH 110 (approved by Curriculum Committee, 1/14/04; approved by faculty and administration, 1/23/04; implemented, 8/19/04).

Also, to better support students who are under-prepared in mathematics, the math faculty created MATH 111L, an intensive 4-credit section of MATH 111, consisting of an extra one-hour-and-fifteen-minute weekly laboratory. As of fall 2004, students who plan to take higher level mathematics at USCB and who score 10 or below on USCB's MATH 111 Placement Test must take MATH 111L; students who score 11-20 place into traditional 3-hour sections of MATH

111; students who score 21 or above place out of MATH 111 and into MATH 122. (Approved by Curriculum Committee, 10/15/03; approved by faculty and administration, 11/21/03; implemented, 8/19/04.)

Further assessment of BMTH 111L (comparing 111 and 111L sections taught by the same instructor) is still needed to determine the effectiveness of the additional contact hours that distinguish 111L from 111.

The math faculty received individualized reports showing the pre-test/post-test performance of their own individual students. The math faculty was then asked to consider both their individual and the group results. They were further asked to consider whether or not Placement Test B really reflects those skills necessary for success in BMTH 122 and, hence, those skills which should be taught in 111/111L. If so, we would hope to raise the percentage of students who can place into BMTH 122 by the end of BMTH 111 & 111L. If not, the faculty has been asked to agree on a set of skills that really *is* necessary for success in 122, with the idea that they might want to design a placement test that more accurately measures those skills. Results of this discussion are still pending.

Student assessment of math education on the survey of rising juniors will be monitored over the next few years to see if results improve as students who have benefited from USCB's recent changes to our freshman mathematics curriculum eventually become rising juniors.

### **Foreign Language**

On May 17, 2005, the following decision was reached and communicated to advisors and program directors: "As of today, the placement exam score needed to place out of USCB's general education requirement in foreign language is a 3 (not a 2). This is the same score required for placement into a 122 level course, and it is the score that most accurately reflects mastery of the knowledge and skills taught in our 109/110 sequences. Until USCB begins to offer 121 courses (intro courses for students with some foreign language experience), a score of 2 will continue to place students into 110. (This has been our practice in recent years for students who intended to continue on to take 122, so this is not a change in policy.) Needless to say, a student who places into 110 only needs 3 credits (from 110) to satisfy our GE requirement in foreign language. This is not a change of curriculum—only a correct interpretation of our GE curriculum—and no language needs to be changed in our bulletin or program brochures. We're ready to implement this policy now."

The foreign language faculty has also been advised that a higher percentage of students completing French and Spanish 110 should be scoring at or close to the F-3 and S-3 level. Only subsequent assessment will demonstrate whether or not we are meeting this goal.

### **Information Literacy**

In fall 2003, the faculty added a mandatory library tour and information literacy test to English 101. The English program has continued to send reminders to all faculty to ensure 100% compliance with this requirement. English instructors have been urged to count the information literacy test toward course grades for ENGL 101 to encourage student participation. English instructors have been further urged to teach the distinction between citing hard copy texts and those from electronic databases.

## MAJORS/CONCENTRATIONS

Major assessment is done in concert with the University's mission and strategic plan. The program director compiles the assessment report in conjunction with the department faculty and submits the document to the University's Institutional Effectiveness Council for review. Majors will be reviewed by internal and external constituencies as the institution continues its commitment to excellence.

Assessment Instrument	Biology	Early Childhood Education	Psychology
Alumni Survey	X	X	X
Graduating Seniors Survey		X	
Capstone Course		X	
Oral Reports		X	
Portfolios		X	
National Exam	X	X	X
Employer survey		X	
Senior Project		X	
Course-embedded	X	X	X
Student Evaluation Forms	X	X	X
Self Assessment Procedures	X	X	X

### Biology

The Biology program was approved in September of 2005. As of April 2006, there were 42 majors in the biology program and two students graduated with a B. S. in Biology. The biology program undergoes continuous review, assessment, and modification to address important program and curriculum issues. Two upper level courses have been added to the curriculum for next year. Laboratory facilities and equipment are being strengthened to enhance learning in the freshmen through senior level laboratory experiences. Plans are to administer the Biology Major Field Test to seniors in the coming academic year. Results will be reviewed and analyzed to aid in identifying areas for improvement.

### Education

The Early Childhood Education program has been aligning desired performance outcomes for graduates with institutional, state, and national standards, and developing assessment rubrics for identified critical performances expected of all program graduates. The assessment and evaluation system includes an analysis of candidate performance on nationally-normed tests of general academic performance in PRAXIS I, and an analysis of candidate knowledge in teaching the specialized area of Early Childhood Education measured by nationally-normed exams in PRAXIS II. To be admitted to the Professional Program, students must pass all three portions of the PRAXIS I. Our pass rate for the PRAXIS II is 100 percent. The Early Childhood Education faculty will continue to advise students of upcoming PRAXIS workshops and encourage attendance.

There is an analysis of candidate performance on 5 critical performances expected of all graduates:

1. Students must have a cumulative GPA of 2.75 to be accepted for Internship.
2. Passing score on PRAXIS II.
3. Satisfactory completion of Professional Portfolio during final semester.
4. Satisfactory ADEPT evaluation and ADEPT notebook.
5. Satisfactory Dispositions evaluation.

During their internship, every teacher candidate must produce a Professional Portfolio that reflects their development as an early childhood educator as well as their understanding of, and application of, classroom practices and NAEYC/NCATE standards. A detailed grading rubric is used to evaluate the portfolios, and for AY 2005-2006, 100% of the Interns received "Satisfactory" or "Target" ratings, with "Target" being the highest, most desired rating.

The USCB Early Childhood Program is based on its Conceptual Framework. Integral components of the Conceptual Framework are the Program Objectives and Student Learning Outcomes. USCB recognizes the importance of a strong and accredited academic program, dedicated and caring faculty, and a strong support system to ensure the education and training of our students to not only be adequately prepared to become successful early childhood educators, but to also gain certification and employment upon graduation. Our results show that we are on track, and we are committed to do what it takes to maintain or improve these results.

## **Psychology**

The Psychology program at USC Beaufort provides students with a broad knowledge of the principles of human behavior and mental processes. The study of psychology has wide applicability to the solving of human problems at both the personal and societal levels. Knowing the factors that help maintain psychological, physical and social well-being can benefit graduates in psychology throughout their professional and personal lives. The program seeks to engender in its students well-developed problem-solving and communication skills which allow the critical analysis and integration of complex information using disciplined thought processes. Further, the program is committed to providing students with a solid academic foundation in psychology for those who will pursue graduate work in psychology and related fields.

Although a new program, the psychology degree program has attained its overarching goal of establishing a viable and thriving majors program for students interested in psychology. Class enrollments have greatly exceeded expectations with 62% growth during one academic year. The scheduling and advisement of students has proceeded smoothly and the psychology major program is stable and established. Already the program has sought to extend the scope of experiences for students with the first potential psychology graduate students gaining valuable research experience in scientific psychology. There are several promising leads for further placements for those students interested in research. Since psychology is at its heart a research science, it has been a major concern for the psychology faculty that students learn how to discriminate and use scholarly sources as a basis for their learning in the field. A comprehensive library usage plan was formulated and used in pilot form during the Spring 2006 semester. The module will now be refined and implemented in all sections of the Research Methods class. Although the psychology degree program had only one major graduating this spring, the psychology faculty are interested in obtaining feedback concerning the overall knowledge base in psychology. Plans are to administer the Major Field Test in Psychology to all graduating psychology majors in the coming year and use the data to improve the quality of the psychology curriculum.

### Programs Eligible for Accreditation

The following is a list of accrediting agencies and areas available to programs offered through USC Beaufort and an indication of the accreditation status of the USC Beaufort available for accreditation.

Accrediting Agencies and Areas	Accreditable Programs	Fully Accredited Programs	Details on Program (if program not fully accredited)			Date agency/ area added to CHE List
			Year Program added at institution	Institution has chosen NOT to seek accreditation for this program	Accreditation Expected (if known)	
Association of Collegiate Business Schools and Programs	<i>An institution may be accredited by the ACBSP or the AACSB</i>					
Business (BUBD) – Baccalaureate degree programs in business and business-related fields	B.S. Business Management		2004			
National Council for Accreditation of Teacher Education	<i>An institution may be accredited by the ACBSP or the AACSB</i>					
Teacher Education (TED) – Baccalaureate and graduate programs for the preparation of teachers and other professional personnel for elementary and secondary schools	B.A. Early Childhood Education		2004		Fall 2007	

The Early Childhood Education Program began the accreditation process by submitting a Program Report to the South Carolina Department of Education, who approved the USC Beaufort Early Childhood Ed Program in October 2005. We are working toward NCATE accreditation, and our program is currently a "Precandidate." After successful evaluation of our preconditions and conceptual framework this fall, the USCB Early Childhood Education Program will become an NCATE "candidate." Our NCATE program report is due in spring 2007. The planned NCATE visit will be in fall 2007.

The Business program plans to seek accreditation from the Association to Advance Collegiate Schools of Business (AACSB) once a program director is hired.

### SUCCESS OF STUDENT IN DEVELOPMENTAL COURSES

This component is not applicable to our institutional type.

### STUDENT INVOLVEMENT IN SPONSORED RESEARCH

The numbers here reflect upper division undergraduate students who participate in sponsored research programs. Each institution that receives research dollars generated by external funding (sponsored research) should report the number of students who benefit from these dollars.

	Number of Students Participating in Sponsored Research
Upper Division, Undergraduate Students	1
Graduate Students	N/A

### RESULTS OF PROFESSIONAL EXAMINATIONS

All public institutions must report student scores on professional examinations with detailed information over time. The information reported should include all examinees that completed the specific exam during the period of April 1, 2005 through March 31, 2006, and should list the entire name for each exam.

Name of Exam	Date(s) Administered	# of Examinees	# of 1 <sup>st</sup> Time Examinees	# of 1 <sup>st</sup> Time Examinees who Passed	% 1 <sup>st</sup> Time Examinees Passing
<b>Teaching Sector</b>					
PRAXIS Series II: Specialty Area Tests					
0020 Early Childhood Education	4/16/2005	2	2	2	100%
0021 Education of Young Children	6/11/2005	2	2	2	100%
	8/06/2005	1	1	1	100%
	9/17/2005	3	3	3	100%
	11/19/2005	1	1	1	100%
	1/07/2006	1	1	1	100%
	3/04/2006	3	3	3	100%
<b>Total:</b>		13	13	13	100%

All of the above tests are PRAXIS II specialty area tests.