

## UNK CAAP Results

### **Introduction and Limitations**

The CAAP assessment results for UNK allow us to compare UNK freshmen and seniors to a national norm groups composed of freshmen and seniors. In the data presented below, student scores from our sample at UNK are divided into four quartiles based on national norm group data. ACT suggests using these percentages as benchmarks, with the goal of reducing the number of students in the lower quartiles and increasing the number in the upper quartiles. ACT also suggests examining the course-taking information for students who fall in the lower quartiles to determine if an intervention is warranted. To discover the actual students who fall in this lowest quartile, we would need to look at the CAAP student roster.

The [CAAP institutional reports](#) are available on the assessment website. The normative information in these reports is for sophomore students, and should **not** be used when making interpretations. Instead ACT provided normative information for freshman and senior who took the CAAP in their *User Norms 2007-2008* brochure, these norms were used in the following presentation of data.

Prior to making interpretations based on the data, a few limitations should be clarified. It is not possible to make value-added statements based on our CAAP data. The data are limited in this regard by the fact that we do not have the same (or matched) students taking the tests in their freshman and senior years. Also, the sampling of students for CAAP testing was not random. It was done by selecting classrooms using random methods. If a comparison of means for freshmen and seniors were to be done (using a cross sectional method), one should also be aware from freshman to senior year the composition of the student body changes. For example, the freshman to sophomore retention rate is about 80%. Presumably, many of the freshmen who do not return are not high achievers. If one wanted to make value added interpretations based on the CAAP data, we could administer the CAAP to the same students during their freshman and senior years. Another option would be to link ACT scores to CAAP scores to evaluate growth.

Although our sampling method was not ideal, our sample does appear to accurately reflect UNK freshmen and seniors. About 80% of undergraduate students campus-wide were White/Caucasian (according to Factbook), this corresponds closely with the percentages of students in the sample. Other demographic characteristics of the UNK sample such as age and gender appear fairly similar to those of the UNK undergraduate student body.

### **Critical Thinking -FRESHMEN:**

One hundred and ninety eight (198) freshmen took the CAAP Critical Thinking (CT) test, the average scale score was 60 (reference the [Institutional Summary Report – Freshmen](#)). A total of 161 (81%) students who took the CT test reported their ethnicity as White/Caucasian. These students had higher scores (mean scale score of 61) compared to Mexican American/Chicano (mean 57) and Asian/Pacific Islanders (mean 53). However, basing interpretations on these numbers is tenuous at best because of the low numbers of non-white/Caucasian participants. If more reliable information is desired, we could over-sample from these groups in future administrations. There was a seven point scale score difference between students who reported English as their first language (mean 61) and those who did not report English as their first language (mean 54). Note that students were not allowed to use translators during the exam. As

expected there was an increase of CT scores as reported GPAs increased. Scores were similar across reported majors.

Of the 138 students who responded to the item about how hard they tried on the CT test, most (92%) reported that they “tried their best” or “gave moderate effort”. This is a very high percentage given that students are expected to be less motivated on an assessment like this. In future administrations, we should make additional efforts to be sure that students respond to this item. As the instructions to complete this item are given after the test is over.

The mean scale score for the sample of 198 UNK freshmen was 60. The average freshman at UNK received a critical thinking score equal to or higher than that of 49% of the freshman in the national norm group (N=16,013).

18% of UNK freshmen scored above the 75<sup>th</sup> percentile nationally,

27% of UNK freshmen scored between the 50<sup>th</sup> to 75<sup>th</sup> percentiles nationally,

32% of UNK freshmen scored between the 25<sup>th</sup> to 50<sup>th</sup> percentiles nationally,

23% of UNK freshmen scored at or below the 25<sup>th</sup> percentile nationally.

### **Critical Thinking (CT) -SENIORS:**

One hundred and sixty nine (169) UNK seniors took the CAAP Critical Thinking (CT) test, the average scale score was 63. (reference the [Institutional Summary Report – Seniors](#)). A total of 136 (80%) students who took the CT test reported their ethnicity as White/Caucasian. These students had higher scores (mean scale score of 64) compared to Mexican American/Chicano (mean 60) and Asian/Pacific Islanders (mean 56). However, basing interpretations on these numbers is tenuous, at best, because of the low numbers of non-white/Caucasian participants. There was a six-point scale score difference between students who reported English as their first language (mean 63) and those who did not report English as their first language (mean 57). Again there was an increase of CT scores as reported GPAs increased. Scores were similar across reported majors, although Social Science majors had somewhat higher scores (mean 65) than other reported majors.

Of the 128 students who responded to the item about how hard they tried on the CT test, most (85%) reported that they “tried their best” or “gave moderate effort”. This is a fairly high percentage given that students are expected to be less motivated on an assessment like this. We should make additional efforts to be sure that students respond to this item.

The average scale score for the sample of 169 UNK seniors was 63. The average senior at UNK received a critical thinking score equal to or higher than that of 50% of the seniors in the national norm group (N=10,547).

25% of UNK seniors scored above the 75<sup>th</sup> percentile nationally,

26% of UNK seniors scored between the 50<sup>th</sup> to 75<sup>th</sup> percentiles nationally,

25% of UNK seniors scored between the 25<sup>th</sup> to 50<sup>th</sup> percentiles nationally,

24% of UNK seniors scored at or below the 25<sup>th</sup> percentile nationally.

### **Writing – FRESHMEN**

There is less information about the demographic characteristics of the students who took the writing test. It is not possible to compare scores by demographic groups using the CAAP writing score report. UNK freshmen (N=196) had an average scale score of 2.8, while the national normative group (N= 11,886) mean was 3.1 (reference the [Institutional Summary Report – Freshmen](#)). The following lines compare the frequency distribution of the UNK freshmen to the freshman normative group.

18% of UNK freshmen scored above the 75<sup>th</sup> percentile nationally,  
40% of UNK freshmen scored between the 50<sup>th</sup> to 75<sup>th</sup> percentiles nationally,  
5% of UNK freshmen scored between the 25<sup>th</sup> to 50<sup>th</sup> percentiles nationally,  
37% of UNK freshmen scored at or below the 25<sup>th</sup> percentile nationally.

### **Writing – SENIORS**

UNK seniors (N=191) had an average scale score of 3.0, while the national normative group (N= 6489) mean was 3.3 (Reference the [Institutional Summary Report – Seniors](#)). The following lines compare the frequency distribution of the UNK seniors to students nationwide. The average senior at UNK received a writing score equal to or higher than that of 41% of the seniors in the senior normative group.

14% of UNK seniors scored above the 75<sup>th</sup> percentile nationally,  
27% of UNK seniors scored between the 50<sup>th</sup> to 75<sup>th</sup> percentiles nationally,  
26% of UNK seniors scored between the 25<sup>th</sup> to 50<sup>th</sup> percentiles nationally,  
33% of UNK seniors scored at or below the 25<sup>th</sup> percentile nationally.

### **Some Summary Observations**

On the Critical Thinking test, 23% of UNK freshmen scored at or below the 25<sup>th</sup> percentile nationally. 24% of UNK seniors scored at or below the 25<sup>th</sup> percentile nationally. On the writing test, 37% of UNK freshmen fell into the lowest quartile nationally; this low achieving group is an important target for intervention. There are several initiatives intended to improve the writing skills of UNK students over the course of their college career (General studies program, WI program, Composition program). Among seniors, the percent in the lowest national quartile is 33%; this number is certainly larger than would be desired. It seems like additional initiatives may be necessary to address the needs of these lowest achieving students. We could examine the course-taking information for students who fall in the lowest quartiles to determine if an intervention is warranted. To discover the actual students who fall in this lowest quartile, we would need to look at the CAAP student rosters.

On both tests the percentage of seniors who fell into the lowest quartile is perhaps an area for concern. If this measure is used in the future it will be of interest to monitor the relative size of this group. This will be of particular interest if there are new initiatives targeting the writing and critical thinking skills of our students.