Fayetteville State University

AY 2006 - 2007

College Basic Subjects Examination [CBASE]

(N = 160)

Spring 2007

General Education Assessment
Rising Junior Examination Report
Summary of Key Findings

The following findings are based on the results of the College Basic Subjects Examination, and on the assumption that the obtained test scores are an accurate reflection of the students' levels of proficiency in the subjects measured:

- One hundred sixty students (160) participated in the spring 2007 administration of College BASE.
- The average subject score in mathematics increased by 24 points from 227 in spring 2006 to 251 in spring 2007.
- In the Algebra Cluster, nearly 70% of the students were able to evaluate algebraic and numerical expressions and solve equations and inequalities.
- Slightly more than half of the students tested were proficient in using statistics (54%).
- Since 1999 FSU students have achieved below average scores in the English Subject area of College BASE. Spring 2007 was no exception with the average English Subject score of 221 declining by one point.
- The average score in the English subject area of 221 was one point lower than in the previous academic year.
- Approximately 60% of the students were able to understand various elements of the writing process, and were also able to identify grammatical elements of a sentence.
- In the area of English, only 40% of the students tested were able to identify main ideas and distinguish them from subordinate ones, recognize clearly implied assumptions, or evaluate underlying meanings of passages, and thus be proficient in reading critically and accurately.

Introduction and Historical Perspective

In Spring 1990, Chancellor Lloyd V. Hackley noted in his Academic Development Plan for FSU that “assessment of required mastery in writing, reading, speaking, and
calculating will be based on students’ performance on basic skills, tests in English and mathematics courses with division-wide examinations, and “rising junior” examinations, and on such follow-on examinations as PRAXIS and the Graduate Record Examination”. It was in that light that Fayetteville State University implemented the “rising junior” examination. The College Basic Subjects Examination (CBASE) was selected as the instrument of choice by the Assessment Advisory Committee, and approved for use by consensus. Since its inception in spring 1990, more than twenty nine hundred students (n = 2,917) have completed the assessment.

The purpose of the “rising junior” program is to provide students, faculty, and administrators with feedback regarding how well students have developed specific academic skills through the end of their sophomore year. For more than fifteen years, Fayetteville State University has systematically assessed student learning outcomes using the College Basic Academic Subjects Examination (CBASE), a nationally standardized examination that measures essential knowledge and skills typically obtained in the first two years of college.

College BASE is a commercially published, criterion-referenced achievement test designed especially to be given at completion of general education requirements. The examination includes 180 multiple-choice items that measure twenty-two specific skills in English, mathematics, science and social studies with three different levels of reasoning competency. CBASE is a required examination for all undergraduate, degree-seeking students who enroll at FSU as first-time freshmen (native students) and who have earned between 40 and 63 credit hours, and are not declared teacher education majors. Students who plan to major in teacher education must take the
Praxis examination to fulfill their “rising junior” examination requirement. For the second consecutive year, FSU did not require students to take either the science or social studies sections of the test. One reason for excluding the science and social studies components was because many students delay taking general education courses in these areas until later in their college career, resulting in poor performance on those sections of the test.

During 2006-2007, 509 eligible students were given the option of writing either the College BASE or the Collegiate Learning Assessment (CLA) to satisfy the rising junior examination requirement. Three hundred seven (307) or 60% of eligible students sat for the two examination programs. Approximately 160 students completed the College BASE, while another 147 completed the CLA.

**Methodology**

The rising junior examination was administered three times during the spring 2007 semester. University Testing Staff created a report with a list of students who met the established criteria, i.e., enrollment at FSU as first-time freshmen, earned between 40 and 63 credit hours and were not declared teacher education majors. In early spring semester 2007, testing staff sent each eligible student a letter and an email notification informing them of the “rising junior” examination requirement and providing them with a test schedule and registration procedures.

**The Sample**

The sample included 509 students who were identified by the Director of University College as being eligible to sit for the examination. Of the 160 students that
wrote College BASE during the spring 2007 semester, 76% reported their classification status as *rising juniors*. Female students comprised 65% of the sample. Ethnic composition in the sample is 84% African American; 2% Caucasian; 6% Hispanic; , and 4% who chose not to indicate ethnicity.

**Interpretation of Scores and Summary of Results**

One reason for conducting assessments at the midpoint of students’ college careers is to determine if FSU is making improvements in meeting institutional goals related to student success. Overall, the results of rising junior testing at FSU indicate a less than adequate level of performance across the board with scores in both English and mathematics falling significantly below the average scaled score of 300.

As indicated above, the College BASE assesses specific, clearly defined content and skills. The test sponsor notes that the criteria and proficiency levels for the skills are based on what a panel of experts agreed should be expected of students who have completed at least two years of college. Two types of test results are provided: numeric scaled scores that range from **40 to 560** points with a mean of 300, and score ratings that can be either “High,””Medium,” or “Low”. Numeric scores represent the students' familiarity with traditional subject matter. Scores that fall between 258 and 332 represent an adequate level of skill development, while scores below 257 suggest that student skills are not well developed and their knowledge of subject matter as measured by CBASE is weak. The average score (221) obtained by FSU students in the English subject area falls well below the comparison group scores, and below the level of proficiency (258) expected of students at the end of the sophomore year.

Conversely, math scores appear to be on the rebound from the low average
scores received in the previous two years, with an average score of 251 obtained by FSU students. This score, while somewhat below the expected level of proficiency (258), is 24 points higher than the average score obtained by FSU students in spring 2006.

Generally, student performance on the College BASE in spring 2007 was similar to the performance of students taking the examination between 2000 and 2006 (See Table 1). Individual scores ranged from a low of 120 to a high of 331 in English. Individual math scores ranged from a low of 116 to a high of 437. Overall, math scores were higher across all skill levels in 2007 than in 2006.

Table 1: Score trends in Average English and Math scores on College BASE

<table>
<thead>
<tr>
<th>Subject</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>255</td>
<td>232</td>
<td>209</td>
<td>222</td>
<td>232</td>
<td>222</td>
<td>222</td>
<td>221</td>
</tr>
<tr>
<td>Math</td>
<td>261</td>
<td>228</td>
<td>219</td>
<td>246</td>
<td>249</td>
<td>237</td>
<td>227</td>
<td>251</td>
</tr>
</tbody>
</table>

As can be seen in the table above, subject scores in English and mathematics have declined every year since spring 2000. It remains unclear whether the poor performance on the College BASE demonstrated by FSU students is an inconsistency based on the lack of importance that students attach to the test, or a clear indication of academic insufficiency. Historically, students have shown little motivation to take the rising junior examination seriously although the test has been required for more than ten years. In spring 2007, however, participation increased considerably. Students were told they would not be allowed to pre-register for the fall semester unless they could
show evidence of having sat for one of the rising junior assessments, College Base or the Collegiate Learning Assessment. This strategy, which resulted in a participation rate of 60%, seems to have produced the desired outcome of increasing the number of students completing an assessment that provides a measure of “value-added” at the midpoint of the college experience.

**Conclusion**

Several points stand out with regard to drawing conclusions about the test results described in this report. Although completing the rising junior examination is a requirement for most degree seeking, non-teacher education students at FSU, it is recognized that motivation to do one’s best is affected by the student realizing that test results have no effect on progression or academic status.

Whether or not typical student performance and proficiency can be generalized on the basis of these results remains unclear. Although participation increased in spring 2007, the number of students participating in College BASE is probably still not sufficient to generalize to the larger rising junior population. If, however, it can be correctly assumed that the performance of students who took the test represents typical performance among all rising juniors, then FSU has work to do to bring FSU students to an acceptable level of proficiency in the skill areas measured by the examination.

**Recommendations**

For the near term, it may be difficult to get student “buy-in” for this examination. After all, the perception is that taking the test is an exercise that they must endure, rather than an activity that will yield some meaningful information and benefit to them. The following recommendations regarding the rising junior examination (CBASE) are
presented for consideration:

- Re-examine the CBASE fit to the established core curriculum.

- Review other instruments that measure general education proficiency.

- Formulate specific criteria for what students are expected to know and be able to do following completion of the core curriculum.

- Reinstate requirement to take all components of the “rising junior” examination, including the writing sample.

- Impose a passing score for CBASE in conjunction with other indicators (GPAs, course grades, faculty developed tests) to document achievement of skills.

- Provide 1 to 3 hours of elective credit to students who score above a designated score on the “rising junior” examination.

- Investigate options for helping students accept the examination as “high stakes” to ensure they put forth effort that is truly reflective of the skills they have obtained.

- Further analyze student performance results and, share with colleges to help them develop strategies to improve skills students need for success in the major.
APPENDIX

Table 2 – Percent of students receiving “high”, “medium,” and “low” proficiency in English Subject area

<table>
<thead>
<tr>
<th>English and Literature</th>
<th>Skills</th>
<th>High</th>
<th>Med</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reading Critically</td>
<td>3%</td>
<td>34%</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>2. Reading Analytically</td>
<td>8%</td>
<td>33%</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>3. Understanding Literature</td>
<td>4%</td>
<td>33%</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>4. Writing as a Process</td>
<td>8%</td>
<td>53%</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td>5. Conventions of Written English</td>
<td>1%</td>
<td>59%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Table 3 - Percent of students receiving “high”, “medium,” and “low” proficiency in Mathematics Subject area.

<table>
<thead>
<tr>
<th>Math</th>
<th>Skills</th>
<th>High</th>
<th>Med</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Mathematics</td>
<td>Practical Applications</td>
<td>6%</td>
<td>38%</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td>Properties and Notations</td>
<td>19%</td>
<td>50%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Using Statistics</td>
<td>8%</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Algebra</td>
<td>Evaluating Expressions</td>
<td>13%</td>
<td>56%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Equations and Inequalities</td>
<td>12%</td>
<td>57%</td>
<td>31%</td>
</tr>
<tr>
<td>Geometry</td>
<td>2 and 3 Dimensional Figures</td>
<td>7%</td>
<td>46%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>Geometrical Calculations</td>
<td>2%</td>
<td>60%</td>
<td>38%</td>
</tr>
</tbody>
</table>
Chart 1 – English and Math Score Comparisons between FSU and National Reference Group *
Peer Institutions

* Note: The following institutions are considered by College BASE to be “Peer Institutions” and are included in the comparative report:

1. Jacksonville State University
2. Troy State University
3. N. Georgia College
4. Jackson State University
5. Missouri Southern State
6. Missouri Western State University
7. East Central University
8. Winthrop University
9. Virginia State University
10. West Virginia State University

Chart 2 – English and Math Score Comparisons between FSU and Peer Institutions *

[Bar chart showing score comparisons between FSU and peer institutions for English and Math]