University of Georgia
2006-2007 College BASE Examination Results

Background

During January and February 2007, 601 UGA undergraduate students, predominantly juniors, each completed one of four Subject Tests from the criterion-referenced College Base Academic Subjects Examination (C-BASE). Subjects tested were English, Math, Science, and Social Studies, with each broad Subject subdivided into more specific Cluster and Skill scores.

UGA received an Institutional Summary (attached) with

1. a Composite Score of overall performance on the exam,
2. aggregate scores for each Subject,
3. aggregate scores for each Cluster within each Subject, and
4. aggregate performance measures of Skill sets within Clusters

The Composite, Subject, and Cluster scores are reported on a scale from 40 to 560, with 300 as the constant mean. According to the C-BASE Interpretive Guidelines, a **difference of 17 points** among Composite, Subject, and/or Cluster scores **can be considered "meaningful."** The specific Skills within Clusters are reported according to the percentages of students who scored High, Medium, or Low on the items associated with the Skill.

In addition to the recent scores for UGA students, we received a Comparative Report (attached) of aggregated C-BASE scores for 13 other institutions selected by the test designers for comparability with UGA.

Finally, the C-BASE was given to a similar sample of UGA students in 2003. The Institutional Summary scores for that administration are comparable with the current ones.

Analysis

Following are three brief analyses: one for the UGA student performance on the C-BASE exam in 2007, another for UGA student performance compared to that of students from a group of other institutions, and finally a comparison of UGA student performance in 2007 with results from 2003.

UGA--2007 Results

The following table lists UGA student scores for four subject areas and the overall Composite score:

Subject	UGA Students
English	328
Mathematics	325
Science	344
Social Studies	349
Composite Score	337

UGA's overall Composite Score of 337 is well above the exam's constant mean of 300, suggesting an **overall strong performance by our students** compared to students in the normed group. All Subject scores are well within the 17 point margin in relation to the Composite Score, so **the exam reveals no relative strengths or weaknesses among Subjects**. In addition, with notable exceptions (discussed below) **very few UGA students (<10%) scored "low" on specific Skills within Subject Clusters** (see attached Institutional Summary for Skills percentages).

English results:

Reading and Literature and Writing Clusters show no relative strengths or weaknesses. **However, relatively high percentages of UGA students scored "low" on the skills *reading critically* (14%) and Reading a*nalytically* (20%). This may suggest an area of concern.**

Math results:

General Mathematics Cluster scores show a relative strength with a difference of +19 from the Subject score.

Geometry Cluster scores are low, with a difference of -28 from the Subject score, indicating a relative weakness in this area. In addition, relatively high percentages of UGA students scored "low" on the skills *2&3 dimensional figures* (20%) and *geometrical calculations* (32%). These two findings may suggest an area of concern. However, Geometry is the last section of the Math subject area, and the test administrators noted a low completion rate for students who took the Math subject test, which may account for these results. See Limitations section of this report for further discussion.

Science results:

Scores indicate no relative strengths or weaknesses.

Social Science results:

Scores indicate no relative strengths or weaknesses.

UGA-Comparison Group Results

The following table lists UGA aggregate scores with aggregate scores for the 13 comparative institutions for the four subject areas and the overall Composite Score:

Subject	UGA	Comparative Group
English	328	285
Mathematics	325	310
Science	344	291
Social Studies	349	280
Composite Score	337	289

These results show **UGA students scoring higher with a "meaningful difference" on the overall Composite Score and all Subject areas except Mathematics**.

Perhaps the most interesting result (see the attached Summary Reports) is that UGA has **dramatically fewer "low" performing students than the Comparative Group**, as summarized in the following table:

% Students scoring "low"	UGA	Comparative Group
Range	2%--32%	10%-30%
Range excluding noted exceptions in Geometry	2%-10%	Na
Average across all skill areas	**9.18%**	**22.45%**

This factor alone may account for the differences in Composite and Subject Scores and may be related to the pool available for the Comparative Group. See Limitations section of this report for further discussion.

Standard deviations range from 46 to 68 points excluding one apparently anomalous 84-point standard deviation in UGA's Geometry scores. With this exception (discussed above), standard deviations are comparable for UGA and the Comparative Group.

UGA—2003-2007 Comparison

The following table lists UGA student scores from 2007 and 2003 administrations of the C-BASE exam.

Subject	Ability Cluster	2003	2007
English		328	328
	Reading & Lit	317	315
	Writing	331	333
Mathematics		331	325
	General Math	325	344
	Algebra	340	338
	Geometry	308	297
Science		331	344
	Lab & Field Work	332	335
	Fundamental Concepts	**319**	**345**
Social Studies		336	349
	History	333	347
	Social Sciences	331	340
Composite Score		332	337

There are **no statistically meaningful changes in Composite or major Subject scores** from 2003 to 2007 for the similar samples of Junior-level students.

Among the Clusters scores, there is one significant change in student performance from 2003 to 2007: the **Fundamental Concepts area of Science shows a rise of 26 points**, from 319 to 345.

Limitations

There are a number of factors that may affect the ability of the C-BASE exam to reliably measure student learning in the Core Curriculum areas at UGA and to provide a useful measure of UGA student achievement in general. Among those factors, the following in particular should be taken into account when considering UGA's C-BASE results.

Time constraints:

The C-BASE allows students 45 minutes per section. Since administration logistics (passing out the test, reading the orientation script, filling in the demographic sections, waiting for latecomers) take about 10 minutes, it is impossible to reserve a full 45 minutes for the test in UGA's 50-minute class periods. While most students do not require the full 45 minutes to complete the English and Social Studies sections of the test, many students need 45 minutes or more to complete the Math and Science sections, both of which require simple but time-consuming calculations (we did not supply calculators). In the Math test, the Geometry questions are clustered at the end, and the time limitation may have affected UGA student scores in that Cluster. In the Science test, the last questions are mixed between Clusters, so any effect would be distributed.

Institutional Comparisons:

Schools in C-BASE Comparative Group (% of group)	
Wichita State University (7.13%)	Univ. of Missouri—Kansas City (10.96%)
Western Michigan University (7.52%)	Univ. of Missouri—St. Louis (9.10%)
Jackson State University (13.53%)	Washington University (.76%)
Miss. State University (9.85%)	Middle Tennessee State Univ. (1.35%)
St. Louis University (2.81%)	Tennessee Tech (20.47%)
Univ. of Missouri—Columbia (13.93%)	Univ. of Tennessee—Knoxville (1.37%)
Univ. of Missouri—Rolla (1.23%)	

These schools were chosen for comparison by the C-BASE testing administrators as the closest possible matches to UGA's Carnegie classification. However, among these schools, only Washington University (.76% of the group) shares UGA's Carnegie profile for undergraduates (Full-time four-year, **more selective**, lower transfer-in). The only official "peer" institution in the group is the University of Missouri, Columbia (13.93%), which, along with the University of Tennessee (1.37%), shares UGA's profile for size, types of undergraduate programs offered, and amount of research activity.

There are no identified UGA aspirational institutions represented in the comparative group for C-BASE.